ROBERT B. HALL'S GEOGRAPHIC STUDIES ON THE JAPANESE BUILT ENVIRONMENT

Tyana Santini Salzano

ROBERT B. HALL'S GEOGRAPHIC STUDIES ON THE JAPANESE BUILT ENVIRONMENT

ロバート･B･ホールによる日本の構築環境に関する地理学的調査研究について

By,
Tyana Santini Salzano

Thesis supervisor,
Professor Takahiro Taji

Doctorate Dissertation
August 2015

Department of Architecture and Architectural Engineering
Graduate School of Engineering
Kyoto University

—I dedicate this thesis to my family, my friends, and my sensei: Yoko Hachiuma—

Acknowledgements

First of all I would like to express my sincere gratitude to my advisor Professor Takahiro Taji, and to all the members of the laboratory for their unconditional support. I am deeply indebted to the help of Ryuho Hosawa, Sei Ketsu Kaku, and Satoru Kimura for their remarks and discussions on the Doctoral seminars. My most sincere appreciation goes to my lab mates and friends Georgia Koutsogeorga and Jina Baek for their constant encouragement, to Hiroyuki Takahashi for being always willing to assist me at the lab, and to Keigetsu Nakamura, Sayuri Hayakawa, Chen Fangjian, and Sanshiro Furuta for making of my time at the lab an enjoyable experience.

I would also like to thank Professor Waro Kishi and my advisor for having accepted the theme of this research, which at the beginning seemed somewhat unrelated to the field of Architecture. I also owe my gratitude to the reviewers of this thesis: Professor Kiyoko Kanki, Professor Teruyuki Monnai, and Professor Kiyoshi Sey Takeyama. Their insightful comments have contributed to improve the quality of this work.

I am particularly indebted to the kind support of Robert B. Hall's grandson, Robert Hall. His generous and constant support made possible the access to several documents that were of great value for this thesis. For the access to the works and documents used in this research my gratitude also extends to the staff of Kyoto University libraries, the Bentley Historical library of the University of Michigan, and Nichibunken Library for their infinite patience.

For making possible the publication of the articles on Robert B. Hall I wish to acknowledge the dedication of the reviewers and the most appreciated assistance of Rebecca Kranz, Yumiko Furukawa, and Sachiko Kobata. I would also like to recognize the support of Professor Taisaku Komeie from the graduate school of Letters of Kyoto University, and Professor Katsumi Nakao from the division of Humanities at J. F. Oberlin University of Japan, for their useful comments and contributions.

This research would not have been accomplished without the financial support of the Monbukagakusho scholarship received during great part of my stay in Japan, the Young Researchers Overseas Support Grant from Kyoto University Foundation, and the assistance of Mr. Hirokazu Hasegawa from the Kyoto University Administration Office.

Finally, I would like to express my most sincere gratitude to Mrs. Misako Hosomi and the Yoshimura family for their candid friendship and hospitality during my time in Japan.

TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION AND OUTLINE OF THE THESIS 1

1 Motivation 3

2 Subject of study 4

3 Framework of the study, objectives, and methodology 6

3.1 Regarding the cross-disciplinary difficulties 7

3.2 Regarding sources 8

4 Review of previous studies related to the subject and academic contribution 8

5 Structure of the dissertation 10

5.1 Dissertation flowchart 13

5.2 Main sources used by Chapter 14

PART 1: Context and Background of Hall's Studies 19

CHAPTER 2

WESTERN PUBLICATIONS ON THE JAPANESE BUILT ENVIRONMENT 21

Introduction 23

1 First impressions (1868 to 1919) 23

1.1 Popular image 23

1.2 Renowned academic studies on the Japanese built environment 25

1.3 Geography publications 26

2 Interwar period (1919-1939) 28

2.1 Popular image 28

2.2 Renowned academic studies on the Japanese built environment 28

2.3 Geography publications 30

Conclusion 34

CHAPTER 3

ROBERT BURNETT HALL (1896-1975) 39

Introduction 41

1 Hall's academic career 41

2 Hall's research in Japan and Japanese colleagues 45
3 Review of the contents of Hall's studies on Japanese settlements 48
1926, *Quelpart Island and its People* (12 pages) 48
1929, The Geography of Manchuria (15 pages) 49
1931, *Some Rural Settlement Forms in Japan* (30 pages) 50
1932, *Sado Island* (22 pages) 50
1932, The Yamato Basin, Japan (49 pages) 51
1933, *The Hiinokawa Plain* (13 pages) 51
1934, *The Cities of Japan: Notes on Distribution and Inherited Forms* (25 pages) 52
1936, *A Map of Settlement Agglomeration and Dissemination in Japan* (3 pages and map) 53
1937, *Tokaido: Road and Region* (24 pages) 53
Conclusion 54

PART 2: Interpretations and Integrated Study of Culture and Nature 59

CHAPTER 4
INTERPRETATION OF THE BUILT ENVIRONMENT 61
Introduction 63
1 Modern Geography and the study of the built environment 63
1.1 The cultural landscape 64
1.2 The cultural landscape and settlements 66
2 Changing understanding of the relationship between culture and nature 67
2.1 Environmental determinism 67
2.2 Possibilism 68
2.3 Interpretation of the culture-nature relation of the first settlements studies in the United States 69
2.4 Hall's position on the debate of the relationship between culture and nature 70
3 The role of Possibilism in Hall's interpretation of the Japanese built environment 71
3.1 Explanations based on nature and expression of causation 71
3.2 Possibilistic viewpoint 72
3.4 Analogies between natural and cultural elements 74
Conclusion 75

CHAPTER 5

HISTORICAL APPROACH 81

Introduction 83

1 Geography: natural or social science? 83

2 Historical approach 85

3 Integration of history in geographical studies 86

4 Practical application of the historical approach 88

5 The importance of history in Hall's studies on Japanese settlements 89

5.1 Hall's application of the historical approach 89

5.2 Laws and generalizations on development 93

5.3 The issue of forecast 94

5.4 The concept of forces 95

Conclusion 96

PART 3: *Studies on Japanese Settlements within the Academic Framework of Geography* 101

CHAPTER 6

STUDIES ON JAPANESE URBAN SETTLEMENTS 103

Introduction 105

1 Academic study of cities in the United States 105

1.1 Study of urban settlements in Geography in the United States 106

2 Studies on Japanese cities 109

2.1 American Geographic studies on Japanese cities 109

2.2 Japanese studies on Japanese cities 110

3 Hall's translation of Geography's methods to the study of Japanese cities 112

3.1 Distribution 112

3.2 Classification 114

3.3 Functional analysis 115

3.4 Structuring Elements 117

3.5 Development 121

Conclusion 124

CHAPTER 7
STUDIES ON JAPANESE RURAL ARCHITECTURE 129
Introduction 131
1 Study of rural architecture within the field of Geography 131
1.1 Development in Europe 131
1.2 Development in the United States 133
2 Academic interest in Japanese Rural Architecture 135
2.1 Japanese scholars 135
2.2 Western publications on Japanese rural architecture 136
3 Hall's studies on Japanese rural architecture 137
3.1 Yamato type 137
3.2 Satsuma type 138
3.3 Echigo type 139
3.4 Izumo type 141
3.5 Shirakawa type 142
3.6 Tokachi (Ainu) type 143
4 Hall's habitation types as compared with the houses studied by Japanese scholars 145
5 Comparison of Hall's and Taut's studies on Japanese rural architecture 147
5.1 Context and intentions of Taut's and Hall's studies 148
5.2 Approach to the study of rural architecture 148
5.3 Explanation of a house unit 150
5.4 Characteristic features common to all Japanese rural houses 152
Conclusion 153

PART 4: Discussion and Conclusions 161

CHAPTER 8
HALL'S CONTRIBUTIONS AND POST WW2 DEVELOPMENT OF THE STUDY OF THE CULTURAL LANDSCAPE 163
Introduction 165
1 Hall's contribution to American Geography 165
1.1 Contribution to the knowledge of the Japanese built environment and its settlements 165

1.2 Contribution to the theory and practice of Geography 167
1.3 Hall's involvement in the education of Geography in the United States 169
2 Post World War 2 view of Regional Studies on the cultural landscape 171
2.1 Hall's publications after World War 2 171
2.2 Regional Studies after WW2 173
2.3 Contemporary studies on the built environment 176
CHAPTER 9
CONCLUSIONS 181
1. Summary: Importance of Hall's studies on Japanese settlements and framework of the analysis 183
2. Findings in relation to the ideological context 184
3. Findings in relation to Hall's practical studies on settlements within the framework of Regional Geography 185
4. Significance of the examination made of Hall's studies on Japanese settlements: 186
5. Future Research 187
BIBLIOGRAPHY 189
Hall's Bibliography 191
Reference bibliography 194
References in Japanese 202
APPENDIXES 203
PUBLICATIONS 223

CHAPTER 1
INTRODUCTION AND OUTLINE OF THE THESIS

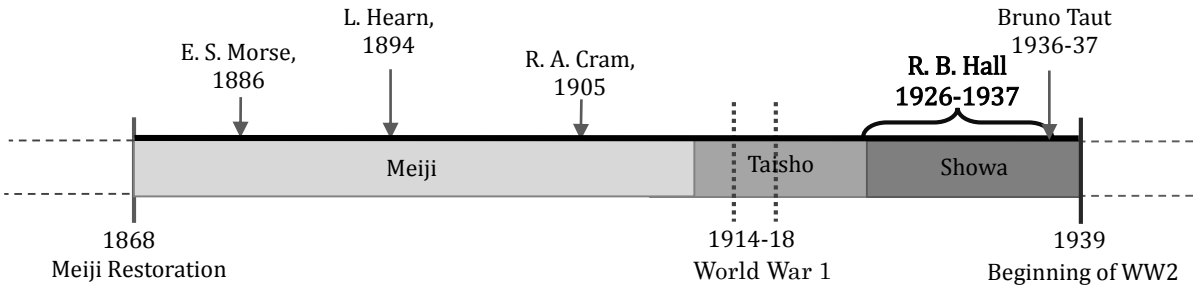
1 Motivation

My interest in Robert B. Hall's work grew out of my Master's research. The subject of the investigation was the representation of Kyoto city in Western publications from the 16th century to our days. The examination of these works led to the finding of a group of publications made within the field of Geography that included the study of Japanese cities and architecture.[1] While most of the bibliography that I considered for the research had been previously discussed in contemporary academic studies, there was no mention of the geographic works on the same subject. At the time, my lack of understanding on the context of such publications and the way in which geographers approached the study of cities and architecture prevented me to include them in the Master thesis, but my interest persisted.

After a preliminary research, a review of these geographers' works was included in the first article written for the doctoral course on the Western understanding of the Japanese built environment. From this initial review it was clear that Hall's works were the most comprehensive among those studies, and that he had an understanding of Japanese cities, towns, and architecture different from the other writers of his time. Further research confirmed that there were no previous studies on Hall's works on Japanese cities and architecture in any academic field. Furthermore, there was no analysis of the development of the study of the built environment that could satisfactorily explain them, which reinforced my decision of making of Hall's work the subject of study of the doctoral dissertation.

Considering Hall's writings as part of the body of Western literature on the Japanese built environment will provide new historical evidence for researchers on the fields of history of Japanese Architecture and Urban Studies. By overcoming longstanding disciplinary barriers, this first analysis of Hall's work hopes to broaden our current understanding of the Western ideas on Japan during the interwar period.

Figure 1-1 Timetable showing the period of publication of Hall's works in relation to most frequently referred publications in contemporary studies on the Western understanding of Japanese built environment (1868-1939)

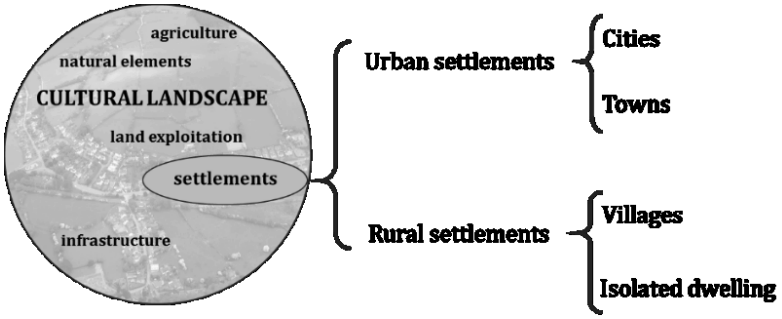


Morse, E. S.: *Japanese homes and their surroundings*, New York, Harper & Bros, 1885
Hearn, L.: *Glimpses of unfamiliar Japan,* Houghton, Mifflin, 1894
Cram, R. A.: *Impressions of Japanese Architecture and the Allied Arts,* George G. Harrap & Co. Ltd., London, 1905
Taut. B.: *Fundamentals of Japanese Architecture*, Kokusai Bunka Shinkokai, K. B. S. publications; ser. B. No.23, 1936
Taut. B.: *Houses and People of Japan*, Sanseido, Tokyo, 1937

2 Subject of study

The publications examined in this dissertation were made within the field of Geography. Therefore, some clarifications regarding the terminology used are needed before defining the specific subject of study.

Hall's publications from the interwar period deal mainly with the Japanese *cultural landscape*. The term cultural landscape (文化的景観) refers to any landscape where the works of culture and nature have been combined, as in a land dedicated to agricultural production, a mining area, or a city.[2] Hall's articles consider a wide range of subjects as land division, agricultural exploitation, including as well the study of what in the field of Architecture is known as *the built environment* (構築環境).[3] It is in this last element of Hall's studies, and in the particular way in which is approached, that this thesis will focus. Within the field of Geography, the closest term to the concept of *built environment*, is *settlements* (集落). This term includes both *rural settlements* —villages and isolated dwellings—, and *urban settlements* —which refers to cities and smaller towns in which some urban functions are carried out.



The specific subject of study of this dissertation is then the content on *settlements* of Hall's publications from the interwar period.[4] Hall's analyses of Japanese settlements were made within two different types of studies: *Regional Geography* studies (RG) and *Settlement Geography* studies (SG). In Regional Geography studies, Hall analyzes all the elements of the landscape of a given area, both natural and man-made elements, while in Settlement Geography the studies focus on the examination of cities, villages, and architecture. Table 1-1 in the following page presents a list of the main publications considered in the dissertation, all authored by Hall.[5] The table includes the articles in which settlements are treated, as well as articles addressing various issues related to Japan and the methods of study of the field of Geography..

Table. 1-1 Robert B. Hall's articles considered for the analysis. The list shows year of publication, title of the article, main theme of the article, and whether it contains analysis of settlements in any of its forms.

Year	Name of Article	Theme	Contents on Settlements		
			US	RS	RA
1924	A Suggested Outline for the Treatment of a Geographic Region	M			
1924	Outline for a Course on the Principles of Geography	M			
1925	Sourcebook in the Geography of Commercial Production	EG			
1926	Quelpart Island and Its People	**RG**	●		
1930	The Geography of Manchuria	**RG**	●	●	
1931	Some Rural Settlement Forms in Japan	**SG**		●	●
1932	Sado Island	**RG**	●	●	
1932	A Geography of Primary Production	EG			
1932	The Yamato Basin, Japan	**RG**	●	●	●
1933	Landforms of Japan	GM			
1933	The Hiinokawa Plain	**RG**		●	●
1934	Agricultural Regions of Asia, Part VII: The Japanese Empire	EG			
1934	Cities, Villages, and Houses of Japan	**SG**	●	●	●
1934	The Cities of Japan: Notes on Distribution and Inherited Forms	**SG**	●		
1935	Agricultural Regions of Asia, Part VII: The Japanese Empire (Continued)	EG			
1935	Agricultural Regions of Asia, Part VII: The Japanese Empire (Concluded)	EG			
1935	The Geographic Region: A Resume	M			
1937	A Map of Settlement Agglomeration and Dissemination in Japan	**SG**	●	●	
1937	Tokaido: Road and Region	**RG**	●	●	●
1939	Geographic Factors in Japanese Expansion	GP			

NOTATION

Articles without specific mention of Japan

Articles that consider Japan

Articles entirely dedicated to Japan

Theme:
M: *Methodology*
EG: *Economic Geography*
RG: *Regional Geography*
SG: *Settlement Geography*
GM: *Geomorphology*
GP: *Geopolitics*.

Contents on Settlements:
US: *Urban Settlements*
RU: *Rural Settlements*
RA: *Rural Architecture*

3 Framework of the study, objectives, and methodology

Hall's studies on Japan can be analyzed within various different frameworks to suit different aims. Having experienced firsthand the difficulty to properly interpret Hall's studies when I first found them, I decided analyze his works through an historical contextualization that could shed light on the ideological and academic circumstances of his research.

Hall's studies were made in a very particular academic period when geographers —who had traditionally dealt with the study of *nature*— began to integrate the study of *culture* into their discipline. After a preliminary investigation of this particular context, two main research issues were raised:

1. How Hall deals with the difficulties produced by the *combination of the study of CULTURE and NATURE;* subject that will be analyzed within the framework of the *Western development of the geographic thought;* and
2. How Hall implements in practice the study of cities, towns, and architecture; subject that will be analyzed within the framework *of the development of the academic study of settlements*.

For each of the issues raised above, two specific objectives were determined:

1.1 Explore the way in which Hall deals with the changing ideas on *causation* between CULTURE and NATURE

The period in which Hall made his studies on Japanese settlements saw a significant ideological change that directly affected the practice of Geography. Until late 19th century, it was believed that the natural environment was the main factor in determining the characteristics of any given culture, and it was then assumed that the cultural characteristics could find explanation in the natural setting. But in the first decades of the 20th century, that assumption began to be challenged by many scholars who believed that, although nature does sets certain constrains, it does not determine culture. This new understanding had an effect on how the elements of the cultural landscape —including settlements— were studied. These changes affected Hall's interpretation of Japanese settlements and the examination of his writings within this context is necessary to understand his work.

1.2 Examine Hall's approach to the combined study of CULTURE and NATURE

The inclusion of cultural elements as part of the subject of study of Geography brought some practical difficulties. When studying the natural world, it was possible to apply the scientific method to find causes, patterns, and laws that could explain those patterns. But by including the cultural elements, such way of studying the landscape became inappropriate. The complexity of the causes behind the cultural elements —that included political, economic, social, and many other factors— prevented geographers to determine universal explanations as easily as for the natural world. Many positions appear on how to address the combined study of culture and nature, and Hall's approach in this matter needs to be examined.

2.1 Make clear how Hall analyzes Japanese cities within a geographic study

The study of settlements within the field of Geography was just beginning at the time Hall made his studies on Japan. Hall, as well as the rest of the geographers studying cities, had to confront their investigation with few guidelines or reference works to follow. It is necessary then to make clear how Hall approaches the study of urban settlements by considering them as an integral part of the cultural landscape.

2.2 Make clear how Hall analyzes Japanese rural architecture within a geographic study

Hall's studies on Japanese rural architecture are one of the few Western studies made on the subject during the interwar period. Contrary to the study on urban settlements, the study of rural habitation was to some extent more developed thanks to the works of French geographers. Still, Hall addresses the subject with a particular approach that has not been analyzed before.

