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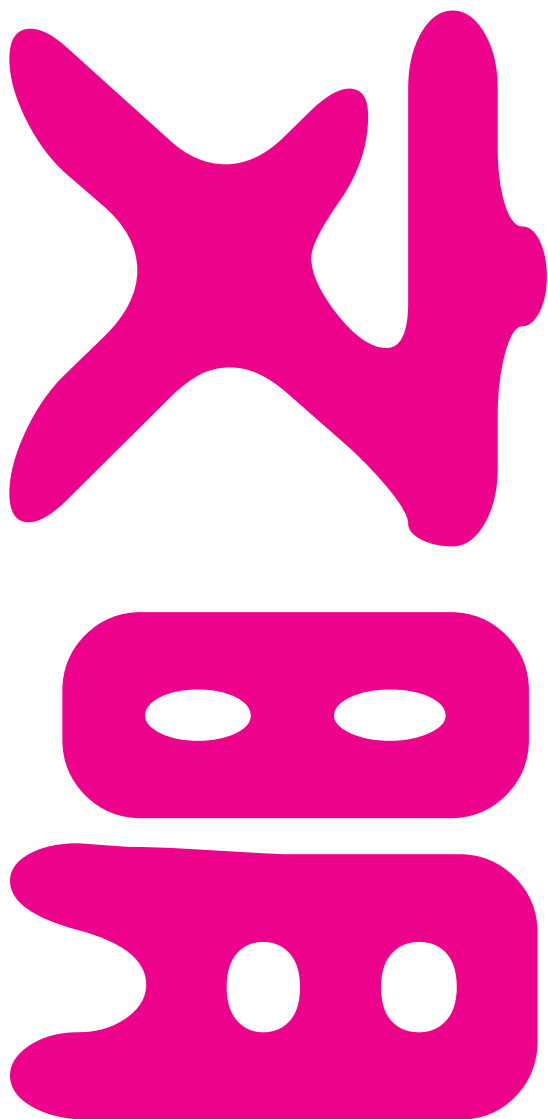
Civilizations

東海大学文明研究所

Institute of Civilization Research, Tokai University

No.24 (Special Issue **2019**)

Dialogue between Civilizations





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***Civilizations* (『文明』) No.24 (Special issue 2019): Dialogue between Civilizations**

- linked with the International symposium, “The 4th Dialogue between Civilizations, held in March 14-15, 2019 at Tokai University European Center in Vedbaek, Denmark.

- edited by
Institute of Civilization Research, Tokai University.

Preface

Tokai University, founded in 1942 during World War II, is a relatively young Japanese university. In 1959, the Institute of Civilization Research was set up so that essential research, realizing the University's Founding Spirit of "building a balanced civilizational society," could be carried out. The aim of this spirit was and is to achieve a balanced society under the harmony of spiritual culture and material civilization. It sought, in other words, a synergy between liberal arts and scientific technology. The journal *Civilization* is the institute's main publication. In 2001, the institute was renewed by integrating the Institute of Civilization Research with the Institute of Social Behaviors and the Institute of Arts. Based on this integration of a variety of research fields, the new institute aims to promote comprehensive research into human activities and the civilizations in which these activities take place.

International collaboration is indispensable to the realization of such civilization studies and to the development of dialogue between different cultures and civilizations. Thus, this special issue (No. 24) is devoted to the international symposium, "The Fourth Dialogue between Civilizations," held in March 2019 at the Tokai University European Center in Denmark. Since November 2015, this symposium has been held annually. The first two symposia took place under the title "Civilization Dialogue between Europe and Japan." The third symposium extended the field of study by changing the name to "Dialogues between Civilizations," to which a new subject area, the Environment Problem, was added.

Today, there is a global trend toward the theme of "national priority." However, humans face many serious problems, such as global warming and plastic pollution, which cannot be resolved nationally. To resolve such problems, international measures must be demanded, based on mutual understandings between countries. Although the symposium is but a small step, it signifies a steady effort to enlarge international relationships and contribute to creating global harmony among our civilized societies.

Finally, in transmitting thanks to the symposium staff, as well as to the editors of the issue, the institute hopes that the symposium will continue to sustain and even develop human civilized society.

Kazushige YAMAMOTO
Director, Institute of Civilization Research

Civilizations (『文明』)
International Journal of the Institute of Civilization Research
No.24 (Special issue 2019): Dialogue between Civilizations

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International Symposium The 4th Dialogue between Civilizations

We are very honored to publish here, the Special Issue of Civilization, the Collected Papers presented on the occasion of the International Symposium, the “4th Dialogue between Civilizations.” This symposium is the fourth of the series, which was initially named the Civilization Dialogue between Europe and Japan. The first symposium was held in November 2015 and was organized primarily by the members of the Institute of Civilization Research at Tokai University. The second symposium was co-hosted with the Centre for Cultural Psychology of Aalborg University in Denmark. The Tokai University European Center co-hosted and provided the venue for the last three symposia. The Institute of Civilization Research held the fourth symposium under joint sponsorship of the European Center and the Graduate School of Letters of Tokai University.

The principal aim of the symposium is to discuss the direction in which our civilization should proceed. All that human beings have built up should be considered to be a civilization, and therefore, we may be asked to determine the future direction of our civilization by examining and synthesizing our wisdom. Here, it is important to ascertain what role humans will be able to play in the future of our civilization and, reciprocally, how our civilization will influence human existence as well as individual thinking and behavior. For this purpose, the discussion should involve various kinds of factors: the East and the West, the North-South problem, globalization and diversity, the community and the individual, and human mind and body, among others.

In fact, from the beginning, the symposium is founded on two research domains developed by the two main organizers of this symposium, Dr. Tanaka and Dr. Hirano. The first is Tanaka’s cultural psychology, focusing on human minds in diverse cultures, and the second is Hirano’s trans-disciplinary humanities, which concerns comprehensive human knowledge since the Renaissance. Varied problems of culture and civilization centered on these relatively new areas have been examined in this symposium series so far, and these will continue to be two the major pillars of discussion.

A new field of study was added to the original two from the third symposium: the environment. The world has witnessed a range of natural disasters such as earthquakes, tsunamis, and outbreaks of abnormal weather in recent years. In Japan, major damage has been wreaked by the Kumamoto earthquakes of 2016, the intense torrential rains, and other natural catastrophes occurring in diverse places. While it is true that human beings cannot do much in the face of natural disasters, it is also undeniable that many of these calamities are civilizational problems caused by humans whose lives are dependent on fossil fuels. How can we build civilizations that harmonize modern human lives with the natural environment? To this end, this symposium series would like to focus on environmental quality of life to ensure human satisfaction while taking the environment into consideration. This field of research appears promising in terms of pointing humanity toward a new direction.

The symposium, “The 4th Dialogue between Civilization”, collected fifteen papers, the presenters of which are from various countries: Japan, Denmark, France, United Kingdom, Germany. The program of the symposium is as follows:

* * * * * Program of the 4th Dialogue between Civilizations * * * * *

March 14, Thursday

Morning Session (I) : Environmental Studies (organized by T. NAKASHIMA and chaired by Y. HIRANO)

NAKASHIMA Takuo, HIRANO Yoichi (Tokai University, Japan)

Nature Oriented Metrics of Wellbeing Based on Environment-Related QOL.

LEE Soji (Tokai University)

Feeling Expansion Model of Environment-related QOL for Leisure Tourism.

Morning Session (II): Societal Studies (organized and chaired by Y. HIRANO)

LESPOUX Yan (University of Montpellier, France)

Foreigners from within? French school and regional languages between the 19th and the 20th centuries.

ADACHI Mina (postgraduate, Tokai University, Japan)

The revival movement of “Poésies Provençales” and the formation of Provence Identity in the 19th century.

Keynote Lecture (Chaired by S. TANAKA)

MURAKAMI Kyoko (Copenhagen University, Denmark)

Relational practice of listening as dialogue.

Afternoon Session (I): Studies on Human Body and Mind (organized and chaired by S. TANAKA)

FRANCESCONI Denis (Aarhus University, Denmark)

Quality of Life Movement and Embodied Wellbeing. An introduction.

WYDER Sylvia (University of Derby, United Kingdom)

The constructed cultural self.

HSIEN Jihe (postgraduate, Tokai University, Japan)

Breathing in Syugyo: Toward a Better Way of Living.

Afternoon Session (II): Trans-Disciplinary Humanities (1) (organzaized by Y. HIRANO and chaired by T.

NAKAMURA)

PIERONI Marina (Technical University of Denmark)

Business opportunities for a transition to Sustainability through Circular Economy.

KAZUHARA Kristina (Copenhagen Business School)

The Relation between Bicultural identity and Bilingual Competences and their importance for Global Organizations.

March 15, Friday

Morning Keynote Lecture (Chaired by Y. HIRANO)

TANAKA Shogo (Tokai University, Japan)

A negative legacy of modernization: The mental disorder Taijin Kyofusho.

Morning Session(I): Trans-Disciplinary Humanities (2) (chaired by Shogo TANAKA)

HIRANO Yoichi (Tokai University, Japan)

Note on the concept of the golden ratio during the Renaissance period.

NAKAMURA Tomoko (Tokai University, Japan)

The shape of knowledge in the Renaissance.

Morning Session (II): Dialogue between Civilizations and Cultures (organaised by N. KUTSUZAWA,
chaired by T. NAKAMURA)

KUTSUZAWA Nobukata (Tokai University, Japan)

About Old Photographs Related to Siebold in the Brandenstein-Zeppelin Archives.

PANTZER Peter (Bonn University, Germany)

Philipp Franz von Siebold –A scholar of Japanese Studies and Cosmopolitan.

* * * * *

Among these lectures, this Special Issue includes the eight papers contributed by authors; one of them is the paper presented in the 3rd Symposium. The abstracts of the other eight presenters are found in the second part of this issue.

There are calls to respect the diversity of a world characterized by the existence of discrete cultures and civilizations in the midst of the continuing globalization. How can those who have developed and taken advantage of the blessings of the scientific and technological civilizations that originated in modern Europe simultaneously promote the coexistence of humans and nature, recover humanity, and create a sustainable global environment? As the very nomenclature suggests, the current Anthropocene period evidences the construction of new strata with materials that do not exist naturally. It is hoped that at this juncture of human development, this symposium will be a step toward the future development of civilization studies and generate discussions centered on the development of a shared and sustainable future for humanity and its ecological foundations.

January, 2020

Tokai University, Institute of Civilization Research

Yoichi HIRANO

Shogo TANAKA

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Part I

I. Societal Studies

Foreigners from within? French school and regional languages between the 19th and the 21st centuries.

Yan Lespoux University Paul Valéry Montpellier 3, France

Abstract

For a long time, the provinces of the Kingdom of France appeared to the central government as almost foreign lands, sometimes even adorned with a certain exoticism or savagery. Submitted to or attached to the kingdom over the centuries, they shared the fact that they brought together subjects of the King of France. But this common bond was not enough to hide many differences: in the government of these provinces, in the weights and measures or, of course, in the language used by the people.

The French Revolution establishes a new common bond. The peoples of France are no longer subjects, but citizens. The revolutionaries very early on raised the question of communication with all citizens and quickly adopted a language policy, as Michel de Certeau, Dominique Julia and Jacques Revel showed in their book *Une politique de la langue* (1975). After an attempt to translate organic and legislative texts for citizens, the idea that it is necessary to use a common language quickly emerges. The particularity of this French language policy is, however, that, rather than considering that this common language can exist alongside regional languages, it is necessary that the latter, these "patois", disappear to give way to the national language.

If in 1794, Bertrand Barère already envisaged that the work of francization of the population should go through the school, it was during the 19th century, following various laws, from Guizot in 1833 to Ferry in 1881 and 1882 that the school institution began to effectively spread the national language.

From then on, pedagogues, inspectors and teachers searched for the best ways to teach French to the children of France, which gave rise to a number of pedagogical debates until the 20th century.

The need to produce French citizens through this educational and linguistic policy, which is based as much on learning French as on the dissemination of a « national novel » through history courses, is all the more important because some of the speakers of regional languages are considered, at least for those whose linguistic area is cross-border - Basque, Alsatian or Catalan - as likely to forge too close links with foreign powers.

Even if, after the First World War, French language undeniably won its battle against regional languages, the fact remains that they remain suspicious. It was not until the Carcopino decrees of 1941, then the Deixonne law in 1951, that regional languages were finally officially taught in French schools. But even then, the debates surrounding these texts show a long-lasting distrust. The preparatory debates for the Deixonne Law, in official bodies or in the press, show how sensitive the subject remains.

Neither the emancipation movements of peoples that flourished in the 1960s and 1970s and (that) allowed a certain revival, at least artistic, of regional languages, nor international policies (UNESCO, European Union) were sufficient to reverse this trend. The debates surrounding the signing of the European Charter for Regional or Minority Languages have regularly shown that any policy in favour of regional languages seems suspicious in France. In this context, the school institution, which has become the privileged place for the transmission of these languages, is in a way paralysed by a contradictory injunction: it must ensure the transmission of languages considered as a national cultural heritage, but without nevertheless allowing them to really exist in a society that consistently considers that the French language is threatened.

Keywords: France, regional languages, school, education, citizenship, language policy

The French Revolution and the establishment of a "language policy"

Under the monarchy, all the people in the kingdom of France had one thing in common: they were all subjects of the king. But there were significant differences between the different provinces: they did not have the same local governments, the same weights and measures, or the same languages. And this is even if, particularly since the Villers-Cotterêts order in 1539, the king's language, i. e. the French language, had normally become the administrative language. A large part of the local elites had therefore adopted French, but regional languages remained the languages of the vast majority of the population.

With the French Revolution, the king's subjects became citizens. But of course they continued to speak their languages. At first, the revolutionaries had to deal with this situation. This is why the decree of January 14, 1790 authorised the translation of laws and decrees "into all the languages spoken in the different parts of France". In this way, a number of translations of official texts have been made. A certain Dugas, from the Tarn, created a real agency in charge of translating laws and decrees in about thirty departments in the south of France.

The situation changed radically from 1794 onwards. Indeed, the translation policy appeared to be costly and ineffective. From that moment on, a whole discourse promoting the French language began to develop. This discourse, which makes French the only language capable of expressing ideas of freedom and equality, leads to the rejection of the regional languages that were then negatively referred to as "patois". The particularity of this French language policy is that, rather than considering that this common language can exist alongside regional languages, it is necessary that the latter, these "patois", disappear to give way to the national language.

On January 27, 1794, Bertrand Barère, as spokesman for the Comité de Salut Public, presented a report in which he identified the idioms perceived as posing threats to the Revolution because of their use by the enemies of the Republic. There were languages from other European countries: German, Spanish, Italian, English, but also a number of regional languages: Basque, Breton, Alsatian, Corsican.

"We have revolutionized government, laws, customs, morals, costumes, trade and thought itself; so we are also revolutionizing language, which is their daily instrument." said Barère. And : "Federalism and superstition speak Low-Breton; emigration and hatred of the Republic speak German; counterrevolution speaks Italian, and fanaticism speaks Basque. Let's break these instruments of damage and error."

Barère concluded his report by proposing in particular the appointment of teachers to teach French in departments that were not yet French-speaking and whose regional language was for him linked to the enemies of the Republic. This means that some regional languages such as Occitan were not yet concerned. But they were very quickly.

Another important character in this story is Father Grégoire. Grégoire was a member of the clergy who eventually joined the Third State. In 1790 he took the initiative to send a survey on the "patois" to the scientific societies of France. And he presented a report from this inquiry on June 6, 1794. For Grégoire, French is not only the language of the law that the sovereign People, supreme legislator, must know, but also the language of revenge against "people as it should". The latter will continue to monopolize all places in defiance of civic equality if French language does not spread among the population. And to spread among the population, the French language must eliminate the "patois". This report was entitled: "Report on the need and means to annihilate the patois and universalize the use of the French language".

It was therefore logical that, on July 20, 1794, Philippe-Antoine Merlin de Douai submitted a decree that the Convention adopted immediately. This decree imposed French as the only language of both public and private acts. The penalty for violating this provision was six months' imprisonment and dismissal.

As we can see, from 1794 onwards, the policy of the language of the Revolution consisted not only in imposing the French language but also in making the regional languages disappear. In the minds of legislators, the possibility of two languages co-existing is difficult to imagine. Above all, the question for them is: Why want to speak a language other than French, which has everything it takes to become a universal language since it carries the values of the Revolution? And why do we want to keep "patois" that have no dignity and whose use, which prevents the learning of French, perpetuates the inequalities of the Ancien Régime between those who knew the language of "people as it should" and others?

The school enters the game

That's when the school started to enter the game. Because it was this institution that had the power to teach French on a massive scale and to transmit the values of the Revolution. Not immediately, because these structures took a long time to put in place, but from the second third of the 19th century.

A first law, the Guizot law, in 1833, provided that "primary education necessarily includes moral and religious instruction, reading, writing, the elements of the French language and calculation, the system of weights and measures". But above all, the Guizot law provided that a primary school for boys should be created in each municipality with more than 500 residents, that each department should have a school to train teachers, and that an inspection body should be created. In short, it created structures that would make it possible to provide massive schooling for children in France (the Falloux law of 1850 also provided for the creation of a girls' school in municipalities with more than 800 inhabitants) and to teach them the national language.

But it was under the 3rd Republic that a decisive step was taken, notably with the 1881-1882 Ferry Laws, which made schooling compulsory for children aged 6 to 13, free and secular. From those years on, the school became the real place for learning French.

In fact, the French regions were considered as colonies to be conquered and preserved, as Paul Lorain explicitly stated in his *Tableau de l'instruction primaire en France à la fin de 1833*: "Should we be called a Vandal, we are of the opinion that we have to take a hard line in this ancient transmission of patois, and that each school is a French language colony in a conquered country".

This search for unity was based on language, but also on history and geography. It was at this time that what the French called the "national novel" was established. The aim was to teach primary school children a common history, made by heroes from ancient times. This picture of the history of France, from "Our Ancestors the Gauls" to the Revolution, suggested that France had always existed and that the French people had always been one.

A school book that had a great success under the Third Republic is *The Tour de France par deux enfants*. It was the story of two orphans from Lorraine who, after the 1870 war and the Prussian takeover of Alsace and Lorraine, left to join an uncle in Marseille while crossing the country. It has been published in 1877 and sold more than 7 million copies before 1914. The following is an excerpt which refers to the issue of regional languages. The two boys, André and Julien, are in the south of France:

"The hotel lady was a good old lady, who seemed so pleasant, that André, to please Julien, ventured to question her, but she only understood a few French sentences, because she spoke as many old local people did to the ordinary, the patois from southern France. André and Julien, who had risen politely, were all disappointed. The people who came in all spoke patois to each other; the two children, sitting apart and not understanding a word of what was being said, felt well isolated in this foreign farm. "Why don't all the people of this country speak French?" - It's

because not everyone could go to school. But in a few years' time, this will no longer be the case, and throughout France we will be able to speak the language of the country." "At that moment, the door opposite opened again; it was the children of the hotelkeeper returning from school. "André", Julien cried, "these children must know French, as they go to school. What a joy! We can talk together. »" (translated by us)

The Guizot and Ferry laws did not explicitly prohibit the use of regional languages. But the mission of the school institution was clear: first and foremost, it was necessary to learn the national language. This is what a school textbook in 1875 said, for example: "1 The language spoken by our parents, and in particular by our mother, is called the mother tongue; it is also spoken by our fellow citizens and by people who live in the same country as us. 2 Our mother tongue is French".

Not all pedagogues agreed on how to teach children the French language. Some thought that it was necessary to start from what the child already knew, from his mother tongue, to bring him to French. Others, such as Irénée Carré, thought on the contrary that it was necessary to consider that the child who arrived at school (at 6 years old, nevertheless!) knew nothing and that it was necessary to speak only French to him, as a mother would do with her baby: this was the "maternal method". We can imagine the frustration this could represent for children who already spoke one language and were given instructions in another language as if their true mother tongue had no value.

This devaluation of the regional language was of course transmitted from school to families. The latter thus became another aid to the spread of the French language and the abandonment of the regional language. First, because the school instilled in children the idea that their language was not a language, that it had no dignity. Secondly, because everyone understood that learning French was the key to social advancement.

A well-known symbol of this language policy is the "signal" also known as a "symbol" or "sign". It consisted in giving an object to the first child who would be caught speaking patois. He would then give it to another child who spoke patois, and so on. Anyone who was in possession of the object at the end of the day was punished. It was a process based on denunciation and humiliation and we have evidences that it existed at least until the Second World War in some places. It was not systematic, but we think it was quite widespread because we have so much testimonies about it.

From the decline to the return of regional languages to school

The decline in regional languages is not uniform. Some regions are becoming more French-speaking than others. But it is clear that the process of francization, from the beginning of the 20th century, is inevitable. As soon as entire generations of children have learned French and this learning has been accompanied by a more or less forced abandonment of their regional languages, those languages are logically destined to disappear.

It is therefore quite logical that, after the First World War, the issue of regional language teaching should appear more regularly in legislative debates. Indeed, as soon as they no longer represent a danger to the French language, we can once again consider studying them. Not at primary school, of course, which remains the exclusive domain of the French language. Moreover, in 1925, a circular from the Minister of Public Instruction, Anatole de Monzie, prohibited any use of regional languages in schools. However, in secondary and higher education, it is considered that regional languages and their literatures may possibly be objects of study. Not all of them: the study of Alsatian, for example, which is a German dialect, is not encouraged, because since Alsace's return to the French nation in 1918, the suspicion of separatism has been hanging over Alsatians.

The fact that certain separatist groups of regionalist movements in Corsica, Brittany or Alsace were encouraged in the 1930s by Nazi Germany and fascist Italy further intensified prejudices against regional languages during this period.

Moreover, this fear of separatism, i. e. the fact that a certain part of the population is considered not to be loyal to the nation and therefore appears as a foreigner from within, became very clear in 1941. In December 1941, decrees issued by the Minister of National Education, Jérôme Carcopino, authorised optional teaching of regional languages, within the limit of 1h30 per week, and outside school hours.

The situation was very particular: France was partly occupied by Germany and the Vichy regime led by Marshal Pétain was based on the values of rural France, on the "small homelands". There were strong reactions in the newspapers. Even before the publication of the Carcopino decrees, the newspaper *Le Temps* wrote in November 1941: "Let us be careful, however, not to raise problems that history has already solved, to raise quarrels, that of languages and dialects, for example, which have long since been calmed down... There are enough borders, unfortunately, in our country not to forge others."

After the war, all Vichy legislative acts were revoked. It was only in 1951 that a law - the only one to date - was passed in favour of teaching regional languages. The Deixonne law of January 11, 1951 was the result of years of negotiations between Breton, Occitan and Catalan militants on the one hand and officials of the Ministry of National Education and parliamentarians on the other. It also raised many objections during its elaboration.

On the first to oppose this law proposal, when it began to emerge in Brittany, was Maurice Deixonne himself. This socialist deputy, faced with a proposal from the alliance of communist and Christian-democratic deputies, said in 1947: "These gentlemen from the priests' and apparatchiks' houses are now submitting proposals for legislation to attack Jules Ferry's work and introduce regional languages as a war machine, a time bomb in the Republic's schools."

Deixonne, who became rapporteur for this law proposal in order to scuttle it, ended up defending it. But he had to face opposition from Ministry officials. Aristide Beslais, Director General of Primary Education, told the Higher National Education Council in February 1949: "If we gave in today on a front as sensitive as this one, our resistance would be compromised on the other fronts. Pass me that expression of a military nature, but I think it has some value here because it is a real struggle that we have to support." What Beslais and the other members of the Higher Council feared was that the fact of granting official teaching to certain languages such as Breton, Basque or Occitan would lead to identical demands in Alsace, which had been occupied by the Germans during the war and whose inhabitants were still feared not to consider themselves as French.

The same opposition appeared in the national press. For example, the writer Georges Duhamel wrote an article in *Le Figaro* in 1950 entitled "An attack on French unity" in which he mentioned Ireland: "If primary school accepts, tomorrow, the teaching of dialects and patois, we too may know something comparable to the painful Irish adventure". Deixonne had to make many concessions. In the end, the law adopted after three years of negotiations does not offer anything very revolutionary: volunteer primary school teachers can teach one hour a week the regional language to pupils who also volunteer, and outside normal school hours. A regional language test is organized in the baccalaureate for volunteer students, but the mark obtained does not count towards graduation, only to obtain a mention.

The only languages covered by the Deixonne Law are Breton, Occitan, Catalan and Basque. The languages considered most likely to be vectors of separatism should wait: the Corsican language was integrated in 1974, the Alsatian language in 1988.

What appears here is the fear of a state that has so much based its unity on a single language that it has come to fear the other languages spoken on its territory. The imposition of French on the entire population was certainly not a problem in itself. What has created a problem is that it has been imposed at the expense of regional languages rather than at their side. In so doing, this language policy has generated frustrations, pushed a part of the population, attached to its regional language, to consider itself as a population of second-class citizens, suspected of being less French than monolinguals or,

even better, of those who had voluntarily abandoned their language to adopt the national language.

The challenging renaissance of regional languages

It was in connection with this policy that the concept of "internal colonialism" emerged in regionalist circles in the 1960s and 1970s. This concept is based on the principle that the centre, Paris, exploits the outskirts of the country for its own benefit, as a metropolis does for its colonies. The imposition of a single culture, which came from this metropolis to these peripheries, is part of this colonization policy.

In 1981, the election of François Mitterrand, who had spoken out in favour of a policy favourable to regional languages during his election campaign, was a hope for regional language activists. But the results were considered disappointing. Their teaching has benefited from new opportunities, such as bilingual education, but the resources devoted to it have proved to be below the expectations of activists and, above all, this teaching has not been accompanied by a policy of linguistic re-conquest in the society. While education has gradually developed and consolidated in both public and private schools that practice language immersion pedagogy, it is not enough to compensate for the loss of speakers.