3.1 Regarding cross-disciplinary difficulties

One of the main difficulties encountered when analyzing Hall's works was the unfamiliar disciplinary work. To clearly understand the context of Hall's studies was one of my main priorities, therefore, during the first stage of the research I was dedicated to interiorize myself with the particularities of Geography's methods and ideologies of the interwar period. Fortunately, since the early 20th century geographers have maintained the interest in assessing their own discipline, publishing a great amount of evaluation works reviewing the development of ideas and methods.

Since the beginning of the research I made sure to have support from professionals within the field of Geography. The Eng. Geologist *Maja Ostric*, from Disaster Prevention Engineering, and the Human Geographer *Taisaku Komeie* (米家泰作), Associate Professor of the Graduate School of Letters —both of Kyoto University— assisted me in countless occasions. Their guidance helped

me unravel unfamiliar geographical concepts, and during the analysis process they helped me verify the accuracy of my interpretations.

3.2 Regarding sources

The original notes and official documents of Hall's travels to Japan could not be found. The Department of Geography to which Hall belonged was closed in the early 1980s, and despite my efforts and the assistance of the staff at the University of Michigan the official documents of his trips could not be located. For that reason, the main sources of analysis of Hall's works are his published articles. Most of these publications could be found in geographic journals accessible from academic databases, nevertheless, a number of important articles (as *The Hiinokawa Plain* from 1933) and other documents could not be easily accessed. To compile Hall's pre-World War 2 bibliography I was assisted by Robert B. Hall's grandson −*Robert Hall*— who kindly provided invaluable personal information about his grandfather's life and career that was not available elsewhere.

It is necessary to point out that the language of some works created certain limitations for the research. In the case of Japanese, the difficulty of analyzing publications that used pre-World War 2 Japanese writing with my limited abilities in the language could be overcomed thank to the much appreciated help of several Lab members, especially Jina Baek. Nevertheless in the case of publications available only in German —as the studies of Ludwig Mecking— the analysis was very restricted. Mecking's publications on the Japanese cultural landscape were reviewed and quoted by Robert B. Hall and Glenn T. Trewartha, but the difficulty in accessing this material and the limitations of the language prevented me to fully explore this issue.

4 Review of previous studies related to the subject and academic contribution

Hall's career after World War 2 has been addressed by many scholars in the past. The issue most usually referred is Hall's engagement in the promotion of the academic study of Japan in the United States, and his role in the development of the studies of Japanese modernization. In this respect the works of Hiroshi Ishida (石田寛) and Yukiko Bedford offer a thorough overview and analysis of Hall's post-World War 2 career.[6]

On the other hand, Hall's publications on the Japanese built environment from the interwar period have been recognized as important but there are no analysis of their contents. The examination of these important and overlooked publications will contribute to three groups of academic literature:

In the first place, it will contribute to academic literature dealing with *Western geographic studies on Japan*. One of the best examples of this category is the previously mentioned work of Ishida. Another important analysis was made by Norton Ginsburg who examined the

developments in the American geographic studies on Japan.[7] A recent study on Geography's Contributions to Japanese Studies —*US Geographers of Japan from the Early Twentieth Century* by Mary McDonald —contains a summary of the career and work of American geographers that studied Japan from all sub-fields until our day, including Hall.[8] In all these works, Hall's pre-World War 2 studies are mentioned and acknowledged as valuable but never analyzed. Although this dissertation focuses on the contents on settlements of Hall's studies, the analysis made of the historical and ideological context will contribute to the understanding of the Western view on Japan in the field of Geography.

In the second place, this analysis will contribute to the literature dealing with the *development of the academic study of cities.* Available studies on the subject, as the works of Jay Vance, Shinzo Kiuchi (木内信蔵), and Seiji Yamaga (山鹿誠次) provide detailed reviews considering mainly the works that were published after World War 2, when Urban Studies was officially established as an independent academic field.[9] At the time Hall made his studies on Japan, the study of cities within Geography was just beginning. Nevertheless, several pioneer works —as the ones of Hall and his colleagues— were being made. The analysis of Hall's studies on cities will contribute to the understanding of the first attempts at systematic studies of cities within Geography.

The third body of academic literature to which the analysis of Hall's studies will contribute is the one dealing with *Western studies on the Japanese built environment*, usually made within the field of Architecture. It was the lack of mention of Hall's studies in this type of works that initially motivated this investigation. Within the field of Architecture, authors referring to this subject usually turn to publications of other disciplines and nonacademic works, as is the case of Barrie Shelton in "*Learning from the Japanese city*" or Henry Smith in "*Tokyo as a Village*"(村<ヴィレジ>としての東京：変転する近代日本の首都像).[10] Despite including all kinds of writings on Japanese cities, Hall's works have not been so far considered, and this omission led to some misconceptions, as the belief that there was no academic Western interest in Japanese cities until after World War 2.[11] The discussion of Hall's studies on Japanese urban settlements corrects such misconception while providing a clear explanation of the way in which Japanese cities were studied within the field of Geography. Moreover, the analysis of Hall's methods to study Japanese rural architecture provides an understanding of an often overlooked approach to the study of architecture.

In all three cases the ideological and methodological analysis of Hall's studies provides new evidence that will improve our current understanding of the Western ideas on Japan of the pre-World War 2 period.

5 Structure of the dissertation

The analysis of Hall's publications is structured in four sections of two chapters each:

Part 1 -*Context and Background of Hall's Studies*- presents the necessary information to understand the historical context of Hall's publications.

Chapter 2: WESTERN PUBLICATIONS ON THE JAPANESE BUILT ENVIRONMENT (1868-1939)

One of the main motivations to make the analysis of Hall's work is to include them among the most important Western studies on the Japanese built environment of the pre-World War 2 period. With that in mind, Chapter 2 presents an overview of the most important Western studies on the Japanese built environment in order to provide the context to locate Hall's work within this bibliography. The chapter is divided in two periods of different historical contexts —between Meiji restoration and World War 1 (1868-1919) and the interwar period (1919-1939). In each of these sections the most renowned popular and academic studies are considered, including as well the less known works made within the field of Geography. The addition of the works made within Geography enlarges the bibliography traditionally considered in scholarly works on the Western views on the Japanese built environment, providing a more comprehensive understanding of the subject.

Chapter 3: ROBERT BURNETT HALL (1896-1975)

This Chapter provides an insight into Robert B. Hall's career and works. After presenting a general biography, his career and field trips to Japan are discussed. At the end of this section, Hall's studies on settlements are briefly reviewed to have an overview of the articles that will be analyzed in the subsequent chapters.

Part 2 –*Interpretations and Integrated Study of Culture and Nature*- examines the ideological and academic context. The analysis of this section is illustrated with examples of Hall's studies on *rural settlements*. In these types of studies the difficulties of the combined study of culture and nature are more obvious and therefore they afford the richest examples.

The analysis of the contents of Hall's articles was made considering Geography publications from the early 20th century, as well as contemporary works analyzing the ideological debates that field during the 1920s and 1930s. Among the Geography publications of the early 20th century, the writings of the renowned American geographer Carl O. Sauer (1889-1975) were especially considered because they were found to be of particular importance to understand Hall's work.

Chapter 4: INTERPRETATION OF THE BUILT ENVIRONMENT

The purpose of Chapter 4 is to make clear how the ideological context of early 20th century's

Geography affected Hall's interpretation of the Japanese built environment. First, there is a discussion of the way in which settlements came to be part of the study of Geography. The changing understanding of the relationship between culture and nature within Geography is then discussed. In this section Hall's thought is located in such debate, pointing out his main influences and key ideas supporting the argument with evidence of his writings on Japan. Finally, Hall's studies on settlements are examined in light of the issues treated earlier in the chapter to make clear the relation between Hall's thought and practice.

Chapter 5: HISTORICAL APPROACH

The purpose of this chapter is to examine the problems of the combined study of culture and nature to understand Hall's position on the subject. First, the debate that took place during that period regarding the correct approach to the study of the culture is addressed, pointing out the relationship with the ideological change discussed in Chapter 4. Then, Hall's attitude to the study of culture is examined, followed by a discussion of the new understanding of the relationship between history and landscape. Hall's writings on Japanese settlements are then analyzed from the stand point of the use of history, revealing the outcomes of Hall's thought in his studies on Japan.

Part 3 - *Studies on Japanese Settlements within the Academic Framework of Geography*- examines the contents of Hall's research on cities and architecture. His studies on cities and rural architecture are the most original part of his research and the most relevant for the fields of Architecture and Urban Studies. Therefore, these subjects are examined separately. The analysis of Hall's writings focuses on making clear the way in which he carried out in practice these studies within the disciplinary framework of Geography. The analysis of Hall's studies was made by first locating his studies within the disciplinary context of his time to evaluate which methods were being used at that time, to then examine in detail the outcomes of Hall's studies on cities and rural architecture.

Chapter 6: STUDIES ON JAPANESE URBAN SETTLEMENTS

The aim of this chapter is to explain Hall's translation of Geography's methods to the study of Japanese urban settlements. First, the situation of Urban Studies in the United States is examined to understand the state of development of the field at the time Hall made his studies. Then, in order to assess the significance of Hall's studies, it was necessary to examine the academic studies on Japanese cities made until World War 2 by American and Japanese scholars. Hall's writings on Japanese cities are finally analyzed in detail from a methodological standpoint, also pointing out the connection the discussions of previous chapters. This section is organized around five main characteristics of Hall's studies on cities that were revealed after the analysis: *distribution, classification, functional analysis, structuring elements, and development.*

Chapter 7: STUDIES ON JAPANESE RURAL ARCHITECTURE

Hall's writings on Japanese rural architecture are analyzed in this chapter to reveal his particular method. For that purpose, the first step taken was the discussion of how rural architecture was approached within the field of Geography. To provide context and counterpoint for the analysis of Hall's work, the academic studies on Japanese rural architecture from the early 20th century (both Western and Japanese) were reviewed. Hall's studies on Japanese rural architecture are then examined in view of the previous subjects, pointing out his influences and the particularities of his interpretation of rural architecture. Finally, Hall's studies are compared with the best known Western studies on Japanese rural architecture of the same period: the studies of Bruno Taut. This comparison allows for the location of Hall's works in a familiar academic context, and illustrates how two dissimilar understandings of the relationship between culture and nature result in different interpretations of Japanese architecture.

Part 4- ***Discussion and Conclusions***- provides some final considerations on Hall's contribution and career after World War 2, and presents the conclusions of the thesis.

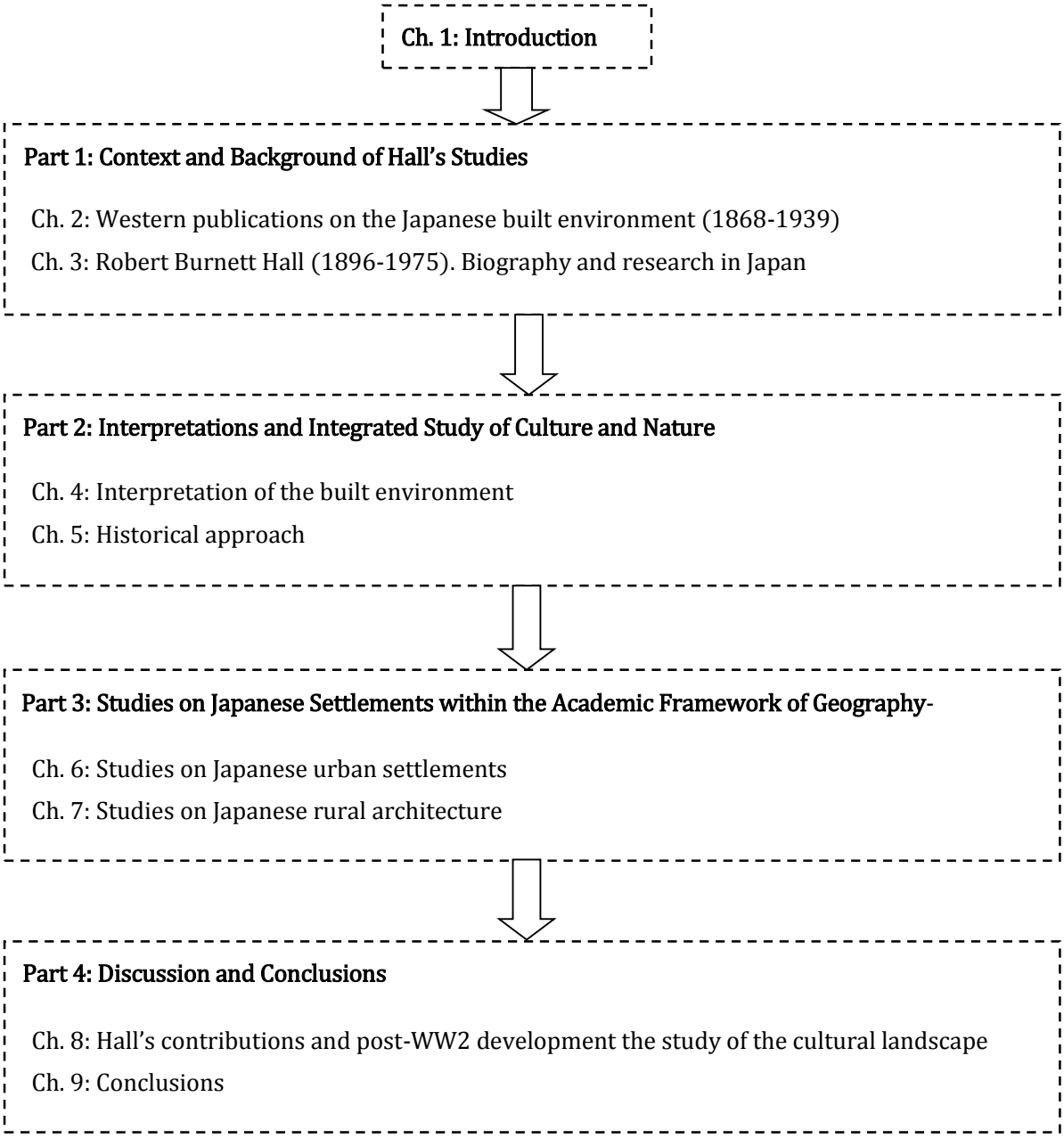
Chapter 8: HALL'S CONTRIBUTIONS AND POST WW2 DEVELOPMENT OF THE STUDY OF THE CULTURAL LANDSCAPE

In this last chapter, the findings of the previous sections are put together in order to highlight Hall's main contributions to American Geography, summarized as: contribution to the knowledge of the Japanese built environment and its settlements, contribution to the theory and practice of Geography, and his involvement in the education of Geography in the United States. In addition, the post- World War 2 development of the studies on the cultural landscape is examined to make clear the reasons why the comprehensive regional studies were abandoned.

Chapter 9: CONCLUSIONS

The conclusions and discussion on Hall's studies are organized around the two main issues that were considered essential for the proper reading and understanding of his works: *findings in relation to the ideological context*, and the way in which Hall carried out *in practice* the study of cities, towns and architecture within the framework of a geographical study. The relevance of this study and possible future developments of this study are briefly discussed at the end of this chapter.

5.1 Dissertation flowchart



5.2 Main sources used by Chapter

The list below is only a selection of the most relevant publications used for review and analysis in each chapter.

Chapter 2:

Bibliography reviewed for the period 1868-1919

1885-Morse, E. S.: *Japanese Homes and their Surroundings*
1894-Hearn, L.: *Glimpses of Unfamiliar Japan*
1905-Cram, R. A.: *Impressions of Japanese architecture and the allied arts*
1912-Wright, F. L.: *The Japanese Print: an Interpretation*
Geographers:
1884-Rein, J. J.: *Japan: Travels and Researches Undertaken at the Cost of the Prussian Government*

Bibliography reviewed for the period 1919-1939

1925-Ponsonby-Fane, R. A. B.: *Kyoto: The Old Capital of Japan, 794-1869*
1937-Taut. B.: *Houses and People of Japan*
Geographers:
1922-Jones, W. D.: *Hokkaido, the Northland of Japan*
1923-Cornish, V.: *The Great Capitals: an Historical Geography*
1928-Trewartha, G. T.: A *Geographic Study in Shizuoka Prefecture, Japan*
1934-Davis: *Present Status of Settlement in Hokkaido*; and *Some Aspects of Urbanization in Japan*
1934-Trewartha, G. T.: *Japanese Cities, Distribution and Morphology*
(See also Hall's bibliography)

Secondary bibliography referred:

1935-Takaki, Y.: *Japanese Studies in the Universities and Colleges of the United States*
2000-Takeuchi, K.: *Modern Japanese Geography*

Chapter 3:

Main sources

Undated-Hall, R. B.: *Personal Data Sheet*. Unpublished document, n.d., provided by Robert Hall
Undated- Gosling, P. & Kish, G.: *Robert Burnett Hall (1896-1975)*, unpublished memorial
Undated- Robert B. Hall's personal *Resume*, unpublished document
1949-Letter from General Douglas MacArthur to Robert B. Hall, date 5th June
Newspapers: The Michigan Daily, *Hall Receives Award*, undated; The Ann Arbor News, *Japanese Crown Prince Tours University Campus*, Ann Arbor, Mich., Wednesdat September 23, 1953; The Ann Arbor News, The Emperor's Old Ties, November 14, 1990; Asahi Evening news, *Dr. Hall Honored*, 1957

Secondary bibliography

1935-Takaki, Y.: *Japanese Studies in the Universities and Colleges of the United States*
1951-Shaw W. B. (Ed.): *The University of Michigan, an encyclopedic survey*
1985-石田寛編: 外国人による日本地域研究の軌跡, 東京: 古今書院
2006-Eyre, John Douglas: *Robert Burnett Hall*. In Armstrong P. H. and Martin G. J. (Eds.): *Geographers: Bibliographical Studies,* Vol. 25, pp. 81-92, London, Continuum, 2006.

2001-Ward, Robert E.: *Reflections on the Origins of the Centre for Japanese Studies: A tribute to Robert Burnett Hall* (1896-1975). In, Centre for Japanese Studies (Ed.): *Japan in the World, the world in Japan: fifty years of Japanese studies at Michigan*, University of Michigan

Chapter 4:

Works analyzed

1912-Semple, C. E.: *Influence of Geographical Conditions upon Japanese Agriculture*
1924-Hall, R. B. & James, P. E.: *A Suggested Outline for the Treatment of a Geographic Region*
1924-Hall, R. B. & James, P. E.: *Outline for a Course on the Principles of Geography*
1925-Sauer, C. O.: *The Morphology of Landscape*
1931-Hall, R. B.: *Some Rural Settlements Forms in Japan*
1935-Hall, R. B.: *The Geographic Region: A Resume*

Secondary bibliography

1920-Brunhes, J.: *Human Geography. An attempt at a Positive Classification*
1922-Vidal de la Blache, Paul: *Principes de Géographie Humaine*
1985- Peet. R.: *The Social Origins of Environmental Determinism*
2001-Dunbar, Gary S.: *Geography: Discipline, Profession and Subject*
2009-Gregory, D.: *The Dictionary of Human Geography* (5th edition)
1966- Lewthwaite, G. R.: *Environmentalism and Determinism: A Search for Clarification*

Chapter 5:

Works analyzed

(Same as chapter 4)

Secondary bibliography

1921-Vallaux, C. & Brunhes, J.: *La Géographie de l'Histoire*
1922-Febvre, L.: *La terre et l'évolution humaine: introduction géographique à l'histoire*
1934-Bowman, I.: *Geography in Relation to the Social Sciences*
1941-Sauer, C. O.: *Foreword to Historical Geography*
1976- (First German ed.:1933)-Von Mises, Ludwig: *Epistemological Problems of Economics*
1996-Gaziano, E.: *Ecological Metaphors as Scientific Boundary Work*

Chapter 6:

Works analyzed

1931-Hall, R. B.: *Sado Island*
1932-Hall, R. B.: *The Yamato Basin, Japan*
1934-Hall, R. B.: *Cities, Villages, and Houses of Japan*
1934-Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*
1937-Hall, R. B.: *A Map of Settlement Agglomeration and Dissemination in Japan*

Secondary bibliography

1955-Smailes, A.: *Some Reflections on the Geographical Description and Analysis of Townscapes*
1971-Vance, J. E. Jr.: *Geography and the Study of Cities*
1973-山鹿 誠次:都市地理学のあゆみ
1981-Whitehand, J. W. R. (ed.): *The Urban Landscape*

1996- Abe. K.: *Urban Geography in Post-war Japan*
1997-Moudon A. V.: *Urban Morphology as Emergent Field*
2004-Gauthiez, B.*: The History of Urban Morphology*

Chapter 7:

Works analyzed

1931-Hall, R. B.: *Some Rural Settlements Forms in Japan*
1933-Hall, R. B.: *The Hiinokawa Plain*
1934-Hall, R. B.: *Cities, Villages, and Houses of Japan*
1937-Taut, B.: *Houses and People of Japan*

Secondary bibliography

1905-Demangeon, A.: *La Picardie et les Regions Voisines*
1920-Brunhes, J.: *Human Geography. An Attempt at a Positive Classification Principles and Examples*
1930-1931-緑草会:民家図集, 第 1 輯 山梨県-第 12 輯 長野県,大塚巧芸社
1967-Nishi, Midori: *Regional variations in Japanese Farmhouses*
1976- 石原憲治:日本農民建築の研究, 南洋堂書店出版部
1990-Morse R. A.: *Yanagita Kunio and the folklore movement*
2008-Edlinger, A.: *The Japanese Example- or the art of appropriation*. In Herrle, P. (ed.): *Architecture and Identity*
2010-Ackan, E.: *Bruno Taut's translations out of Germany*. In Lejeune, J. F. and Sabatino, M. (eds.): *Modern Architecture and the Mediterranean: Vernacular Dialogues and Contested Identities*

Chapter 8:

Works analyzed

1934-Hall, R. B.: *Local Inventory and Regional Planning in the School Curriculum*
1939-Hartshorne, R.: *The Nature of Geography: A Critical Survey of Current Thought in the Light of the Past*
1942-Hall, R. B.: *The Road in Old Japan*
1953-Schaefer, K. F.: *Exceptionalism in Geography: A Methodological Examination*
1962-Hall, R. B.: *A Map of "Buraku" Settlements in Japan*

Secondary bibliography:

1954-James, P. E. & Jones, Clarence F.: *American Geography: Inventory & Prospect*
1965-Stone, Kirk H.: *The Development of a Focus for the Geography of Settlement*
1988-Kinda, A. & Kobayashi, K.: *Research Frontiers in the Historical Geography of Japan in 1978-1987*
2002 -Turner B. L: *Human-Environment Geography and Disciplinary Implications in a Restructuring Academy*
2009-Denevan, W. M. & Mathewson, K. (Eds.): *Carl Sauer on Culture and Landscape*
2010-Kobayashi, A.: *People, Place, and Region: 100 Years of Human Geography in the Annals*

Notes:

1 The word *Geography* and its variations, when capitalized, refers to the academic field.

2 This contemporary definition of *cultural landscape* is from: *Operational Guidelines for the Implementation of the World Heritage Convention*, UNESCO, Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, July, 2012, p. 14. The historical development of the concept of *cultural landscape* is discussed in detail on Chapter 4

3 In its widest sense, the term *built environment* includes all of man-made objects. Nevertheless in the fields of Architecture and Urban Studies the term *built environment* usually refers to immobile construction and infrastructure that noticeable modify the landscape. The term *built environment* was used by the British architect and town planner William Graham Holford (1907–1975) in 1965 in a publication entitled *The Built Environment: Its Creation, Motivations, and Control*. Later, the British journal dedicated to architecture and planning called *Built Environment Quarterly* (renamed as *Built Environment* after 1978) popularized the term. The term in German *(gebaute Umwelt)* and in French *(cadre bâti)* also started to be frequently used since the 1970s.

4 Hall published two articles after World War 2 on the Japanese built environment: *The Road in Old Japan*, in 1942, and *A Map of "Buraku" Settlements in Japan*, in 1960. These two publications are analyzed separately on Chapter 8 because of their different historical and ideological context

5 For a complete list of Hall's publications please refer to Bibliography

6 石田寛: 外国人による日本地域研究の軌跡, 東京: 古今書院, 1985; Bedford, Y.:アメリカにおけるエアリア・スタディによる日本研究と日本近代化, Japanese Journal of Human Geography 32(6), 504-517, 1980

7 Ginsburg, N.: *Geography and Area Studies, the case of Japan* by (1973); Bedford, Y. op. cit. Other recognitions of Hall's pre-World War 2 works can be find in: Nishi, M.: *Regional Variations in Japanese Farmhouses*, Annals of the Association of American Geographers, Vol. 57, No.2, pp.239-266, 1967. p. 239; and Stone, Kirk H.: *The Development of a Focus for the Geography of Settlement*, Economic Geography, Vol. 41, No.4, pp. 346-355, 1965. p. 353

8 McDonald, Mary: *Geography's contributions to Japanese Studies*. In BABB, James D. (Ed.): *The SAGE handbook of Modern Japanese Studies*, SAGE Publications, 2015. pp. 103-109

9 Vance, J. E. Jr.: *Geography and the Study of Cities*, American Behavioral Scientist, Vol. 22, No. 1, pp. 131-149, 1978; 木内信蔵:都市地理学研究, 増補版.古今書院, 1956; and 山鹿誠次: 都市地理学のあゆみ, Geographical review of Japan Vol. 46, No. 7, pp. 488-491, 1973

10 Shelton, B.: *Learning from the Japanese City: Looking East in Urban Design*, E & FN Spon, London 1999; Smith, H. D.: *Tokyo as a Village: Changing Perceptions of Japan's Capital City.* In Suzuki Hiroyuki et al., eds., Shiriizu Toshi-kenchiku-rekishi 6: Toshi bunka no seijuku, (Tokyo University Press, 2006), pp. 201-37-村<ヴィレッジ>としての東京：変転する近代日本の首都像, シリーズ都市・建築・歴史６：都市文化の成熟

11 Hein, C.: *Shaping Tokyo: Land Development and Planning Practice in the Early Modern Japanese Metropolis, Journal of Urban History,* (2010); Smith, H.D., op. cit.

PART 1: Context and Background of Hall's Studies

CHAPTER 2
WESTERN PUBLICATIONS ON THE JAPANESE BUILT ENVIRONMENT

Introduction

This chapter presents an overview of the Western publications on the Japanese built environment from Meiji Restoration (1868) until the beginning of World War 2 (1939). The purpose is to examine what kind of information on Japanese cities, towns, and architecture was available at the time Hall made his studies to provide the proper bibliographical context to locate his work. The first section of the chapter (1) focuses on works published between 1868 and the end of World War 1 (1919). During this period, Western countries were eager to learn as much as possible from a country that had remained secluded until that time, and countless works were published on all subject related to Japan. The second section (2) deals with the interwar period (1919-1939). During this time, the Western interest in Japan persisted, although motivated for different reasons as the rapid industrialization and military expansion of the country.[1]

Most Western works on Japan, academic or otherwise, included in some degree accounts of buildings and townscapes as part of their descriptions of the country. Each section of this chapter examines different types of publications categorized into three groups: first, the popular publications; then, the most relevant academic studies; and finally, the less known works made within the field of Geography. The focus of the review of these works is laid in the type of content (whether they included cities, towns, and/or architecture), their respective approach to these subjects (if they are descriptive, include explanations, or graphic analysis), and the general assessment that the writers made of the Japanese built environment.

1 First impressions (1868 to 1919)

1.1 Popular image

Long before the reopening of Japan in 1868, its arts were known and respected in Western countries. On the other hand, the knowledge of the Japanese cities, towns, and architecture was very limited. After the Restoration, countless traveler's accounts of Japan were published and created the first images of its landscapes and cities for Western readers. Two of the most popular works published before World War 1 were made by Westerners who had lived in Japan for long periods, which gave them a deep insight in the culture and daily life of the country. These works are *Things Japanese* (1890), written by the British scholar Basil Hall Chamberlain (1850-1935), and *Glimpses of unfamiliar Japan* (1894), written by the Greek-Irish journalist Lafcadio Hearn (1850-1904),

Chamberlain lived in Japan from 1873 until 1911. He wrote extensively out of his experience in the country and translated important Japanese classic as the *Ko-ji-ki* (古事記, the oldest existent Japanese chronicle) contributing significantly to the knowledge of Japanese culture in the West. Chamberlain's most popular work —*Things Japanese*— includes articles on various subjects presented in an encyclopedic style. While his appreciation for the Japanese arts is shown in his

extensive entries on subjects such as wood engraving, porcelain, and other arts, his view or Japanese architecture and cities is much less approving. The descriptions of townscapes is only addressed in the entry for the word *Architecture*, being the section for *Cities* dedicated to the account of the history of the main capitals of the country. When describing the cityscape from the distance, Chamberlain notices that there are no towers or domes, or in his words, "*…nothing aspiring heavenwards, only long, lowliness of constructions, even the Buddhist temples roofs being quaint and graceful but only slightly above the other roofs with no intentions of standing out"*.[2] This understanding of the Japanese cityscape as monotonous was a consequence of the comparison with Western cities in which cathedrals and public buildings stand out from the residential buildings of smaller dimensions. Chamberlain's comments on Japanese architecture are also brief and unenthusiastic. Japanese houses are described from the constructive standpoint mostly referring from the works of other Westerners. While explaining the traditional construction Chamberlain points out that although Japanese houses might seem uncomfortable for a Western, the idea of comfort is not shared by both cultures.[3] Nevertheless, this type of recognition of cultural differences was not always taken into account by Chamberlain who, in the case of settlements, relied in the comparison with Western examples.

Although Chamberlain's publication was extremely popular, the most appreciated works on Japan in English speaking countries were those of Lafcadio Hearn. He lived in Japan from 1890 until his death in 1904 where he worked as a journalist and lecturer. Hearn's numerous publications on Japan are now controversial because of the exotization that he makes of the country, but at the beginning of the 20th century his proficiency in Japanese matters was highly respected. In 1894, Hearn published his most renowned work —*Glimpses of Unfamiliar Japan*— where he presents his explorations of the country. Regarding the townscapes Hearn stated that "*there are no immediately discernible laws of construction or decoration: each building seems to have a fantastic prettiness of its own; nothing is exactly like anything else, and all is bewilderingly novel. But gradually, after an hour passed in the quarter, the eye begins to recognize in a vague way some general plan in the construction of these low, light, queerly-gabled wooden houses*".[4] His descriptions of cities, towns, and architecture present a hazy and idealized version of traditional Japanese architecture, but they provided Wester readers with the first vivid accounts of the Japan's life and customs in the form of stories and personal chronicles.

In most publications of this period, a combination of admiration and criticism towards Japanese constructions and townscapes was common, and particularly in the description of the Japanese cityscapes, Westerners opinions were divided. For instance, the renowned English writer Rudyard Kipling (1865-1936) perceived the Japanese townscapes as monotonous stating that "*one Japanese town (…) is very like another to look at – a gray sea of house roofs, speckled with the white walls of the fire-proof godowns* (kura) *"*.[5] On the other hand, Westerners who were familiar and appreciated the traditional Japanese woodblock-prints depicting these homogeneous traditional scenes, saw the same townscapes as pleasant. That is the case of the American

architect Frank Lloyd Wright (1867-1959), whose descriptions of Tokyo are as idealized as Hearn's accounts, and he even states that "*it all looked just like the prints!*".[6] Despite the different opinions about the aesthetic qualities of the Japanese townscapes, there was consensus among Westerners in the appreciation of other non-material characteristics as the cleanliness and liveliness of the streets.

1.2 Renowned academic studies on the Japanese built environment

Two of the most influential Western studies on Japanese architecture were published during this period. These works were *Japanese Homes and their Surroundings* (1885) by the American zoologist Edward S. Morse (1838-1925), and *Impressions of Japanese Architecture and the Allied Arts* (1905) by the American architect Ralph Adams Cram (1863-1942). In both cases, constructions were analyzed in detail while little was said about the context, either natural rural or urban, in which they were situated.[7]

Edward S. Morse made three visits to Japan during early Meiji period, where he taught Zoology at Tokyo Imperial University and assisted in the renovation of Japanese education programs.[8] During his time in Japan, Morse surveyed Japanese middle-class residential architecture to have a record of what he perceived to be endangered by foreign influences. In his book, Morse provides thorough descriptions of house construction, roofings, and materials, paying great attention to the interior of the house and the gardens. Morse believes that in order to understand Japanese houses, Westerns "*must get rid (…) of all preconceived ideas as to what a house should be, and judge the work of a Japanese builder solely from a Japanese stand-point*".[9] For this reason, his explanations of architecture are always related with detailed accounts of Japanese lifestyle and manners, as well as in the local conditions as climate, earthquakes, and resources. The little attention given to the town and city is perhaps motivated by Morse's lack of appreciation to the external appearance of the house, which he considers in much lesser extent. He describes the façades of Japanese houses in general terms as "*usually of wood, one story and unpainted* "adding that "*there is a sameness about them that becomes wearisome*"(Fig. 2-1, following page).[10] Still, Morse dedicates a small section at the beginning of his book to the urban context named *Appearance of City and Village.* Here he provides a series of descriptions of the urban scene, commenting on its visual aspects. Contrary to his examination of architecture, when describing cities most comments come from implied of explicit comparisons with Western cities, as the reference to the "*clarity and cleanliness"* of the atmosphere because of the absence of smog.[11]

The most important work of Ralph Adams Cram on Japan, *Impressions of Japanese Architecture and the Allied Arts* (1905) was written after a four month trip that Cram made to Japan in 1896.[12] In this work, Cram focuses on the architecture of Temples, Shrines, Tea-houses, and some examinations of residential architecture of the noble classes (Fig. 2-2, following page). Cram, as Morse, recognizes the difficulty of interpreting an art of a foreign culture, stating that

"*there is something between Europe and Asia besides a difference of tongues (…) There is an utter antagonism of ideals and methods*."[13] In his understanding, these antagonisms prevented Westerners to judge Japan by its own standards, and in an attempt to overcome this bias, Cram takes into account the historical development of the country and influences of Korean and Chinese architectonic styles in his explanations of Japanese architecture.

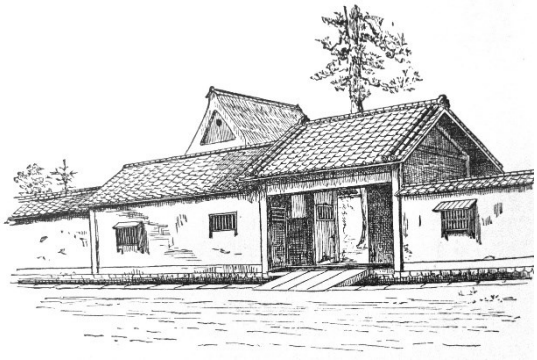


Fig. 2-1 Morse- Original Caption: "*Entrance to the Court-yard of Old House in Kioto".* In the text it is explained that"*(…) like all such houses, had its uninteresting end towards the street*"

Fig. 2-2 Cram- Original Caption: Kyoto Imperial Palace. "*Simple and monastic, but within the decoration is often splendid beyond description"*

Although Cram dedicates most of his attention to religious buildings, he recognizes the middle class dwelling as the only architectonic type that will survive the influence of Westernization. Cram understands that "*(w)hile in public architecture, in painting and sculpture, in the industrial arts, and even in the greater part of the domestic architecture of the better class, Japan is fast losing all national quality, the houses of the lower and middle classes still preserve the beautiful characteristics of the old art, so unique, so refined, so wholly ethnic and national*."[14] In general, the adoption of Western building techniques and materials for the improvement of infrastructure was regarded as necessary for the improvement of cities, but the adoption of Western styles of architecture was hardly criticized. As in the case of Morse and many other Westerners, Cram's study was motivated by a concern with the loss of the traditional Japanese culture.

1.3 Geography publications

As scholars from other fields, Western Geographers traveled to Japan after its reopening to gain as much knowledge as possible from this unknown country.[15] Works on Japan made within the field of Geography not only included the study of the natural environment but treated a wide range of subjects related to the population and its activities. Numerous studies included among its subject the analysis of Japanese settlements, as *The Distribution of People in Japan in 1913* by Mark Jefferson (1863-1949) where the author addresses the distribution and location of cities; *The Japanese Life and Customs as Contrasted with Those of the Western World* by Kinza Riuge M. Hirai (平井金三, 1859-1916), which includes a very complete account of life in Japan, explaining Japanese houses and cities from an experiential point of view; or *Japan: Geographical and Social*

by William Elliot Griffis (1843-1928) that included the history and descriptions of the important urban centers of Japan.[16]

The most extensive work of this period was made by the German geographer Johannes Justus Rein (1835-1918), who performed a far-reaching exploration of Japan during the years 1874 and 1875. The result of this research was published in two volumes: *Japan: Travels and Researches* (1881), and *The Industries of Japan* (1886).[17] These comprehensive works were printed in German and English and are today qualified as the first modern scientific studies of Japan.[18] The first volume is divided into a section on natural geography, and a section dedicated to the *Japanese People*, where Rein presents *"a brief account of their history, civilization, and condition, from Jimmu-Tenno to present day".*[19] This comprehensive study considers Japanese cities, towns, and residential architecture. As opposed to books focused on architecture, Rein's approach to buildings is for the most part descriptive. Houses are depicted from a constructive standpoint and despite having made a thorough study of Japanese lifestyle and customs Rein judges them from Western lifestyle standards, which leads him for example to judge the lack of furniture as a negative feature. Similarly, Rein perceives the lack of decorations as "*poverty-stricken"*, but he recognizes that "*in the construction and covering of their roofs the Japanese display great skill, (…) the thick tile or straw roof has a care and attention bestowed upon it which we frequently miss elsewhere*."[20]

Fig. 2-3 Rein- Tokyo plan showing layout and location of temples, shrines, and railroads.