We might think that today things have changed. But mistrust of language claims remains very high. The Deixonne Law was repealed in 2000, but regulatory provisions have made it possible to develop the teaching of regional languages. However, this regulatory framework remains fragile because it does not really require the State to provide this education.

Since the revision of the Constitution in 1992, article 2 states that "the language of the Republic is French". This article, as constitutionalist Guy Carcassonne says, affirms something that has long been acquired. Its only function is therefore to "create an obstacle to the recognition, even if reasonable, of regional or minority languages".

The revision of the Constitution in 2008 made it possible to include an article, article 75.1, which states that "Regional languages are part of France's heritage". But the Constitutional Council ruled that this article did not grant any particular right to these languages. It is therefore only symbolic.

What we have seen since the debates on the signing of the European Charter for Regional or Minority Languages in 1999, in particular, is that any policy in favour of regional languages seems suspicious in France. In this context, the school institution, which has become the privileged place for the transmission of these languages, is in a way paralysed by a contradictory injunction: it must ensure the transmission of languages considered as a national cultural heritage, but without however allowing them to really exist in a society that systematically considers that the French language is threatened.

References

- Boutan, P. (1996), *La langue des Messieurs*. Paris, France: Armand Colin.
- Carcassonne, G. (2000), *La Constitution*. 4th edition. Paris, France: Seuil.
- Certeau, M., Julia, D., & Revel, J. (1975). *Une politique de la langue*. Paris, France: Gallimard.
- Chanet, J.-F. (1996). *L'École républicaine et les petites patries*. Paris, France: Aubier.
- Lafon, M. (2015). *Qui a volé mon "patois"*. Montpellier, France: Presses universitaires de la Méditerranée.
- Lespoux, Y. (2006). L'instruction publique et les patois dans les Basses-Pyrénées des années 1880 aux années 1930, d'après le Bulletin de l'Instruction primaire des Basses-Pyrénées. *Lengas*, 59, 165-181.
- Lespoux, Y. (2010). De l'utilité ou de l'inutilité de la loi Deixonne pour l'enseignement des langues régionales en France. In G. Agresti, M. D'Angelo (Eds), *Roversciare Babele. Economia ed ecologia delle lingue regionali e minoritarie* (pp. 129-147). Roma, Italy: Aracnée editrice.
- Lespoux, Y. (2010). Autour d'une revendication méridionale : la Ligue pour la Langue d'Oc à l'École. *Annales du Midi*,

271, 391-406.

Lespoux, Y. (2010). Soixante ans d'enseignement de l'occitan : idéologie(s) et institutionnalisation. *Les Langues Modernes*, 4/2010, 43-46.

Lespoux, Y. (2013). Enseignement des langues « régionales » et en langues « régionales ». In G. Kremnitz (Ed), *Histoire sociale des langues de France* (pp. 375-384). Rennes, France: Presses Universitaires de Rennes.

Lespoux, Y. (2013). Robert Lafont et l'enseignement de l'occitan. In C. Torreilles (Ed.), *Robert Lafont. La haute conscience d'une histoire* (pp. 139-148). Canet, France: Éd. Trabucaire.

Lespoux, Y. (2014). Entre pédagogie et militantisme : la revue Viure a l'Escòla (1975-1981). *Lengas*, 75.

Lespoux, Y. (2016). *Pour la langue d'oc à l'école. De Vichy à la loi Deixonne, les premières réalisations de la revendication moderne en faveur de l'enseignement de la langue d'oc*. Montpellier, France: Presses universitaires de la Méditerranée.

Martel, Ph. (1987). Travail, famille, Patois. Vichy et l'enseignement de l'occitan : apparences et réalité. *Practicas*, 9-10, 53-63.

Martel, Ph. (1990). Autour de la loi Deixonne. In A. Lobier (Ed), *Actes de l'Université d'Été* (pp. 41-52), Nîmes, France: M.A.R.P.O.C.- I.E.O.

Martel, Ph. (2007). *L'école française et l'occitan. Le sourd et le bègue*. Montpellier, France: Presses universitaires de la Méditerranée.

Thiesse A.-M. (1997). *Ils apprenaient la France. L'exaltation des régions dans le discours patriotique*. Paris, France: Éditions de la MSH, Mission du Patrimoine Ethnologique.

Weber E. (1983). *La fin des terroirs*. Paris, France: Fayard/Éditions Recherches.

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The revival movement of “Poésies Provençales” and the formation of Provence Identity in the 19th century

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1. Introduction

In 19th century France, Félibrige was founded at the beginning of the Second Empire as a group to revive the linguistic culture of Provence. However, even prior to the formation of Le Félibrige, poets in Provence held meetings and formed a movement to revive Provence. In particular, the spelling of Provençal language and literature was becoming a central issue. In actuality, there were similar discussions between Mistral and Roumanille, who were responsible for the creation of Le Félibrige, and it is believed that the regionalism and regional consciousness that existed in each of them were at the heart of their disputes over spelling. In this paper, we consider the creation of Félibrige based on their regional consciousness, and examine the process of how Félibrige, having been created with such a consciousness, at the same time fomented a regional consciousness in later poets from Provence.

2. The Founding of Félibrige

Félibrige was born out of meetings between poets who gathered to restore the language of southern France. It began in 1854, at the start of the Second Empire, and it can be understood as a literary revival movement centered on Frédéric Mistral. However, the group's bylaws and member's rolls were actually created in 1862, when, for the first time, the group was organized into an academic organization, with a chairman who was known as a caprie and a membership of intellectuals knowledgeable of Provençal history and culture, as well as several priests. These members assembled from throughout the region of Provence, and from a small group of enthusiasts, it grew into a well-organized association. Mistral drafted the group's bylaws in 1862, and served as its chairman until 1883.

Mistral was certainly a central figure, though it is reasonable to think that Félibrige was formed around Roumanille at the time of its founding in 1854. As central figures during its foundation, Mistral and Roumanille engaged in disputes from the very beginning, as we shall note hereafter, and a certain kind of discord grew between them. If anything, Félibrige was founded upon overcoming the disputes, although this was not realized until Mistral drew closer to Roumanille.

At the same time, the purpose in founding the group was not only the revival of the language, poetry, and literary arts of Provence. There was also dissatisfaction and awareness regarding the circumstantial crisis of Provence that Mistral and Roumanille felt. Other Provençal intellectuals (such as Raybaud) also experienced this dissatisfaction and consciousness, and this was tied to the increasing regional consciousness of those in Provence. Later, such consciousness brought about the issue of spelling we shall discuss below. Félibrige was founded against that backdrop.

3. Spelling of the Provençal language

At the time of the founding of Le Félibrige, consistency was not necessarily present in the written language that was used everyday in Provence. Even so, consciousness of spelling as an issue grew more prominent in the early 19th century and is thought to be a reflection of France's situation—the policy of French language unification—at the time. Mistral and Roumanille had inherited the Provençal language, including the issue of spelling, and they viewed the inroads of the French language—Gallicism on the one hand and public education on the other—as harmful to the

culture and language of Provence. At the root of their motivation was a passionate love for the language and culture of the Provence region; that is to say, they had a regional consciousness that may be called “Provence identity.” The two discussed extensively about reviving the traditional poetry and culture of southern France based on this regional consciousness, and Roumanille, in particular, called this the “Provence Renaissance.”

The issue of spelling in the Provençal language caused various disputes, as shall be discussed hereafter. These disputes were also inherited by Mistral and Roumanille, as a difference in opinion around the notation of classical Provençal poetry. However, this was not merely an argument over spelling, but the result of differences in the identity of Provence that each respected. Put differently, the regional consciousness of Provence that each held created the dispute over spelling, and victory in the conflict condensed into the founding of Félibrige. Accordingly, the founding provides an insight into the culmination of their Provence identity with the language of Provence as a backdrop.

Besides that, the regional consciousness of this pair described above is a reflection of the social circumstances of Provence at the time. In 1841, the worker-poet Bellot had already attempted to bring together the poets of southern France in Marseille. In response to this literary movement, Mistral declared, “this is an accomplishment in a time of devotion to a single culture.” However, this attempt ended up dividing people of the Marseille and Avignon regions. Behind this split was the argument over spelling.

This inter-regional conflict was significantly related to the founding of Félibrige. On August 29, 1852, Roumanille, along with Aix-Marseilles poet Gau, assembled the first Congress d’Arles, held jointly with the Aix-Marseilles and Avignon factions in Arles. It is important to note that Roumanille was taking the initiative, and assembled five others—Aubanel, Giéra, Mathieu, Roumanille, and Mistral—who attempted to found Félibrige. This meeting was cordial, although there were arguments over spelling at the second Congress d’Aix held in Avignon on August 21, 1853. However, each of the arguments had incompatibilities with the others, and in the end the meeting ended in a split. Later, the feud between the Aix-Marseilles and Avignon became decisive, and any subsequent meeting was never organized.

4. The Start of Spelling in Félibrige: The Argument Between Mistral and Roumanille

Arguments over spelling were evident since 1841. On the one hand, there was the etymological spelling propounded by Simone Jude-Onora, and on the other an opposing phonetic spelling argued for by Raybaud. Since the 16th century, Provence had seen a growing number of poets who used phonetic spelling. However, at the start of the 19th century, there was an increasingly strong argument that phonetic spelling was not harmonious for Provence overall, since pronunciations varied by area. In particular, many started claiming that the etymological spelling was appropriate for the use of specialized terminology. In these circumstances, Raybaud complained that spelling which favored etymology was normative and esoteric.

This dispute also made a major contribution to the founding of Félibrige. Before being employed at a higher secondary school in Avignon in 1845, Roumanille taught at a small boarding school in Nyons, which was at the forefront of Provence poets. It was there that he met Dupuis and Raybaud, who had already been teaching other Provençal poets. Through this encounter, Roumanille found opportunities to argue about the causes for making the French language obligatory, and this served to strengthen his own thinking about Provence. As a result, Roumanille took up the torch for the phonetic spelling of Raybaud, essentially becoming his disciple.

The phonetic spelling inherited by Roumanille was in conflict with the arguments of Mistral. In arguing for etymological spelling, Mistral declared, “it is more logical and simpler for those who are familiar with the Provençal

language.” He demanded for “unity, to the extent possible both logically and etymologically, in order to make the language of Provence easier to understand.” He criticized phonetic notation by stating that it was like a “second tower of Babel”¹). In response, Roumanille emphasized such phonological expressions as the unique characteristics and features of the Provençal language, the harmony of calm tones, and the refinement and elegance of words more than academic notation.

The rift between Mistral and Roumanille grew wider, especially with Roumanille’s alterations made to his spelling method in a collection of poetry, “Li Provençalo,” that he published. Roumanille rewrote poetry in this collection phonetically, to which Casmir Bousquet of the Aix-Marseilles faction rebutted in December 1852 in the royalist newspaper *Gazette du Midi*. To strike back at Bousquet’s rebuttal, Roumanille asked Mistral for support, as he not only hailed from the Avignon area but also was his student previously. However, Mistral turned this request down in a letter to Roumanille. Mistral replied, “this is such a large mistake. It will hasten the decline and extinction of language”²). Further, he argued, “I wish not only to be understood by a few people living on the outskirts of Arles but also by everyone in southern France”³). This argument, or rather the spirit of resistance, of Mistral’s regarding spelling was sufficient to cause a collection of poetry to be rewritten in the Aix-Marseilles faction’s method of spelling after the Avignon poetry meetings.

5. The Regional Consciousness of Mistral and Roumanille

This antagonism between Mistral and Roumanille can be viewed as a conflict between “scholarship” and “tradition” (experiential tradition). The “scholarship” referred to here is the perspective that emphasizes an awareness of resisting French through spelling based on Latin and linguistics. In addition, “tradition” implies perspective that emphasizes an awareness of maintaining and increasing words (pronunciation) used in various regions.

Roumanille was aware of the poetic tradition of the troubadours that was inherited by Dante, a poet in medieval Italy. In particular, he strived to maintain the bountiful words (the abundance of pronunciations and expressions) of each region and argued for phonetic spelling. He overflows with an affection for Provence that honors regional traditions and the language and culture of each area. This regional consciousness of Roumanille can be thought of as having been strengthened and created by the arguments of Raybaud in the area of Nyons that was discussed previously. However, Mistral took issue with the obstruction of regional languages that came with the promotion (or incursion) of the French language in education. Therefore, he strived for the establishment of spelling for the Provençal language in a form that is clearly superior to the French language—the creation and unification of Provençal spelling. In this we can decipher Mistral’s desire and aspirations for a revival or rethinking of the mother tongue and lifestyles that spring from experiences in one’s native land.

Why was Félibrige founded around Mistral and Roumanille in 1854? An answer can be found in the changes of Mistral’s thinking pattern. Mistral shifted his assertions on spelling after 1854, and drew closer to the phonetic spelling emphasized by Roumanille. One reason for this was his respect for Roumanille, who can be thought of as a former teacher, and it is believed that the Roumanille’s increasing regional consciousness also had something to do with the change. In other words, this is viewed as a strong expression of belonging to his hometown of Maillane and the Avignon area, which he discussed with Roumanille in the Provençal language during his time as a student. Eventually, Mistral prioritized his affection for Avignon and Provence more than his arguments on etymological spelling. At its heart is the importance of his own strong regional consciousness, a Provence identity.

In this manner, and as of 1854, Félibrige had overcome issues of spelling, and its foundation under Mistral and

Roumanille was centered on Provence Renaissance thinking of Roumanille in particular. However, the regional consciousness that maximizes respect for Mistral's Provence did in fact have a major impact on the later direction of Félibrige's development, and reflected the federalism conceived by Roumanille after 1866.

6. Conclusion

Editing of Provence language dictionaries and establishing spelling provide assessments of the early period after the founding of Félibrige. The arguments over spelling described above can be positioned as initial arguments in creating dictionaries and spelling methods. In particular, spelling is known as "Mistralienne" due to Mistral organization of it after the founding of Félibrige. Later, it was organized as a group, and, as it developed, the poets who were members spelled their poems in true Mistralienne in their annual journal. These activities were responsible for the Provence revival movement, which initially were generated in the regional consciousness of Roumanille and Mistral. Such activities, later, pushed Provençal people to promote regional consciousness, and in that sense the regional consciousness of Mistral and Roumanille can be said to be that of Provence.

Further themes from this study are as follows. It is thought that the circumstances of Provence at the time surrounding the unity of the French language was behind this pair's fostering and establishing of regional identity, though what was the relationship with their disillusionment in politics and their dissatisfaction with how regional educational institutions had developed due to public education? Conversely, from an academic perspective, what was their relationship with the Central Academy and various universities? Answers to these questions will likely further clarify the regional consciousness of Mistral, Roumanille, and the people of Provence, and will portray the historical *raison d'être* of Félibrige.

References

- Mistral, F., *Mémoire et Récit, Correspondance*, Aix-en-Provence, Pierre Rollet, 1969. (abbr. *Correspondance*)
- Roumanille, J., *Li Margalideto : Poésies Provençales*, reproduction (l'édition originale 1847).
- Jouveau, R., *Histoire du Félibrige 1854-1876*, 1984, Aix-en-Provence.
- Thompson, M., *Plaidejat a una dama a còr freg 1: The Occitaniste Movement in France from the Third Republic to 1945*, *Comparative Culture, the Journal of Miyazaki International College*, No.21(2016), pp.36-57.

Notes

- 1) The original version of the three citations are as follows:
 - C'est plus rationnel et plus facile à comprendre pour ceux qui n'ont pas l'habitude du provençal.
 - Conformons-nous, autant qu'il est possible, à la logique et à l'étymologie afin d'être compréhensibles.
 - Si tous nos troubadours écrivaient leur composition d'après le dialecte de leur village, ce serait Babel.(Mistral's letter to Roumanille, December 21, 1850; *Correspondance*, pp.(895)-(896))
- 2) ... grave erreur en ce que leur système tend à hâter la corruption et la disparition de la lèng, ...
(Mistral's letter to Roumanille, July 14, 1853; *Correspondance*, pp.(964)-(965))
- 3) J'ai beau chercher, je trouve que je ne perds rien à ma réforme, pas même l'euphonie, et j'ai l'avantage de parler dans une langue comprise par ce moyen dans tout le midi, au lieu de l'être seulement par quelques amateurs de l'arrondissement d'Arles.
(Mistral's letter to Roumanille August 13, 1853; *Correspondance*, p.(972)).

II. Environmental Studies

Nature Oriented Metrics of Wellbeing Based on Environment-Related QOL

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1. Introduction

The contemporary civilization developed by the science and technology has generated environmental problems such as global warming, which has led to climate change producing droughts or floods due to heavy rain. The earth has changed to the Anthropocene epoch, which refers to human influence on the planet's geology and ecosystem. The Anthropocene epoch was widely popularized in 2000 by atmospheric chemist Paul J. Crutzen (Crutzen and Stoermer, 2000), who regards the influence of human behavior on the earth's atmosphere in recent centuries so significant that it constitutes a new geological epoch. These results mentioned that global sustainability is tied to both human activity and the natural environment. We should consider the coexistence between human life and earth's environment. In these condition, the following two points should be considered. 1) Humans seek to maintain their livelihoods (i.e. civilization) and seek satisfaction in their lives. 2) Humans need to conserve and maintain the natural environment. In addition, humans need to understand the current condition on Earth and environment on land or sea. The continuation of today's society should overcome a crisis arising from the destruction of the natural environment. We must incorporate the maintenance of the environment as part of human life and tie this into satisfaction.

Denmark has been focused on resolving environmental problems for a long time and is the top country for happiness in different measurements. "Hygge" is the word for representing happiness in Denmark and is associated with the following keywords: atmosphere, presence, pleasure, equality, gratitude, harmony, comfort, truce, togetherness, and shelter. We proposed that space-oriented e-QOL (environment-related QOL) should be classified into four levels; the individual level, the local community level, the national level, and the global level (Nakashima and Hirano 2018). In this paper, we focused on the environmental elements of Hygge and different feeling in the national levels of e-QOLs.

Our goal of this research is to establish the concrete definition of e-QOL. The relation between the metrics of e-QOL and other metrics of global organizations would be examined. In addition, we would compare the evaluation values of e-QOL in different countries leading we could evaluate the features of cultural and social circumstances. These results could extract and indicate the lack of concept of human life in terms of well-being in different countries. If we could extract nature-oriented metrics of wellbeing based on e-QOL, we could propose the new concept for each country to maintain the sustainable society.

2. Works and Researches on the International Organization

2.1 The definition of WHO

QOL (Quality of Life) is known to express one's life satisfaction meaning that the quality of human existence and life with wellbeing. The Constitution of the World Health Organization (WHO) defines health as "A state of complete physical, mental, and social well-being not merely the absence of disease . . .". It follows that the measurement of health and the effects of health care must include not only an indication of changes in the frequency and severity of diseases but also an estimation of wellbeing and this can be assessed by measuring the improvement in the quality of life related to health care. WHO has developed two instruments for measuring quality of life, the WHOQOL-100 and

WHOQOL-BREF. In the document (WHOQOL, 1997), the WHO has determined six domains for the evaluation of QOL, such as 1) Physical health, 2) Psychological health, 3) Level of Independence, 4) Social relationship, 5) Environment and 6) Spirituality/Religion/Personal beliefs. The domain of “Environment” is explained that the environment surrounding the personal life influences personal physical and mental conditions. The facets incorporated within “Environment” domain include “participation in and opportunities for recreation” and “physical environment, such as pollution/noise/traffic/climate”. These elements show that QOL should be described with relation of natural environment and human activities over the natural environment.

2.2 Quality of life indicators in Eurostat

The conference Beyond GDP: Measuring progress, true wealth and the well-being of nations was held in November 2007 (Cassiers 2007). Pierre le Roy (2017) indicated that limits of GDP (Gross Domestic Product) as an indicator to assess the world or a country situation are widely acknowledged. GDP is not a satisfactory index because it ignores important things of daily life: when a tree is cut down, GDP grows; traffic accidents increase GDP, and so do wars potentially. The only significant progress to go beyond GDP has been the creation, in 1990, of the human development index (HDI), calculated and published yearly by the United Nations Development Program (UNDP). On the other hand, QOL and happiness indicator are paid attention to enhance the personal wellness. Eurostat (2015) published “Quality of life indicators”, providing recent statistics on the quality of life in the European Union (EU). The publication presents a detailed analysis of many different dimensions of quality of life, complementing the indicator traditionally used as the measure of economic and social development: GDP. This article is a general introduction to the set of the following '8+1' statistical articles, sketching the conceptual, policy and methodological background. The '8+1' dimensions of quality of life consists of 1) Material living conditions (income, consumption and material conditions), 2) Productive or main activity, 3) Health, 4) Education, 5) Leisure and social interactions, 6) Economic and physical safety, 7) Governance and basic rights, 8) Natural and living environment, +1) Overall experience of life. Most of elements has the meaning of QOL or wellbeing.

3. Proposed New Approach for Wellbeing

3.1 Wellbeing Manifesto of Denmark: Hygge

Denmark has the history to conscious about environment. In 1971, Denmark firstly established the Ministry of the Environment in the world. On the same period, United Nations established the Environmental Protection Agency (EPA) in 1970. The mission is to properly protect the atmosphere, water and the earth (natural environment), and to maintain and promote human health, and has an organization and system for that. The operation was carried out in accordance with the five goals shown in the 2006 Five-Year Plan on Air Quality Improvement, Water Quality Improvement, Land Recovery, Ecology Recovery, and Regulatory Compliance. Denmark has the EPA in the Ministry of Environment and Food of Denmark (EPA 2019). WWF (World Wildlife of Fund) has recognized as a Gift to the Earth the inspiring leadership and example set by Denmark to address climate change with its highly ambitious commitments to reduce carbon emissions, phase out fossil fuels, and switch to renewable energy (WWF 2013). In addition, Denmark has been evaluated the most kind country for climate change by the CCPI (Climate Change Performance Indexes) in these years (CCPI 2019). The turnout at general elections is high in Denmark compared to other countries, with 80-90 per cent of the electorate casting their vote (Danish Parliament, 2019). These results show that the social and natural environment generate the feeling of wellness and enhance these feelings. The U.N.'s happiness rankings use one data point from a massive survey known as the Gallup World Poll. That data point comes

from a question that asks people in more than 150 countries to rate their lives on a scale of zero to 10 -- with zero being the worst possible life and 10 being the best possible life (Clifton 2017). In this report, Denmark was position on top level, second rank, for happiness. As these real evaluations, we will extract the concept of wellbeing in Denmark as a example of happiness country.

Linnet (2011) showed that the style of social interaction known as *hygge* is analyzed as being related to cultural values that idealize the notion of 'inner space' and to other egalitarian norms of everyday life in Scandinavian societies. In addition, Linnet (2011) also described that *hygge* acts as a vehicle for social control, establishes its own hierarchy of attitudes as the egalitarian features. These concept reveals *hygge* acts as the important role of social activity and reveals the safe habitat; the experience of comfort and joy, especially in one's home and family; a caring orientation, for example, toward children; a civilized mode of behavior that other people find easy to get along with, one that soothes them and builds their trust (Linnet 2011). In addition, *hygge* is known as the manifesto in Denmark and consist of the concept of happiness. Dawson (2016) defined the metrics to present the wellbeing as follows, 1) Atmosphere, 2) Presence, 3) Pleasure, 4) Equality, 5) Gratitude, 6) Harmony, 7) Comfort, 8) Truce, 9) Togetherness, 10) Shelter. Bille (2015) focused on the Atmosphere and explored the use of light to stage atmospheres in a residential area of Copenhagen, Denmark. This research investigates how light is about more than individual perception and plays a crucial role in orchestrating a sense of community, solitude and 'secureness' at home. Such staging of atmospheres, it is argued, importantly relies on cultural premises and notions of intimacy, informality and relaxation, encompassed in the Danish term *hygge* (Bille 2015).

3.2. Our Approach: Environment-related QOL

We presented a new concept of Environment-related QOL (e-QOL) (Nakashima and Hirano 2018). This concept is based on dual perspectives of "a rich human life" and "the maintenance of the natural environment". In addition, the concept of e-QOL is based on global sustainability supporting today's civilization and human life. Human life is always vulnerable and exposed to nature. It is therefore closely tied to environmental problems and natural disaster. E-QOL is the two different concepts collaboration. QOL expresses one's health and life satisfaction meaning "the quality of human existence and life". In addition, we added the new approach from environment including living and natural environment.

One of e-QOL Constituent Concepts is "nature" which is a resource for humans and an object of cultivation and can become a threat to the continuance of human life. On the other hand "nature" can be a psychological support, such as the ocean which is a source of healing for humans and may be the target of tourism or recreation.

On the contrary, e-QOL has two different viewpoints: (I) e-QOL for the natural environment including the ecosystem. (II): e-QOL for humans confronting the environment. These viewpoints has the means considering nature amidst its connections to humanity, both in physical and psychological terms.

We expand the concept of e-QOL based on the area from the individual area to the world. The following four steps are defined. (Step 1): the individual level. Satisfaction from and consciousness of the value of the local natural environment in which one lives. (Step 2): the local community (area) level. Insider's and Outsiders' satisfaction from and consciousness of the value of maintaining the natural environment in a region. (Step 3): the country level. Sharing among a wider area of satisfaction from and consciousness of the value of the natural environment. (Step 4): the global level. Sharing several models of satisfaction at the global level.