Although the contents on architecture are simpler than those of Morse and Cram, the considerations of villages and cities are much more comprehensive. His assessment of the townscape is mostly negative, noting no variation. Rein, as many Westerners, could not find marked differences between houses of different classes or regions, or even between country and city houses, explaining that *"the town is only marked by the number of houses and by the business carried on by shopkeepers*".[21] Rein provides a great amount of detailed data on size, functions, and population of Japanese cities illustrated by charts and layout plans of the most important urban centers (Fig. 2-3). Contrary to most of the works on Japan previously mentioned, Rein sees the modernization of Japanese construction as positive, predicting for Tokyo that "*(t)he time is coming when it will no longer be said, as hitherto, (…) 'the Fire is Yedo's flower;' but when, even for the solidity of its architecture, Yedo might be called the flower of the cities of Japan*".[22]

2 Interwar period (1919-1939)

2.1 Popular image

The rapid industrial development of Japan created strong contrasts between the traditional landscapes and the new building systems, infrastructure, and transportation works. To manage the hasted development numerous plans were carried out by the Japanese central and municipal authorities, in both rural and urban areas.[23] In addition, the Great Kanto Earthquake of 1923 and the economic recession of the late 1920s stimulated the application of planning systems that aimed at the rationalization of the settlements of the country.

During the 1920s and 1930s fewer works on Japan were published, and these dedicated great amount of their writing to correct misunderstandings about the country that had been presented in earlier publications. A good example in this regard is the work of the Irish poet James Cousins (1873-1956). At the beginning of his work —*The new Japan: impressions and reflections*— Cousins states that "*Japan has suffered from extremes of adulation and condemnation (…) equally remote from reality*".[24] With the accounts of his trip Cousins tries to amend the mistaken impressions that Westerners had of all subjects of Japanese culture. When explaining Japanese houses, he refers to a foreign expression, popular at that time, that said: *"(s)ee one house and you have seen the whole of Japan"*.[25] He then states that Japan is superficially monotonous "*only to those who look superficially on Japan*" explaining that Japanese do not seek in variety in *form*, but *within* form, referring to the variation of tints and textures of the construction elements as opposed to the variation in their structure or design.[26]

The appreciation of townscapes during the interwar period did not have much variation from the one of the first Western visitors. Despite the developments of the country the image of the Japanese built environment in the West was still created mainly by the works of Hearn and Morse, which continued to be the most popular publications on Japan for many decades after World War 1.[27]

2.2 Renowned academic studies on the Japanese built environment

During the interwar period, the renowned work of the German architect Bruno Taut (1880-1938) overshadows other academic publications on Japanese architecture and culture. Taut was in Japan between 1933 and 1936, time during which he was committed to the study of the country's lifestyle, religion, arts, and buildings. Several works were published showing the results of his examinations. The reproduction of his conference *Fundamentals of Japanese Architecture*, published in 1936, was a turning point for the Western perception of Japanese architecture because to this work it is assigned the rediscovery of the architectonic values of Katsura Village by their association with the Western principles of modern architecture.[28]

In his most extensive work —*Houses and People of Japan,* from 1937— Taut makes a comprehensive analysis of Japanese residential architecture of the average Japanese citizen (Figs. 2-4 and 2-5). To make this study, Taut consciously decides to rely on a subjective description. In his understanding, the only way to obtain objectivity is by explaining his own perception and understanding.[29] Still, he is determined to do so from a "*scientific standpoint*" considering cultural aspects from a biological perspective, analyzing the "*conditioning factors* "of his objects of study.[30] This way, Taut's explanations of traditional town and rural archieture are accompanied with rich descriptions of the Japanese natural environment, lifestyle, religion, and even ergonoimics.

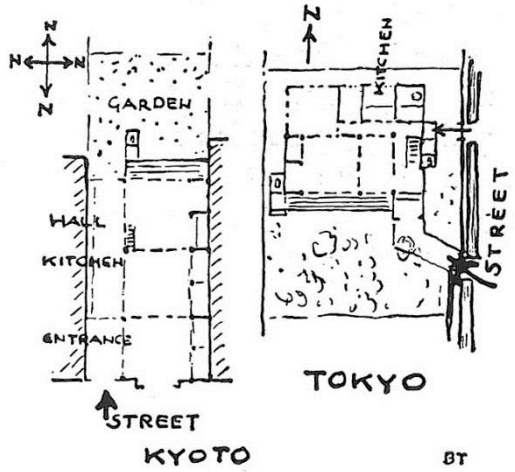


Fig. 2-4 Taut- Comparison of Kyoto and Tokyo Houses

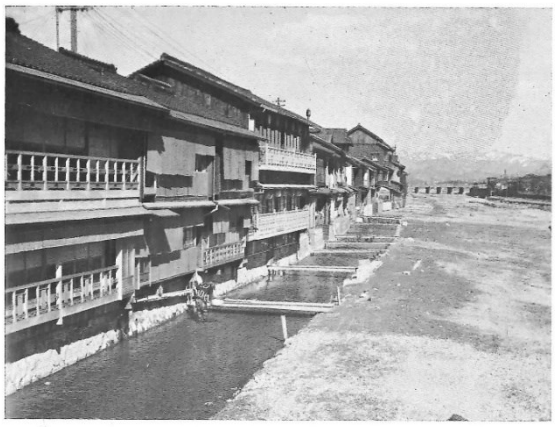


Fig. 2-5 Taut- Original caption: *Restaurants in the Banks of the Kamo River. In Summer Time are built Many Terraces*

In *Houses and People of Japan*, Taut refers to the context of the archiecture studied more than Cram and Morse, but the examination of cities, towns, or villages is still secondary in his study. Taut's lack of interest in Japanese towns and cities comes from the fact that, on Taut's view, Japanese towns have "*developed like villages pressed together",* unlike Westerner cities which are said to have a political origin.[31] Taut reacts with hard criticism to Japanese modernized cities as Tokyo, while parsing the traditional ones. He particular admires Kyoto, where he finds in the long rows of similar buildings an example of "*how natural harmony can be maintained even in a big town".* [32] Still, in Taut's view "*(o)f town planning as a science and an art, scarcely any studies can be made in Japan*", therefore neglecting the serious examination of cities.[33]

Although most Westerners disregarded the study of the Japanese city, there was during this period an important work on the history of Kyoto that included a comprehensive account of its urban development. The author of this book was the British Scholar Richard A. Ponsonby-Fane (1878-1937).[34] He was the author of several books on the history of Japan that were known and appreciated by the Western public. Ponsonby-Fane's study of Kyoto —*The Capital and Palace of Heian,* published in 1925— contains detailed explanations of streets, blocks, and plot organization during Heian period. The main reference for this work is the Japanese book *Heian Tsūshi* (平安通

史), published by Kyoto Prefectural Office in 1895. Kyoto city had been the home of the Emperor from 786 to 1868, and because of its historical importance there was available a large amount of records from which the author claims to have made only a recount of the most relevant features. Even though this study follows the urban development of Kyoto only during Heian period, it is a valuable account on subject that was usually overlooked by other authors.

2.3 Geography publications

Contrary to publications on other fields, Geography studies with examinations on the Japanese built environment increased during the interwar period. The study of the cities, towns, and architecture was mostly done by regional geographers who treated the subject in different degrees and with dissimilar approaches.

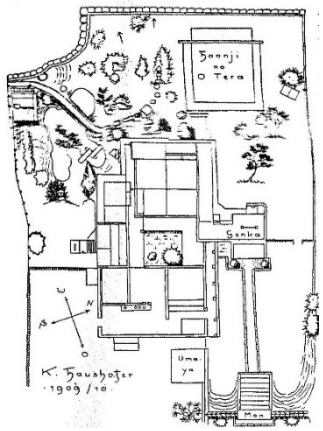


Fig. 2-6 Haushofer- Priest house of Honji Temple, Kyoto

One of the most comprehensive geographic works on Japan published before 1939 was made by the German General and geographer Karl E. Haushofer (1869-1946). Between 1908 and 1910, Haushofer was in Japan as an advisor to the Japanese army. In 1923, he published a comprehensive regional study on Japan entitled *Japan and the Japanese, A Regional Study.*[35] As in J. J. Rein's study, Haushofer treatise presents an exhaustive and methodic exposition of geographic data. The descriptive accounts of architecture, towns, and cities are not its strongest points, but the work provides an integrated view of the Japanese landscape with an important amount of data and illustrations (Fig. 2-6).

On very different lines, the British geographer Vaughan Cornish (1862-1948) published in 1922 The *Great Capitals: an Historical Geography*.[36] In this renowned work, Cornish addresses the history of the most important capital cities of the world, explaining the role of their geographic location in their history. This comprehensive work was praised even by those who did not agree with Cornish's hypothesis on the prevalent role of the geographical location in the success of a capital city.[37] In the chapter dedicated to Japan, Cornish analyzes the situation of Tokyo, Osaka, and Kyoto with regard to the advantages provided by the geographical location and natural resources. Physiographic, climatic, and historical factors were included into the analysis, offering a new understanding about Japanese cities to the Western public.

The work of the German geographer Ludwig Mecking (1879-1957) is also related with the geographical location of cities, dealing mainly with Japanese ports and harbor cities. Mecking conducted investigations in Japan during 1926 and published several works with the results of his study. Among his most important works are the articles *Culture and Landscape in Japan*, *Japanese Cityscape*, and the book *Japanese Seaports and its Latest Developments*.[38] For Mecking, culture is

a significant determining factor in the Japanese city landscape. His studies include formal analysis of the cities, tracing in occasions the historical development of the layouts, complementing the examinations with several maps, sections, and photographs of Japanese townscapes (Figs. 2-7, 2-8).

Fig. 2-7 Mecking- Tokyo, Commercial district, Marunouchi, showing brick buildings constructed after the earthquake of 1923 made in European style

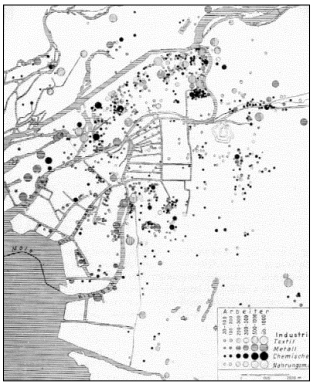


Fig. 2-8 Mecking- Distribution of Industries in Osaka

Besides these European geographers, during the interwar period a small but important group of Midwest American geographers performed fieldwork on Japan and included the study of Japanese settlements in different degrees. These were Darrell Haug Davis (1879-1962) from the University of Minnesota, Glenn Thomas Trewartha (1896-1984) from the University of Wisconsin, Wellington Downing Jones (1886-1957) from the University of Chicago, and Robert Burnett Hall (1896-1975) from the University of Michigan.

Darrell H. Davis received the Fluid Research Fund to conduct fieldwork in Japan in 1932. His research was centered in the study of settlements of Hokkaido because the influence that American advisors had in the rural development of the area (Fig. 2-10), and its strategic location relative to Russia. Davis was particularly interested in the study of Hokkaido because, in his words, "*exhibits all stages of occupance* [and] *it is seldom that the stages of sequent occupance can be compared so effectively in such a small area*".[39] He published three articles on Japan, two about rural settlements in Hokkaido, and one on the Japanese urban settlements of Japan.[40] When studying rural settlements,

Davis analyzes two different scales. In the first one, of a relatively regional scale, he considers the location and distribution of settlements within the island and its changes in relation to agricultural activities and rail road layouts. The second scale of analysis, to which less importance is assigned, is a closer look at the habitation that takes into consideration some aspects of the construction and life conditions (Fig. 2-9). According to Davis' evaluation, rural houses of Hokkaido are for the most part poorly constructed, but he also notes that "*(t)heir generally neglected and shabby appearance should, however, not lead to the inference that agriculture is necessarily unprofitable, since poor buildings in Hokkaido are commonly present on successful*

farms as success is measured by Japanese standards."[41] This type of consideration of cultural differences, in this case of a different attitude towards economic success, helped Davis make a more accurate interpretation Hokkaido's rural landscape.

As opposed to his examinations of rural settlements, Davis's article on cities is mostly descriptive. In this article —*Some Aspects of Urbanization in Japan*— his objective is to show *"some of the anomalies which have resulted from the superimposition of western industrialization on (...) major urban centers*".[42] The accounts of the cities, which resemble a traveler's chronicle, focus on the improvements of construction techniques and infrastructure pointing out the aesthetic outcomes of the modernizations of the townscape that are presented without the usual Western condemnation towards these changes (Fig. 2-10).

Fig. 2-9 Davis- Original caption: *"House under construction. American in line, construction is purely Japanese"*

Fig. 2-10 Davis- Original caption: *"Widening a bridge and street in Osaka"*

Glenn T. Trewartha (1896-1984) conducted fieldwork in Japan during 1926-27 thanks to the Guggenheim Fellowship, and again in the summer of 1932 with grants for the National Research Council and the University of Wisconsin.[43] Trewartha's comprehensive regional studies of Iwaki Basin (Aomori Prefecture), Suwa Basin (in Nagano Prefecture) and Shizuoka Prefecture, of the cultural landscape concentrate in the agricultural production of the area and its natural assets inasmuch as it is a resource for men (Fig. 2-11, next page).[44] Although the analysis of settlements does not take a central role in Trewartha's studies, within the examination of the agricultural area he includes some valuable considerations on the distribution and location of rural settlements in relation with the landforms. In 1934

Trewartha published a study on urban settlements entitled *Japanese Cities Distribution and Morphology*.[45] In this article, he approaches the study of Japanese cities considering their "*cultural morphology*". Much of Trewartha's discussion is dedicated the functional distribution within the industrialized cities and to the examination of the relation between the morphology and the landforms (Fig. 2-12, next page), combined with some descriptions of the buildings and cityscape.[46]

Fig. 2-11 Trewartha- A street in a village of Iwaki Basin, Akita Prefecture

Fig. 2-12 Trewartha- Distribution of industrial plants in Osaka

Among the American regional studies made on Japan within the interwar period, Robert B. Hall's studies are the ones that have the most comprehensive studies on settlements. Before World War 2, Hall made five fieldtrips to Japan and published fifteen articles covering the study of various regions of the country. His publications stand out not only for the wider range of settlements considered, but also for the importance assigned to the formal analysis and explanation of these settlements. He examines rural settlements in all of his regional studies, and in addition, in 1931 he published an extensive article dedicated entirely to the study of rural settlements —*Some Rural Settlement Forms in Japan*. While the analysis of settlements of most regional geographers focused on distribution and location, Hall's studies include a closer examination of various intermediate scales that ranged from the formal analysis of towns, to the study of the functional distribution of smaller villages and habitation floor plans. (Fig. 2-13 to 2-15). His most extensive study on Japanese urban settlements —published the same year that Daves' and Trewartha's articles on the same subject— include innovative morphological and formal analyses that were at that time unusual, even in the work of scholars entirely dedicated to urban studies.

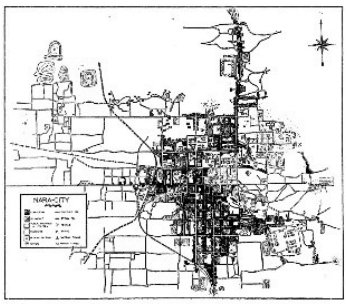


Fig. 2-13 Hall- Nara functional distribution

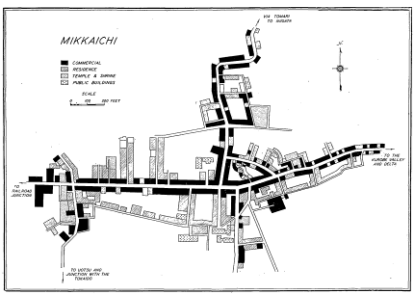


Fig. 2-14 Hall- Mikkaichi functional scheme

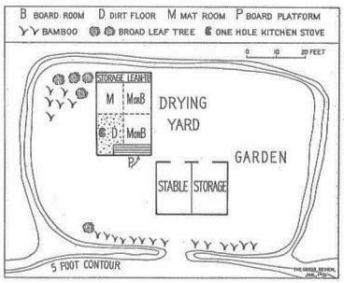


Fig. 2-15 Hall- Satsuma house type

Conclusion

A wave of publications on Japan initiated after the Meiji Restoration offered for the first time fresh impressions of the country's landscapes to Western readers. These first popular books presented an image of Japan that emphasized the traditional features of the built environment, which were at the time still predominant. Japanese architecture, although not as much praised as its arts, was respected and admired. Japanese towns and cities, on the other hand, were not valued from an aesthetic point of view but were appreciated for other non-material characteristics as the cleanliness and liveliness, which were highly appreciated by all Western.

During the first decades after the reopening of the country, scholarly studies on the built environment concentrated mostly on religious and residential architecture. Still, some authors as Edward S. Morse and Ralph A. Cram saw the residential architecture of the middle classes as an important representative of the Japanese culture, which they thought to be threatened by the rising Western influences. Nevertheless, although specific buildings were studied and appreciated, the uniformity of the houses in residential areas was invariably mentioned. The distant view of the city with continuous tiled roofs left a strong impression on the viewers. The skyline was usually compared to that of American or European towns, and the absence of church spikes or other Western urban landmark was repeatedly noted. Despite the efforts of most authors to overcome cultural aesthetic prejudices, the way in which the Japanese townscapes were evaluated depended greatly on the set of preconceptions that determined what a city should be for the observers. Particularly in the case of cities, most authors failed to see beyond the missing Western patterns.

The comments on Japanese architecture made by geographers were naturally less thorough than the ones of the specialized publications as those of Morse or Cram. Yet, the studies of Japan made within the field of Geography provided an important amount of information on cities as explanations of location, data on buildings and population, and even vivid descriptions of all kinds of settlements.

During the interwar period, the initial Western curiosity about Japan diminished and fewer travelers' stories were published. The popular books of the turn of the century, as the work of Lafcadio Hearn, continued to be the main material from which the image of Japan was created in the West. The fewer books published after World War 1 attempted to rectify misconceptions of previous works that had been frequently caused by judging Japan by Western standards.

The most renowned academic Western work on the Japanese built environment from the interwar period was made by the German architect Bruno Taut. His writings were so influential in the Western perception of Japanese architecture that there is scarcely any study on the subject, to the present day, which does not refer to his works. In his studies, Taut focuses on the traditional aspects of the Japanese culture, censuring most of the changes that the industrialization of the country caused in its built environment.

Contrary to Taut, most geographers were interested in the modernizations of Japan which they saw as a positive sing. While during the first period geographic studies were mainly descriptive, during the decades of the 1920s and 1930s geographers developed systematic regional studies that included morphological and formal analysis of rural and urban settlements. In general terms, geographers' interest in Japan did not come from an admiration of the traditional culture or aesthetic values, but it was mainly motivated by the country's growing economic and military strength. The fact that the aesthetic aspects of buildings and townscapes were not of interest to geographers, allowed them to address the study of the Japanese built environment with fewer prejudices in this regard.

Notes:

[1] Jansen, M. B.: *The Making of Modern Japan*, Belknap Press of Harvard University Press, 2000

[2] Ibid., p. 23

[3] Chamberlain, B. H.: *Things Japanese: being notes on various subjects connected with Japan, for the use of travellers and others*, Kely & Walsh, London, 1905, p. 37

[4] Hearn, L.: *Glimpses of unfamiliar Japan,* Houghton, Mifflin, 1894. p. 14

[5] Cortazzi, H. &Webb, G. (eds.): *Kipling's Japan: collected writings,* Athlone Press, 1988, from letter 4 written in 1889

[6] Wright, F. L.: *The Japanese print: an interpretation*, Horizon Press, New York, 1967(first edition 1912), p. 95

[7] Morse, E. S.: *Japanese homes and their surroundings*, New York, Harper & Bros, 1885

[8] Hickman M. L. and Fetchko, P.: *Japan Day by Day. An Exhibition Honoring Edward Sylvester Morse and Commemorating the Hundredth Anniversary of His Arrival in Japan in 1877*, Peabody Museum of Salem, 1977. p. 3

[9] Morse, E. S., op.cit., p. 46

[10] Ibid., p. 49

[11] Ibid.

[12] Moore, Charles W.: *Impressions of Japanese Architecture*, The Japan Architect, Vol. 53, p. 5

[13] Cram, R. A.: *Impressions of Japanese Architecture and the Allied Arts,* George G. Harrap & Co. Ltd., London, 1905. pp. 17-18

[14] Ibid. p. 115

[15] Most researchers were American, French, and German

[16] Jefferson, M.: *The Distribution of People in Japan in 1913*, Geographical Review, Vol. 2, No. 5, pp. 368-372, 1916; Hirai, K. R. M.: *Life and Customs as Contrasted with Those of the Western World (With the Treaty Question)*, Journal of the American Geographical Society of New York, Vol. 26, No. 1, pp. 123-158, 1894; Griffis, W. E.: *Japan, Geographical and Social*, Journal of the American Geographical Society of New York, Vol. 10, No. 10, pp. 77-92, 1878

[17] Rein, J. J.: *Japan: Travels and Researches Undertaken at the Cost of the Prussian Government*, Hodder and Stoughton, London, 1884

[18] Hohmann, J.: *Johannes Justus Rein*, Erdkunde, Vol. 22, No. 1, 1968

[19] Rein, J. J., op. cit., p. 211

[20] Ibid., p. 415

[21] Ibid., p. 414

[22] Ibid., pp. 479-480

[23] Some of these changes were the *Tokyo Urban area Improvement Plans*, or the *1919 City Planning Law* that was applicable to the every city in the country

[24] Cousins, J. H.: *The new Japan: impressions and reflections*, Ganesh, 1923

[25] Ibid., p. 193

[26] Ibid.

[27] Santini, T.: *Representation of Kyoto in Western Publications through History*, Master thesis, 2012

[28] Taut. B.: *Fundamentals of Japanese Architecture*, Kokusai Bunka Shinkokai, K. B. S. publications, 1936, p. 10-11. In this work Taut traces the historical development of Japanese architecture identifying two lines of developments: a positive one starting in the temples of Ise, going through the Buddhist temples and tea houses ending in Katsura Villa; and a negative line in which the degeneration of construction of the Buddhist temples ended in the kitsch decoration of the Toshogu temple of Nikko, which is the most lavishly decorated temple of Japan. This explanation had an extraordinary influence in the image of Japanese architecture, but it was mostly

referred to religious and noble residential buildings.

[29] Taut. B.: *Houses and People of Japan*, Sanseido, Tokyo, 1937. p. i (introduction)

[30] Ibid., p. x (introduction)

[31] Ibid., p. 235

[32] Ibid., p. 266

[33] Ibid., p. 237

[34] Ponsonby-Fane, Richard A. B.: *Kyoto: The Old Capital of Japan, 794-1869*, Kyoto: The Ponsonby Memorial Society, 1956; first published in Transactions of the Japan Society of London 22 (1925)

[35] Haushofer, K. E.: *Japan und die Japaner: eine Landeskunde,* B. G. Teubner, 1923

[36] Cornish, V.: *The Great Capitals: an Historical Geography*, Methuen, 1923

[37] *The Capital City: A Step in Its Interpretation,* Geographical Review, Vol. 14, No. 1, pp. 156-157, 1924

[38] Mecking, L.: *Kult und Landschaft in Japan*,in Geographische Anzeiger 30, pp. 137-146, 1929; and Mecking, L.: *Japanische Stadtlandschaften*, in Passarge, S.: *Stadtlandschaften der Erde* -Comparative Study of City Landscapes- , de Gruyter & Co, 1931; *Japans Häfen; ihre Beziehungen zur Landesnatur und Wirtschaft*, de Gruyter & Co, Hamburg, 1928

[39] Davis, D. H.: *Present Status of Settlement in Hokkaido*, Geographical Review, Vol. 24 No. 3, pp. 386-399, 1934, p. 386

[40] Davis, D. H.: *Some Aspects of Urbanization in Japan*, Journal of Geography ,Vol. 33 No. 6, pp. 205-220, 1934; *Type Occupance Patterns in Hokkaido*, Annals of the Association of American Geographers, Vol. 24 No. 4, pp. 201-223, Dec. 1934; *Present Status of Settlement in Hokkaido*, op.cit.

[41] Davis, D. H.: *Present Status of Settlement in Hokkaido*, Geographical Review, op. cit., p. 397

[42] Davis, D. H.: *Some Aspects of Urbanization in Japan*, op. cit., p. 210

[43] Hartshorne, r. & Borchert, J.: *In Memoriam: Glenn T. Trewartha, 1896-1984*, Annals of the Association of American Geographers, Vol. 78, No. 4, pp. 728-735, 1988

[44] Trewartha, G. T.: *A Geographic Study in Shizuoka Prefecture, Japan*, Annals of the Association of American Geographers, Vol. 18, No. 3, pp. 127-259, 1928; *The Iwaki Basin: Reconnaissance Field Study of a Specialized Apple District in Northern Honshiu, Japan*, Annals of the Association of American Geographers, Vol. 20, No. 4 , 1930; *The Suwa Basin: A Specialized Sericulture District in the Japanese Alps*, Geographical Review, Vol. 20, No. 2, pp. 224-244, 1930; *A reconnaissance geography of Japan*, University of Wisconsin. Studies in the Social Sciences and History No. 22, University of Wisconsin, 1934

[45] Trewartha, G: *Japanese Cities Distribution and Morphology*, Geographical Review, Vol. 24 No. 3, pp. 404-417, 1934

Image sources:

Fig. 2-1 Morse, E. S.: *Japanese homes and their surroundings*, New York, Harper & Bros, 1885, p. 65

Fig. 2-2 Cram, R. A.: *Impressions of Japanese Architecture and the Allied Arts,* George G. Harrap & Co. Ltd., London, 1905, p. 61

Fig. 2-3 Rein, J. J.: W. Engelmann, 1905, p. 649 (Plate 23) *Japan nach reisen und studien im auftrage der königlich preussischen regierung dargestellt*

Fig. 2-4 Taut B.: *Houses and People of Japan,* Sanseido, Tokyo, 1937, p. 235

Fig. 2-5 Ibid., p. 267

Fig. 2-6 Haushofer, K. E.: *Japan und die Japaner: eine Landeskunde,* B. G. Teubner, 1923, p. 70

Fig. 2-7 Mecking, L: *Japans Hafen; ihre Beziehungen zur Landesnatur und Wirtschaft*, Friedrichsen de Gruyter, 1931, p. 367

Fig. 2-8 Ibid, Plate 21, Fig. 2

Fig. 2-9 Davis, D. H: *Type Occupance Patterns in Hokkaido,* Annals of the Association of American Geographers, Vol. 24 No. 4, pp. 201-223, Dec. 1934, p. 213 (Plate 8)

Fig. 2-10 Davis, D. H: *Some Aspects of Urbanization in Japan*, Journal of Geography, Vol. 33 No. 6, pp. 205-220, 1934, p. 210

Fig. 2-11 Trewartha, G. T.: *The Iwaki Basin: Reconnaissance Field Study of a Specialized Apple District in Northern Honshiu, Japan*, Annals of the Association of American Geographers, Vol. 20, No. 4 , 1930, p. 201

Fig. 2-12 Trewartha, G. T.: *Japanese Cities, Distribution and Morphology*, Geographical Review, Vol. 24 No. 3, pp. 404-417, 1934, p. 415

Fig. 2-13 Hall, R. B.: *The Yamato Basin, Japan*, Annals of the Association of American Geographers, Vol. 22, No. 4, pp. 243-292, 1932, p. 287

Fig. 2-14 Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*, Annals of the Association of American Geographers, Vol. 24, No. 4, pp. 175-200, 1934, p. 197

Fig. 2-15 Hall, R. B.: *Some Rural Settlement Forms in Japan*, Geographical Review, Vol. 21, No. 1, pp. 93-123, 1931, p. 107

CHAPTER 3
ROBERT BURNETT HALL (1896-1975)

Fig. 3-1 Robert Burnett Hall (1896-1975)

Introduction

Robert Burnett Hall (Fig. 3-1) became interested in Japan early in his career and maintained strong personal and academic ties with this country for his entire life. He was born in New Mexico in 1896 and after dropping out of high school at the age of 16, he enrolled in the United States Army. At his return from World War 1, where he served as an intelligent officer, Hall entered the University of Michigan with a military veterans funding.[1] There, he obtained a Masters in Geography in 1923 and Doctoral degree in the same field in 1927.

In Japan, Hall is most remembered for his engagement in the promotion of academic collaborations between the United States and Japan after World War 2. Nevertheless, the significance of his early regional studies where he included the examination of cities, towns, and architecture, has not been properly recognized. In this chapter, Hall's academic career and fieldwork in Japan are examined in order to understand the context of these early studies. The first section of the chapter (1) provides an examination of Hall's academic career pointing out his main influences and most important achievements. Then, in section two (2) a closer examination of Hall's research in Japan is made, paying special attention to his field trips and Japanese colleagues. The last section of the chapter (3) presents a review of Hall's publications on Japan to provide an overview of the articles to be analyzed in the following chapters.

1 Hall's academic career

At the time Hall began his academic education, the newly created Department of Geology and Geography of the University of Michigan was under the direction of the renowned Carl Ortwin Sauer (1889-1975).[2] Sauer, now recognized as one of the most influential American Geographers, was the founder of what is now known as *Cultural Geography*. Although Sauer's geographic though did not fully-develop until he transferred to the University of California in 1923, his approach to the examination of the landscape while teaching at the University of Michigan already emphasized in the importance of culture and stressed in the importance of field observation.[3] In 1920, the year Hall initiated his studies, a field station was established in Kentucky under Sauer's direction to allow geography students to develop the practical skills.[4]

In 1923, Preston Everett James (1899-1986) —a regional geographer dedicated to the study of Latin America— joined the Geography department and worked in close association with Hall. James and Hall co-wrote two an article and a book on the objectives and methods of the field of Geography, where they tried to define the boundaries and main goals of their relatively new field of study.[5] For his Doctoral dissertation, Hall chose to analyze the structure and evolution of Haiti's landscape, most probably influenced by James' research. He travelled to Haiti during the summers of 1924 and 1925 to collect data in site. Hall's interest in the culture of the researched areas is patent from his first publications.[6] In the case of Haiti, he even published a study on the

social organization—*The Société Congo of the Ile áGonave*— which had a distinctly anthropological approach.[7] After receiving his Doctoral degree in 1927, Hall was granted with a fund to make his first research trip to Japan. From this time, Japan became the main focus of Hall's studies and he dedicated most of his publication to this region. In the studies on Japan, Hall redirected his interest in culture to its *material expressions*, particularly settlements. James' and Hall's works were essential for the progress of the study of the *cultural landscape* and the inclusion of *settlements* within the department of Geography. Following the Sauer's footsteps, who in the early 1920s had taught a course on *The Geography of the Settlement of America*, Hall created a course called *Settlements* and Preston E. James a course on *Urban Geography*.[8]

Throughout his academic life, Hall continued to be part of the University of Michigan. His frequent field trips to Japan were combined with summer teaching assignments at the department of Geography of the University of California, which was under the direction of his former professor, Carl O. Sauer.[9] In 1937, Hall became a full professor and was appointed director of the *Institute of Far Easter Studies*, which was created to promote studies on Japan, China, and Korea.[10] In an article explaining the goals of this Institute, Hall refers to the development and mission of the study of Asia at the University of Michigan. According to Hall, Asian studies were "*a response to a rapidly growing scholarly and public interest in the Far East."*[11] The hasted industrialization and militarization of Japan interested scholars that frequently selected political and international relations as the subjects of study. The Institute was a summer program with several lectures. Hall gave a course entitled *The Lands and Peoples of the Japanese Empire*, and *Research and Special Problems in the Far East*, making use of his own experience on Japan. Other courses on the country were *Japanese Religious Architecture* given by the architect Ralph W. Hammett, and *Japanese Poetry* given by the Japan Scholar Shio Sakanishi (坂西志保).[12]

With the beginning of World War 2, Hall got involved in war studies. Before the United States entered the conflict, Hall acted as chairman of the *Division of Social Sciences*. In 1939, this Division created a special *committee on war documentation* in order to collect as much information as possible on the conflict. In a report presented by Hall in June of 1941, he states that the Rockefeller Foundation provided financial assistance to several projects to support the committee.[13] It is likely that one of these projects were Hall's trips to Latin America made during 1941-42.[14] According to the geographer John Douglas Eyre (1922-2014), author Hall's most complete biography, in these trips Hall was in fact in a secret mission to evaluate the Japanese commercial and diplomatic penetration in Latin America.[15] Later, after the United States got involved in the War, Hall served once again as an intelligence officer in the O.S.S. (Office of Strategic Services, currently C.I.A.) in China and India.

At the end of the War, Hall declined a rank promotion in the Army to resunme to his academic career at Michigan. At his return Hall made a change in his career path redirecting his efforts to the development of Area Studies, but maintaining the interest in Japan. He continued to be part of

the Board of Directors of the *Social Science Research Council* until 1955, which he had entered in 1941, and as chairman of the *Committee on World Area Research* until 1952.

In 1947, Hall published a report for the promotion of Integrated World Area Programs —*Area Studies: with special reference to their implications for their research in the social sciences*—where he stresses the importance of the study of foreign regions in American universities. According to Hall, the Second World War had proven that the United States did not have sufficient knowledge on most of the key cultural areas of the world.[16] Hall's comments on the need for the development of foreign studies soon became influential for the promotion of Area Studies in the United States.[17] According to his colleague and friend Robert E. Ward (1916-2009), Hall was a "*superb academic politician*", and his accomplishments of the second stage of his career confirm this description.[18]

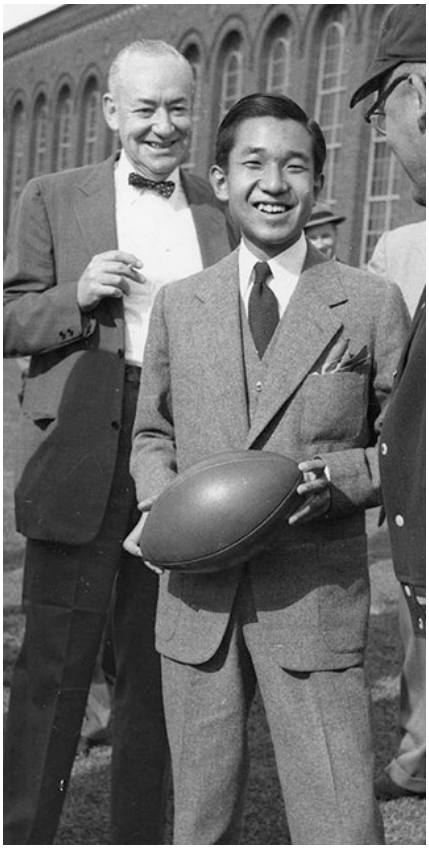


Fig. 3-2 Robert B. Hall with Prince Akihito at UM, 1953

One of Hall's most recognized achievements was the negotiation for the establishment of the interdisciplinary field station in Okayama prefecture during the American occupation. The Japanese contacts that Hall established during his field trips, as the politician Maeda Tamon (前田多門, 1884-1962), were instrumental to undertake this project.[19] In a letter confirming the acceptance of the Okayama project, General Douglas MacArthur, with whom Hall had several meetings, states that Hall's "(…) *four-year project for research in Japan appears to be boldly planned and soundly conceived. Carried to a successful conclusion, it should result in a body of knowledge which will prove of inestimable value not only to the academic world, but to a better understanding of Japan by our own people*".[20] Several interdisciplinary investigations were carried out at the Okayama field station. The activities included studies on geography, economy, anthropology, and sociology of this agricultural community. The outcomes of these investigations were presented in 1959 in a publication that was at the time recognized as "*the best and most detailed study of Japanese life ever produced in a Western language",*[21] and even today it remains as a recurrent reference for social studies on Japan.[22]

Hall's commitment in the promotion of Asian studies was also fundamental for the establishment of the *Center for Japanese Studies* of the University of Michigan in 1947, where he acted as director for ten years.[23] To the long list of important positions held by Hall, it has to be added that of editor of the *Far Eastern Quarterly* (The Journal of Asian Studies) of Cambridge

Journals from 1938 to 1945, visiting professor at the Tokyo University during one year in 1955, and director of the Tokyo office of the *Asia Foundation* from 1955 to 1962.[24]

During the 1950s and 1960s Hall received several honours in reckognition of his fruitfull career. In 1956 he was awarded for *Meritorious Constribution to Geogaphy* by the Association of American Geographers. In 1957, he received a *Third class Order of the Rising Sun* from the Japanese government "*in recognition of the outstanding services in the development of cultural friendship between Japan and the United States*" (Fig. 3-3)[25]. In 1960, Hall was the first American to be honored with the *Silver Medal* of the Tokyo Geographical Society for his important research in Japan, and in 1962 he received a *Second class Order of the Sacred Treasure* for fostering international goodwill and promotion of the study of Japanese culture (Fig. 3-4).[26]

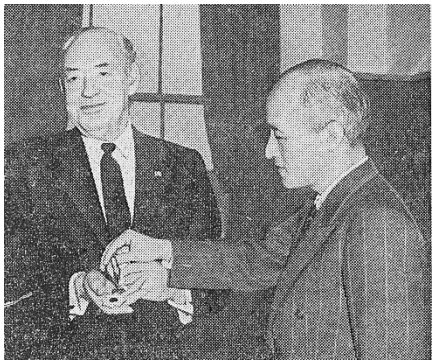


Fig. 3-3 1957, Hall receiving the Order of the Rising Sun

Fig. 3-4 1962, Robert B. Hall receiving the Order of the Sacred Treasure from Takeo Ozawa (Japanese consul general from Chicago)