4. Concrete approach to establish e-QOL

4.1 Proposed Model and System

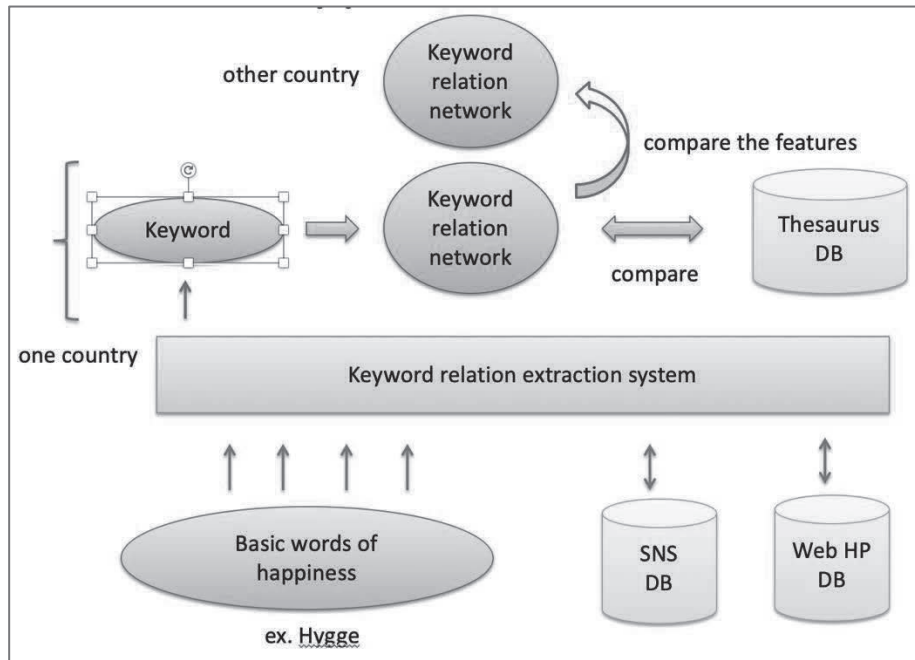


Figure 1. Proposed Keyword Data Selection System

We conducted experiments to gather e-QOL information using Twitter API, and analyzed the feeling indicated by certain keywords. The results of these experiments revealed the word “atmosphere” is associated with the words “like,” “good,” “feeling,” “photograph,” “photo,” “hall,” “everybody,” “myself,” “happy,” and “nice.” Our data, the Japanese feeling-based e-QOLs, are compared to the description of Hygge.

Atmosphere: like, good, feeling, photograph, photo, hall, everybody, myself, happy, nice
Presence: myself, good, feeling, me, human, Japan, society, god, world, value
Pleasure: futon, me, earth, cotton, gratitude, mother, peace, sadness, lyrics, problem
Equality: human, men-and-women, woman, everybody, freedom, country, man, Japan, society, discrimination
Gratitude: anniversary, early, everybody, campaign, festival, futon, hold, character, max, win
Harmony: human, tomorrow, schedule, delicious, limit, marvelous, sweet, Kyoto, max, win
Comfort: car, Chinese character, space, comfortable, crown, room, life, train, vehicle, video
Truce: once, agreement, war, South Korea, consideration, Korea, army, me, self-defense force, necessity
Togetherness: hall, maximum, tour, precedent, performance, Yokohama, emotion, live, great, stage
Shelter: flight, America, school, army, sky, human, Futenma, place, children, government

Figure2. Frequently appearing tweets with Hygge’s keywords in Japan

4.2 Comparison of Key Concept between Denmark and Japan

We assume the Hygge reveals the features in Denmark and Tweets in Japanese reveals the features in Japan and compare features represented by keywords in the both countries: Denmark and Japan shown in Figure 2. The following comparison reveals features in different countries for each keyword.

1) “Atmosphere”

Hygge: “Atmosphere” is expressed by the “Turn down the lights”. The atmosphere in night with surrounding “Light” is important for wellbeing in Denmark.

SNS-Japanese: The keyword “Atmosphere” represent following words: like, good, feeling, photograph, photo, hall, everybody, myself, happy, nice. The results means that the atmosphere is more related to the environment surrounding people and relation between people.

2) “Presence”

Hygge: “Presence” is expressed by the “Be here now” or “Turn off the phones”, meaning that short term self-conscious words have the important role of wellbeing.

SNS-Japanese: The keyword “Presence” represent following words: myself, good, feeling, me, human, Japan, society, god, world, value. The results means that “Presence” is important for self-conscious keywords especially in short time.

3) “Pleasure”

Hygge: “Pleasure” is expressed by the “Coffee”, “Chocolate”, “Cookies”, “Cakes” and “Candy” meaning that “Pleasure” is represented by keywords related to meal.

SNS-Japanese: The keyword “Pleasure” represent following words: futon, me, earth, cotton, gratitude, mother, peace, sadness, lyrics, problem. “Futon”, cushioned mattresses to sleep in Japan, appears in “Pleasure” and “Gratitude” meaning that sleeping and rest is the big element in Japan. In addition, “Pleasure” seems to cover a long term wellbeing.

4) “Equality”

Hygge: “Equality” is expressed by the “‘We’ over ‘me’”. Sharing tasks and the time are important role to establish wellbeing. The concept of “share” is meaningful for the definition of “Equality”

SNS-Japanese: The keyword “Equality” represent following words: human, men-and-women, woman, everybody, freedom, country, man, Japan, society, discrimination. “Equality” is mainly described in objects and in social life in Japan.

5) “Gratitude”

Hygge: “Gratitude” is expressed by the “Take it in”. This might be as good as it gets.

SNS-Japanese: The keyword “Gratitude” represent following words: anniversary, early, everybody, campaign, festival, futon, hold, character, max, win. The elements of “Gratitude” come from the event or festival. We suppose that people in Japan have no close gratitude such as for family or community.

6) “Harmony”

Hygge: “Harmony” is expressed by the “It’s not a competition” and “We already like you” meaning that there is no need to brag about your achievements.

SNS-Japanese: The keyword “Harmony” represent following words: human, tomorrow, schedule, delicious, limit, marvelous, sweet, Kyoto, max, win. “Harmony” is very restricted scene such as feeling of taste in Japan. In this sample, the different taste sweet generates the taste of harmony. This concept of “Harmony” is rear human relation

in Japanese society.

7) “Comfort”

Hygge: “Comfort” is expressed by the “Get comfy” and “Take a break”. These words represent about relaxation.

SNS-Japanese: The keyword “Comfort” represent following words: car, Chinese character, space, comfortable, crown, room, life, train, vehicle, video. Both description for “Comfort” are likely same concept.

8) “Truce”

Hygge: “Truce” is expressed by the “No drama” and “Let’s discuss politics another day”.

SNS-Japanese: The keyword “Truce” represent following words: once, agreement, war, South Korea, consideration, Korea, army, me, self-defense force, necessity. Co-occurring words of “Truce” and “Shelter” are related to the war in Japanese. These words are rare to use in normal communication. This concept of “Truce” have huge difference for two countries meaning that “Truce” are not described in normal and real life.

9) “Togetherness”

Hygge: “Togetherness” is expressed by the “Build relationships and narratives” and “Do you remember the time we ..?”.

SNS-Japanese: The keyword “Togetherness” represent following words: hall, maximum, tour, precedent, performance, Yokohama, emotion, live, great, stage. “Togetherness” is commented in the field of music live. In Japan, people do not think about the advantage of togetherness such as the chance to join other person.

10) “Shelter”

Hygge: “Shelter” is expressed by “This is your tribe” and “This is a place of peace and security”

SNS-Japanese: The keyword “Shelter” represent following words: flight, America, school, army, sky, human, Futenma, place, children, government. In Japan, these words are rare to use in normal communication and social shelter or truce is merely commented in communication. People have no such comfortable official space in Japan with one exception of “Temple” in previous days.

5. Conclusion

In this paper, we discussed the concept of Hygge based on the proposed a new concept of e-QOL to find the key concept of wellbeing in different countries. In addition, we conducted experiments to get the keywords of Hygge base on the Twitter data meaning that we could compare the “Word of Mouth” information and the description of Hygge. As the results of experiments, we could capture the nature and nation oriented metrics of wellbeing. We will re-organize our approach and expand the concept of relation between “nature” and “environment”. Current Japanese lift is tent to apart from the nature, and social relation is not deeply described in Japanese society. We should consider the relation between social life and sustainable nature. In the future, we will examine the experiments using artificial intelligent based on diverse keyword set in multiple social network system.

References

- Bille, Mikkel (2015), Lighting up cosy atmospheres in Denmark, *Emotion, Space and Society*, 15, 56-63.
- Cassiers, Isabelle, (2007), Beyond GDP, Measuring progress, true wealth, and the well-being of nations : Conference Proceedings, *Beyond GDP, International Conference*. <http://hdl.handle.net/2078.1/111103>.
- Clifton, John (2017), The Happiest and Unhappiest Countries in the World. <https://news.gallup.com/opinion/gallup/206468/happiest-unhappiest-countries-world.aspx>.

- Crutzen, P. J. and Stoermer, E. F. (2000), The Anthropocene, *The International Geosphere-Biosphere Programme (IGBP) News Letter*, no.41.
- Dawson, Ashley (2016), *Extinction: A Radical History*, Or Books, p.19. ISBN 978-1944869014.
- Goossens, Yanne et al. (2007), Alternative progress indicators to Gross Domestic Product (GDP) as a means towards sustainable development, IP/A/ENVI/ST/2007-10. Study provided for the Committee on Environment, Public Health and Food Safety of the European Parliament.<http://www.beyond-gdp.eu/download/bgdp-bp-goossens.pdf>.
- Linnert, Jeppe Trolle (2011), Money Can't Buy Me Hygge Danish Middle-Class Consumption, Egalitarianism, and the Sanctity of Inner Space, *Social Analysis*, Volume 55, Issue 2, 21–44.
- Nakashima, Takuo and Hirano, Yoichi (2018), The Relation Between Human Activities and the Natural Environment -An Essay on the Introduction of Environment-Related QOL-, *Proc. of the 3rd Dialogue between Civilizations International Symposium*, pp.6-16.
- Roy, Pierre le (2017), World Happiness Index, *Beyond GDP, International Conference*, pp.301-302.
- CCPI (Climate Change Performance Indexes), (2019), <https://www.climate-change-performance-index.org/>.
- Danish Parliament (2019), <https://www.thedanishparliament.dk/en/news/2019/05/general-election-2019>.
- EPA (2019), <https://eng.mst.dk/>, Denmark EPA in the Ministry of Environment and Food of Denmark.
- WHOQOL, (1997), Measuring Quality of Life, http://www.who.int/mental_health/media/68.pdf.
- European Statistics (Eurostat) (2015), Quality of life indicators – measuring quality of life. http://ec.europa.eu/Eurostat/statistics-explained/index.php/Quality_of_life_indicators_-_measuring_quality_of_life.
- WWF (World Wildlife of Fund) (2013), http://wwf.panda.org/wwf_news/successes/?212900/WWF-praises-Denmark-for-climate-leadership

A Feeling Expansion Model of Environment-related QOL for Leisure Tourism

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1. Introduction

In September 2000, The Millennium Development Goals (MDGs) (United Nations, 2013) were set up as the common goals to develop the international community. It is based on the United Nations Millennium Declaration adopted at the UN Millennium Summit in New York. The MDGs have set eight goals to be achieved by 2015, such as the eradication of extreme poverty and hunger, and have achieved some results by 2015, the deadline for achievement. Its contents are drawn to the 2030 Agenda for Sustainable Development (2030 Agenda) as a successor. In 2015, the United Nations formally adopted the new framework, “Transforming Our World: the 2030 Agenda for Sustainable Development,” which comprises seventeen goals and 169 targets to wipe out poverty, fight inequality, and tackle climate change over the next fifteen years. These goals are called SDGs (Sustainable Development Goals) (United Nations, 2018), and include “good health and wellbeing,” “climate action,” and “life on land,” as elements of QOL (Quality of Life) which indicate human wellbeing. Wellbeing has been the focus of diverse fields in recent years, including philosophy, sociology, health science, and psychology, and describes a broad range of terms, such as “quality of life,” “life satisfaction,” “happiness,” and “wellness.” Nakashima and Hirano (2018) introduced the concept of e-QOL (Environment-related QOL) to identify trends in feelings of wellbeing and we will apply this expanding concept of QOL to the leisure tourism field in this paper.

Leisure tourism is an easy way to realize personal wellbeing and gain satisfaction. In addition, the natural environment offers beautiful scenery and comfortable feelings for tourists, meaning that concept of e-QOL would be enhanced by the leisure tourism. “Word of mouth” information in leisure tourism is often based on SNSs (Social Networking Services), which provide more reliable and important information for travelers than tourist targeted website information, due to the individually-oriented information provided.

Our research comprised a quantitative analysis of Tweets to find the metrics of the relationship between tourism and wellbeing and identify obstacles in terms of feelings of wellbeing. We implemented an information gathering system and extracted a broad range of elements indicating individual people’s feelings. We proposed a two-word expanding model based on the co-occurrence relation. Our model will extract the expansion of diverse concepts, aggregate a few words to a concept, and qualitatively evaluate the expansion of concept. Our research could establish a new method for expanding concepts based on keyword co-occurrence relations. In addition, we will investigate to evaluate how the feeling flow will expand in leisure tourism based on the NLP (Natural Language Processing) analysis using the noun, adjective and verb words.

2. Related Researches

2.1 Definition of QOL by EU-stat

Eurostat is the statistical office of the European Unions, based in Luxembourg (LU) and provide the recent statistics on the quality of life in the EU (Eurostat online publications. (2019)). Eurostat provides a detailed analysis of 8+1 dimensions which can be measured statistically to represent the different complementary aspects of quality of life. This metrics complements the economic and social development indicator: gross domestic product (GDP). Eight of

these dimensions concern the functional capabilities citizens should have available to effectively pursue their self-defined wellbeing, according to their own values and priorities. The last dimension refers to the personal achievement of life satisfaction and wellbeing. These dimensions consist as follows. 1) Material living condition, 2) Productive or other main activity, 3) Health, 4) Education, 5) Leisure and social interactions, 6) Economics security and physical safety, 7) Governance and basic rights, 8) Natural and living environment, 9) Overall experience of life. Each element exists independently, however, we focus on both “leisure and social interactions” and “Nature and living environment” dimensions. In “leisure and social interactions” dimension, the individual wellbeing and mutual relationship are described in leisure and social interactions respectively. Participation in culture or sport activities are adopted in the leisure dimensions as the quality of leisure. On the other hand, the frequency of getting together with family and relatives or friend and participation in formal and informal voluntary activities are adopted in social interaction’s dimension. These definitions are limited in personal living environment even if people tend to trip abroad and communicate to foreign people each other. In “natural and living environment” dimension, which has two, “pollution” and “landscape and the building environment” elements, negative and positive aspects are described in each pollution and landscape and the building environment.

2.2 Relation between QOL and Leisure Tourism

The previous studies relating to the relation between QOL and leisure tourism have explored the areas of Wellbeing as the most affected by tourism experiences. Neal, Sirgy and Uysal (2004) developed a model and a measure to capture the effect of tourism services on travelers’ quality of life (QOL). The paper showed that overall life satisfaction is derived from two sources of satisfaction, namely satisfaction with non-leisure life domains and satisfaction with leisure life. Satisfaction with leisure life is derived from satisfaction with leisure experiences that take place at home and satisfaction with travel/tourism experiences. Dolnicar, Yanamandram and Cliff (2012) distinguished between leisure and vacations and extracted the QOL domains in 14 research papers to find the different QOL domains in each activity. They presented empirical evidence for the contribution of vacations to QOL, determined the extent of this contribution and investigated variation in the extent to which vacations contribute to the QOL of the majority of people. Dolnicar, Yanamandram and Cliff (2012) extracted two research papers including environment domain, such as the paper of Lazim and Osman (2009) and Lever (2000). Both researches conducted the local area and indicated the importance of “environment” indicator in the QOL domain. Lazim and Osman (2009) extracted the new Malaysian Quality of Life Index (MQOLI) with 11 QOL components and offered a new way of expressing the quality of life index using a mathematical modelling based on fuzzy sets theory and the proposed weights based on Maslow’s theory of hierarchical human needs. Lever (2000) described the QOL as the subjective, multidimensional construct, and investigated the QOL among the inhabitants of Mexico City using the open interview. To analysis these results, the paper applied the factorial analyses and tests of internal consistency. Finally, the paper showed the 19 subdomains of QOL and showed the importance of element of “environment”. These researches showed the leisure tourism affect the wellbeing, and the local environment plays the important role of enhance the satisfaction.

2.3 Definition of proposed e-QOL

We defined the space-oriented e-QOL (Nakashima and Hirano, 2018) to enhance from the individual level to the global level in each related wellbeing dimension. Our e-QOL definition is classified into four levels, individual level, local community level, society or country level and global level as follows.

- Individual level : People lives in the tourist attraction

- Satisfaction and consciousness of the value of the local environment
- Local community level : Common understanding between individuals and tourists
 - Insiders and Outsiders satisfaction from consciousness of value of maintaining the natural environment in a Region
- Country level : Inbound tourism
 - Sharing awareness about the satisfaction of the larger areas and the value of the natural environment
- Global level : Mutual cultural exchange policy
 - Sharing various models of satisfaction in different countries

In this research, we focus on the expansion of feeling of tourists in the circumstance between the individual level and the local community level. We assume the SNS information reveals the “Word of Mouth” information in these circumstances meaning the feeling of the visiting tourist.

3. Proposed Feeling Expansion Model

In this section, the restriction of data gathering method will be explained using pre-experiments data, then proposed feeling expansion model and the method will be explained.

3.1 Experimental Setup

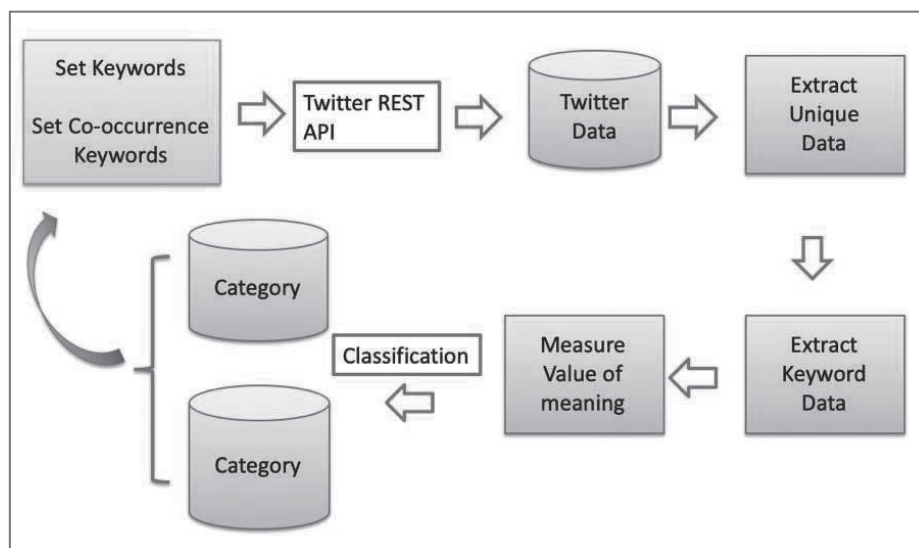


Figure 1. Experiment Environment

Firstly, we will explain the experimental setup and system modules. In these experiments, the system was written in the Python programming language. Figure 1 shows the data flows in these experiments. The Twitter REST API could be gathered the Twitter information written in JSON format and is applied to collect sentences from Twitter dataset in many times with 15 minutes interval requesting multiple-keywords. These gathered Twitter data includes many duplicate sentences due to multiple posts should be eliminated to generate the unique data. The unique Twitter data will be applied using the morphological analysis with dictionary. The nouns, verb and adjective data will be extracted which will show the meaning of Twitter data. Finally, we measured the value of frequency of each word and extracted the category set.

3.2 Pre-experiments

Before establishing the feeling expression model, we conducted multiple pre-experiments to discuss the sampling

policy and check the validity of our system configuration using the real data in Figure 2.

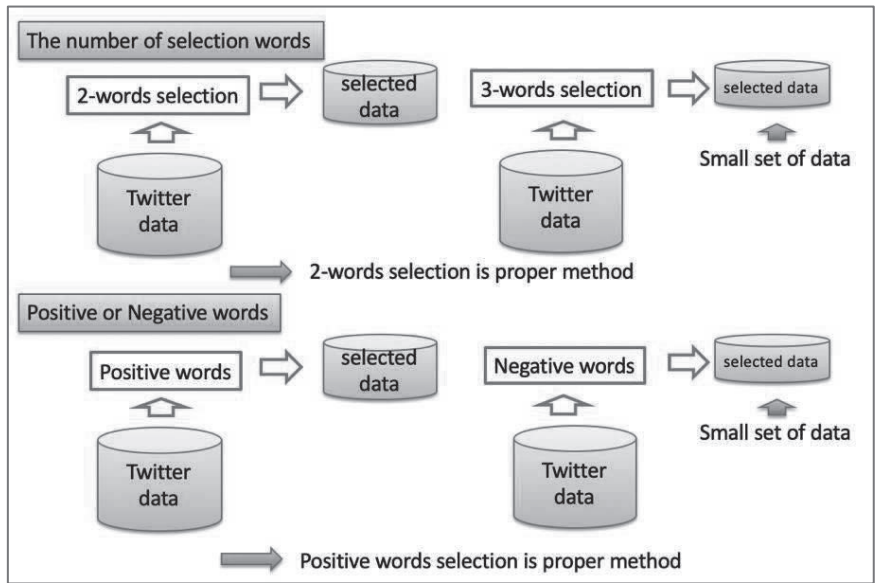


Figure 2. Sampling Policy based on Pre-experiments

Firstly, we conducted to verify the number of different words. We selected two types of methods; two words keyword selection and three words keyword selection. As the results, the volume of three words selection method was very small volume causing the difficulty to aggregate the important information. We decided to use the two words selection method and will extract the new relation. Secondly, adjective words were selected as the expression of personal feelings. In addition, four patterns of experiments whether the adjective or noun word is positive or negative word were executed. As the results of experiments, if the selected word-set includes the negative element, small volume size of tweets are appeared on the direct negative expression. The large volume dataset is required to evaluate the flow of feeling and to find the relation between feeling and object. In this paper, we focus on the flow of feeling in relation to positive keywords.

3.3 Proposed Feeling Expansion Model

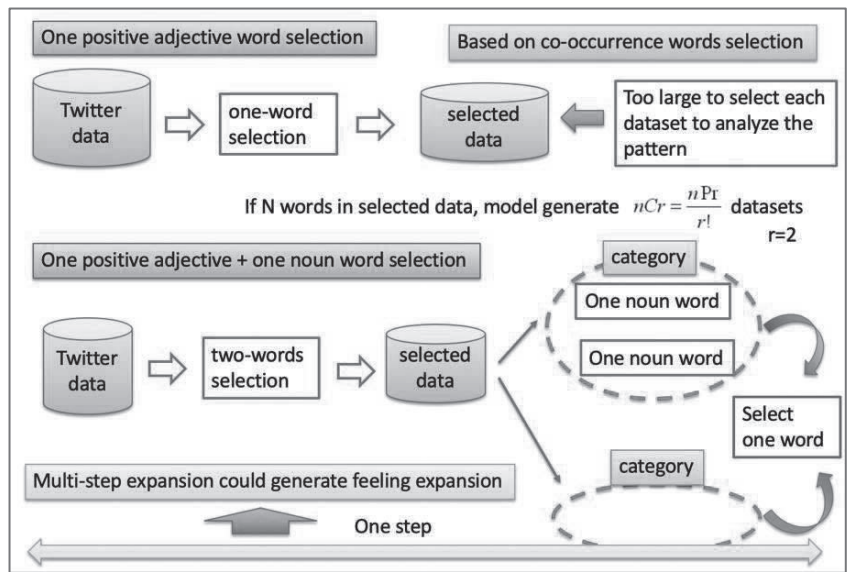


Figure 3. Feeling Expansion Model

We will propose “Stepwise feeling expansion model” to express the flow of feeling in SNS information in Figure 3. This model assumes that tweets data with co-occurred related words has expressed the same feeling, and we analyze the frequency of words representing vocabularies. The one-word oriented tweets data will be selected using feeling explaining adjective or noun from the data source. These tweet dataset, however, would be constructed as a huge volume dataset. If dataset consists of N words, then the number of data set increase the huge number of the N combination of 2. To avoid this combinatorial explosion, we used the filter to extract the co-occurrence relation using two words; one noun word and one feeling expressing words such as adjective or noun word. Then we categorized the extracted data based on the frequently appeared in dataset. We assume this categorized dataset reveals the feeling of the person who tweets and these continuous process means the expansion of feeling. This feeling flow means one-step feeling expansion and could be continued the next-step using the frequently appeared noun or adjective words in the category. Our proposed “stepwise feeling expansion model” are these stepwise feeling expansions based on the co-occurred words.

4. Results of Experiments

From the results of pre-experiments, two words keyword extraction method is effective to expand the feeling concept. In addition, proposed “feeling expansion model” will gather the concrete feeling of person using the noun + positive adjective or noun word. In this section, we show and classify the category in relation to the feeling for “leisure tourism”. In this experiment, “leisure tourism” is set as the main keyword and the six positive adjective words; nice, good, happy, pleasure, great and interesting are set as the additional feeling word. We conducted these experiments for one week from November 10th to 16th in 2018, and gathered the tweets data with 111 thousand lines.

We analyzed the feeling expansion in each case and gathered the frequently appeared words. The word of “good” or “nice” induced the concept of space expression such as “Kyoto” or some famous places for leisure tourism. These words are supposed to be tightly connected to the individual famous place. The word of “happy” induced the concept of time expression such as “Today”. The “happy” feeling more connects to the concept of time than the concept of place. These results show that the positive expression based on “leisure tourism” could generate the relationship between adjective word and the time and space concept. The word of “pleasure” induced the long period time concept such as “autumn leaves” or “weather”. The word of “pleasure” generated the long term satisfaction to the concrete object. The word of “great” induced the words relating meal such as “cuisine” and “delicious”. We suppose the feeling of “great” would be frequently commented at the eating places and would connect to the real objects. The word of “interesting” induced the remarkable object such as guide board. These results show that the positive adjective words could be used in the different situation and connect to the time and space concept.

5. Conclusion and Future Works

In this research, we introduced the e-QOL concept relating to the leisure tourism and proposed the stepwise feeling expansion model to get the information of “Word of Mouth”. We implemented the extraction system and executed our system to get the information and evaluate proposed model. As the experimental results, our model could capture the concept of feeling based on the SNS information and the positive adjective words could represent person’s wellbeing feeling over the time and space concept in especially the field of environment.

We could define two-way resolution approach; the top down analysis and bottom up analysis in Figure 4. The top-down analysis stands on the theoretical analysis based on the theoretical research such as the field with

“civilization” as the keywords. In this analysis, the system extracts the concept of words using natural language processing (NLP) and the technique of machine learning processing used in Artificial Intelligent field. NLP conducts the morphological analysis then executes the syntax analysis using thesaurus. On the other hand, our current approach is defined as the bottom up analysis based on the tweets data shown in Figure 4. We suppose the twitter information consists of honest information and finally compare the results of top-down analysis and of bottom-up analysis. This comparison will generate the ideal and realistic matters. We will finally verify the exact concept of e-QOL and establish the abstraction of feeling of wellbeing. We will continue to conduct the quantitative analysis and join into the qualitative analysis.

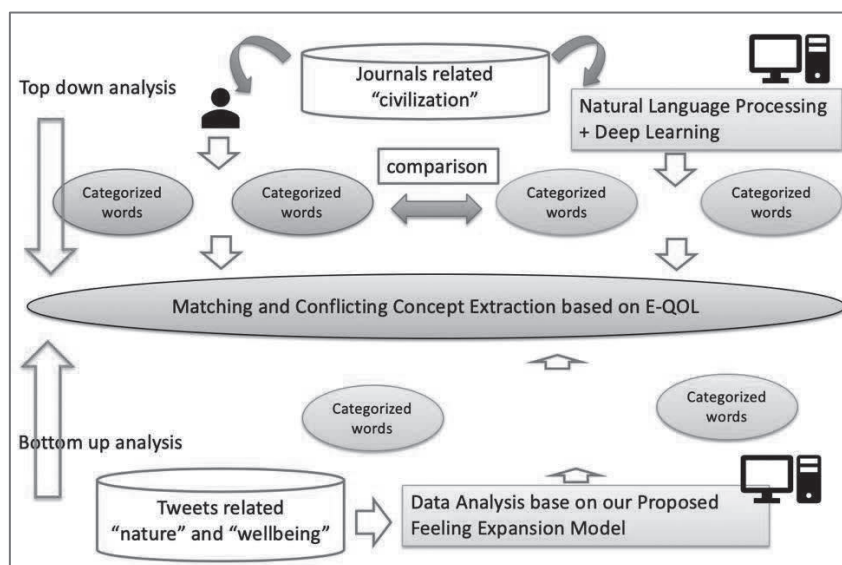


Figure 4. Future Cognitive System Configuration

References

- Dolnicar, S., Yanamandram, V. & Cliff, K. (2012), The contribution of vacations to quality of life. *Annals of Tourism Research*, 39 (1), 59-83.
- Lazim , M. Abdullah and Osman, M. Tap Abu (2009). A New Malaysian Quality of Life Index Based on Fuzzy Sets and Hierarchical Needs, *Social Indicators Research*, 94, 499-508.
- Lever, Joaquina Palomar (2000), The Development of an Instrument to Measure Quality of Life in Mexico City, *Social Indicators Research*, 50, 187-208.
- Nakashima, Takuo and Hirano, Yoichi (2018), The Relation Between Human Activities and the Natural Environment - An Essay on the Introduction of Environment-Related QOL-, *Proc. of the 3rd Dialogue between Civilizations International Symposium*, pp.6-16.
- Neal, Janet D., Sirgy, M., Joseph and Uysal, Muzaffer (2004), Measuring the Effect of Tourism Services on Travelers' Quality of Life: Further Validation, *Social Indicators Research*, Volume 69, Issue 3, pp 243–277.
- Smith, Melanie Kay and Diekmann, Anya. (2017), Tourism and wellbeing, *Annals of tourism research*, vol. 66, pp.1-13.
- Eurostat online publications (2019). https://ec.europa.eu/eurostat/statistics-explained/index.php/quality_of_life_indicators.
- United Nations (2013), <https://www.un.org/millenniumgoals/bkgd.shtml>.
- United Nations (2018), Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. https://unstats.un.org/sdgs/indicators/Global%20indicator%20Framework%20after%20refinement_Eng.pdf.

III. Studies on Human Body and Mind

Breathing in Syugyo: Toward a Better Way of Living

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1. Introduction

•Social change in Western Countries

In some Christian philosophical thinking, “dualism” exists as a prevalent system of thought-base in theological schemas, separating the spirit and the body. People believe that the God made the shape (body) of the human such that it resembles himself, imparted the soul (spirit) into that shape, and that is how humans became “alive” i.e., spiritually cognizant creatures as differentiated from animals. After death, the soul will be judged by God on Judgment Day, implying that the “you” you currently know will still exist by the mechanism of your eternal soul even though you will be physically dead. However, 19th century German philosopher Friedrich Nietzsche (1844–1900), famously asserted that “God is dead.” He also asserted that the spirit is an instrument for the body which takes the lead on ourselves¹⁾. According to him, our body and the spirit are not two different things, that is, every breath and movement we take does not come from our “spirit” but from the whole body, which knows everything including the things we can't figure out via our mind. In other words, the body and the spirit are unseparated.

•Influence of East -Asian Religious Practice

Nowadays, and especially since the 1970's, yoga and Eastern-style meditations have become well-known in Western countries. Differing from dualism, they pursue a higher state of the spirit through bodily practices. One of the methods for doing yoga is putting the body in certain, specific and physically tough positions, so people can actually focus on the pain, thereby getting rid of all distractions. While, in other ways such as Zen Buddhism and mindfulness, concentration is required on/within your mind instead of the body. No matter what kind of method is used, the purpose is to attain a calm and peaceful state through repeated practice.

•Mindfulness

Speaking of mindfulness, it is a kind of meditative practice used to train the body and spirit. While you are practicing it, you need to be aware of what you are doing, for example, what kind of position you are taking. And you also need to observe what you are feeling now, for example, whether you feeling sad or happy, whether you feel cold or warm, and so on. You are required to observe every aspect of your condition and focus your attention as much as possible on/in the present moment. You are not required to control your emotions, or judge anything, and you are recommended to simply feel it and accept it. Kabat-Zinn (1944–), the leading figure who brought the mindfulness to the Western world, founded Mindfulness Based Stress Reduction Clinic in 1979. Through clinical practice, the mindfulness-based therapy proved to be helpful to enhance relaxation and reduce stress and depression.

•Syugyo

In Eastern countries, we can find many traditional methods that are used to promote body and mind toward healthier states, other than yoga or mindfulness meditation. In Japanese, they are called “Syugyo.” This word has two meanings. One is “修行,” which is based on Buddhist thinking, and means to practice or try hard on learning something. Another one is “修業,” which means to learn something in order to become an expert in a professional way. In this essay, since I want to talk about the relations between the body and spirit through “practice,” the meaning of Syugyo is closer to the first definition which focuses on both the body and spirit.

2. Diversity of Syugyo

Generally speaking, Syugyo is seen not only in Japan but broadly within Asia. For example, in India, Yoga trains the body and the spirit, to achieve a peaceful sense of self. The concept is based on Buddhism and Hinduism. Yoga also contains a technique of meditation for observing breathing. All of the training and practice are aimed at connecting and uniting the body and the spirit as one.

In Japan, the typical and classic practice of Syugyo is Zen. Shunryu SUZUKI (1904–1971), one of well-known priests who introduced Zen meditation to Western society, explains the purpose of Zen as follows:

The innocence of the first inquiry—what am I? And the purpose of Zen is to notice yourself, to make you wonder and to answer that wondering with the deepest expression of your own nature.²⁾

Although it sounds abstract, Zen has concrete methods to help learners to find their true self, for instance, one is to observe one's own breath. Practicing the archery can be another method of practicing Zen meditation. In *Zen in the Art of Archery*³⁾, describing the relation between Zen and archery, the author Eugen Herrigel explains that one needs to learn how to take a breath, forgetting the target. Also, one needs to avoid wandering in the mind and concentrate in the given situation, getting rid of what bothers you mentally.

Sado (tea ceremony), another Japanese cultural practice, is also a kind of Syugyo. Sado: it is not only for making a great green tea, offering to the guests, it is also a development of Zen⁴⁾. After repeating the same recipe again and again, the body learns what to do in the next step, so you don't need to think a lot. The learner's body will realize every necessary step to serve tea for the guest thus liberating the mind to be "elsewhere."

In China, there have also been many kinds of Syugyo. For example, QI-gong believes that there is a subtle and invisible energy in the air called "Chi." By breathing in a proper manner, it is said that the energy goes into the body. And practicing certain postures and movements, the energy becomes well circulated in the body. And it also brings good health and reduces tension.

Another method, Tai-chi is based on the Chinese thinking of Yin Yang. It is believed that combination of Yin and Yang can make people healthier and stronger. In a well-known manual of Tai-Chi, it is written as follows:

To practice Taijiquan, you must clearly understand the natural principle of breathing, and you must not hold your breath.⁵⁾

Tai-chi is the whole body, and the whole body is Tai-chi.⁶⁾

Overviewing Eastern traditions of Syugyo, we notice that breathing is one of the commonly emphasized aspects of meditative bodily practices.

3. Body and Mind

In the 20th century, psychoanalyst Wilhelm Reich (1897–1957) developed the concept of body armor. Body armor is a pattern of muscle tensions that prevents patients from feeling negative emotions. If the patient couldn't deal with the stress or the depression or any kind of negative emotions in the right way, the psychological repression forms a pattern of muscle tensions as body armor, which defends the patient's mind from the "attack" of negative emotions

derived from the given situation. Although the body armor physically sustains the ego defense mechanism, ultimately it is not good for mental health. Because it usually suspends the body in a tough state, the breathing is also sustained at a shallow level. Based on this clinical observation, he developed a therapy to heal the patient through deeper breathing. He found that deep breathing was helpful to alleviate neurosis as well as to enhance mental stability.

Reich considered breathing as a tool to heal patients and help them back to a healthy and positive state. However, as he emphasized the importance of releasing the repressed emotions and memories, his goal in psychotherapy was to bring the patients back to the positive, energetic, and happy state. He focused on getting rid of the psychological/somatic repressions and achieving the “positive” state.

In contrast, Syugyo is not simply about being “happy” or “positive,” but it is more about the peaceful state of mind which one already has. Practicing and training one’s breathing serves to achieve this goal. While one can maintain well-trained breathing, one keeps the peaceful state of mind, in which one can deal with both positive and negative emotions in a proper manner without repressing them.

For example, in Buddhism, they think that knowing how to breathe is one of the most fundamental things, like a gateway, to the Buddhist universe. There are two different methods of breathing to practice Zen meditation. One is the intentional/voluntary method. The learner is required to focus on the breathing process itself, by counting the times of respirations. The other one is an unintentional/involuntary method. The learner is required to observe the breath, that is, observing how long it is and how strong it is. It is not required to change the process of breathing, but just letting it happen⁷⁾ in an observant state.

The point is that breathing does not only take the mind into a peaceful state, but the whole body and mind realizes the peaceful state through calm, but rhythmical movement. Without anger or any negative emotions, neither excited nor any positive emotions, but just in a stillness and peaceful state. In Zen term, this state is called “Ding.”⁸⁾

At the initial stage of training, one can achieve the peaceful state only during the practice itself. However, the more you have practiced, the more peaceful a state one can realize outside practice. One gets to know how to manage the mental states through the body—by breathing, and it is important because it means that one is getting closer to the Buddha⁹⁾. Not only in traditional Buddhist meditation, but also in sado, archery, and other types of Syugyo that we have referred to here, breathing has been regarded as a crucial factor for training and practicing.

So, we have found that in both Western and Eastern cultures there are methods that utilize the breath as a significant tool to achieve a “better” state of living. But the difference between West and East is that Reich took the breath as a method/therapy to help people face and release the repressed psychological problems and become happy again. In Eastern thinking, Syugyo, the emphasis is how to achieve the peaceful—not happy nor sad—state of mind, a state of mind acquired by adjusting the bodily process, especially that of breathing.

4. Medical Evidence

Regarding the relationship between the body and breathing, modern medicine has also promoted research in the field of neurophysiology. Peripheral nervous systems are composed of two different systems. One is the somatic nervous system that corresponds to the sensory inputs from sense organs as well as to voluntary movements. The other one is the autonomic nervous system that mainly corresponds to internal organs. It unconsciously regulates our bodily functions such as digestion, heart rate, urinations, and so on. The important point is that breathing is an exceptional action that is influenced by both systems. It means that we can breathe consciously as well as unconsciously¹⁰⁾. On the one hand, we can control our breathing in an intentional way, but on the other hand, we can let the breathing

happen without awareness. Through the autonomic nervous system, breathing is closely connected to other psychosomatic functions such as heart-beat, interception, and emotion. So, when you have headache or you find your hands shaking or your breathing is different from the usual pace, it is possible that you are under stress or depressed without noticing it¹¹⁾. These kind of somatic changes derive from the autonomic nervous system that functions to connect our mind and body. Our body is much smarter than we think. Even though you do not consciously control your body, it keeps working 24 hours a day in an unconscious manner.

The problem is, if we can't figure out why the body is acting strange, it has a negative influence on both physical health and mental health because we have no idea about how to control it. Training our breathing can be a good solution for this. We can consciously control our breath through somatic nervous system, but this can affect our whole mind and body through autonomic nervous system. Emotions are the most changeable part of the mind, being particularly susceptible to being affected by regulatory breathing practices. This is the empirical support for Syugyo that emphasizes the importance of breathing to promote the healthy conditions of mind and body.

5. Conclusion

First, the purpose for Syugyo is to achieve a peaceful state of mind, especially through practicing and training breathing. Second, we can find breathing techniques in both Western and Eastern cultures. In the West, Reich emphasized a way to release muscle tensions and repressed emotions through deeper breathing. In the East, Syugho emphasized keeping the mind in a peaceful state so that one can be detached from negative emotions and prevent from repressing them. Third, we barely can find a study about breathing technique before the 19th century in the West. However, in Western cultures, we can find a profound description of breathing in the Holy Bible, which states:

And the Lord God formed the man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul.¹²⁾

The body without the spirit is dead.¹³⁾

According to this, in the West, the breath is regarded as Spirit. And the Spirit is the source of life that maintains life in the human body—“the body without the spirit is dead.” This conception of breathing seems rather abstract. Breathing is used not only to make the body alive, but also symbolizes the spiritual essence that connects humans with God. In contrast, in the tradition of Syugho, breathing was regarded as something more practical. Breathing is a method used to achieve higher mental states (as well as bodily states), to keep our lives better and more valuable. In the Bible, the breath is the Spirit or the abstract source of life, but in Syugyo, breathing is a concrete way of living that realizes the ideal state of mind and body.

In our current globalized society, we are observing a curious social change. There are many people who are practicing mindfulness or other types of meditation in both Western and Eastern countries. As we saw already, breathing is a core technique in these methods. Breath and breathing could be an important key to consider the wellness of human beings beyond cultural differences or religious traditions.

References

MINDFULNESS IN PLAIN ENGLISH by Bhante Gunaratana, Wisdom Publications (2002)

身體與想像的辯證：以尼采《悲劇的誕生》為例 龔卓軍 (http://www.itpark.com.tw/people/essays_data/162/1550)

What is Mindfulness? (<https://www.mindful.org/what-is-mindfulness/>)

History of Mindfulness: From East to West and From Religion to Science. (<https://positivepsychologyprogram.com/history-of-mindfulness/>)

『日々是好日』森下 典子著 新潮文庫 (2008)

Zen Mind, Beginner's Mind by Shunryu SUZUKI, Shambhala (2011)

Zen in the Art of Archery by Eugen Herrigel, Vintage (1999)

The Book of Tea by Kakuzo Okakura, Dover Publications (1964)

The Body, Self-Cultivation, and Ki-Energy by YUASA YASUO, Shigenori and Monte S. Hull translated, State University of New York Press (1993)

Tai Chi Boxing: 太极拳 (English Edition) by ZHI SHI, Kindle, 2018

《觀呼吸》佛使比丘 泰文講述 鄭振煌中譯 大千出版 (2014)

MIDFULNESS AND CHRISTIAN SPIRITUALITY by Tim Stead, SPCK (2016)

《在家練氣功》陳國璋 商周出版 (2013)

『情動と呼吸』帶間 良一、本間 生夫編集 朝倉書店(2016)

Cambridge Dictionary (<https://dictionary.cambridge.org/dictionary/english/spirit>)

禪悅 阿姜布拉姆著 賴隆彥譯 橡實文化(2007)

Notes

- 1) 身體與想像的辯證：以尼采《悲劇的誕生》為例 龔卓軍。
(http://www.itpark.com.tw/people/essays_data/162/1550)
- 2) *Zen Mind, Beginner's Mind* by Shunryu Suzuki, Shambhala (2011) p.177.
- 3) *Zen in the Art of Archery* by Eugen Herrigel, Vintage (1999).
- 4) *The Book of Tea* by Kakuzo Okakura, Dover Publications (1964).
- 5) *Tai Chi Boxing: 太极拳 (English Edition)* by ZHI SHI, Kindle(2018), p.763.
- 6) *Tai Chi Boxing: 太极拳 (English Edition)* by ZHI SHI, Kindle(2018), p.779.
- 7) 《觀呼吸》佛使比丘 泰文講述 鄭振煌中譯 大千出版 (2014).
- 8) Have 5 level, level 1 is "Ding." Level 5 is get out of Sansara (rebirth/cyclicality of all life, matter, existence).
- 9) Since Buddha lives in the Sukhavati (eastern paradise), a peaceful place, without any mind wandering or carnal desires.
- 10) *MIDFULNESS AND CHRISTIAN SPIRITUALITY* by Tim Stead, SPCK (2016), p.7.
- 11) 『情動と呼吸』帶間 良一、本間 生夫編集 朝倉書店(2016), p72.
- 12) HOLY BIBLE KING JAMES VERSION, Collins (1991), Genesis 2:7.
- 13) HOLY BIBLE KING JAMES VERSION, Collins (1991), Games 2:26.

IV. Dialogue between Civilizations and Cultures

About Old Photographs Related to Siebold in the Brandenstein-Zeppelin Archives

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1. Introduction

For two years from 2004 to 2005, we received a fellowship grant on the theme of “research and study of old photographic collections in Japan and overseas” as part of the scientific research funds in a specific domain of study for “Craftsmanship in Edo”, and visited museums and private homes in Japan and abroad, and conducted research and study of the state of craftsmanship in Edo captured in photographs. Among these are a lot of photographs that remain with the Brandenstein-Zeppelin family who are descendants of Philipp Franz von Siebold and who currently live in Castle Brandenstein standing on a small hill in the village of Elm, a suburb of Schülchtern, Hesse, Germany. The photographs had been left under the care of Philipp’s children, his eldest son Alexander, second son Heinrich, eldest daughter Helene, and second daughter Mathilde.

Here, we examine how material, including old photographs related to Siebold, came to be collected by the Brandenstein-Zeppelin family, while referring to research by Mr. Masahide Miyasaka. According to his research, following the death of his widow Helene von Siebold in 1877, a part of Philipp’s belongings was first inherited by Alexander, and the other by his eldest daughter Helene, second daughter Mathilde, and second son Heinrich. Among these, the materials handed down in the second inheritance, are said to have been those collected by the Brandenstein-Zeppelin family. In particular, materials that constitute the core among those currently at the Brandenstein-Zeppelin family house, are those inherited by the eldest daughter Baroness Helena von Ulm Erbach, and as Erbach and his wife did not have children, all the materials later were inherited by the second daughter Mathilde’s eldest son Graf. Alexander von Brandenstein-Zeppelin. At that time, as Alexander’s eldest daughter Baroness Erhardt (Erika Freifrau von Erhardt-Siebold) claimed the right to inheritance, a part of the belongings were transferred, and after this the materials related to Alexander (such as letters and diaries) were purchased by Japan, and those related to Philipp were purchased by the Japan-Institut in Berlin (Japanese Society) through Friedrich Maximilian Trautz. In this way, other belongings and documents related to the Siebold family are managed together at the Brandenstein Castle till today¹⁾.

Apart from the scientific research grants reports, results of research done so far using the old photographs left to the Brandenstein -Zeppelin family have also been revealed through oral presentations at the Nihon Dokugaku Shigakukai²⁾. Here, based on the presentations so far, we would like to examine the situation of children when the Siebold photographs and monuments were photographed and the relationship of the people (mainly Japanese) in contact with them, combining not only the old photographs, but also related documents.

2. Old Photographs Related to Siebold Monuments

Photograph (1) is the “Siebold Monument” of Vienna and was built for the first time in 1881 (Meiji 14) in Europe as the monument of Siebold. The sequence of events related to this are that when the Vienna World Exposition (hereafter the Vienna Exposition) was held in 1873 (Meiji 6), gardeners and botanists of Vienna proposed the establishment of a Siebold monument, and on the occasion of the exposition, the monument was built with a Siebold Relief set in stone that had been obtained from Japan. According to Yoshikazu Ishiyama, this relief is considered to be the same as the one on the tomb of Siebold in the former South Cemetery in Munich, and it is the work of Rudolf Schwanthaler,

Professor at the Munich Academy of Fine Arts. On the stone is carved a bamboo drawn by the Nanga (a southern school of Chinese painting) painter Tsubaki Chinzan in the late Edo period. Currently, this monument that is beside the glass houses within the Schönbrunn Palace and Gardens, was previously located beside the Building of the Imperial and Royal Horticultural Society along the Vienna Parkring Street. However, as even the shadow of the tumult after the First World War disappeared, in 1926 (1st year of the Showa era) the Japanese Consulate General donated funds and repaired the monument, and rebuilt it again at its current location. In Hans Körner's book, a featured illustration is recorded in the "Vienna Illustrated Special Edition Newspaper" 1881 April 22³⁾, although the existence of the photograph at the time of creation was unclear. In this survey, we were able to find a photograph of the monument when it was first built.



(1) "Siebold Monument" of Vienna



(2) "Siebold Monument" in front of the Nagasaki Prefectural Library

Photograph (2) is of the "Siebold Monument" in front of the Nagasaki Prefectural Library in Nagasaki. Regarding this monument, after the decision to construct a monument in Vienna, the Horticultural Society here also introduced the establishment of the monument to the city of Würzburg, the hometown of Siebold, and this monument is related to the decision to construct a monument in the same city as well. For the construction of the Würzburg Siebold monument, fund procuring also started in Japan, and in August 1875, in addition to Shigenobu Okuma, Munenori Terajima and Tsunetami Sano became founders and a Japan Branch was created with former Fukuoka Domain Lord Nagahiro Kuroda as president⁴⁾. In this way based on the funds collected from all over the world, the monument created by Christoph Roth, Professor of Munich Academy of Fine Arts, was built in 1882 (Meiji 15) in Würzburg on the 25th anniversary of the founding of the Franken Horticultural Society⁵⁾. A surplus amount of 865 yen was collected in the process of funds being collected for the Siebold monument, and 600 yen were donated to Germany and this monument of Nagasaki was built in 1879 (Meiji 12) with the surplus balance⁶⁾. The epitaph is written by the craftsmanship historian Tadanaka Omori⁷⁾. At the time of construction, there was also a circular stone monument with the name of the donors carved on it and also the "Kaempfer and Thunberg Monument" built by Siebold in Dejima, but his monument came back to Dejima at the time of the post-war reconstruction and restoration of Dejima. Further, if one sees the photograph⁸⁾ at the time of the Siebold's Visit Centennial Commemoration Festival in 1924 (Taisho 13) which is recorded in Shuzo Kure's *Dr. Siebold: His Life and Work*, one can see that there is an iron fence around it and the "Kaempfer and Thunberg Monument" is to the extreme left, and the position is different from that

in this photograph. From this, it can be said that there is high possibility that this photograph is also of the time of the foundation of this monument. This photograph has also been recorded by Körner mentioned earlier, and one can understand that Körner used this photograph of the Brandenstien-Zeppelin Archives when writing.

Further, although it is unclear who had the photographs of these two monuments, it seems likely that the eldest son Alexander was in possession of them.

3. Meishiban Photographs, Carte-de-visite Photographs Related to Alexander and Heinrich

Here, I would like to explain about the *meishiban* photographs, that is, carte-de-visite photographs. It was started by Andre Adolphe—Eugene Disderi in 1854. It is a method of attaching multiple lenses to a single camera, taking more than one negative, and separating them by printing. At that time, visitors in Europe and the United States sent photographs of sceneries of the travel destination, or family and photographic portraits of themselves in the form of a card to others instead of souvenirs, and were popularly called carte-de-visite in French. In Japan, due to its size, it was called the *meishiban* photographs⁹⁾. There are about 200 such *meishiban* photographs in the Brandenstien-Zeppelin house, but here we introduce some focusing on photographic portraits and examine their relationship with the Siebold brothers.