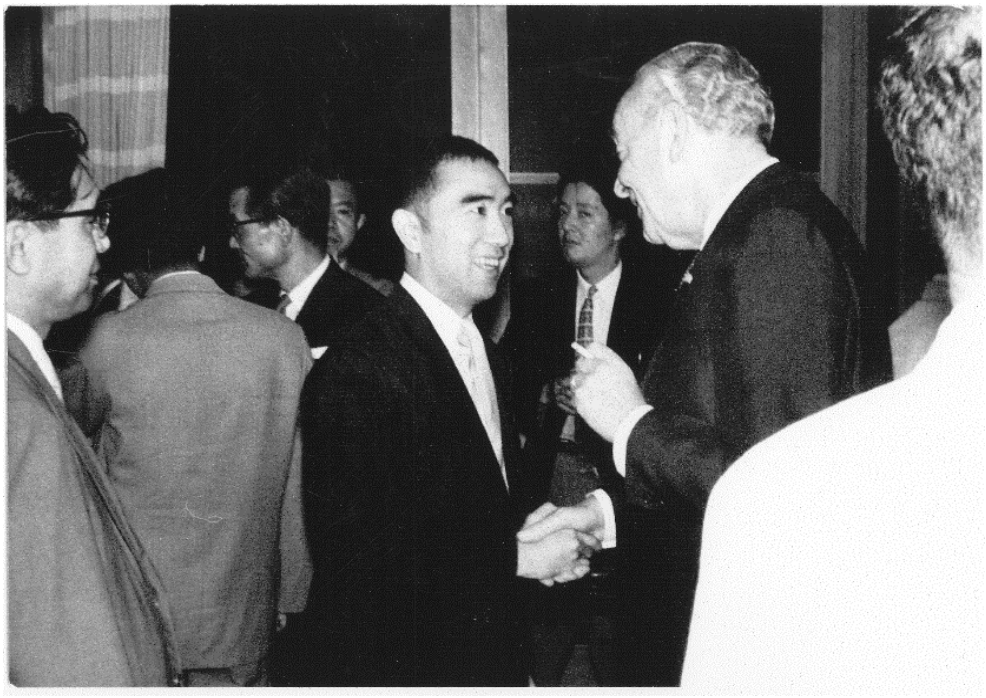


Fig. 3-5 Robert B. Hall with the renowned artist Yukyo Mishima. 1950

2 Hall's research in Japan and Japanese colleagues

Although the academic study of Japan in the United States had its greatest impulse after World War 2, during the interwar period a small number of scholars dedicated to this subject and set the basis for the future development. According to a study made by the historian John W. Hall (1916-1997), during the 1920s Japanese studies were "*dominated by part-time practitioners and amateurs who offered only the bare beginnings of serious professional training*".[27] One of the most important limitations, besides funding, was the inadequacy of the available resources for the study of Japanese language and culture. In 1933, the American Council of the Institute of Pacific Relations ordered a survey of the state of Japanese studies in American universities that was carried out by the Japanese political scientist Yasaka Takaki (高木八尺, 1889-1984).[28] From the one hundred and four researchers recognized in the study, which were for the most part dedicated to political sciences, there were only five geographers: Darrell H. Davis from the University of Minnesota, Wellington D. Jones from the University of Chicago, and Glenn Trewartha from the University of Wisconsin, John Ewing Orchard (1893-1962) from Columbia University, and Robert B. Hall from the University of Michigan. Of these researchers, all but Orchard who studied economy, performed regional studies in Japan including in some degree the study of Japanese settlements.

Hall's lifelong interest in Japan started in 1927 when he received the Social Science Research Council fellowship in Human Geography to make a study on "*rural Japanese communities, with special reference to the readjustments resulting from migration to higher and lower latitudes*".[29] The study was carried out in a summer field trip made on 1928, although the initial objective of the research was replaced by the performance of regional studies of several areas of Japan. Between 1928 and 1937 Hall made a total of five visits to Japan financed by the *Social Science Grant-in-Aid for Research in Human Geography in the Japanese Empire*, and the *Faculty Research Found* of the University of Michigan. He made four summer research expeditions in the years 1928, 1929, 1931, and 1933; and a special long term stay during the year 1935-1936. During this prolonged stay Hall was accompanied by his family and with a group of graduate students from the University of Michigan.[30] The areas of fieldwork of this trip were fairly limited because of the progressively military activity, which restricted the access to sensitive areas. At the return to the United States, Hall traveled through Korea, Manchuria, and China.[31]

In his visits to Japan, Hall surveyed areas of distinctive local characteristics (Fig. 3-6, next page): *Satsuma* (1) in south Kyushu; *Yamato* (2) in the Kinki region of southern-central Honshu; the ancient province of *Izumo* (3), more specifically the Hikawa plain; the village of *Shirakawa* (4); *Echigo* (5)in north-central Honshu; and *Tokachi*(6), south-east Hokkaido(Fig.3-6, next page). Hall also visited other regions of Toyama, Shizuoka, and Tokyo prefectures, but the data of these areas was not included in the analysis.

Hall's emphasis on culture when approaching the study of regions is apparent from the initial decisions of his analysis. When determining the boundaries of a region, geographers were usually guided either by natural limits or political divisions. In Hall's case, he opted to follow the ancient division of the country (Ryōseikoku, 令制国) because in his understanding the "*cultural unity*" was more closely bounded within these ancient provinces than to the prefectural divisions defined after Meiji Restoration, made to have an equitable distribution of natural resources among prefectures.[32]

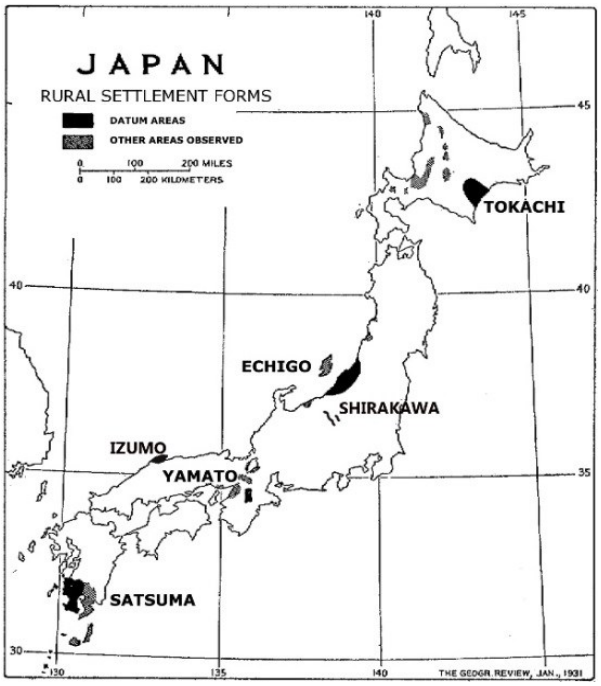


Fig. 3-6 Areas studied (datum areas in black, other areas observed). Modified from original, Izumo and Shirakawa do not appear originally in this map

During the course of his trips to Japan, Hall worked in association with the Geographical Institute of the Tokyo Imperial University and the Imperial Military Academy. His closest colleague in Japan was Professor Akira Watanabe (渡辺光, 1904-1984). Watanabe graduated from Tokyo Imperial University in 1928 and later became a professor in the Imperial Military Academy and Ochanomizu University.[33] He collaborated with Hall in the collection and translation of official data and Japanese references, as well as in the field expeditions. On one occasion Watanabe, Hall, and some of his students walk the entre Tokaido —the ancient road that connected Kyoto to Edo (Tokyo)— to make a study of this important communication route. In addition, Hall and Watanabe co-wrote a work entitled *Landforms of Japan* focused on the physical geography of the country. The association with Hall led Watanabe to the University of Michigan, where he stayed as a research fellow during 1930-31.[34] Although Watanabe's career was dedicated almost exclusively to the study physical geography, his collaboration significantly enriched Hall's investigation on the Japanese built environment.

The most noteworthy of Hall's academic acquaintances in Japan was the renowned Kunio Yanagita (柳田國男, 1875 -1962) father of folklore studies in Japan.[35] Yanagita was deeply engaged in the protection of the traditional rural culture of Japan and although he was not personally dedicated to the study of material culture, he worked in close association with other scholars interested in the subject as the architects Wajiro Kon (今和次郎, 1888-1973), and Koichi Sato (佐藤 功一, 1878-1941).[36] In one of Hall's early summer expeditions to Japan, Yanagita guided him and his students in a field survey of Kinuta Village (砧村), in Setagaya, Tokyo prefecture.[37]

Hall's works were not largely discussed within Japanese academic publications The only article written by Hall that was available in Japanese before World War 2 was Sado Island, which was translated in 1933 by the geographer Taiji Yazawa (矢沢大二, 1913-1994).[38] Still, his regional studies were referred by some Japanese scholars as Torashiro Osaki (尾崎庫四, 1902-1991), who refers to Hall's seasonal study of land use, and Takeo Tanioka (谷岡武雄, 1916-2014) that uses Hall's article on Sado Island as a reference for his a study of Oki Islands.[39] Likewise, Hall uses numerous references of Japanese scholars in his studies. The notes and citations from Japanese sources that Hall uses when addressing the study of cities, villages, or architecture (shown in Table 3-1), are few if compared with the ones mentioned in the analysis of physical geography or climate.[40] To which extent Hall managed the contents of these works —that were mostly in Japanese− cannot be determined. Regardless of this fact, it is certain that the collaboration of Akira Watanabe and the staff of the Imperial Military Academy made possible that Hall's studies were informed by Japanese official records and the latest academic publications.

Table 3-1 Japanese references on settlements used in Hall's studies

	Hall's Article	Author referred	Work referred	Subject referred
1931	Some Rural Settlement Forms in Japan	FUKUDA, Tokuzo(福田徳三, 1874-1930) Economic Historian	*The Social and Economic Development in Japan* , 1900	Distribution of population
		TAKIZAWA, Matsuyo (1898-?) Historian	*The Penetration of Money Economy in Japan and its Effects upon Social and Political Institutions* , 1927	Village arrangement
		SASAKI, Hikoichiro(佐々木彦一郎, 1902-1936) Geographer	*The Mechanism of the formation of Settlements in Basins* , 1926	Settlement development
1932	The Yamato Basin, Japan	OGAWA, Takuji (小川琢治, 1870-1941) Geographer	*Land and People in the Kinki District* , 1928	Division of regions
		ISHII, Itsutaro (石井逸太郎, 1889-1955) Geographer	*The Distribution of Population in the Nara Basin* , Chiri-Kyozai-Kenkyu, 1-18; and Nara Higher Normal School, Tokyo 1924	Distribution of population and settlements
		NISHIDA, Yoshiro(西田与四郎, 1884-1952) Geographer	*Siedelung in the Nara Basin* , Chikyu-The Globe, 4, No.4 348-359	Distribution of population and settlements
1933	The Hiinokawa Plain	KUSAMITSU, Shigeru(草光 繁) Geographer	*Morphological Study of Landscape of Villages of the Hiinokawa Plain* , Geographical Review of Japan, Vol. 6, No. 8, 1930	Settlement morphology and distribution
1934	The Cities of Japan: Notes on Distribution and Inherited Forms	NISHIDA, Yoshiro(西田与四郎, 1884-1952) Geographer	*Cities of Japan,* Sp. Pub., Nara Chirigakki, 1927; and*The City* , Chirigakusasshi, Dec., 1927	Classification of Cities
		Ryokusokai Committee(?)	*A Collection of Illustrations of Japanese Houses* , Ryokusokai Committee, 1931	Dwellings appearance
		TAKEKOSHI, Yosaburo(竹越 與三郎, 1865-1950) Historian and politician	*The Economic Aspects of the History of Civilization of Japan* , 1930	Classification of Cities by origin
		OGAWA, Takuji (小川琢治, 1870-1941) Geographer	*Studies in Human Geography* , Tokyo, 1928	Location of Castles
		ONO, Hitoshi(小野均, 1904-1942) Historian	*A Study of Castle Towns* , Tokyo, 1928	Castle Towns layouts
		ODAUCHI, Michitoshi(小田内通敏, 1875-1954) Geographer	*Regional Studies in Geography* , Tokyo, 1931, Chapter on Japanese cities, pp.135-172	Classification of Cities
		WATANUKI, Isahiko(綿貫勇彦, 1892-1943) Geographer	*Settlement Geography* , Tokyo, 1933	Settlement data

3 Review of the contents of Hall's studies on Japanese settlements

Between 1926 and 1939 Hall published fifteen articles on Japan, most of which include in some degree the examination of Japanese cities, villages, and architecture. The articles that include the study of settlements are of two types: (a) *Regional studies*, in which the analysis of settlements is only a part of the examination of several features of the cultural landscape, and (b) *Systematic geography studies*, which address only the specific subject of settlements. The nine articles that include the greatest amount of analysis on settlements are reviewed below, describing the areas studied, the conditions in which the studies were made (as for example filed trip in which the data was collected), the structure of the articles, and the main themes treated. The first two studies published on Japan addressed in fact areas that were part of the territory of the Japanese Empire at the time Hall made his field works (Fig. 3-7), but that were not strictly culturally Japanese. After Hall focused his studies completely in Japan, these areas were only considered in the articles pertaining to agricultural resources while his studies on the cultural landscape concentrated in territory as it was before the expansion.

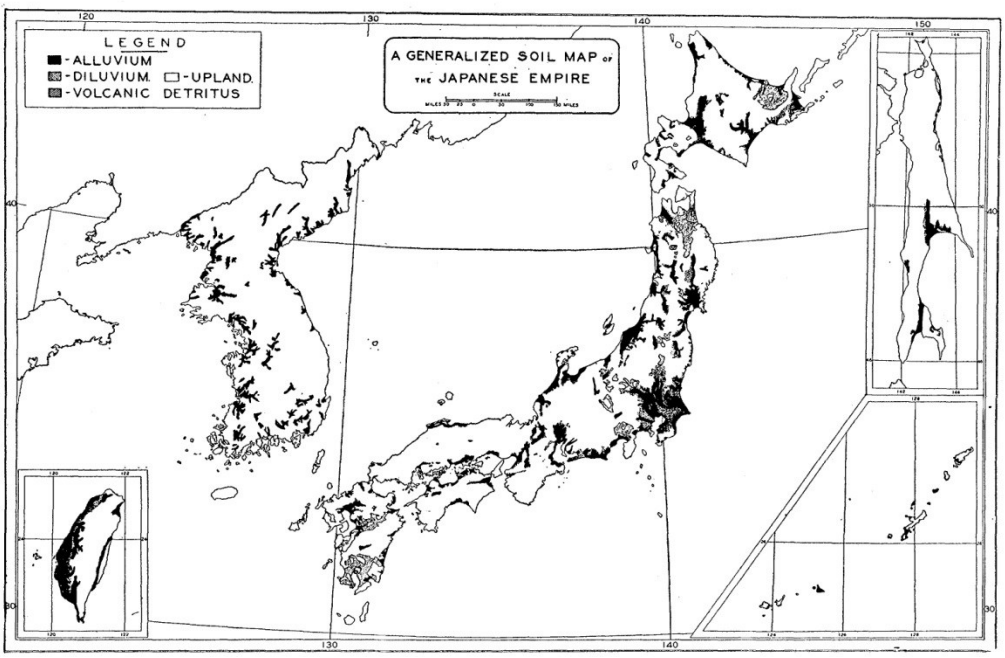


Fig. 3-7 Soil Map of Japanese Empire. Hall presented this map in the article Agricultural regions of Asia (1934). The map show the Japanese main territory plus the occupied areas of Korea, a small area of Manchuria, and Russian island of Sakhalin.

1926, *Quelpart Island and its People* (12 pages)

This regional study was published before Hall made his first acknowledged trip to Japan, but still the data used comes from official statistics from the island. Quelpart (now called Jeju Island, part of Korea) was annexed to Japan in 1910 and remained under its power until 1945. Hall's research on the island laid emphasis on the study of population. The article is divided on three sections dedicated to each of the three distinctive geographic regions of the island: costal, middle,

and mountain district. The coastal district, where most of the population was located, is the area most extensive analyzed. A section dedicated entirely to settlements —entitled *Cities and Villages*—includes accounts of their history, an examination of the distribution of settlements (Fig. 3-8), and descriptions of cities and villages. In this study, Hall still maintains some of the anthropological interest. He takes into account the origin of the population, their economic state, and activities. The images showing and describing native people of the area becomes less common in subsequent articles (Fig. 3-9).

Sample graphics from the article:

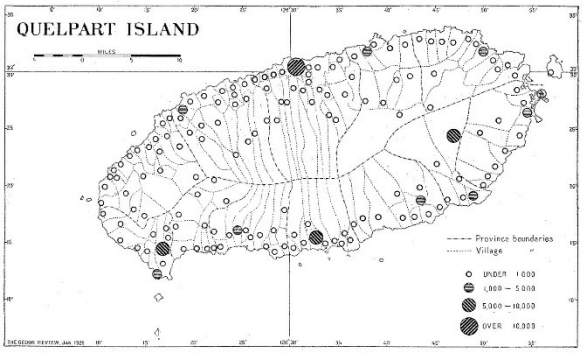


Fig. 3-8 Population distribution of Quelpart Island showing major agglomerations and province boundaries

Fig. 3-9 Original caption: "*Two old men of the Mountain District"*

1929, The Geography of Manchuria (15 pages)

The territory of Manchuria had been disputed by Japan, Russia, and China since the end of 19th century because of its natural resources. The area of Kwantung (Liaotung Peninsula), including the city of Dairen (now called Dalian) were under Japanese control at the time Hall's study on Manchuria was published.[41] This regional study focuses on the examination of the natural resources and potential agricultural exploitation. During this period, these type of studies known as studies on "*pioneering bets*" were common among geographers because of the economic interests that encourage the examination of the possibilities for agricultural expansion and colonization. Hall illustrates this article with several statistical charts on natural resources and crops, and a single map showing Manchuria's natural divisions. Despite the main focus on resources, there is a section dedicated to settlements. Under the heading *Chinese, Russian, and Japanese Settlements* Hall describes rural villages and houses, comparing the different expansion processes of these three cultures. A brief section on *Urban Settlements* deals with the cities of the area where Hall describes the main characteristics as layout and materials of buildings in general terms. Dairen, the most important city of the peninsula, is the only city specifically addressed, presented as the best example of the cities dominated by "*Japanized Western elements*".[42]

1931, *Some Rural Settlement Forms in Japan* (30 pages)

This is the first study that addresses Japan's main territory, and the first systematic study dedicated entirely to settlements. The study is divided in four sections that correspond to the areas surveyed: (1) *Yamato*, (2) *Satsuma*, (3) *Echigo*, and (4) *Tokachi*. Each section is a brief regional study where Hall analyzes the natural condition, land division, agricultural activities, and finally settlements. A single representative type of village and housing is determined for each region by sampling several examples.[43] The examination of agricultural areas is illustrated with maps of settlement distribution with scales varying between 1:30,000 and 1:50,000 (Figs. 3-10 and 3-11), while the illustrations used for explanation of the habitation types include pictures, elevations (Fig 3-12), and floor plans. The types determined in this article are later used as reference by Hall in the subsequent studies. This article is the first Western systematic study of Japanese rural houses, and it has been recognized as being the initiator of settlement forms studies in the United States.[44]

Sample graphics from the article:

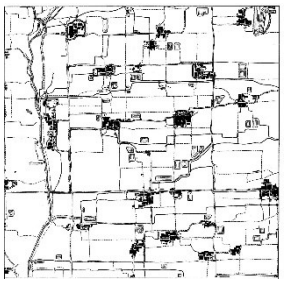


Fig. 3-10 Village distribution of Yamato area. Scale 1:35,000

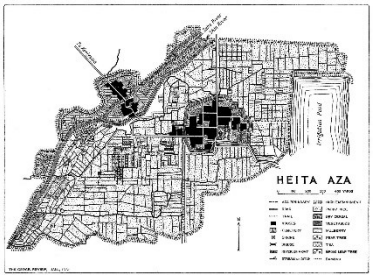


Fig. 3-11 A village of Yamato area. Scale 1:20,000

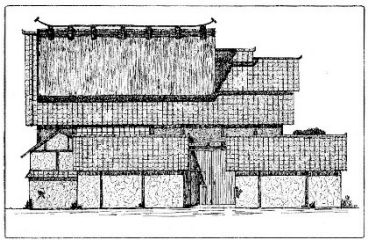


Fig. 3-12 Yamato house type elevation

1932, *Sado Island* (22 pages)

According to Hall, the island of Sado provided a great opportunity for regional studies because of the indisputable boundaries of the region and the island's important natural resources. The gold and silver mines of Aikawa, located at the West coast of the island, were intensely exploited since Heian period. Hall made the study of Sado as part of the regional research of Echigo during the trip founded by the *Social Sciences Research Council for research in Human Geography in the Japanese Empire* of 1929. The article follows the structure of a traditional regional study —examining the geomorphology, land use, and settlement distribution— adding a section especially reserved for settlements. Here the distribution and type of villages are explained in general terms as to distribution and shape. To explain Sado habitation, Hall refers to the Echigo type explained in *Some Rural Settlement forms of Japan*. Hall dedicates a separated section to the study of the city of Aikawa, the capital of the island, focusing in the study of its development through cartographic records.