Photograph (3) is a *meishiban* photograph of Alexander, who was working at the Seiin (Central Council) at that time as a foreigner hired by the Japanese government. At that time, he was one of the members dispatched by the Japanese government for the Vienna World Exposition and this photo was taken in Vienna on August 16, 1874 (Meiji 7), with him wearing the civil officer's court dress of Japan. Photograph (4) is one in which Alexander and Heinrich are pictured together, and is the one that was taken in Vienna in the same year of 1874. The brothers were staying together in Vienna as members dispatched by the Japanese government, and both were working for the Exposition with Alexander as a foreign drawing clerk and Heinrich as a translator and editor¹⁰⁾.

In what circumstances did the Meiji government come to participate in the Vienna Exposition in which the Siebold brothers were involved together? On February 5, Meiji 4 (March 25, 1871) in a meeting in the Ministry of Foreign Affairs, Heinrich Ritter von Calice, the Austria-Hungary Imperial Envoy to Japan, asked Nobuyoshi Sawa, the Minister of Foreign Affairs for the exhibition to be held at the exposition in Vienna to commemorate 25 years of the reign of Emperor Franz Josef I in 1873. The Japanese government decided to participate in the Exposition at the end of the year, and the next year, on May 3, Meiji 5, Tsunetami Sano, Senior Secretary of Ministry of Engineering, was made the Acting Director of the Exposition and on May 22, the Secretary¹¹⁾. Further, on September 18, Sano wrote a letter to the Central Council, the Cabinet at that time, stating that he would like to hire Heinrich who was working as temporary interpreter trainee at the Legation for the Austrian-Hungarian Empire in Japan, as the Japan side officer for the Vienna Exposition¹²⁾. As a result, as he received a letter to that effect from the Legation, one can see that he immediately took the required procedures for employment. In this way Heinrich was dispatched to the Vienna Exposition as one of the foreigners hired by the Japanese government.

In 1870 (Meiji 3), Alexander resigned from the British Legation to Japan for whom he had been working as an interpreter till then, and signed a contract with the Ministry of Popular Affairs in July, becoming a foreigner hired by the Japanese government. Further, in August of that year, he traveled to London as secretary of the Senior Secretary of Ministry of Finance, Kagenori Ueno, and in June 1871 he went to Frankfurt for the printing and transport monitoring of bank notes¹³⁾. On October 26, immediately after he returned to Japan, the Exposition Secretariat requested the Central Council that they wished to avail of the services of Alexander at the Exposition Secretariat.

This historical document is the “Inquiry about let Siebold work in the exhibition secretariat for a while”¹⁴⁾.

When one sees this one can understand that Alexander received orders from Ambassador Tomomi Iwakura during the tour of Europe and America, and established contact with persons associated with the Austria Exposition, and worked on collecting information. In this way, one month after Heinrich’s employment, Alexander also became involved in the Vienna World Exposition. While the personnel dispatched to the Exposition were determined, collection of goods to be exhibited at the Exposition was also being conducted steadily. In the “*Oukoku Hakurankai Sandō Kiyō*” (edt .Yoshio Tanaka and Narinobu Hirayama, 1897) we have, “(omitted) based on the suggestions of the German employee of the Japanese government, ‘Baron Alexander von Siebold’, the Golden Dolphins from Nagoya Castle, a model of the Great Buddha of Kamakura, a model of the Pagoda of the Yanaka-Tennoji Temple in Tokyo, a big drum, a large lantern, a Japanese garden, the architecture of a Shinto shrine and shops were chosen as the exhibits”¹⁵⁾, and one can see that Alexander’s suggestions were adopted.

Photograph (5) is the *meishiban* photograph of Tsunetami Sano (1822-1902) who led a 72-person delegation to the Exposition as the Deputy President of the Exposition Secretariat. It was taken at the same Vienna Exposition photograph pavilion in 1874. Tsunetami Sano was from the Saga Domain, and after engaging in Dutch studies and chemistry at Genkyo Hirose in Kyoto at the end of the Edo period, and engaging in Dutch studies at the Koan Ogata’s Tekijyuku Academy in Osaka, he studied physics, chemistry, and metallurgy from Genboku Ito and Seikai Totsuka in Edo. In 1856 (Ansei 3), he participated in the Nagasaki Naval Apprenticeship started by the shogunate government and then went on to establish the Saga Navy. At the Paris World Exposition in 1867 (Keio 3), he participated with the Saga clansmen, and after the expo, he traveled to Netherlands and the UK to inspect the navy and the industries and then returned home. After returning home, he guided the reform of the clan’s military system, but in 1870 he served in the Meiji government and was mainly involved in the founding of the navy¹⁶⁾.



(3) Alexander



(4) Alexander and Heinrich



(5) Tsunetami Sano

When Sano became a board member of the Exposition Secretariat, one of the Central Council’s purposes of participation in the Exposition was to study the actual circumstances of the European engineering industry and also to be trained in the academic study of each specialized domain. Further, it was decided that a few people from among those traveling would be selected and transfer and study of technology would be conducted, and after the end of the Exposition, along with the accompanying government-employed foreigner Gottfried Wagener, he traveled to various

parts of Europe and observed their conditions of learning and also met teachers when they were teaching and asked to be taught¹⁷). After this, Sano was appointed as Senate member, Minister of Finance, the Privy Council counseling officer, and Minister of Agriculture and Commerce (Meiji-Taisho). On the other hand, in the Satsuma Rebellion in the 77th year, he founded the Hakuaisha (later, the Japanese Red Cross Society) with the cooperation of Alexander, and established the Ryuchi Kai (later, the Japanese Art Association), and contributed to the development of arts and crafts. Also, although it is unclear who was in possession of these three *meishiban* photographs taken at the time of the Vienna Exposition, but it can be considered that it was in the possession of one of the brothers.

In the Brandenstien-Zeppelin Archives there also exists a *meishiban* photograph of members of the Tomomi Iwakura Mission. Photograph (6) is a *meishiban* photograph of Yoshinari Hatakeyama (1843-76), and was taken in Paris on June 17, 1873. On the reverse side of the photograph is the assumed name (Kozo Sugiura) at the time of study abroad (K.Sougiwoura Japan June 17 1873 Sugiura Kouzo). Hatakeyama was from the Kagoshima Domain, and after studying English at Kagoshima Kaiseijo, he went to Britain as an international student of the Satsuma Domain in 1865 (Keio 1), went to the United States in 1867 together with Arinori Mori, studied at Rutgers University and graduated, and on the way back home, was ordered to accompany the Tomomi Iwakura Mission as Third Secretary¹⁸).

In order to negotiate amendments to the original treaty, the Tomomi Iwakura Mission delegation visited the United States, and after this, in order to conduct an examination of the circumstances of each country, the delegation on the tour of Europe reached Vienna on June 3, 1873. On June 6, Ambassador Iwakura, and all the Vice-Ambassadors including Hirobumi Ito and Naoyoshi Yamaguchi visited the Park of Prater that was the venue for the exposition. Hatakeyama who accompanied the delegation from Paris reached Vienna through Brussels, The Hague, Berlin, Petersburg, Copenhagen, Stockholm, Rome and Naples¹⁹). This photograph is thought to have been handed over to either of the Siebold brothers at that time.



(6) Yoshinari Hatakeyama



(7) Teijiro Kurimoto

Hatakeyama, who returned home with the Iwakura delegation, served in the Ministry of Education in 1873 and then assumed office as the first principal of Tokyo Kaisei School, and in 1875 he joined the Tokyo Museum of Books and museums where he served concurrently as Director of both Tokyo Library and Tokyo Museum. In 1876 he left for the United States for exhibition related office work for the Philadelphia Exposition and died on board the ship on his way back home.

Photograph (7) is the *meishiban* photograph of Teijiro Kurimoto (1839-81). Kurimoto was the adopted child of Joun Kurimoto who had worked at the Magistrate of Foreign Affairs and the Commissioner of Finance of the shogunate government. He studied French at the Yokohama Gogakujo in 1865, and then served as President of the shogunate Kaiseijo (school of foreign studies set up by the shogunate during the Edo period) and as Hohei Gashira nami (equivalent to a major or a battalion commander). In 1867 he went to France as an international student of the shogunate government and returned the following year, but in 1870 he went to France once again and subsequently in 1873 he served in the Ministry of Foreign Affairs as second secretary to the Ambassador²⁰). A *meishiban* photograph similar to this photograph of Kurimoto was also taken at Berlin and in the possession of Takayoshi Kido, Vice-ambassador of the Tomomi Iwakura Mission, and according to Yoshiko Higuchi who has written a description of this photograph, it is considered that Kurimoto accompanied the Mission from France to Russia²¹). The photograph was taken in Copenhagen, and on the reverse side of the photograph we have “To Heinrich July 16, 1873” (Henry Siebold Vienna 16 July 1873 T. Kurimoto). It is considered that Kurimoto presented it to Heinrich at the time of the Vienna Exposition. Kurimoto subsequently served as a nominated officer, but in January next year he was relieved at his own request and went to France for the third time and died there in 1881. In addition, currently these two photographs can be confirmed to be the photographs of persons related to the Tomomi Iwakura Mission, but no photograph has been found of Ambassador Iwakura and Vice-ambassador Ito among others.

4. *Meishiban* Photographs related to Helene (Baroness Erbach)

Here, we look at the *meishiban* photograph that is considered to have been in the possession of Siebold’s eldest daughter Helene (Baroness Erbach) (Photograph 8). The person in Photograph (9) is Hosei Ito (1832-98). Hosei enrolled in Ito Genboku’s Shosendo cram school in 1849 (Kaei 2), and engaged in Dutch studies and studied medicine, and later went on to marry Genboku’s daughter and became his adopted child. In 1861 (Bunmyu era), he travelled to Nagasaki and after studying under Pompe van Meerdervoort at the Nagasaki Yojosho and Igakusho, in the following year, he went for study abroad to the Netherlands together with Tsuna Hayashi and studied medicine at the University of Utrecht. After returning to Japan in 1868, he became a university doctor, Senior Tenyaku physician and Imperial Court physician, and went back to Europe from 1870-74 and where he studied in Germany. From 1887 to 1889 he visited Europe for the third time²²). This photograph was taken in Vienna and on the reverse side of the photo is, “December 10, 1888, To Baron Ulm, Hosei Ito) (Herr Baron von Ulm Wien 10 Dezemb, 1888 Hosei Ito). It is considered that when he went to Europe for the third time, he visited the Erbach Castle (Photograph 10) near Ulm where Helene and her husband Baron Erbach lived and handed the photograph to the Baron. Ito knew that his adoptive father Genboku has studied medicine from Siebold at the Narutaki-juku in Nagasaki, and one can say that he intended to visit Siebold’s daughter.

The person in Photograph (11) is Harukazu Fujiyama (1862-1917). As Fujiyama has been discussed in detail in research by Naomi Uemura²³) and Knaup, Hans Joachim²⁴), we shall examine the photograph with reference to these. Fujiyama who was born in 1862 (Bunmyu 2) in a Saga Domain family and in 1878 (Meiji 11) he enrolled in Komaba Agricultural School, studied in Germany from 1880 (Meiji 13) to 1883 as one of the scholarship students of Ko Nabejima of the former Saga Domain, and studied at the University of Berlin and the University of Bonn²⁵). Details after this are not known, but he got acquainted with Helene at this time, and stayed in Erbach Castle where the couple lived. At this time Helene too seemed to have been in possession of the historical documents left by her father Philipp, Fujiyama browsed through the historical materials in this castle. Further, the results were announced in 1889 (Meiji

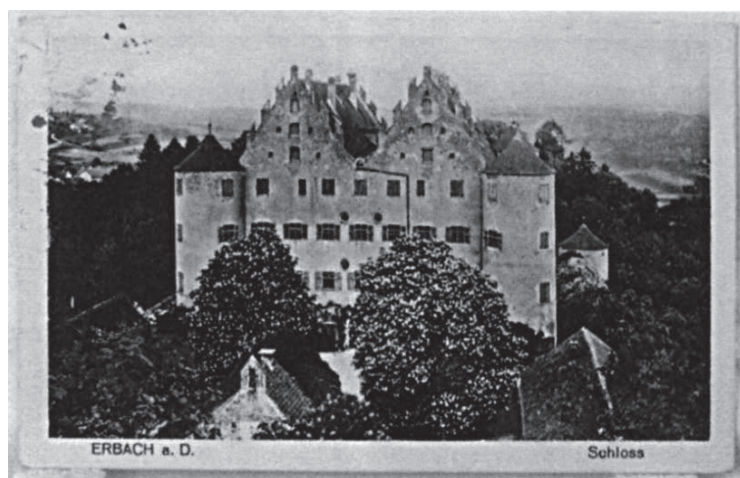
22) in the German language in the German language magazine “*Von West nach Ost/From the West to the East*” as “Frantz von Siebold”. In Japan, Shuzo Kure’s “Biography of Siebold” published in 1894 (Meiji 27) in “*Chugai Iji Shinpo/Chugai Medical News*” is famous as the first paper written in the Japanese language²⁶⁾, but Fujiyama had published a paper on Siebold in the German language prior to this. After he returned to Japan, Fujiyama taught German at the Tokyo School of Foreign Languages, the Preparatory School of the University of Tokyo, and the Tokyo College for Forestry from 1884 (Meiji 17) to 1887 and worked as a German-language instructor in the Army War College from 1887 to 1904. This photograph in which he is wearing the court dress of a civil officer was taken at the Riyou Maruki Photography Gallery in Tokyo²⁷⁾, and on the reverse side of the photograph we have “In Cherished Memory to His Excellency Baron Ulm Erbach and Baroness Ulm Erbach, June 21, 1897” (Frau Baronin und Herr Baron von Ulm Erbach zu Freundlich Erinnerung Harukazu Fujiyama 21 Juli 1897). From 1896 (Meiji 29) to 1897, Fujiyama went again to Germany to study and one can consider that this photograph was presented to the Erbachs at that time.



(8) Siebold's eldest daughter Helene (Baroness Erbach)



(9) Hosel Ito



(10) Erbach Castle



(11) Harukazu Fujiyama

Further, there is one more *meishiban* photograph of Fujiyama taken in Berlin that does not mentioned who it is addressed to and that has only “As a Cherished Memory February 28, 1896” (zu Freundlich Erinnerung aus Harukazu

Fujiyama Berlin den 28 Feb. 96) written. This can also be considered to have been presented to the Erbachs by Fujiyama, and from this one can consider that Fujiyama visited the Erbachs twice. After he finished his studies abroad, Fujiyama became a commissioned lecturer at Waseda University in 1902 and a professor at Waseda University in 1910, and the first German Language Department Head, and from 1909 to 1916 he worked as commissioned lecturer at the naval Paymaster's School. Uemura says the following about Harukazu Fujiyama as the Meiji-Taisho period German language scholar. First, while serving as a German language instructor at the Army War College, he accompanied German officers including Major Meckel on staff tours as an interpreter and supported their activities. Second, he translated German military science books and compiled German language dictionaries for soldiers and contributed to the development of this field of study. Third, he became the first German Language Department Head at Waseda University and built the foundation for the future development of the department. To this, the author would like to add that Fujiyama was the first in Japan to write a paper on Siebold in the German language and would like to point out that contact with Helene constituted the background for this.

Further, in 1923 (Taisho 12) when the Siebold's Visit Centennial Commemoration project was being planned in Nagasaki, Helene donated the sword and the full dress from the articles left behind by her father, but the new fact that the survey this time reveals is that in 1904 (Meiji 37) also 300 Deutsche marks were donated to Japanese Red Cross Society at the time of the Russo-Japanese War. This can be seen as an event that reveals aspects of Helene as a Japanophile.

5. Conclusion

As mentioned before, the old photographs in possession of the Brandenstein-Zeppelin family, who are the descendants of the Siebold, throw light on various aspects. The first is that, from the old photograph of the Siebold monument in Vienna and Japan, one can understand the conditions at the time the monument was constructed. Like the Vienna monument, from the old photograph one can understand the original appearance of the monument that has currently been relocated to another place. The same is true of the monument in Japan too, and it is possible to know about the conditions at the time of the foundation that are different from the present. Next, from the photographs of Alexander and Heinrich of a certain period one can come to know where they were and what activities they were involved in at that time. In the "*Okoku Hakurankai Sandō Kiyō*", it is recorded that Alexander was involved in the selection of the exhibits to be displayed at the Exposition, but from the old photograph introduced this time it not only becomes clear that the Siebold brothers travelled to Vienna and participated in the Vienna Exposition, but also that there was contact between them and the members of the Tomomi Iwakura Mission delegation including Hatakeyama and Kurimoto. Lastly, the old photograph in possession of the eldest daughter Helene (Baroness Erbach) reveals that the Japanese visited the Erbachs' residence too. In particular, with respect to Harukazu Fujiyama, it can be seen that the visit to the Erbach Castle led to the writing of the first paper on Siebold in Japan. This fact too is something that cannot be known only from the document and one can say that it was clarified from the old photograph.

In conclusion, I would like to discuss about future challenges. The Brandenstein-Zeppelin house has 200 old photographs, but most of them are of foreign politicians and bureaucrats. It can be considered that they are people who were associated with Alexander and Heinrich, but even their names are not certain. In the future, I would like to examine the *meishiban* photographs of not only the Japanese but also foreigners and combine these with document materials to clarify the relationship of the Siebold brothers with these people.

Notes

- 1) Masahide Miyasaka “Siebold Documents in an Old Castle-The Establishment and Characteristics of the von Brandenstein-Zeppelin Family Collection”, in Joseph Kreiner edited “Tokugawa Japan in the Twilight Years- The Japan As Seen by the Siebolds”, Japan Broadcast Publishing Co., Ltd (NHK), 1998, pp. 131-135.
- 2) Results of the research and study were compiled as the “ ‘REPORT ON THE STUDY OF OLD PHOTOGRAPHS COLLECTION IN JAPAN AND FOREIGN COUNTRIES’(March 2006, Page 1190) in the 2004-2005 Grants-in-Aid for Scientific Research, Research in a Special Domain, Project Number 16018218”
Oral presentations were as follows.
 - ”Vienna World Exposition and Alexander von Siebold “(Nihon Dokugakushi Gakkai, November 2008)
 - ”About Old Photographs Related to Siebold in the Brandenstein Archives” (Nihon Dokugakushi Gakkai July 2010)
- 3) Yosikazu Ishiyama “The Siebold Monument in Vienna” Document Research in Science and Medicine No. 317, Noma Research Archives for Science and Medicine 2001, pp. 12-14.
- 4) “Biography of Siebold and his Sons” ,author Hans Körner, translated by Seiichi Takeuchi (Sozo shea1974), p. 155. Besides this, even in Kure Shuzo’s “Dr. Siebold: His Life and Work”, (Reprint Meicho Kanko Kai 1979) there is a record of the “Dr. Siebold’s Monument in Vienna” photograph (pp. 890), and it seems to be of a time a little after the foundation of the monument.
- 5) Susumu Yokoyama, Masataka Koda, “Introduction to Documents the note of mendicant marks Dr. Siebold Memorial Tower “ (Ito Keisuke Document Research Group Edited “Ito Keisuke Diaries 10th Collection Kinkao Nikki (Meiji 8 March 1-2) Higashiyama Zoo and Botanical Gardens Nagoya City 2004).
- 6) Kutuzawazawa, Nobukata “About the Monuments and Statues of Siebold in Japan and Abroad”, Tokai Shigaku, Vol. 41, The Historical Study of Tokai University 2007, pp. 2-3.
- 7) Susumu Yokoyama, Masataka Koda, “Introduction to Documents the note of mendicant marks Dr. Siebold Memorial Tower “ p. 187.
Section of Omori Tadanaka, Dictionary of Japanese Biography (Newly Compiled Dictionary of Japanese Biography), Volume 1, Heibonsha 1979, p. 611.
Kure Shuzo “Dr. Siebold: His Life and Work” (Reprint Meicho Kanko Kai (1979), p. 895.
- 8) Section of Omori Tadanaka, Dictionary of Japanese Biography (Newly Compiled Dictionary of Japanese Biography) Volume 1, Heibonsha 1979, p. 611.
- 9) Kure Shuzo “Dr. Siebold: His Life and Work” (Reprint Meicho Kanko Kai (1979), p. 895.
- 10) Naomi Izakura English by Torin Boyd Editorial Supervision of JCII Camera Museum, “Sepia Portraits Bakumatsu Meiji Meishiban Photograph Collection”, Asahi Sonorama 2000, p. 222.
- 11) “The Third International Exposition Attending Employees, List of Duties for Foreign Nationals, Yoshio Tanaka, Narinobu Hirayama (eds.)“Okoku Hakurankai Sandō Kiyō, “Appendix Moriyama Nariyosi 1897, p.9.
- 12) “Chapter II The Plan of the Hakurankai Sando” (Yoshio Tanaka, Narinobu Hirayama (eds.) “Okoku Hakurankai Sandō Kiyō”, Appendix Moriyama Naruyo 1897, p.8.
- 13) Paragraph on “Sano Tsunetami” (“Meiji Restoration Biographical Dictionary”, Yoshikawakobun kan 1981), p. 463.
- 14) Kutsuzawa, Nobukata, “Meiji 6 Vienna World Exposition and Japan’s Participation—Focusing on Japan’s Industrial Development Policy in the Early Meiji Era” (Tokai University Foreign Language Education Center, Intercultural Exchange Research Group edited Japan’s Modernization and Intellectuals Young Japan and the World II”, Tokyo University Press 2000), pp. 76-77.
- 15) Paragraph on Hatakeyama Yoshinari (*Nihon Rekishi Gakkai* edited “Meiji Restoration Biographical Dictionary”, Yoshikawakobunkan 2000), p. 784.
- 16) Masataka Hatano Edited “5 Tomomi Iwakura Mission Tour Schedule Record and Route Maps” (Tanaka Akira and Takada Makoto Eds. “Interdisciplinary Study of Beio Kairan Jiki or Record of the Tour of United States and Europe by the Japanese Envoy Extraordinary and Ambassador Plenipotentiary”, Hokkaido University Library Publication Society 1993), pp. 119-133.
- 17) Paragraph on Kuromoto Teijiro “Encyclopedia of the Names of Japanese Who Went Overseas”, Nichigai Associates, 1985, p. 241.
- 18) Paragraph on “Kurimoto Teijiro 123”, (An Exhibition on “Photo Albums of a Marquis Family—Photographic Materials of the Kido Family — From Takayosi to Koichi”, National Museum of Japanese Histories, 2011), p. 68.
- 19) Paragraph on Ito Hosei, *Nihon Rekishi Gakkai* Edited “Meiji Restoration Biographical Dictionary”, (Yoshikawakobunkan 2000), p. 98.
- 20) Uemura Naomi “ Chapter V Scholars of the German Language: Life and Work of Fujiyama Harukazu”, (A Study on German

- Language Experts in the Meiji Era”, Taga Shuppan, 2001).
- 21) Hans Joachim Knaup, “Fujiyama Harukazu’s Paper on Siebold-Seeking New Possibilities of Cultural Communication” (“Keio University Hiyoshi Bulletin German Language and Literature”, No. 26, 1998)
In addition, among the things mentioned in Fujiyama’s Paper on Siebold, we have Minoru Hirota’s “Circumstances of Fujiyama Harukazu’s Paper on Siebold in the German Language —Based on the Discussion of Mr. Hans Joachim Knaup”, (Kyushu University Department of Language and Culture Studies Edited “Studies in Language and Cultures” No.16202).
 - 22) In Morikawa Jun “International Students to Germany in the Meiji Period —A Study of Japanese Students Enrolled in Universities in Germany” (Yushodo Shuppan 1997), registrations of students from 1870 to 1893 when Japanese went to study in universities in Germany are recorded. According to this, Fujiyama studied at the University of Berlin (Department of Philosophy, Agriculture Major) in the 1880 Winter Term and the Summer and Winter Term of 1881, and at the University of Bonn (Department of Philosophy, Economics Major) in the 1882 Summer Term and Winter Term. (pp. 154-155, pp. 180-181).
 - 23) Kure Shuzo “Biography of Siebold” (Chugai Iji Shinpo /Chugai Medical News” 133 1333 1894).
 - 24) Maruyama Riyo (850-1923) was born in Fukui, and went to Tokyo in Meiji 8 (1875) and studied at Futami Choyo, Asakuma. Became independent in Meiji 13 (1880) and opened a photography gallery in the Shimbashi Soma Residence premises in Meiji 21 (1888) and photographed Emperor Meiji and the Empress together with Suzuki Shinichi, in addition to working for the Imperial household and distinguished people. Later, worked as the head of the Tokyo Photography Union. (Naomi Izakura English by Torin Boyd “Sepia Portraits Bakumatsu Meiji Meishiban Photograph Collection”, Asahi Sonorama 2000, p. 185.
 - 25) Uemura Naomi, “Chapter V Scholars of the German Language: Life and Work of Fujiyama Harukazu”, (A Study on German Language Experts in the Meiji Era”, Taga Shuppan, 2001), p. 95.
 - 26) Kutsuzawa, Nobukata “A Study on Seibold’s Visit Centennial Commemoration Festival —Focusing on the Diplomatic Archives of the Ministry of Foreign Affairs of Japan—”, (“Siebold Memorial Museum Narutaki Bulletin” Vol 6 (Special Issue on Siebold’s 200th Birth Anniversary) Siebold Memorial Museum 1996) pp. 132-133.
 - 27) There are several references related to Helene’s activities at the time of the Russo-Japanese War which are in the possession of the Brandenstein-Zeppelin Family Archives.

IV. Civilization and the humanity

An aspect of the historical development of the concept of the “golden ratio”

— concerning the “divine proportion” in the Renaissance period —

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Summery

The golden ratio is perhaps one of the most fecund notions in the history of mathematics. In fact, various aspects with regard to this concept may be found in historical stages of human activity: in the development of mathematics, especially geometry; in human cultural activities such as the fine arts of the Renaissance period; and even in human efforts to explain certain natural phenomena. These varied factors offer many interesting and esoteric topics of research. Numerous books and articles in present times report and discuss diverse aspects of the golden ratio. Most of them are written with the precise and steadfast intention of discussing the discrete factors related to this notion. There is no denying, however, that some research is conducted separately and fragmentarily, without consideration of the full context. From a historical viewpoint, the notion of the golden ratio should be intimately related to human thoughts and activities with respect to the objects that exist in the world. This paper attempts to evince the diverse aspects of the golden ratio as seen in the historical development of the concept to suggest that this notion should be discussed in a wider and deeper context. In particular, this study indicates that the concept was called the “divine proportion” in the Renaissance period and that this term could be derived from Leonardo da Vinci’s *Paragone* of his book *Libro di Pittura* (on Painting), proving that mathematical notions and human activities are closely related to each other.

1. Introduction

Some mathematical concepts are treated with special meanings in human activities due to their nature. One such example is the “golden ratio”. The “golden ratio” is certainly a mathematical concept itself but at the same time, it has appeared in various forms in the history of human activities. This ratio has been studied as a mathematical concept relating geometric properties and the numbers and quantities derived therefrom. In that respect, this ratio has fulfilled the demands of human intellect while being supported by mathematical logic. Though, at the same time, it has been discussed in the context of “harmony” and “beauty” expressed in art and architecture such as paintings and sculptures. It has also been used to understand various regularities found in the natural world beyond human activities. In other words, this ratio has also responded to a certain sense of values connected to human sensitivity. For that reason, various discussions have been developed over this ratio historically and a wide range of outcomes have been introduced. Some of them are highly specialized mathematical or philosophical discussions but we can also find descriptions that stimulate the curiosity of many people with the view that this ratio is a “symbol of mystery”.

What does the “golden ration” mean for humans? The “golden ration” has been called by various names according to the periods and the regions and had a meaning unique to each period and place. The fact that one concept has been employed continuously regardless of the time and the place means that it has been deeply involved in culture and civilization. In other words, this ratio is directly concerned with the sense of value underlying the human spirit and the human activities that arise from it, and humans have felt the sense of beauty, harmony, and mystery at the root of this concept. The “golden ratio” is essentially a mathematical concept. However, it has influenced our creative

activities such as art and at the same time, it has been used to understand nature.

This paper aims to examine the changes in the name of the versatile “golden ratio”. It was in the nineteenth century when people started to call this ratio the “golden ration”. Originally, when the ratio was first introduced in Ancient Greece, it was called the “extreme and mean ratio”. More interestingly, it was called the “divine proportion” in the Renaissance period. It is known that Luca Pacioli wrote a book entitled *Divina Proportione* in 1498, but this name is thought to originate from Leonardo da Vinci. In this paper, the author examines this hypothesis while comparing the work of Luca Pacioli and the description of ‘*Paragone*’ in *Libro di Pittura* by Leonardo da Vinci.

2. Three perspectives to capture the “golden ratio”

Since the “golden ratio” is one of the mathematical concepts, it is natural that various discussions on mathematical properties have developed throughout history. Particularly noteworthy is that this is not only the ratio between one side of a regular pentagon and the diagonal line but it is thought that the value of that ratio led to the discovery of irrational numbers (or the “incommensurability” at the time). On the other hand, it is assumed that this ratio was also used in the field of art. For example, there is a theory that this ratio was used for the proportions of the human body since the time of Ancient Greece. This ratio was said to be used for the harmony of the human body created by the gods. Moreover, the “golden ratio” has had a big influence on understanding nature, that is, the argument that this ratio exists also in the regularity appearing in the form and shapes of nature which are not created by human activities. Therefore, we can argue that the “golden ratio” has been treated as something more than a mathematical concept and understood in conjunction with human consciousness concerning “harmony” and “beauty”. There we can find a kind of harmony, beauty, or mystery that humans have felt for this ratio. Given these points, I can find the significance of examining the history of human activities under the theme of the “golden ratio” from the following three perspectives.

(i) The harmony and mystery in mathematics

- The ratio of a side of a regular pentagon to the diagonal line
- The discovery of irrational numbers
- Its relationship with the Fibonacci sequence

(ii) The harmony and mystery in cultural activities such as art

- The ratio in Polykleitos' sculptures
- The proportion of man and the ratio seen in temples and paintings by Vitruvius

(iii) The harmony and mystery in nature

- The number of spirals made by sunflower seeds
- The growth rate of the spirals of the nautilus

These three perspectives maintain mutual relation. Therefore, they point to the direction for us to rethink this ratio as the symbol of one of the values in the human spirit.

3. The changes in the name of the “golden ratio” over history

The “golden ratio” is one of the concepts which contain the broadest range of applicability in mathematics, and as such, it has involved in various human activities in history. However, there are still problems to be examined about this concept. One of them is the problem of appellation. Considering it from the perspective of harmony and mystery, the “golden” ratio certainly seems to be an appropriate appellation to represent this ratio. That is because this ratio used in various historical scenes is thought to connote “an ideal ratio” or “completeness” and appears to be a ratio of

the highest order and the most “sublime” one.

So, when and by whom was this ratio named the “golden ratio”? It is not so easy to answer this question. Rather, if we follow its historical background, it emerges that this ratio was called at least by three different names - i.e. “*the extreme and mean ratio*”, “*the divine proportion*”, and “*the golden ratio*” (all in the English spelling) according to the times. The historical circumstances of these three names are introduced below.

2.1 Introduction of the “extreme and mean ratio” in Ancient Greece

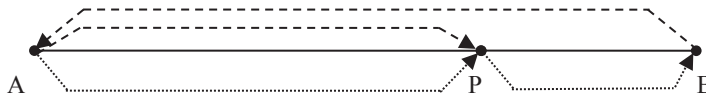
It is assumed that the first person to clearly define the “golden ratio” was probably Euclid (ca. BC 300, Eukleides), a mathematician of Alexandria in Ancient Greece. In *Euclid's Elements*, he compiled, this ratio is called the “extreme and mean ratio” (ο ακρος και μεσος λογος [Greek]) and is defined as follows:

Book VI, Definition 3.

A straight line is said to have been cut in extreme and mean ratio when, as the whole line is to the greater segment, so is the greater to the less.²⁾

In Proposition 30 of Book VI, Euclid also suggests a drawing method (in terms of geometry) using the “extreme and mean ratio”³⁾.

The content can be summarized as follows. Definition 3 refers to the so-called “golden section” - that is, to internally divide a line into the “golden ratio”. Figure 1 shows this definition in a diagram.



【Fig.1】

Here, the point P divides the line AB in the following ratio:

$$AB : AP = AP : PB$$

Conversely, if we take the product of the internal terms and the external terms in this proportional formula, the equation will be as follows:

$$AP^2 = AB \cdot PB$$

This shows the geometrical meaning of this ratio - i.e. the area of the square with AP as a side and the area of the rectangle formed by the two lines AB and PB are equal (Book VI, Prop. 30). That is, when we divide a line into two segments, the area of the rectangle formed by the whole line and the shorter segment is equal to the area of the square formed by the greater segment.

Meanwhile, some of the attributes of the “extreme and mean ratio” are shown in Book XIII of *Euclid's Elements*. Whereas the definition above represents the segmentation of a line, the value of the ratio of the “extreme and mean ratio” is discussed in the first three Propositions of Book XIII (especially in the Prop. 3). This corresponds to the following if we use 【Fig. 1】⁴⁾.

$$AB/AP = (1+\sqrt{5})/2, \quad PB/AP = (\sqrt{5}-1)/2$$

It is also stated in Proposition 8 that the diagonal lines of a regular pentagon divide one another in the “extreme and mean ratio”⁵⁾. Furthermore, in the second half of this volume, especially the property of a regular polyhedron is discussed, and it is mentioned that this ratio appears in a regular polyhedron such as a regular dodecahedron or an

icosahedron. Therefore, we can see that the description in *Euclid's Elements* refers to the basic property of the “extreme and mean ratio”, namely, the “golden ratio”, while developing a geometrical argument based on the segmentation of a line.

2.2 The “sacred” ratio in the Renaissance period

Little is known about how the “extreme and mean ratio” of Ancient Greece was inherited through the Middle Ages and what else it was called. However, it is recorded that this ratio was called the “divine proportion” in the Italian-Renaissance period of the 15th century. We know today that Fra Luca Pacioli (ca.1445-1571), a Franciscan monk and a mathematician from Italy, used the name in his book *Divina proportione*⁶. This book was written as a manuscript to dedicate to Ludovico Maria Sforza (known as il Moro), the then Duke of Milan in 1498. The book mainly discusses numerous polyhedrons derived from a regular polyhedron, but it is accompanied by 56 sheets of drawings of polyhedrons (the last is a sphere) which are thought to be drawn by Leonardo da Vinci at the back. Both Pacioli and Leonardo left Milan around 1500 and went to Florence. Later on, this book was re-edited and published as a print book in Venice in 1509.

In *Divina proportione*, Pacioli deals with regular polyhedrons (or the so-called Platonic solids), the Archimedean semi-regular polyhedrons, and various kinds of polyhedrons derived from them. The notable point here is that the properties related to the “golden ratio” are found in regular polyhedrons. Each face of a regular dodecahedron, which is one of the regular polyhedrons in the first place, is a regular pentagon and the “golden ratio” is directly involved in it. Moreover, we can find a correlation concerning the “golden ratio” between the five kinds of regular polyhedrons. For example, we can create a regular icosahedron by combining three golden rectangles. Also, a regular icosahedron inscribed in an octahedron divides each side of the octahedron in the “golden ratio”. Given these correlations of regular polyhedrons, it is clear that the “golden ratio” is an important factor in the polyhedron theory centered on regular polyhedrons.

Pacioli based his study of regular polyhedrons on the idea developed by Plato (ca. BC 427 - BC 347). Plato applied the four elements of earth, water, air, and fire which constitute the world and the fifth element which constitutes the universe to five kinds of regular polyhedrons respectively as the form of each element. Earth corresponds to a regular hexahedron, water corresponds to a regular icosahedron, air corresponds to a regular octahedron, fire corresponds to a regular tetrahedron, and the supreme universe corresponds to a regular dodecahedron (*Timaeus*)⁷. Pacioli follows this model and in the list of contents, which is an equivalent to a table of contents, at the beginning of this book, he expressly writes “by a Platonist” and states that he is to discuss a regular tetrahedron which has the form of fire in Chapter 26, a regular hexahedron which has the form of earth in Chapter 27, a regular octahedron which has the form of air in Chapter 28, and a regular icosahedron which has the form of water in Chapter 29, and take up a regular dodecahedron as the “principal sphere” in the following chapter 30. After specifying that it is based on Plato's *Timaeus* in Chapter 5 of the main text, he actually explains that the four regular polyhedrons apart from dodecahedron correspond to each element mentioned above and a regular dodecahedron which consists of twelve pentagons corresponds to the universe which is the “fifth element” and is composed in the sacred ratio. Therefore, we can see that Pacioli believed the “golden ratio” has an important significance as a ratio that is related to regular dodecahedrons as well as their constituents, pentagons, and it deserves to be called the “divine proportion” because it corresponds to the supreme universe.

2.3 The naming of the “golden” ratio in the 19th Century

While the “golden ratio” was called the “extreme and mean ratio” in Ancient Greece and the divine proportion in the

Renaissance period, the name “golden ratio” we call today is thought to have been introduced only after the beginning of the 19th century. Johannes Tropfke (1866-1939), a German mathematician, points out in his book *History of Elementary Mathematics (Geschichte der Elementar-Mathematik)* that this name was invented by *Martin Ohm* (1792-1872)⁸⁾, one of the German mathematicians at that time⁹⁾. The same thing is also indicated in *The golden ratio*¹⁰⁾ written by Mario Livio.

We refer to Tropfke's writing in the following. After mentioning the development of the ratio since the Renaissance period, Tropfke provided an explanation on the introduction of the name “golden ratio” (“Goldenen Schnitt” in German) in the 19th century in one of the footnotes¹¹⁾. According to Tropfke, Ohm uses the term “golden section” in his *Pure Elementary Mathematics (Reinen Elementarmathematik)* published in 1835. However, he also points out that this name is not used in Ohm's *Elementary Geometry and Trigonometry (Elementare geometrie und Trigonometrie)* written in 1819. Moreover, Tropfke suggests that the name “golden” originates from its confusion with the proportion problems we had since the Middle Ages¹²⁾ or the “Golden Rule” in the *Bible*¹³⁾.

On the other hand, Mario Livio examined Ohm's writings further, and considered from the description quoted above that the name “golden section” was not introduced by Ohm himself and pointed out that the *Pure Elementary Mathematics* published in 1835 was the second edition and the term “golden section” does not appear in the first edition published in 1826. Mario Livio speculates that the name “golden section” was used among mathematicians and others in different fields in around 1830. Furthermore, he states that especially in the late nineteenth century, the terms such as the “golden ratio” and the “golden number” also began to appear in various fields apart from the “golden section”¹⁴⁾.

4. Pacioli and the “divine proportion”

As described in the previous section, the “golden ratio” gradually arrived at the name in the 19th century after it was called the “extreme and mean ratio” in Ancient Greece and the “divine proportion” in the Renaissance period. In Ancient Greece, it was primarily named from the geometric aspect of the segmentation of a line and it had no connotation of a “supreme” ratio or a “harmonious” ratio. On the other hand, even if the name, the “golden ratio”, in the 19th century was a product of coincidence, it is unlikely that the name was founded on religion or other things. Rather, while people were beginning to identify the mathematical properties related to the “golden ratio”, they were encouraged to consider the existence of this ratio as a mathematical idea. Nevertheless, people regarded it as a kind of mystique that this ratio is found in natural beauty and harmony. Therefore, it was thought that the “golden ratio” was one of the principles that underlie the human spirit.

Now, what was the circumstance in which the “divine proportion” was introduced in the Renaissance period? We can regard Pacioli's *Divina proportione* to be the first book with the title, the “divine proportion”. However, there is still room for consideration as to whether he was the first to introduce this name himself. In the following section, we examine Pacioli's work and suggest a way to approach this question.

First, I examine Pacioli's study on geometry. He is thought to have written only a couple of books throughout his life. Prior to *Divina proportione* in 1498, Pacioli wrote his first book, *Summa (Summa de arithmetica, geometria, proportioni et proportionalita)* in 1494. This is a book on arithmetic, geometry, and the proportion theory, and today it is known especially as a book that involves double-entry bookkeeping. On this book, Jayawardene has said as follows:

“Pacioli’s *Summa*... (1494) was more comprehensive. Unlike the practical arithmetics, it was not addressed to a particular section of the community. An encyclopedic work written in Italian, it contains a general treatise on theoretical and practical arithmetic; the elements of algebra; a table of moneys, weights, and measures used in the various Italian states; a treatise on double-entry bookkeeping; and a summary of Euclid’s geometry. He admitted to having borrowed freely from Euclid, ... and others. Although it lacked originality, the *Summa* was widely circulated and studied by the mathematicians of the sixteenth century.”¹⁵⁾

Therefore, it was very rare for people to write a book specialized in mathematics at that time, and we can assume that *Summa* was a precious book also in terms of its practicality.

Part 2 of *Summa* concerns geometry, in which Pacioli introduces some of the contents of *Euclid's Elements* in a revised form of the original. Section 1, Chapter 4 corresponds to the Book VI of *Euclid's Elements*, but there, Pacioli uses the “extreme and mean ratio” that refers to the “golden ratio” as in Ancient Greece in its Latin form, “*medium et duo extrema*”¹⁶⁾. Also, the term “divina proportione” or any related descriptions do not appear at all in the section of the latter half of the book that concerns a regular pentagon and a regular dodecahedron. The section of the book that concerns geometry is not a faithful reproduction of *Euclid's Elements*, but rather it focuses on the applications of geometry such as areas and volumes¹⁷⁾. We can imagine that Pacioli did not have interest in the extreme and mean ratio beyond its geometrical concept at this point.

On the other hand, the following points should be noted with respect to his *Divina Proportione*. There has been a claim that this book was plagiarized from the book with the same title by Piero della Francesca (ca. 1416-1492). In fact, it is known today that Piero wrote an essay entitled “On the five regular polyhedrons” (*De quinque corporibus regularibus*) around 1482. Giorgio Vasari (1511-1574) publicly accused Pacioli, who was a pupil of Piero, for publishing an unpublished book written by his teacher under his own name.

“A consummate arithmetician, geometrician and perspectivist, the blindness which came upon him in his old age and the termination of his life, prevented him from displaying the results of his labours and the numerous books written by him, which are still preserved in his native Borgo. The man who should have done his utmost to increase Piero’s glory and reputation, who had learned from him everything which he knew, impiously and malignantly sought to annul his teacher’s fame, and usurp the honour due to him, publishing under his own name of Fra Luca dal Borgo all the results of the labours of that good old man, who, besides his knowledge mentioned above, was also an excellent painter.”¹⁸⁾

The existence of Piero's essay has been confirmed today and its manuscript has been reproduced in print¹⁹⁾. This reprint edition carries an annotation that includes the comparison with Pacioli's *Divina proportione*. In Piero's essay, he discusses the properties of the five kinds of regular polyhedrons but does not use the name “divine proportion” for the particular ratio. Rather, we can say that it is exclusively dedicated to geometric explanations concerning a regular polyhedron. Specifically, it deals with a regular pentagon in the proposition from Prop. XXX of Part 1 to Prop XXXVII (the manuscript, sheet 14V - 18R), but there, he uses the term the “proportionem medium et duo extrema” (the “extreme and mean ratio” in Latin) for this ratio as in Ancient Greece. He also uses the same term as above when he discusses the properties of a regular dodecahedron from Prop. XXX to Prop. XXX of Part 2 (the manuscript, sheet 32R - 35V) which deals with polyhedrons.

With regard to Pacioli's *Divina proportione*, while there has been a criticism that it is plagiarized from Piero, it is also true that there has been a positive view that the publication achieved to clarify the situation of mathematical discussions on regular polyhedrons at that time. Away from such questions, if we focus on the name "divine proportion", we will see that at least this name was not created by Piero. Therefore, it seems to be highly possible that the name "divine proportion" was introduced *uniquely* by Pacioli.

5. On the origin of the "divine proportion"

5.1 Leonardo da Vinci's *Paragone*

Incidentally, there is a very interesting fact concerning the phrase "divine proportion". That is that this phrase appears in *Paragone* (the theory of comparative arts) at the beginning of "*On painting*" ("*Trattato della pittura*") which is thought to have been written by Leonardo da Vinci (1452-1519). It is in the section that compares painting, music, and poetry in *Paragone*. Given this fact, we can hypothesize that the name "divine proportion" comes from Leonardo. After mentioning the appearance of the phrase "divine proportion" in '*Paragone*', Mukogawa points out in his thesis published in 2002²⁰) that the "divine proportion" (i.e., *divina proportione*) is referred to in the three sections of the theory. Through the examination of the descriptions of the "divine proportion" and the "harmonic proportion" in the "*Trattato della pittura*" in conjunction with Leonardo's theory on human proportion [Theory of equilibrium of human body], he concludes that the "divine proportion" refers to the "golden ratio". His argument is based on the premise that the "golden ratio" or the "Fibonacci number" was a concept known to Leonardo, but it seems we still need to have further discussions on the question as to whether Leonardo had a grasp such a concept. We proceed to consider the writings of Leonardo next.

"*Trattato della pittura*" is not a manuscript written by Leonardo himself but edited after his death by the hand of Francesco da Melzi (1493-1570) who was a disciple of his. It is now called *Codex Urbinas Latinus* (1270). It is thought that Leonardo conceived an idea for part of a book on painting and completed it during his stay in Milan. Although that book no longer exists, we can surmise that its contents are reflected in *Codex Urbinas* that exists today. While referring to the English translation by M. Kemp²¹), we examine the sections related to the "divine proportion" in Leonardo's *Paragone* below based on the reprint edition of the original text of *Libro di Pittura* by Carlo Vecce²²). In the Vecce edition, the phrase "divine proportion" appears in the section under the subtitle "Reply of King Mathias to a poet" vied with a painter in Section 27 (*Codex Urbinas*, 14V - 15R). It describes a scene where King Mathias admires his portrait when a poet and a painter presented a poem and a portrait on his birthday.

"Do you not know that our soul is composed of harmony, and that harmony cannot be generated other than when the proportions of the form are seen and heard instantaneously? Can you not see that in your science, proportionality is not created in an instant, but each part is born successively after the other, and the succeeding one is not born if the previous one has not died? From this I judge that your invention is markedly inferior to that of the painter, solely because it cannot compose a proportional harmony. It does not satisfy the mind of the listener or viewer in the same way as the proportionality of the very beautiful parts composing the divine beauty of this face before me, and which by contrast are conjoined instantaneously, giving me such delight with their divine proportions. I judge that there is nothing on earth made by man which can rank higher." [Urb. 14V-15R]²³)

Apart from this, we can find the following description in the Vecce edition [section 23] (*Codex Urbinas*, 11V - 12R).

“He [poet] cannot delineate them [the elements of beauty] without excessive wordiness, and not being able to depict them, he cannot compose the proportional harmonies that are produced by divine proportions.” [Urb. 11V-12R]²⁴⁾

Before this quote, there is a description that the beauty of human body copied in a painting by a painter keeps its harmony regardless of the passing of time. Also, we can find the following description in the Vecce edition [Section 32] (*Codex Urbinas*, 18R):

“...such singing cannot result in that grace of proportioned harmony which is contained within harmonic intervals. Alternatively, something made by the poet may be linked to a beautiful face which is shown to you feature by feature, and, being made in this way, cannot ever satisfactorily convince you of its beauty, which alone resides in the divine proportionality of the said features in combination. Only when taken together do the features compose that divine harmony which often captivates the viewer.” [Urb. 18R19R]²⁵⁾

From these descriptions, we can see that *Leonardo* has certainly written the expression, the “divine proportion” (*divina proportione*). However, as far as the descriptions in *Paragone* are concerned, it is not certain whether *Leonardo* was identifying this phrase with the “golden ratio” as a mathematical concept. On the other hand, we can read the following from *Leonardo*’s own description quoted above. It is that beauty is present only in the proportional relationship where the whole is harmonious, and it is the “divine proportion” that constitutes the proportional relationship. Therefore, it is certain that at least the phrase “divine proportion” appears in his *Paragone*, but I have a negative impression as to whether the ratio in *Leonardo*’s description implies the “golden ratio” as a mathematical term.

5.2 On the name “divine proportion” — based on the relationship between Pacioli and Leonardo

What was the circumstance in which *Leonardo* introduced and used the phrase “divine proportion”? Did he first introduce the phrase? Or had it already been used in some forms at that time? We are uncertain about the question. However, if this phrase was a creation of *Leonardo* himself, it seems possible to imagine the root of the sense from his view of nature.

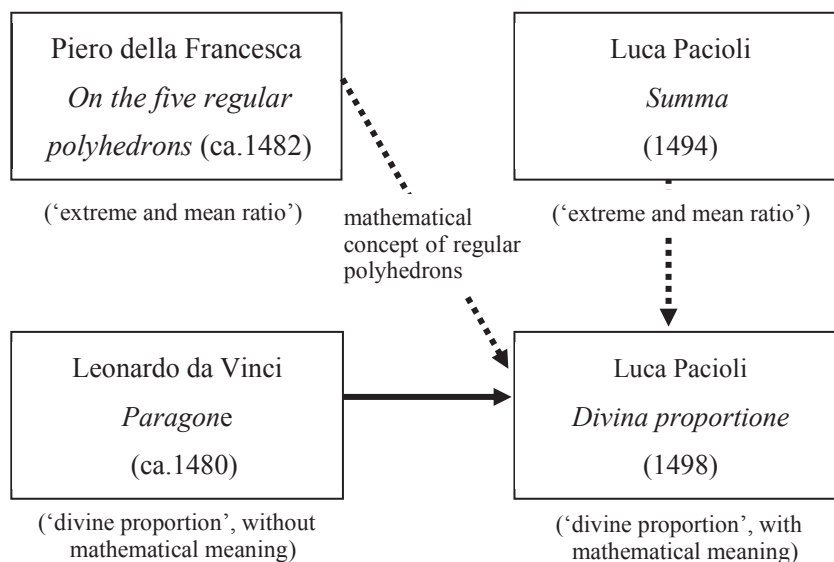
Leonardo observed various ways of nature and gave thoughts on them while depicting them. His subject extended from various phenomena of nature, plants, animals to the human body, but one of the things he paid particular attention to was *water*. In fact, there are a huge amount of notes on water among his manuscripts that exist today. *Leonardo* seems to have believed that water is not only indispensable for human life but also it greatly affects human spirit as a gift of nature. Water is a natural existence that is far greater than human beings, and it seems that *Leonardo* found the remarkable power and beauty of nature in water.

In *Il manoscritto C* which is thought to have been written by him in around 1490, there is a description that water is a nutrient and body fluid of every living body and nothing can keep its original shape without water (Sheet 26V)²⁶⁾. In other words, *Leonardo* seems to have captured the spirituality of water as the source of life. He made many drawings of water which precisely depicted how water flows out, falls from high places, and swirls around. Such descriptions are found everywhere in the other manuscripts he wrote²⁷⁾.

Leonardo considered water seen as one of the four elements since ancient times to be nature's life force. That means that he found some kind of sublimity in nature called water. It must be the sublimity represented by the harmony nature has and that he called sacred. Leonardo repeatedly made drawings of water. It seems that there were beauty and harmony of nature that could only be expressed by precise drawings and it was sacredness that formed the most fundamental part. Likewise, Leonardo seems to have thought the “divine proportion” originates in the harmony of nature.