1932, The Yamato Basin, Japan (49 pages)

This is Hall's most comprehensive regional study of Japan. The data for this article was collected during the field trips of 1929 and 1931. The study has the arrangement of a regional study, but the study of settlements is particularly extensive if compared to other studies of the time. The geomorphological study of the area is divided in *natural* and *culturally induced land forms,* where Hall explains the current situation of the landscape following the effects of countless generations modifying the land, either for its agricultural use, or other ends as the construction of the tomb mounds. The population, regional economy, irrigation system, and industries are thoroughly examined and illustrated with abundant maps and charts. When studying settlements, Hall considers their distribution, classification of village types of the area, and examines particular cases, as Horan village (Figs. 3-13 to 3-15). The development and morphology of the city of Nara is as well analyzed, illustrating the study with a functional map. The two cross-sections of Nara are an addition that was not common in the study of towns, and were recognized during that time as a valuable contribution for settlement studies.[45]

Sample graphics from the article:

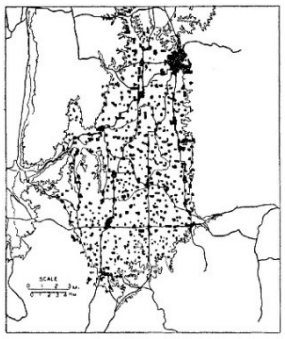


Fig. 3-13 Major towns and cities of Yamato Basin

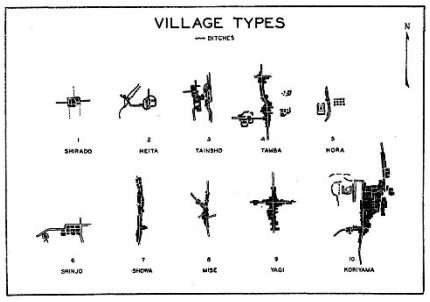


Fig. 3-14 Original caption: "*Ten Village Types found in Yamato*"

Fig. 3-15 Original caption: "*Street in Horan Village*"

1933, *The Hiinokawa Plain* (13 pages)

This small plain, actually named Hikawa (簸川平野)[46], is located in the ancient province of Izumo, today part of Shimane Prefecture. Hall studied this area during the field trip of 1931 supported by the *Social Science Research Grant in Aid*. This study deals with the typical issues of a regional study —as geomorphology, climate, and population— but in this case Hall dedicates half of the article to the study of rural settlement forms. Hall emphasizes in a particular characteristic of this area that is the growing delta plain that is gaining land over the Lake Shinji. This article is profusely illustrated by reproduction of Japanese original records and previous studies on the area. Hall also provided original graphics that show the time and origin of settlements (Fig. 3-16, next page), distribution of buildings, and plot occupation. In this article Hall explains the representative habitation of Izumo, illustrated by a floor plan and elevation (Fig. 3-17, next page).

Sample graphics from the article:

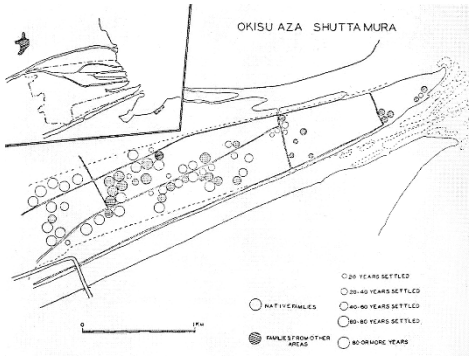


Fig. 3-16 Original caption: "*Time and origin of representative settlements*"

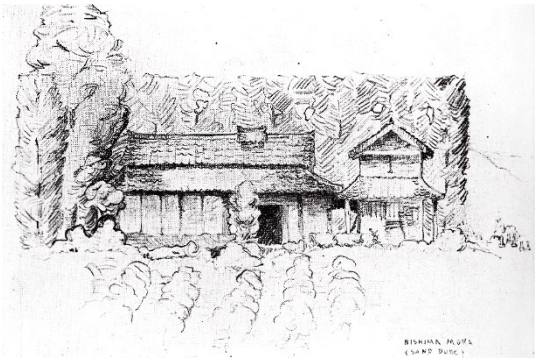


Fig. 3-17 Original caption: "*A representative habitation, showing hedges, the great tree, and the family graveyard*"

1934, *The Cities of Japan: Notes on Distribution and Inherited Forms* (25 pages)

This article contains the most complete formal analysis of Japanese urban settlements made in Western languages during the interwar period. Hall made this systematic study on Japanese urban settlements with the data collected in the field trip of 1931. The stated objective is to point out the salient features of distribution of Japanese cities, describe the most common and important city patterns, and explain their origin.[47] This is the only article in which Hall deals with bigger urban settlements as Tokyo, Nagoya, or Osaka. After explaining the factors involved in the distribution of Japanese cities within the country, Hall organizes the article around the three main types of cities categorized according to their origin: (1) Administration and Defense, (2) Religion, and (3) Commerce and Transport. Hall makes a formal examination of the cities, paying special attention to changes of layout features related to the origin of the cities as the castles or temples. The cities of Kyoto, Tokyo, Yokohama, and Nagoya are analyzed but the examples more thoroughly examined with graphic analysis are Matsue (castle town), Nara (religious town), and Mikkaichi (commercial town). Hall's study is illustrated with photographs, reproductions of official maps, and several graphic schemes made by Hall and his colleagues that include functional maps, comparative layout plants, and sections of the representative cities (Figs. 3-18 to 3-20).

Sample graphics from the article:

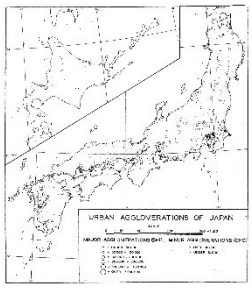


Fig. 3-18 Distribution of urban agglomerations of Japan

Fig. 3-19 Modern Tokyo, reproduction from Atlas of Japan

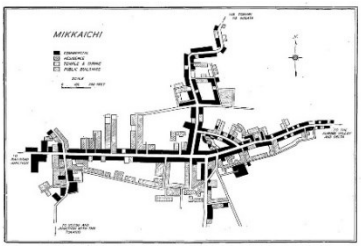


Fig. 3-20 Functional scheme of Mikkaichi town, in Toyama Prefecture

1936, *A Map of Settlement Agglomeration and Dissemination in Japan* (3 pages and map)

The main element of this brief article is a map of Japan scale 1:1,000,000 showing the distribution of Japanese settlements. Hall made this map to test his own method to manage and record settlement information. The map shows three categories of settlements: low density settlement dissemination, high density settlement agglomeration, and major urban centers (Osaka, Kyoto, Nagoya, and Tokyo).

1937, *Tokaido: Road and Region* (24 pages)

The survey made by walking the road between Tokyo and Kyoto together with Akira Watanabe, gave them a particular insight into the understanding of this road. This article could be classified as an historical monograph with geographical elements of analysis. Here, Hall traces the physical expression of history in the road by analyzing different political periods and the modifications brought by transportation changes, explaining the different relationships of the road with its posts and neighboring villages. The study is divided in three historical periods: from its beginning until the end of 16th century, then the golden age of the road from the end of 16th century until Meiji Restoration in 1868, and finally since the restoration to the 1930s. The article contains several illustrations ranging from traditional Japanese wood-block prints (Figs. 3-21), a comparative map of the main roads and settlements of the area in two periods, a village layout (Fig. 3-22), and a floor-plan of a traditional hotel. This wide-ranging article is the best read and known among geographers.[48]

Sample graphics from the article:

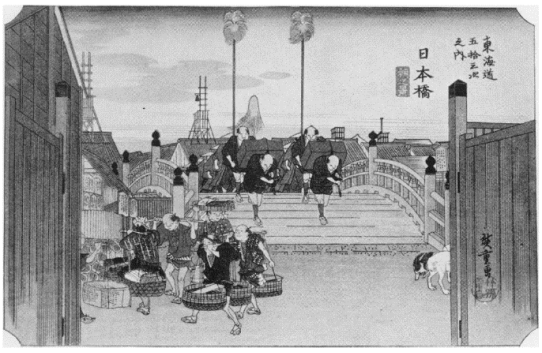


Fig. 3-21 Reproduction of Hiroshigue's print of *Nihon-bashi*

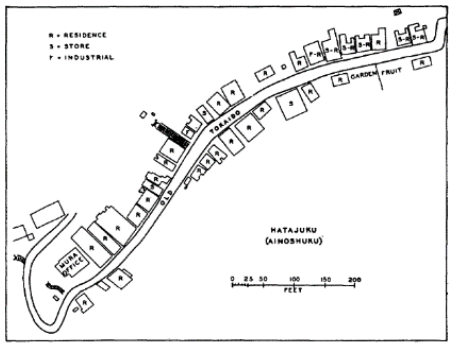


Fig. 3-22 Original caption: "*Plan of the middle stage, aino shuku, (...)*"

Conclusion

Robert B. Hall's outstanding career after World War 2 has perhaps overshadowed his early regional studies. Besides their value as comprehensive geographical examinations of Japan, these early publications hold a great amount of pioneering formal analysis on settlements. Nevertheless, these writings on Japanese cities, towns, and architecture were usually part of broader regional studies only published in Academic Journals, which maintained them relatively unnoticed.

The academic environment in which Hall carried out his research fostered the development of the study of the cultural elements of the landscape, including settlements. Since the beginning of his career Hall was in contact with the renowned Carl O. Sauer, from whom he learned the importance of empirical fieldwork and the appreciation of culture. In his first articles, Hall's interest in culture is manifested in anthropological explorations that later, in his studies on Japan, develop into the study of the material expressions of culture. The collaboration with Preston E. James had also an important role in the of Hall's academic development, particularly on account of their cooperation in the publications on the goals and procedures of the field of Geography. Sauer, James, and Hall were central figures in the development of settlement studies in the University of Michigan, giving several lectures which were among the first on the subject in the United States.

Hall's interest in Japan started just after he finished his graduate education and continued throughout his academic career. Hall visited from Hokkaido in at the upper north of the country to the southernmost areas of Kyushu, which provided Hall with a varied perception of the different natural and cultural settings of Japan. The emphasis on culture of his regional studies is apparent since the selection of the areas studied, which have distinctive cultural characters and are bounded not within the political or natural limits, but the cultural ones. Moreover, while for the study of agricultural and natural resources Hall considered all the territories that were under Japanese rule during the interwar period, for the study of the cultural landscape he focuses in the main territory of the country. Although Hall's studies do not share a fixed structure, they have in common the inclusion of settlements as an important part of the study, which are always studied within a regional approach.

The support of Japanese collaborators was vital for the quality of Hall's studies on the country. The partnership with Akira Watanabe who personally accompanied Hall in his field trips, and the contact with Kunio Yanagita who at the time was the highest authority on the traditions of rural Japan, made possible that Hall had a deep understanding of Japanese culture, which is reflected in the thoroughness of his examination of the cultural landscape.

Notes:

1 Eyre, J. D.: *Robert Burnett Hall*. In Armstrong P. H. and Martin G. J. (Eds.): *Geographers: Bibliographical Studies,* Vol. 25, pp. 81-92, London, Continuum, 2006. p. 82-83

2 Sauer was a professor at Michigan from 1915 to 1923

3 Denevan, W. M. & Mathewson, K.: Carl Sauer on Culture and Landscape: Readings and Commentaries, Louisiana State University Press, 2009. p. 207

4 Shaw W. B. (Ed.): *The University of Michigan, an encyclopedic survey*, Vol. 2, parts III, IV and V, Ann Arbor, University of Michigan Press, 1951. p. 583

5 Hall, R. B. & James, P. E.: *Outline for a Course on the Principles of Geography*, Edwards Bros., Ann Arbor, Michigan, 1924; *Principles of Geography*, Edward Bros., Ann Arbor, Michigan, 1926; *A Suggested Outline for the Treatment of a Geographic Region*, Journal of Geography, Vol. 23, No. 7, pp. 288-291, 1924

6 Hall's original dissertation on Haiti could not be accessed despite the author's efforts. Nevertheless the articles published on geographic journals after Hall's Haiti's research provide an understanding of his approach and interests

7 Hall, R. B.: *Société Congo of the Ile á Gonave*, American Anthropologist, Vol. 31, No. 4, pp. 685-700, 1929

8 Shaw W. B. (Ed.): op. cit., p. 582 (Hall's course on Settlements started in 1931).

9 Newspaper: *The Interpreter*, Article name: *Forrest R. "Woody" Pitts OLS 3/20/45-1924-2014. College and the Navy Intertwined*. The US Navy Japanese/Oriental Language School Archival Project, Archives, University of Colorado at Boulder Libraries, Number 214, December 1, 2015, (pages unnumbered)

10 Ward, R. E.: *Reflections on the Origins of the Center for Japanese Studies: A tribute to Robert Burnett Hall* (1896-1975). In, Center for Japanese Studies (Ed.): *Japan in the World, the world in Japan: fifty years of Japanese studies at Michigan*, University of Michigan, 2001

11 Hall, R. B.: *The Institute of Far Eastern Studies*, The Quarterly Review of the Michigan Alumnus, Vol. 44, No. 10, pp. 83-86, 1937, p. 83

12 Ibid., p. 84

13 Hall, R. B.: *The Division of Social Sciences*, University of Michigan Official Publication, Vol. 43, No. 64, pp. 276-277, 1941. p. 277

14 Hall, R. B.: *Personal Data Sheet*. Unpublished document, n.d., provided by Robert Hall

15 Eyre, J. D., op. cit., p. 84

16 Hall, R. B.: *Area Studies: with special reference to their implications for their research in the social sciences*, Social Sciences Research Council, New York, 1947. p. 23

17 For an analysis on the political implications of Area Studies refer to Lewis, M. W. and Wigen, E. K.: *The Myth of Continents: A Critique of Metageography*, University of California Press, Berkeley, 1997; and Szanton, D(Ed.).: *The Politics of Knowledge. Area Studies and the Disciplines*, University of Califormnia Press, 200

18 Ward, R. E.: *Reflections on the Origins of the Center for Japanese Studies: A tribute to Robert Burnett Hall (1896-1975)*, unpublished manuscript, p. 3

19 Ward, R. E., op. cit., p. 42

20 Letter from General Douglas MacArthur to Robert B. Hall, date 5th June 1949. From the Center for Japanese Studies of the University of Michigan, Okayama Field Station official site (www.ii.umich.edu/cjs/aboutus/historyofcjs/okayamafieldstation, accessed 2014/01/15)

21 Gosling, P. L. A. and Kish, G.: *Robert Burnett Hall (1896-1975)*, unpublished memorial. Copy provided by Robert Hall. The book published after the Okayama field station research is Beardsley, R.K., Hall, J. W., Ward, R. E.: *Village Japan*, University of Chicago Press, 1959.

22 See for example Hanley, S. B. & Yamamura, K.: Economic and demographic change in preindustrial Japan, 1600-1868, Princeton University Press, 1977; Goodman, R.(Ed.): Family and social policy in Japan: anthropological approaches, Cambridge University Press, 2002; Waswo A. & Nishida Y.: Farmers and village life in twentieth-century Japan, Routledge, 2003

[23] For a detailed study on Hall and other American geographer's studies on Japan post-World War 2 see 石田寛編: 外国人による日本地域研究の軌跡, 東京: 古今書院, 1985, Part 1, Section 3 アメリカ地理学者における日本研究

[24] Hall, R. B.: *Personal Data Sheet*. Unpublished document, n.d., provided by Robert Hall; Asahi Eve. News (Hall receiving Order of the Rising Sun)

[25] Asahi Evening news, *Dr. Hall Honored*, 1957 (Newspaper clipping provided by Robert Hall)

[26] Data from several Newspapers: The Michigan Daily, *Hall Receives Award*, undated; The Ann Arbor News, *Japanese Crown Prince Tours University Campus*, Ann Arbor, Mich., Wednesdat September 23, 1953; The Ann Arbor News, The Emperor's Old Ties, November 14, 1990; Asahi Evening news, *Dr. Hall Honored*, 1957

[27] Hall, J. W.: *Japanese Studies in the United States, A Report on the State on the Field, Present Resources and Future Needs*, Newsletter of the Association for Asian Studies, Vol. 16, No. 1, Association for Asian Studies, Ann Arbor, 1971

[28] Takaki, Y.: *Japanese Studies in the Universities and Colleges of the United States*, Institute of Pacific Relations, Hawaii, 1935

[29] The Michigan Alumnus, Vol. 34, No. 26, April 1928, p. 571

[30] Eyre, J. D., op. cit., p. 83. The only of Hall's students that could be identified were Douglas Dunham Crary (1910-2005) and Curtis Alexander Manchester

[31] Eyre, J. D., op. cit., p. 83

[32] Hall, R. B.: *Cities, Villages, and Houses of Japan*, Quarterly Review of the Michigan Alumnus, pp. 138-149, 1934, p. 139; and *The Geographic Region: A Resume*, Annals of the Association of American Geographers, Vol. 25, No. 3, pp. 122-136, 1935, p. 129

[33] 石井素介: 戦時下「皇軍」の「兵要地誌」と地理学者の関与をめぐって, 外邦図研究ニューズレター, No. 7, pp. 29-32, 2009. p. 32

[34] Proceedings of the Board of Regents (1929-1932). University of Michigan. Board of Regents February meeting 1930, p. 176. (http://quod.lib.umich.edu/u/umregproc/ACW7513.1929.001?rgn=main;view=fulltext, last accessed on October, 2015). 石井素介, Ibid.