Leonardo and Pacioli befriended each other in Milan in the late 1490s. Some of Leonardo’s manuscripts show that he learned “*Euclid’s Elements*” and he started to mention it right after he first met Pacioli. From this, we can infer that Leonardo studied geometry through Pacioli²⁸). It seems certain that the “divine proportion” used by Leonardo was irrelevant to mathematics. However, we can find a strong connection between the descriptions found in Leonardo’s *Paragone* and the fact that Pacioli called the ratio “divine proportion” from the sense of sublime harmony.

At the end of this section, I insert a diagram of the genealogy centered on the “divine proportion” with regard to the books each written by Leonardo, Pacioli, and Piero, respectively (Fig 2).



【Fig.2】

6. Conclusion

In this paper, we examined the concept of the “golden ratio”, especially of its names, from the perspective of harmony and mystery. Subsequently, we described the possibility that the name “divine proportion” used in the Renaissance period for this ratio originates in Leonardo da Vinci.

The “golden ratio” is a product of the human spirit and the creation from the perspective set deep inside the human spirit. However, humans never invent “mathematical concepts”. They always exist in some way in the world that surrounds humans. Humans set a “perspective” such as shapes, quantities, geometry, and calculus and simply unveil an aspect of the world they can see through them. Therefore, whether the “golden ratio” is recognized as the geometric properties of a regular pentagon or whether it is found as mystique in nature and human activities, it is merely the result of a human perspective that has captured that part of the world.

When we consider from this viewpoint, it seems that there is more than one aspect to the mystique the “golden ratio” has. One is the geometric harmony of a pentagram drawn inside a regular pentagon. Mathematics reveals its

nature to the human spirit and intellect. This ratio has also been used as a standard and an indicator for the creation of the human spirit such as paintings and the construction of buildings. At the same time, this ratio also appears in grasping the phenomena in the natural world that are beyond the level of human activities. It means that this ratio has given some special influence on the human spirit as harmony, but we can also regard this as the mystique of this ratio. And mathematics functions to establish consistency between this ratio and the human activities in the real world.

It might be that Leonardo referred to the “golden ratio” as the “divine proportion” based on the concept of beauty for nature and humans — i.e. harmony and mystique. And the question was that it may have been the event that reflected the very nature of the Renaissance period. In this paper, we developed the hypothesis that the name “divine proportion” came from Leonardo. In fact, we can say that the exact nature of the Renaissance period led to the ratio being called the “divine proportion” in the relationship between the human spirit and nature.

Dr. J. V. Field who has considerable expertise in the Renaissance art states as follows: “The name Renaissance is really a label for a style not for a period”²⁹). The statement is easy to understand when we consider that the Renaissance is a significant period in promoting harmony, beauty, and even sacred thoughts in terms of positioning humans in nature. The “golden ratio” — then called the “divine proportion” — must have been the most appropriate subject. The reason seems to be that the ratio is not only backed by a logical system called geometry originated from Ancient Greece but also have an aspect that responds to the human sensibility which pursues the perfection and mystique within God. And this dual aspect of the ratio still appeals to us with the same question.

References

Primary sources:

- Leonardo da Vinci, *Libro di Pittura, Edizione in facsimile del Codice Urbinatense lat. 1270 nella Biblioteca Apostolica Vaticana*, a cura di Carlo Pedretti, Trascrizione critica di Carlo Vecce, Firenze, Giunti Gruppo Editoriale 1995.
- Leonardo da Vinci, *I manoscritti dell'Institut de France, Il manoscritto C*, trascrizione diplomatica e critica di Augusto Marinoni; Japanese ed., -- Iwanami. -- (Edizione nazionale dei manoscritti e dei disegni di Leonardo da Vinci).
- Leonardo da Vinci, *Il codice Arundel 263*: nella British Library edizione in facsimile nel ordinamento cronologico dei suoi fascicoli a cura di Carlo Pedretti ; trascrizioni e note critiche a cura di Carlo Vecce ; : set, tavole, testi. -- Giunti, 1998.
- Luca Pacioli, *De Divina Proportione*, Fontes Ambrosiane in Lucem Editi cura et studio Bibliothecae Ambrosianae, 72, Milano, [Silvana Editoriale], 1986.
- Luca Pacioli, *Divina proportione: opera a tutti gli ingegni perpicaci e curiosi necessaria oue ciascum studiofo di philosophia, prospectiua pictura sculptura, architectura, e musica, e altre mathematice, suauissima, s ottile, e admirabile doctrina consequira, e delectarassi, co varie questione de secretissima*, Venezia [Paganino Paganini], 1509, Tokyo, Bunryu reprint, 1973.
- Luca Pacioli, *Divine Proportion*, traduction par G. Duchesne et M. Giraud, Libraire du Compagnonnage, 1998.
- Luca Pacioli, *Summa de arithmetica, geometria, proportioni et proportionalita*, (Reprint, Originally published, Venice, 1494), Kyoto, Daigakudo Books, 1973 .
- Piero della Francesca, *Libellus de quinque corporibus regularibus*, Giunti Gruppo Editoriale, Firenze, 1995.
- Plato, *Tymaeus*, translated by Desmond Lee, Penguin Books, 1977.
- Vasari, Giorgio, *The Lives of the Painters, Sculptors and Architects*, Vol.1, Translated by A. B. Hinds, Everyman's Library, 1927, revised edition, J. M. Dent & Sons Ltd., 1963.
- Tropfke, Johannes, *Geschichte der Elementar-Mathematik*, Berlin und Leipzig, 1923, Band 4.

Secondary sources:

- Field, J. V., *The invention of infinity*, Oxford University Press, 1997.
- Heath, Thomas L., *The Thirteen Books of Euclid's Elements*, vol.2, Dover, 1956.
- Iwata, G., "Ougon-bunkatsu to Yojo", *Sugaku-Seminar*, Nov., 1963, pp.8-11 (in Japanese).
- Jayawardene, S. A., "Luca Pacioli", *Dictionary of Scientific Biography*, vol.10.
- Kemp, Martin, (ed.), *Leonardo on Painting*, Yale Nota Bene, Yale University Press, 2001.
- Livio, Mario, *The Golden Ratio*, Broadway Books, 2002.
- Mukogawa, Soichi, "On the Meaning of Leonardo da Vinci's 'divina proportione' in His 'paragone'", *Journal of art history (Bijutsushi)*, 51(2), 2002, pp.282-296 (in Japanese).
- Smith, David Eugene, *History of Mathematics*, Vol. II, Dover, 1958.
- Hirano, Y., "Remark on the notion of Golden Ratio— concerning 'Divine Proportion' in the Renaissance period —", *Civilization Studies (Bunmei Kenkyu)*, No.30, 2012, pp.1-26 (in Japanese).
- Hirano, Y., Sakamoto, A., Fueki, A., Leonardo da Vinci and Euclid's Elements, *Japanese and Chinese History of Modern Mathematics Education*, No.6, 2007, pp.22-38 (in Japanese).

Notes

- 1) This article is based on the following research:
 - Hirano, Y., "Remark on the notion of Golden Ratio— concerning 'Divine Proportion' in the Renaissance period —", *The Fourth National Conference on History and Pedagogy of Mathematics*, 2011, Shanghai (oral communication).
 - Hirano, Y., "Remark on the notion of Golden Ratio— concerning 'Divine Proportion' in the Renaissance period —", *Civilization Studies (Bunmei Kenkyu)*, No.30, 2012, pp.1-26 (in Japanese).
 - Here, the author revises the contents by developing some details from a viewpoint of the history of philosophical ideas.
- 2) Heath, Thomas L., "*The Thirteen Books of Euclid's Elements*", vol.2, Dover, 1956, p.188.
- 3) Book VI, Prop. 30: "To cut a given finite straight line in extreme and mean ratio". (Heath, "*The Thirteen Books of Euclid's Elements*", vol.2, pp.267-268.)
- 4) Book XIII, Prop. 3: "If a straight line be cut in extreme and mean ratio, the square on the lesser segment added to the half of the greater segment is five times the square on the half of the greater segment." (Heath, "*The Thirteen Books of Euclid's Elements*", vol.3, p.445.)
- 5) Book XIII, Prop. 8: "If in an equilateral and equiangular pentagon straight lines subtend two angles taken in order, and they cut one another in extreme and mean ratio, and their greater segments are equal to the side of the pentagon." (Heath, "*The Thirteen Books of Euclid's Elements*", vol.3, p.453.)
- 6) • The reprinted edition of the version of 1498:
 - Luca Pacioli, *De Divina Proportione*, Fontes Ambrosiane in Lucem Editi cura et studio Bibliothecae Ambrosianae 72, Milano, [Silvana Editoriale], 1986.
 - The reprinted edition of the version of 1509:
 - Luca Pacioli, *Divina proportione: opera a tutti gliingegni perpicaci e curiosi necessaria oue ciascum studiofo di philosophia, prospectiua pictura sculptura, architectura, e musica, e altre, mathematice, suauiissima, s ottile, e admirabile doctrina consequira, e delectarassi, co varie questione de secretissima*, Venezia [Paganino Paganini], 1509, Tokyo, Bunryu reprint, 1973.
 - Translation in French:
 - Luca Pacioli, *Divine Proportion*, traduction par G. Duchesne et M. Giraud, Libraire du Compagnonnage, 1998.
 - 7) *Timaeus*, 53C-56-C, (Plato, *Timaeus*, translated by Desmond Lee, Penguin Books, 1977.).
 - 8) The brother of Georg Ohm (1789-185), German physicist.
 - 9) Iwata, G., "Ougon-bunkatsu to Yojo", *Sugaku-Seminar*, Nov., 1963, pp.8-11 (in Japanese).
 - 10) Mario Livio, *The Golden Ratio*, Broadway Books, 2002, pp.6-7.
 - 11) Johannes Tropicke, *Geschichte der Elementar-Mathematik*, Berlin und Leipzig, 1923, Band 4, p.187 (see the footnote 1410).
 - 12) See David Eugene Smith, *History of Mathematics*, Vol. II, Dover, 1958, pp.477-494.
 - 13) Sermon on the mount (Matthew, 7-12).

- 14) e.g. *Encyclopedia Britanica* (1875), *American Mathematical Monthly* (1895), *Nouveau Larousse Illustré* (1900).
- 15) S. A. Jayawardene, "Luca Pacioli", *Dictionary of Scientific Biography*, vol.10, p.270.
- 16) Luca Pacioli, *Summa de arithmetica, geometria, proportioni et proportionalita*, (Reprint), (Originally published, Venice, 1494), Kyoto, Daigakudo Books, 1973.
The corresponding part is on the left page of sheet no. 5 in the section of geometry in *Summa* and the "extreme and mean ratio" is described in the same way as the definition 3 in Volume VI of Euclid's *Elements*.
- 17) Euclid's 'Elements' was written on the argument system of demonstration but it is thought that Pacioli was more interested in the practical aspect of geometry.
- 18) "Piero della Francesca of the Borgo a S. Sepolcro, Painter", p.331. Giorgio Vasari, *The Lives of the Painters, Sculptors and Architects*, Vol.1, Translated by A. B. Hinds, Everyman's Library, 1927, revised edition, J. M. Dent & Sons Ltd., 1963, pp.331-336.
- 19) Piero della Francesca, *Libellus de quinque corporibus regularibus*, Giunti Gruppo Editoriale, Firenze, 1995.
The subtitle of the comment attached to the reprinted version of Piero's manuscript is as follows: "Corredato della version volgare di Luca Pacioli".
- 20) Mukogawa, Soichi, On the Meaning of Leonardo da Vinci's 'divina proportione' in His 'paragone', *Journal of art history* (Bijutsushi), 51(2), 282-296, 2002 (in Japanese).
- 21) Martin Kemp, *Leonardo on Painting*, Yale University Press, 1989.
- 22) Leonardo da Vinci, *Libro di Pittura, Edizione in facsimile del Codice Urbinatense lat. 1270 nella Biblioteca Apostolica Vaticana*, a cura di Carlo Pedretti, Trascrizione critica di Carlo Vecce, Firenze, Giunti Gruppo Editoriale 1995.
- 23) Leonardo da Vinci, *Libro di Pittura, Edizione in facsimile del Codice Urbinatense lat. 1270, nella Biblioteca Apostolica Vaticana*, a cura di Carlo Pedretti, Trascrizione critica di Carlo Vecce, Giunti, 1995, p.151. English Translation: Kemp, Martin, (ed), *Leonardo on Painting*, Yale Nota Bene, Yale University Press, 2001.
- 24) *Libro di pittura*, p.147 / Kemp p.24.
- 25) *Libro di pittura*, p.155.
- 26) Leonardo da Vinci, *I manoscritti dell'Institut de France, Il manoscritto C*, trascrizione diplomatica e critica di Augusto Marinoni; Japanese ed. -- Iwanami. -- (Edizione nazionale dei manoscritti e dei disegni di Leonardo da Vinci).
- 27) e.g., "Il codice Arundel", 236V.
Leonardo da Vinci, *Il codice Arundel 263*: nella British Library edizione in facsimile nel riordinamento cronologico dei suoi fascicoli a cura di Carlo Pedretti ; trascrizioni e note critiche a cura di Carlo Vecce ; : set, tavole, testi. -- Giunti, 1998.
- 28) See Hirano, Sakamoto, Fueki, 2007, pp.22-38.
- 29) J. V. Field, *The invention of infinity*, Oxford University Press, 1997, p.1.

Relocation and *Décroissance* in Tourism Development

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1. Introduction

In 2016, the number of overseas tourists traveling between countries reached 1.3 billion. That number was about 700 million in 2002, and it has doubled in just 15 years (UNWTO, 2017, p.2). This rapid increase of tourists started in the 1950s has pushed the tourism industry to a national project for each country. For so-called developed countries, the tourism industry is a means to earn foreign currency. For developing countries, it has been hoped that the tourism development accelerates improvement of infrastructures, provides an opportunity to attract investment from around the world and drives economic growth. However, these projects have not been always successful. It is because tourism development at times produces economic disparity and labor exploitation, causes cultural change and has had a great impact on the natural environment. These issues have led to a discussion of tourism sustainability, and many people now fear the future of the tourism industry (Moutinho & Vargas-Sanchez, 2018, pp.218-219).

In this paper, based on these issues, we will apply Relph's argument and consider tourist sites as place colored by culture, society and nature, and study the change in meaning of place by tourism development (Relph, 1976). In addition, with the keyword "locality" created by place, we will seek a viewpoint on the tourism sustainability from the concept of "localism" in Latouche's concept of *décroissance* (Latouche, 2004). Tourism development is closely linked to modern Western values. We would like to reconsider this value by using the concept of place to learn how tourism events out to be in thought of *décroissance*.

2. Tourism development and placelessness

Progress in tourism development means that change will come to the land. The land where people did not live before is developed as a tourist site, and the living space for people in a certain land is changed to a space for tourists who come from the outside. Relph discussed the change of space as the relationship between placeness and placelessness. We live in a certain place. This place is an "existential space" and is a place that is meaningful to us (Relph, 1976, pp.45-48). In other words, place does not simply refer to space, but is given meaning by the memory and history of the people who are involved there. Having such meaning/nature, in other words placeness, we recognize a space as our place. We are born in a place, grow in a place, move to a place and die in a place. Each place plays a vital role in our lives.

Rapoport compared this place with the one of Aborigines, indigenous people in Australia and the one where it continued to be industrialized (Rapoport, 1969, pp.15-17). For Aborigines, their place was colored by legends, ceremonies and festivities, was where spirits live all over and was sacred with various meanings. However, Aboriginal place has lost its sacredness and has become more functional and practical as it has been developed and becomes an industrialized city one after another. In other words, Aborigines have lost placeness. Relph called this placelessness (Relph, 1976, p.25). Their place lost its sacredness and meaning, and instead has become an extremely homogeneous and geographical space.

The important point of what Relph has pointed out is that a tourist site exactly has the characteristics of this placelessness. In any tourist sites, originally, local people are born and raised, and their memories and history are engraved in the land, and the land becomes a place that is meaningful to them. In other words, with the culture being

built and maintained in the land, local people create the "locality" unique to the area colored by nature and the culture (Relph, 1976, p.89). This very "locality" becomes the tourism resource. Tourists seek and visit for the nature and culture unique to the area, and there they feel "locality" based on placeness. However, once it is recognized as a tourist site, the area itself starts to have economic feasibility, which requires to attract tourists and make them revisit. It is also necessary to secure the safety. Becoming a tourist site means that "locality" starts to have economic feasibility. Facilities for food and accommodation are necessary to receive tourists, and new tourism resources are required for increasing tourists. This is how tourism development is born. Therefore, in tourism development, it is important to raise curiosity and secure the safety. In addition, cleanliness and being enjoyable to everyone is also required. Placeness is rapidly lost and placelessness is produced by tourism development. Placeness creates, for local people, convenience and inconvenience to live, sometimes violence and conflict, even ideology and race conflict. On the other hand, tourism development eliminates these political issues as "locality" and creates a safe and homogeneous space. Relph pointed out that this is how tourism deprives placeness (Relph, 1976, p.115).

3. "Relocation" for placeness

In addition to the construction of facilities and creation of tourism resources, tourism development promotes functional urbanization in terms of improvement of infrastructure and construction of residence, etc. in order to establish tourism industry. If tourists are comfortable to stay, local people are also comfortable to live. This urbanization, in pursuit of functionality for the people, produces placelessness. From this point of view, the residents in urban area are interested in rural areas and seek ecotourism and green tourism in order to regain their lost placeness. People see the townscape that has lost its history every day, therefore they are interested in old town and look for the traditional festival. Even though we go sightseeing to find the lost placeness, tourism development to attract tourists is producing placelessness. This is a paradoxical situation. This situation is one of the factors that impedes the tourism sustainability.

John Urry also discusses tourism and place. He argues that tourism is consuming place in the first place (Urry, 1995). When a certain place gets attention and tourists rush there, it gains a status as a tourist site and produces economic effects. However, once tourism is established to a certain extent, tourists look for the next tourist site. Urry points out the problem of mass tourism through a series of discussions that tourists are consuming places (Urry, 1995, p.108), and the concept of consumption of places at least overlaps with Relph's argument of placelessness. In other words, it is the consumption of place that produces placelessness.

However, space where placelessness is produced by tourism development and consumed as a tourist site, is originally a place with placeness. Here, there is room for reproduction of place, in other words there is room for "relocation". In the discussion of "the creation of the sense of place", Relph says that place is created by people's ordinary activities over a long period of time (Relph, 1976, p.84). People are born and raised, form and maintain society and culture. Meaningful place itself is created as an accumulation of days regardless of the amount and quality of curiosity and safety. Tourists stay for no more than a week. If local people can create and maintain the placeness in the land developed for tourism, and tourists could enjoy the "locality" based on the placeness during their stay, we could regard it as "relocation".

4. Post-development in tourism

How can "relocation" be realized in the trend in which many countries undertake tourism development as a national

project? A series of "post-development" activities and the corresponding Latouche's concept of "décroissance" becomes useful (Latouche, 2007). At the beginning of this paper, I mentioned the meaning of the tourism industry in developing countries and developed countries. The whole idea behind the concept of post-development originates in the fact that President Truman of the United States made a distinction between underdeveloped areas and the United States in 1949. Since then, the dichotomy between underdeveloped areas and developed areas has become the norm. This dichotomy cannot simply be replaced by the dichotomy between developing countries and developed countries. The reason is that developing countries and developed countries are connected through capital investment and technical assistance, and a large gap is also created between developing countries.

The development indicated by dichotomy mentioned here is linked to modern Western values, such as economic growth as a typical example, progress, rationality, efficiency, and control of nature. Latouche ironically states that in project development it is important to exploit natural resources and human resources, value them and gain profit from them (Latouche, 2007, p.8). These ideas are collectively referred to as development paradigm. It is a contradiction that we must continue to develop despite the limitation of resources on the earth. A pioneering effort aimed at overcoming development paradigm can be found in Ivan Illich's theory. He criticized the current economic institutions, developed ideas for reproducing endogenous autonomy of human being, and conceived a way of a rich society that was not tied to economics (Illich, 1969, p.19). He also says that endogenous autonomy refers to cultural autonomy and vanuclal society which maintains this autonomy is necessary (Illich, 1973, p.89). We could say that vanuclal as cultural autonomy mentioned here is exactly synonymous with the "locality" indicated by Relph. This is because, on this premise, Illich also found "place" of spirituality built up over a long period of time in the area (Illich, 1981, p.51).

If we address development as one of the problems, we will have to mention the problem of "locality". Latouche also discusses regional development and regional growth in his study. Speaking of a region in general, it has various meanings, from micro to macro, in other words, from local to super national. A region refers to a wide range of areas. Latouche, however, states that whether a region is micro or macro, it refers to "territoire" and "terroir", as well as the material, cultural and human relations' properties that are rooted in each land (Latouche, 2004, p.42). This refers to the establishment of the limits, boundaries, and the hometown. According to Inuzuka, "territoire" is a place where local people approve their identity, and where the preservation of all their property is considered (Inuzuka, 2011, p.30). "Terroir" also includes the meaning of a hometown, as it is used as a term which means a rural area in French. Going back to the argument of placeness, regional development is nothing more than depriving a place to live which has placeness. The development and growth that originally a region aims for are to approve oneself with an increasing sense of safety, to preserve local properties, and to become a place to live. These are all premised on placeness. Interestingly, Latouche uses the phrase "invasive tourism" when he discusses tourism (Latouche, 2004, pp.25-38). It means that tourism development is invading a place to live by constructing facilities, etc., and also invading placeness by raising the curiosity of tourists and creating a safe space for them. "Territoire", "terroir" and local properties are abandoned by the placelessness that appears in its place. To be more precise, we can say tourism is selling locality. However, it sells the image of locality, not locality itself. It is a locality that tourists can look at from a safe place that is created for them. Converting local properties into local images and generating economic effects from them, hardly reduce the problems of the whole region or the whole society. Rather, it requires further conversion. Of course, there is no problem with tourism development or regional development itself. Latouche says that regional development and tourism development under development paradigm should not be confused with the growth of the region's

property, or the region itself (Latouche, 2007, p.34).

5. Conclusion: "relocation" from the perspective of décroissance

Latouche cites décroissance and "localism" as two forms of post-development. For example, Itonaga defines that décroissance avoids unifying modern economic values, and aims to create a local community with pluralistic values regarding re-localization that meet the local culture and climate, and with the participation of various stakeholders (Itonaga, 2011, p.7). In other words, it means going from modern Western values to more pluralistic values. These pluralistic values exactly mean the same as placeness in Relph's argument. Placelessness is to lose such pluralistic values. Latouche also says that "localism" means rooting in the area and concretely practicing autonomy to revive the land in each area (Latouche, 2007, p.35). In other words, in order to break away from placelessness, it is necessary to create and maintain placeness autonomously and to reconsider it as "relocation".

For us who are still in post-development, the new idea of "décroissance" is very effective in changing the paradigm. On the other hand, it is difficult to understand décroissance as a concrete form. It would be equally difficult even if we limit it to regional development. This is because "territoire" and "terroir" are too established based on pluralistic values. It is already daunting just to think about who the value is shared with in the area. However, a concrete path will be found by examining this problem in relation to tourism events. Because tourism events itself promote unification of values, the tourist site shall not sell its own image as a consumption target. By showing "locality" as a specific place, placelessness too will be able to be considered as one of the pluralistic values. This is why the idea of décroissance is important. By positioning placeness in it, we will find the ideal form of the region as a concrete "relocation". We should not forget that tourism started with people with different values interacting with one another in their lives.

References

- Illich, I. (1969). *Liberer l'avenir*. Seuil.
- Illich, I. (1973). *Energie et Equite*. Seuil.
- Illich, I. (1981). *Le travail fantome*. Seuil.
- Inuzuka, J. (2011). Environment and Man, a Double Crisis: The Subject of Reconstruction of the Harmony in Recongniton and Society, *Journal of the School of Life Science Jissen Women's University* [in Japanese].
- Itonaga, K. (2011). Rural Community Improvement and Rural Planning for Society of De-utility and De-growth in Instability Era, *Journal of Rural Planning Association* [in Japanese].
- Latouche, S. (2004). *Survivre au Developpement*. Librairie Artheme Fayard.
- Latouche, S. (2007). *Petit Traite de la Decroissance Sereine*. Librairie Artheme Fayard.
- Moutinho, L. & Vargas-Sanchez, A. (2018). New Performance Measurements, *Strategic Management in Tourism*. CABI.
- Rapoport, A. (1969). *House Form and Culture*. Prentice Hall.
- Relph, E. (1976). *Place and Placelessness*. Sage.
- UNWTO. (2017). *Tourism Highlights 2017 Editon*, World Tourism Organisation.
- Urry, J. (1995). *Consuming Places*. Routledge.

Part II

VI. Abstracts

Keynote Lecture

Relational practice of listening as dialogue

Kyoko Murakami University of Copenhagen

Listening is essential to all effective communication. Without the ability to listen effectively, messages are easily misunderstood. Misunderstanding leads to destructive conflict. A recent opportunity to look at cultures of listening (Motzkau, 2017) allowed me critically to revisit my work on conflict resolution and reconciliation discourses. In the more orthodox social psychological approach to studying memory as a pure recall, the analyst tends to assume the role of listening, especially the researcher's role in the conversation, as given, as if it was a neutral recipient of information given and therefore, deemed less important. Much discourse research on collective remembering and commemoration has focused on how accounts of events and people were remembered by interlocutors during talk in interaction. Such work examines the discursive production of accounts, or the practices of accountability used in relation to what is remembered. Arguably memory of the problematic past is constructed in social interactions and contentious stakes are managed. Thus, 'good' listening practice of the researcher has a bearing on the quality of the data. The analyst gets into the business of addressing how interlocutors engage in sensitive conversations, when contentious claims about past events are put forward, negotiated, contested and reformulated. Only until recently, I focused on this very discursive production. I am now thinking differently about listening, especially listening from the point of view of the researcher and the teacher, which are my professional roles. How do I talk and listen as a teacher or a researcher in conversations about a problem, albeit with a student in distress or anxiety, or a WWII veteran with bitter past relations with the Japanese? In these instances, I would like to consider listening as dialogue. In doing so, I would like to argue that listening is a relational practice for achieving empathy between the interlocutors; it is not merely cognitive adaptation or alignment, more than agreeing (or disagreeing) with the account. In this talk, I wish to share my work-in-progress approach to listening as dialogue. After outlining concepts of dialogue drawing from the work of Martin Buber (Buber, 1947, 1970), David Bohm (Bohm, 1996; Brinn, 2016) and/or Mikhail Bakhtin (Skidmore, 2000). I would like to explore two issues: (1) how the act of listening is configured as emergent empathy, (2) how the act of listening is linked to the phenomenological issues of attunement, taking care, and the interlocutors' being-in-the world (Heidegger, 2010 (1953)) and illustrate them in a few examples taken from my work of reconciliation talk (Heidegger, 2010 (1953); Murakami, 2012) or the ritual practice of tea ceremony (Murakami, 2018). This presentation is aimed at extending and re-specifying 'cultures of listening'. I wish to address implications for this perspective on dialogic listening to the current crisis in the development of critical social and cultural psychology in Denmark and its vicinity.

References

- Bohm, D. (1996). *On Dialogue*. London: Routledge.
- Brinn, M. (2016). The Conceptions of 'Dialogue' Offered by Bohm and Buber: A Critical Review. In D. Skidmore & K. Murakami (Eds.), *Dialogic Pedagogy* (pp. 68-82). Bristol, UK: Multilingual Matters.
- Buber, M. (1947). *Between Man and Man*. London: Routledge.
- Buber, M. (1970). *I and Thou* (a new translation with a prologue "I and you" and notes by Walter Kaufmann) (W. Kaufmann, Trans.). New York: Scribner's Sons.

- Heidegger, M. (2010 (1953)). *Being and Time*. Albany: State University of New York Press.
- Motzkau, J. (2017). Cultures of listening in child protection: Dark listening as relational agency. Paper presented at the Symposium 9: Cultures of listening: Exploring the emancipatory potential of listening in law, child protection, remembrance and excolonial politics - The 17th biennial conference of the international society for theoretical psychology: The ethics of theorizing, Rikkyo University, Tokyo, Japan (21st-2th August 2017).
- Murakami, K. (2012). *Discursive Psychology of remembering and reconciliation*. Hauppauge, NY, USA Nova Science Publishers.
- Murakami, K. (2018). The art of dialogic silence in the way of tea: rethinking space and time for contemplation. *International Journal of Heritage Studies*, 1-11. doi:10.1080/13527258.2018.1448881
- Skidmore, D. (2000). From Pedagogical Dialogue to Dialogical Pedagogy. *Language and Education*, 14(4), 283-296.

Keynote Lecture

A negative legacy of modernization: The mental disorder Taijin Kyofusho

Shogo Tanaka Tokai University

My aim in this presentation is to understand the mental disorder Taijin Kyofusho (TKS) from a historical perspective, rather than the cultural perspective that has been dominant in past research. TKS is a form of social anxiety disorder (SAD) that has been regarded as a culture-bound syndrome found predominantly in Japan and South Korea. The term itself has its origin in Japanese psychiatry and literally means “phobia (Kyofusho, 恐怖症)” of “the interpersonal (Taijin, 対人)”. As in SAD, patients with TKS also experience extreme tension and fear during interpersonal interactions with others. Symptoms are experienced mentally as well as somatically, and include the fears of blushing, making eye contact with others, and acting awkwardly, among others. The patient often shows a tendency to avoid social situations even though such interactions pose no actual threat.

Current DSM-5 diagnostic criteria describe TKS as a culture-bound syndrome (“cultural syndrome” in its terminology) due to the presence of an excessive concern about others (APA, 2013, p. 837). DSM-5 descriptions of both SAD and TKS include patients who are behaviorally embarrassed in front of others and experience fear as a direct reaction to the presence of others. What differentiates patients with TKS is the added fear of offending others or making others feel uncomfortable in response to their behavior. This characteristic of fear of offending others has been the key factor in defining TKS as a culture-bound syndrome (Sasaki, 2016). However, several research results have revealed that offensiveness is not the critical characteristic of TKS as a culture-bound syndrome. First, the fear of offending others is also commonly seen among patients with SAD in the United States (Choy et al., 2008). Second, among TKS patients in Japan, the tension subtype of the majority of patients does not actually involve the characteristic of offending others (Kasahara, 2005; Yamashita, 1993).

Furthermore, focusing on the bodily aspects of both disorders, it can be seen that TKS is essentially a variation of SAD. In both disorders, excessive fear is triggered by social situations where the patient’s body and performances might be perceived and judged negatively by others. What underlies both TKS and SAD is the inadequately attuned embodied interaction of perceiving and being perceived between the self and the other. Japanese psychiatrist Masatake Morita (1874-1938), who first conceptualized TKS as a mental disorder in the 1920s, described the symptoms in terms of neurotic tendencies. While negative bodily experiences, such as blushing or stammering, can happen to anyone in social situations, a person with neurotic tendencies insists on controlling them in order to present him/herself in a favorable manner, and thereby gets stuck in hyper-reflection, which elicits symptoms of TKS (Morita, 1928).

What I would like to highlight in this presentation is the historical context of Japanese society in which Morita was engaged in clinical practice. During that era, Japanese society was in transition from a traditional and collectivistic structure to the modern version that came about following incorporation of Western individualism. Without doubt, this transition involved a radical change in the manner that people carried out interpersonal interactions. Examining the patients' own descriptions of their symptoms, it is suggested that they experience their own body as something deeply relational with others (something collectivistic) on the one hand. On the other hand, they eagerly try to control their own body, including autonomic functions, according to their personal will; that is, the body is experienced as something individual. In this regard, patients with TKS seem to be suspended between collectivistic and individualistic manners of interpersonal interaction. Thus, from a historical perspective, TKS seems to have emerged as a maladaptive effect of the ambiguity between individualism and collectivism in society.

References:

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders, fifth edition (DSM-5)*. Arlington, VA: American Psychiatric Publishing.
- Choy, Y., Schneier, F. R., Heimberg, R. G., Kang-Seob, O., & Leibowitz, M. R. (2008). Features of the offensive subtype of Taijin-Kyofu-Sho in US and Korean patients with DSM-IV social anxiety disorder. *Depression and Anxiety, 25*, 230-240.
- Kasahara, T. (2005). *Taijin Kyofu and social anxiety disorder*. Tokyo, Japan: Kongo Shuppan. (笠原敏彦『対人恐怖と社交不安障害』金剛出版)
- Morita, M. (1928/2003). *The true form and the therapy of neurotic character*. Tokyo, Japan: Sozo Shuppan. (森田正馬『神経質の本態及び療法』創造出版)
- Sasaki, A. (2016). Abnormal psychology for Taijin-kyofusho. *Seisan to gijutsu, 68*, 67-69. (佐々木淳「対人恐怖症の異常心理学」『生産と技術』第 68 巻)
- Yamashita, I. (1993). *Taijin Kyofu or delusional social phobia*. Sapporo, Japan: Hokkaido University Press.

Quality of Life Movement and Embodied Wellbeing. An introduction

Denis Francesconi Aarhus University

Robert F. Kennedy once said that a country's Gross Domestic Product (GDP) measures “everything except that, which makes life worthwhile” (Costanza et al., 2014). GDP measures mainly market transactions and it ignores social costs, environmental impacts and income inequality (Costanza et al., 2014).

Since the early nineties, there has been a paradigm shift in human development theory, and a slow but steady increase of attention towards the interconnections between social, political and economic features (Nussbaum & Sen, 1993). This, among other factors, has brought about a concomitant increased interest on wellbeing and quality of life (QoL), and several institutions and scholars have started to develop new policies and indicators to promote and measure them. Among the most important we can cite EU's Quality of Life in Europe (2015), OECD's Better Life Initiative (OECD, 2013), Stiglitz-Sen-Fitoussi Commission (Stiglitz, Sen, & Fitoussi, 2009), Quality of Life's approach (Nussbaum & Sen, 1993), Subjective Wellbeing (Kahneman, Diener, & Schwarz, 2003), Post-2015 Development Agenda (UN Economic and Social Council) and UN Sustainable Development Goals (UN, 2015).

The ongoing debate on the nature and theoretical background of concepts such as wellbeing, quality of life, happiness, eudaimonia, flourishing, thriving and others similar, is nowadays massive and very intricate, as well as the analysis

of their impact on our societies.

In this paper, I will present the current debate on QoL studies and the embodied approach to wellbeing, focusing on the following points: 1) I will first provide an introduction to the QoL movement through a map of the main national and international QoL policies and initiatives. 2) Then I will present the variety of theoretical approaches to wellbeing, with a specific focus on hedonic and eudaimonic wellbeing. 3) Finally, I will focus on the embodied approach to wellbeing (Francesconi 2018; Francesconi & Tarozzi 2018) and its relevance for higher education systems.

In conclusion, I will stress the necessity of an educational approach to contemporary well-being theories, reminding that any educational theory, if really educational in terms of Paideia, is de facto a theory of happiness. Based on historical philosophical affinity between Eudaimonia (happiness) and Paideia (education), we need to develop a solid reflection on quality of life and wellbeing in order to tackle present and future challenges. The educational community should gain awareness of contemporary policies and movements about quality of life and wellbeing in order to include them into education systems.

References

- Costanza, R., Kubiszewski, I., Giovannini, E., Lovins, H., McGlade, J., Pickett, K. E., Wilkinson, R. (2014). Development: Time to leave GDP behind. *Nature*, 505(7483), 283–285. doi:10.1038/505283a
- European Union, Quality of life in Europe - facts and views. doi:10.2785/59737. Retrieved from <http://ec.europa.eu/eurostat/en/web/products-statistical-books/-/KS-05-14-073>
- Francesconi, D. (2018). Eudaimonic Wellbeing and Education. In Galvin K. T. (Ed.). *Routledge International Handbook of Wellbeing*. London, UK: Taylor and Francis Books. DOI: 10.4324/9781315724966-30.
- Francesconi, D. & Tarozzi, M. (2012). Embodied Education: A Convergence of Phenomenological Pedagogy and Embodiment. In *Studia phaenomenologica*, 12: 263-88.
- Kahneman, D., Diener, E., & Schwarz, N. (Eds.). (2003). *Well-Being: Foundations of Hedonic Psychology*. New York: Russell Sage Foundation Publications.
- Nussbaum, M., & Sen, A. (Eds.). (1993). *The Quality of Life*. Oxford University Press. Retrieved from <http://www.oxfordscholarship.com/view/10.1093/0198287976.001.0001/acprof-9780198287971>
- OECD. (2013). *How's Life? 2013*. OECD Publishing. Retrieved from http://www.keepeek.com/Digital-Asset-Management/oecd/economics/how-s-life-2013_9789264201392-en#page1
- Stiglitz, J., Sen, A., & Fitoussi, J.-P. (2009). *The measurement of economic performance and social progress revisited. Reflections and Overview*. Commission on the Measurement of Economic Performance and Social Progress, Paris. Retrieved from <http://www.ofce.sciences-po.fr/pdf/dtravail/WP2009-33.pdf>
- UN Economic and Social Council. (n.d.). Retrieved November 7, 2014, from <http://www.un.org/en/ecosoc/about/mdg.shtml>
- WHO | The Ottawa Charter for Health Promotion. (n.d.). Retrieved November 7, 2014, from <http://www.who.int/healthpromotion/conferences/previous/ottawa/en/>

The constructed cultural

Silvia Wyder University of Derby

Introduction

My PhD-research deals with the question of how the self is symbolically constructed and aesthetically represented by using the concept of the house amongst art therapy patients, artists and architects across multiple cultures (within Europe and in Japan). An important subsidiary question is if and how symptoms of Posttraumatic Stress Disorder (PTSD) can become apparent in such representations. Since the theme of the house is both emotionally charged and universal, it should additionally be appropriate for cross-cultural studies.

Keywords: House, Self, Trauma, PTSD, Culture, Architecture

Methodology

My methodology is grounded in qualitative phenomenological approaches, but also includes quantitative elements in form of psychometric PTSD (IES-R, Weiss & Marmar, 1996) and well-being (Hobi, 1985) tests.

Fieldwork procedures (after receiving ethical approval and participants' consent) consist of art therapy focus group workshops in clinical, as well as university and art studio settings where participants are invited to draw or paint houses. Further material is obtained through participants' narratives as well as via my observational field notes. Registered and transcribed semi-structured interview questionnaires (Wyder, 2016) carried out with patients, artists and architects provide rich material alongside with their art-works, narratives and published documentation via a literature review.

Analysis of obtained material builds on phenomenological coding by addressing inter alia notions of interiority and exteriority and the space in between by detecting possible emerging patterns.

Method

The art therapy workshops at the Ohmiya Kousei Byoin (hospital) in Japan consisted of two art therapy focus groups including a total of 15 (11 male, 4 female) patients. Two weekly sessions were held for a duration of 90 minutes each. The art materials consisted of paints and graphite and colour pencils/crayons, including Japanese ink, brushes and paper.

The art therapy sessions were facilitated by the author. The language used was mainly Japanese, supplemented occasionally with English vocabulary and assisted by portable phone dictionaries (Japanese/English, Japanese/French) used by some participants as well as myself.

So far, data have been obtained in psychiatric clinics (in Tokyo, Japan, in Wil, German speaking Switzerland, and in Paris, France), and in the architecture theory department of the Technical University in Vienna, Austria. A last art therapy workshop during this study with Taiwanese and European artists will take place in Holland this February.

Discussion

The emphasis of this paper focuses on findings and experiences of the recent clinical period of art therapy and cultural studies fieldwork carried out at the Ohmiya Kousei Byoin, which is located in Saitama-ken, Japan.

It became apparent that human beings' ways of suffering seemed to be very similar between Japanese and European participants including, for example, symptoms of depression, self-harm, traumatic experiences, alcoholism, suicide attempts, PTSD symptoms, and so forth.

Interestingly, however, the way in which house-related phenomena were addressed and depicted were partially different in terms, for example, of Japanese participants referring more often to traditional house structures (e.g. 'minka', 民家), the embeddedness of houses within nature (mainly the sea and mountains) and the importance these notions played in their narratives and aesthetic representations. Further, in my view, some of the participants' house drawings or paintings seemed to convey a sense of loss and nostalgia, aspects which were hardly expressed aesthetically or verbally by their European counterparts.

The choice and underlying reasons for depicting a certain style of house, be it grounded within a particular geographical area, or be it imaginative, may represent a way of dealing with current or past psychological sufferings. This kind of longing might be reflected by the Japanese architect Andō Tadao who said (1999, p. 63): These houses

[minka] had a simplicity of composition, born of long years of struggle and sympathy with nature, and reflected the stable and quiet way of life proper to farmers" [my translation]. It seemed to me that this "stability" of the old times, or also referring to Buddhist imagery, might perhaps provide some of the Japanese participants with a sense of calming existence, and reassurance.

More generally, building a bridge thanks to interviews of architects that took place in Tokyo parallel to the clinical art therapy workshops, elements of architecture, traditional and contemporary materiality by integrating up-to-date aesthetics will be argued to contribute to some degree to the observed distinctions between the Japanese and European patients via their house related art-works. As taciturn as the visual arts are, so may be architecture as the Swiss architect Peter Zumthor (2018, p. 32) said: "The physical gestures of a building are more primal, more directly connected to the sensory capacities of our bodies than to thoughts and words". Hence, it is the conjuncture of house-based aesthetic representations, together with narratives and relevant literature, that will result in the findings of this study.

References

- Hobi, V. (1985). *Befindlichkeitsskala*, BBS, Basel, Switzerland.
- Nussaume, Y. (1999) *Andô, Tadao, Pensées sur l'architecture et le paysage*. arléa, Paris, p. 63.
- Weiss, D. S. & Marmar, C. R. (1996). *The Impact of Event Scale - Revised*. In J. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD* (pp. 399-411). New York: Guilford.
- Wyder, S. (2016). *Semi-structured interview questionnaire, 28-items*. PhD thesis, art therapy & cultural studies, University of Derby, UK.
- Zumthor, P. & Lending, M. (2018) *A feeling of History*, Verlag Scheidegger & Spiess AG, Zurich, p. 32.

Business opportunities for a transition to sustainability through Circular Economy

Marina Pieroni Technical University of Denmark

Circular Economy is viewed as a key approach to enable a significant change in the current 'take-make-use-dispose' economic system while contributing to the development of a more sustainable society. Circular Economy means fighting against structural waste, which is basically waste that is caused by inherent ineffectiveness within value production and consumption systems due to bad design, suboptimal processes, out-dated laws, or sheer lack of motivation or insight on the receiver's or the provider's side. From an industrial and companies' perspective, the idea is to focus on providing the highest value possible from the provider to the receiver of a product or service, whilst minimising the amount of resources consumed along the way by reusing, recycling or sharing between numerous users. One of the most compelling promises of the Circular Economy concept is the opportunity to make significant savings (and even earnings) for the company, via a radical change in the relationship between value creation and resource consumption. This presentation will address these topics showing examples of how companies have been capturing these opportunities of savings and earning by means of implementing new business models and changing their product design.

Tracing Bicultural Talent within Multinational Corporation

Kristina Kazuhara Copenhagen Business School

In this talk, I will present my ongoing doctoral study of biculturalism from a cross-cultural management perspective. In my dissertation, I take an up-close view on the various types of bi- and multiculturals – some bilingual and some not – working for multinational companies. Applying a comparative case study design, I examine how two multinational companies in the pharmaceutical industry utilize different bicultural types in different tasks. I plan to draw from empirical data collected at headquarters and subsidiaries across two contrastive national contexts, Denmark and Japan. The dissertation will add to extant theories about bi- and multiculturals as an important resource for organizations by developing a more fine-tuned understanding of individual bicultural and bilingual skillsets as they relate to the transfer of knowledge within knowledge-intensive organizations.

Philipp Franz von Siebold A scholar of Japanese Studies and Cosmopolitane

Peter Pantzer Bonn University

Everyone knows that Siebold was a gifted scholar, having spread the knowledge on Japan. There are many publications about him and many exhibitions on his Japanese collection have been organized both in Japan and Germany. Or in the Netherlands. Does something still remain new telling more about him? For the Japanese people, he was a Dutchman, when Siebold came to Japan. For the compatriots of his birthplace – he was born in Würzburg in the region of Bavaria – he was a German. In respect to his language, yes, he was a German.

However, when Siebold was born, his country was not as it is now called “Germany” and the “German” emperor had his seat not in Berlin. This country was called “Holy Roman Empire”, which means that it was a multi-ethnic complex of territories in Central and Eastern Europe. Besides the German language, many other languages were also spoken, for example Czech, Italian or Slovenian languages. And the seat of the emperor was in – Vienna, nowadays Austria, throughout his life time. Since this country, the “Holy Roman Empire”, was the homeland of Siebold, and split into independent countries as the result of nationalistic ideas in later years, I was of the opinion that historical records on Philipp Franz von Siebold in relation to Japan must have been kept also in these countries. That was my idea as an historian with specific interests on Japan.

In this way, I made many finds. The Siebold family had, as sources tell, a close relationship to Austria. Siebold’s grandfather, also a physician, was ennobled by the Habsburg emperor: not only Philipp Franz von Siebold, but also his sons Alexander and Heinrich as well.

All these nobility documents are kept in the state administration archive in Vienna until now; also in Prague of Czech Republic; also in castles of the country side. Siebold has corresponded with Metternich, the chancellor of the Austro-Hungarian Monarchy, even with the Austrian emperor, who received him in audience. All in all, I discovered 65 letters of 31 persons in this area of Europe, who were not related to the present-day Germany but have written to Siebold in respect to Japan. And 35 original letters written by Siebold to 16 persons with a similar intention. Thus, I found all together exactly 100 letters which show the topics referring to Japan with Austrian scientists, politicians and other influential people which are not related to the present-day Germany or the Netherlands.

Siebold was much more than a German or a Dutch, he was – a cosmopolitan!

In this lecture, it is impossible to touch all these documents related to Japan, for which a publication is now planned. Here and today it is only a selection of about what the scientists and intellectuals of these countries communicated with Siebold, and how they contributed to extend the culture and learning on Japan. It offers a picture not only of Siebold’s knowledge, but also of his strong and impressive character.

The shape of knowledge in the Renaissance

Tomoko Nakamura Tokai University

Previously, at this symposium, I have discussed some characteristics of European knowledge and culture through the study of art history in the Renaissance period.

In 2016, at the first Civilization Dialogue, I presented an analysis of the view of human proportion in the work of the German Renaissance painter and theorist Albrecht Dürer (1471–1528), which was a great interest of his over the course of his career [1]. By studying his work, we find that the mathematical method used by Dürer had changed from geometrical to numerical. Dürer sought to draw the ideal human body, as inspired by Vitruvius. He first attempted the geometrical approach but eventually failed, leading him to use the numerical, anthropometric approach, i.e., not drawing but measuring. This method was more useful for measurement, but it meant the loss of the traditional symbolic meaning of geometry.

On the basis of the discussion at the first symposium, I continued to consider the problem of quantification in European civilization, featuring a discussion of “the usefulness of mathematics” in my 2017 presentation for the second Civilization Dialogue [2]. In the presentation, I discussed the theory of human proportion as expressed by L. B. Alberti (1404–1472), a typical Humanist and theorist of the early Renaissance and analyzed his mathematical methods in relation to Dürer’s anthropometric approach. We can recognize the beginning of abstraction in the European style of knowledge here; it should also be noted that contemporary Europeans were gradually realizing the potential influence and power of mathematics on real life and nature, hence the name “the usefulness of mathematics.” From the 16th century on, the European style of knowledge based on this usefulness has been expanded across the world; on the other hand, the cultural peculiarities of Europe are increasingly being lost in this context.

I raised a common issue in both of the discussions: the civilization of modern science and technology from European civilization has been developed globally, and it is now also causing various shapes of friction in other cultures. The cultural meaning of knowledge in its original context requires further thought than its universal usefulness. Thus, in this paper, I will discuss the cultural meaning of Renaissance knowledge, namely, the possible shape of knowledge in the original context of the Renaissance.

Generally, when viewed as part of the history of science, the Renaissance period may be considered a preliminary phase for the coming scientific revolution. This view may certainly indicate an aspect of the state of science during the Renaissance, but that would not be enough. Namely, those pursuing scientific activities in the late Middle Ages are not only scholars by vocation but also people of various occupations such as merchants, artisans, or artists. In particular, art had rarely been so close to mathematics or science, and works of the period can be considered a result of collaboration between scholar and artist. These works still remain to the present day in the form of symbolic works such as Alberti’s *On Painting (Della Pittura, 1435/36)*, which is dedicated to Filippo Brunelleschi (1377–1446) [3], and *Divine proportion (Divina proportione, 1498/1509)* by Luca Pacioli (c.1447–1517), a mathematician and friend of Leonardo da Vinci (1452–1519) who may have produced the illustrations for this book [4].

Such works cannot be evaluated on the only point of view of whether they contributed to the development of art or science. These works have worth as products of some human activities and are an aspect of the history of European culture. They are created from an overlap of multiple types of human activities as one. The fields of art, science, and mathematics also have their own histories of formation as a discipline or a field of human activity. Therefore, we should not discuss a historical cultural phenomenon on the assumption that the disciplines exist in their modern shape. First, we must grasp the works of the Renaissance within the wider history of knowledge and human activities in European civilization.

The multiplier effect of collaboration or the friction between art and science produced a kind of knowledge or expression in the Renaissance that has an original shape and meaning for its own time; knowledge appearing in this history must have grounded its first principles in the original cultural context that cultivated it. Noting the cultural context will eventually indicate the role that trans-disciplinary humanities studies should perform. This means that indigeneity and cultural diversity must be acknowledged.

References:

- [1] Nakamura, T. (2015). The Beauty of Harmony: The Case of Albrecht Dürer's Theory of Human Proportion. In: *Civilizations (Bunmei) No.20*, Institute of Civilization Research, Tokai University, pp29-33. (『文明』20号、東海大学文明研究所.)
- [2] Nakamura, T. (2017). The Usefulness of Mathematics in Renaissance Art Theory. In: *Civilizations (Bunmei). Special Issue: Dialogue between Civilizations*, Institute of Civilization Research, Tokai University, pp.108-116. (『文明』特集号、東海大学文明研究所.)
- [3] Alberti, L.B. (1435/36. English trans., 1972). *On Painting (De Pictura / Della Pittura)*. London, Penguin books.
- [4] Pacioli, L. (1498/1509. Facsimile original version of 1509, 2014). *On the Divine Proportion (De Divina Proportione)*. Createspace Independent Pub.



No.24 (Special Issue **2019**)
Dialogue between Civilizations

発行日	2020年3月31日
発行者	山本和重
発行所	東海大学文明研究所 神奈川県平塚市北金目4-1-1 〒259-1292 Telephone : 0463-58-1211 (EXT 4900, 4902) Facsimile : 0463-50-2050 E-mail : bunmei@tsc.u-tokai.ac.jp
制作	東海大学出版部 神奈川県平塚市北金目4-1-1 〒259-1292 Telephone : 0463-58-7811 Facsimile : 0463-58-7833