[35] I owe the information on Hall's acquaintance with Kunio Yanagita to the kindness of Mr. Katsumi Nakao (中生勝美), Professor of Anthropology of J. F. Oberlin University, Japan.

[36] Weldelken-Mortensen, C.: *Living with the Past: Preservation and Development in Japanese Architecture and Town Planning*, MIT, PhD. Dissertation, 1994. p. 31. Morse, R. A.: *Yanagita Kunio and the folklore movement the search for Japan's national character and distinctiveness*, New York, Routledge, 2015

[37] Hall, R. B. (ホール, ロバート):佐渡が島 (上), 矢沢大二訳, 島, Vol. 1 No. 3, pp. 43-48, 1933, p. 43

[38] Hall, R. B. (ホール, ロバート):佐渡が島 (上), op. cit.;佐渡が島 (中), 矢沢大二訳, 島, Vol. 1 No. 4, pp. 23-28, 1933; 佐渡が島 (中), 矢沢大二訳, 島, Vol. 1 No. 5, pp. 49-54, 1933

[39] 谷岡武雄: 隠岐島の地理的性格, 人文地理, Vol. 1, No. 4, pp. 37-46, 1949; 尾崎甫四郎: 房總東南部の微細地誌(第 1 報) 2, 地理学評論, Vol. 9, No. 2, pp. 128-144, 1933 , p. 136

[40] Some Japanese works on settlements referred by Hall could not be properly recognized. These unidentified works appear in Hall's articles as: *On the selection of the Position of Castles,* Chirigakuzasshi, 1927, pp. 71-76, by Yamazaki. H; and *Matsue City,* undated, by Mori. N. Among the referred works in the table there are two works that were published in English, both on economic history: *The Economic Aspects of the History of Civilization of Japan* by Takekoshi from 1930, and *The Penetration of Money Economy in Japan and its Effects upon Social and Political Institutions* by Fukuda, published on 1927.

[41] The Liaotung Peninsula was under Japanese control since 1905, following the Treaty of Portsmouth after the Russo-Japanese War (1904-1905). See Kuroishi, I.: *Constructing the colonized land: entwined perspectives of East Asia around WWII*, Ashigate, 2014, p. 12

[42] Hall, R. B.: *The Geography of Manchuria,* Annals of the American Academy of Political and Social Science, Vol. 152, pp. 278-292, Nov. 1930, p. 290

[43] Hall, R. B.: *Some Rural Settlement Forms in Japan,* op. cit., p. 101

[44] Kirk H.: *The Development of a Focus for the Geography of Settlement*, Economic Geography, Vol. 41 No. 4, pp. 346-355, Oct. 1965, p. 353

[45] Fead, M. I.*: Notes on the Development of the Cartographic Representation of Cities*, Geographical Review, Vol. 23 No. 3, pp. 441-456, 1933, p. 455

[46] The Japanese names of locations is only added for relatively unknown areas or town that are difficult to locate by the name in alphabet.

[47] Hall, R. B.: *Cities, Villages, and Houses of Japan*, op. cit., p. 175

[48] Eyre, J. D., op. cit., p. 87

Image Sources:

Fig. 3-1 Image provided by Robert Hall. Source: *The National Cyclopedia of American Biography*

Fig. 3-2 www.ii.umich.edu/cjs/aboutus/historyofcjs/okayamafieldstation, accessed on 2014/01/15

Fig. 3-3 Asahi Evening news, *Dr. Hall Honored*, 1957

Fig. 3-4 The Michigan Daily, *Hall's Receives Award*, 1962

Fig. 3-5 Image provided by Robert Hall (unknown source)

Fig. 3-6 Hall, R. B.: *Some Rural Settlements Forms in Japan,* Geographical Review, Vol. 21, No. 1, pp. 93-123, 1931, p. 93. Modified from original

Fig. 3-7 Hall, R. B.: *Agricultural Regions of Asia, Part VII*: *The Japanese Empire*, Economic Geography, Vol. 10, No. 4, pp. 323-347, 1934, p. 324

Fig. 3-8 Hall, R. B.: *Quelpart Island and its People*, Geographical Review, Vol. 16, No. 1, pp. 60-72, 1926, p. 63

Fig. 3-9 Ibid., p. 67

Fig. 3-10 Hall, R. B.: *Some Rural Settlements Forms in Japan*, Geographical Review, Vol. 21, No. 1, pp. 93-123, 1931, p .97

Fig. 3-11 Ibid., p. 99

Fig. 3-11 Ibid., p. 100

Fig. 3-13 Hall, R. B**.**: *The Yamato Basin, Japan*, Annals of the Association of American Geographers, Vol. 22, No. 4, pp. 243-292, 1932, p. 277

Fig. 3-14 Ibid., p. 284

Fig. 3-15 Ibid., p. 292

Fig. 3-16 Hall, R. B.: *The Hiinokawa Plain,* Papers Fifth Pan-Pacific Science Congress, pp. 1359-1371, 1933, p. 1366

Fig. 3-17 Ibid., p. 1370

Fig. 3-18 Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*, Annals of the Association of American Geographers, Vol. 24, No. 4, pp. 175-200, 1934, p. 176

Fig. 3-19 Ibid., p. 191

Fig. 3-20 Ibid., p. 197

Fig. 3-21 Hall, R. B.: *Tokaido: Road and Region*, Geographical Review, Vol. 27, No. 3, 1937, p. 355

Fig. 3-22 Ibid., p. 366

PART 2: Interpretations and Integrated Study of Culture and Nature

CHAPTER 4
INTERPRETATION OF THE BUILT ENVIRONMENT

Introduction

The objective of Chapter 4 is to make clear how the ideological context of early 20th century's Geography affected Hall's interpretation of the Japanese built environment. The first section (1) discusses how the *cultural landscape* came to be a subject of study of Geography, examining how this concept was treated in the academic context in which Hall was educated. Section two (2) focuses on the ideological shift that the discipline of Geography was experiencing in the United States at the time Hall began his studies. The understanding of the relationship between culture and nature was beginning to be seen as an interaction, and this changed the way in which the cultural elements of the landscape were interpreted. After discussing the different viewpoints of Hall's contemporaries, his writings are examined supporting the discussion with evidence of his studies on Japan. In the third section (3) Hall's studies on Japanese settlements are examined in light of the issues treated in sections 1 and 2 to make clear the relation between his understanding of the relationship between culture and nature and his interpretation of the Japanese built environment.

1 Modern Geography and the study of the built environment

To understand why settlements became a subject of study of Geography, a brief review of the evolution of this academic field is necessary. One of the early contributors to the modern redefinition of Geography was Immanuel Kant (1724-1804). According to Kant, there are two different ways of classifying phenomena for their academic study: in one, phenomena are grouped according to *their nature* (as in zoology, botany, or economics), and in the other phenomena are grouped according to *their position in time or space*. Within this second category, the association of phenomena of diverse origins according to *time* is the basis of *History*, while grouping things of diverse character and origin on the basis of *space* is the subject matter of *Geography*. Based on this broad categorization, subsequent definitions described Geography as the field concerned with *the study of the phenomena located on the earth surface*.[1]

Later, the founders of modern scientific Geography —Alexander Von Humboldt (1769-1859) and Carl Ritter (1779-1859)— encouraged a view of the discipline understood as the study of "*the Earth as the dwelling place of man*".[2] During the early 19th century, geographic studies covered large extensions of the earth surface and tended to focus either on one of the aspects of the complex geographical environment, or resulted in long encyclopedic listings of elements without analysis of their relation. As a reaction to this type of study, Carl Ritter advocated for the study of smaller areas beginning with the approach to the study of the landscape known as *Regional Geography.* This type of study offered the possibility of a more comprehensive examination of the interaction of all the elements of the landscape within a manageable and restricted area, and it was for many decades the preferred approach of European and American geographers.[3]

1.1 The cultural landscape

At the end of 19th century it was understood that the Geography was concerned with the study of the elements of the natural landscape of a given region and the analysis of their interaction. Nevertheless, the extent of man-made modifications of the natural landscape was by this time so vast that it was no longer possible to make a clear distinction between the natural and the cultural elements to study them independently. In view of this situation, the German geographer Otto Schlüter (1872-1952) redefined the subject of study of Geography form the *landscape*, to the "*cultural landscape*". In an article published in 1906 —*Objectives of Geography of Man*— Schlüter describes Geography as the study of the totality of "*visual perception of the area*", that is, the phenomena on the surface of the earth that could be perceived by the senses.[4] The non-material facts of the area, as political or cultural, were outside the concerns of Geography but could be borrowed from other fields of knowledge for the interpretation of the cultural landscape.

The change in the understanding of the focus of Geography led to a division of the field in two branches: *physical geography*, focused on the study of the natural elements; and *human geography*, which was mainly interested in the elements of culture and the interaction between culture and nature.[5] Most regional geographers of the turn of the century adopted the second approach, combining the study natural and cultural elements in their studies.

The works of the German geographers as Friedrich Ratzel (1844-1904), Siegfried Passarge (1866-1958), and French geographers Paul Vidal de la Blache (1845-1918), Albert Demangeon (1872-1940), Jean Brunhes (1869-1932), and Camille Vallaux (1870-1945) were important references for scholars around the world, providing the first theoretical and practical guidelines for the study of the cultural landscape.[6] As part of Geography, the study of human facts was concerned first and foremost with the areal distribution of man's activities and their material representations.[7]

In the United States, the role of Carl O. Sauer —Hall's former professor — was fundamental in the adoption of the concept of the cultural landscape as the subject of study of Geography. In 1925 Sauer published an article entitled *The Morphology of Landscape*, where he states that "*(t)he content of landscape is found (…) in the physical qualities of area that are significant to man and in his forms of the use of the area, in facts of physical background, and facts of human culture*".[8] The influence of this article reached the entire country and helped redefined the academic field of Geography in the United States. The writings of Hall and James also contributed to the consolidation of the inclusion of the study of cultural elements within Geography at the University of Michigan. In the article *Outline for a Course on the Principles of Geography* published in 1924 Hall and James presented a tree-shaped scheme showing the fundaments of Regional Geography as the roots, the method of study as the trunk, and the applications at the crown of the tree (Fig. 4-1, next page). Among the fundaments of Geography are considered the different sub-disciplines of Physical Geography as Meteorology and Geology, as well as disciplines concerned with culture

as Sociology, Economy, and Ethnology. At the crown of the tree are shown all the sub-branches of Regional Geography, all of which are dedicated to the study of the cultural landscape. Therefore, a regional geographer was concerned with the study of climate, physiography, or sociology inasmuch as these were of value for the study of one of the top branches of Regional Geography. The studies of this sub-field could be *systematic*, that means, entirely dedicated to one of the subject presented as economic geography or urban geography, or it could be a comprehensive *regional study*, in which the amount of contents on these subject could be combined and adjusted according to the relative importance for the region.

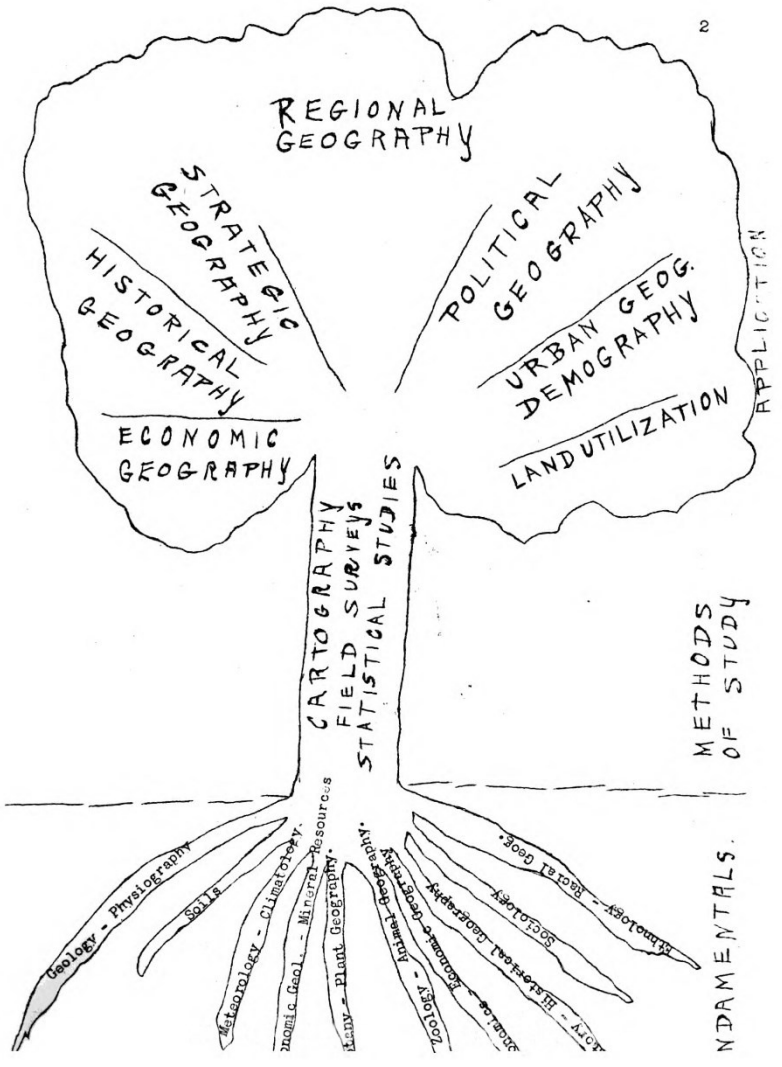


Fig. 4-1 Hall and James, 1924- Tree-shapes scheme showing the methods of study and applications of Regional Geography

1.2 The cultural landscape and settlements

After having recognized that the man-made elements had to be considered in the study of a region, it was necessary to determine some criteria for the approach to their study. Once again, the works of French human geographers as Demangeon and Brunhes provided the main guidelines.

The expressions of cultural activities included all modifications of the landscape, from land division and agriculture, to a single habitation unit. According to Brunhes, within these cultural expressions there were two essential *facts* (or elements) of human occupation: *houses* and *roads*. In this classification *houses* refers in fact to any kind of building including "*all human structures, from the humblest straw huts of the savage to the most elaborate mansion of our cities, the cupolas of observatories, or spikes of cathedrals*".[9] The same way, roads refer to any course that allowed for communication as "*the half beaten paths (...) great city streets paved or asphalted (...) railroads (...) and* 'flowing roads' - *dikes, rivers or canals*".[10] These two elements were the basic components of any human *settlement*, the most noticeable expression of man's activities on the landscape (Fig.4-2).

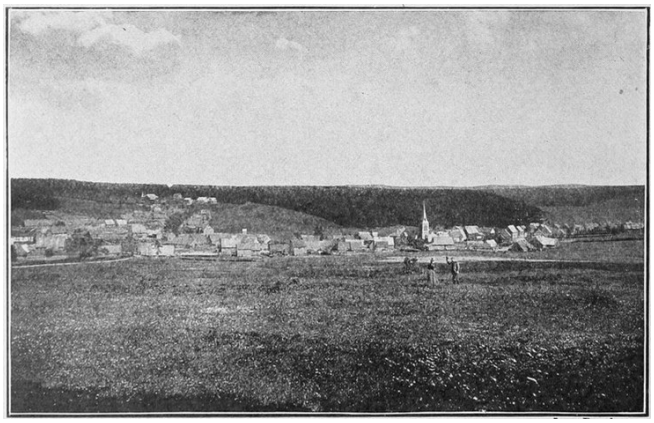


Fig. 4-2 Brunhes- Original caption: "*Braunlage (Harz). Note how visibly the human settlement is cutting into the forest*"

The amount of contents on settlements and the importance assigned to their analysis varied greatly from geographer to geographer. In the case of Hall, he intentionally laid "*overwhelming emphasis on settlements*" because he understood that "*the settlement sums up more completely the geographic environment than any other one thing.*"[11] To point out the importance of the study of settlements Hall quoted in more than one occasion the work of Demangeon:

> *The study of settlements "opens up a vast domain where the geographic explanation must pass over a complexity of facts —some pertaining to distant human history and others arising under our very eyes. It calls our attention to a variety of*

studies; natural conditions, social conditions, demographic conditions, economic conditions. It includes the knowledge of human settlements throughout history. It constitutes one of the most original of the human sciences because it is a question of knowing how the bonds which connect the life of men with the soil are fastened".[12]

Hall was aware that the knowledge of the cultural elements of the landscape was far behind the knowledge of the natural ones, and believed that the study of these cultural elements "*will have to be made by the geographer and should be regarded as contributions to regionalism*".[13] The objectives of the studies of both rural and urban settlements were then integrated into the ultimate goal of regional geography, which was, in Hall's words, "*the creation of a sound, comparative world pattern*".[14]

2 Changing understanding of the relationship between culture and nature

Since the cultural landscape was accepted as the subject of study of Geography, the understanding of the relationship between man and nature becomes of critical importance in the study of settlements. But, just at the time Hall started his academic education, this understanding was changing.

2.1 Environmental determinism

Since mid-19th century American Geography was strongly dominated by the ideology of *environmental determinism,* according to the natural environment had a dominant and unidirectional influence on societies. This idea had been present in the geographical thought since the first studies made by Strabo (c.64BCE-21CE), but the work of the German geographer Friedirich Ratzel —*Anthropogeography,* from 1882— is recognized as the promoter of environmental determinism in modern Geography.[15] According to the environmental determinist interpretation, human development was largely shaped by geographic and climatic conditions, and therefore the explanations for historical, economical, and cultural traits were searched —and found— within the natural environment.[16]

In the United States, the most important supporter of environmental determinism was Ratzel disciple, Ellen Churchill Semple (1863-1932). Her works on the influence of the natural environment on culture had a great influence on American historians and geographers from the first decades of the 20th century.[17] In the book entitled *American History and its Geographical Conditions* from 1903, Semple explains for example "*(t)he Influence of Appalachian Barrier upon colonial history*", and the "*growth of the United States to a continental power geographically determined*".[18]

The understanding that the social and economic fate of societies was determined by nature was frequently related with social Darwinism, which sustained that there was a unique and predetermined path of development for societies. Associating this idea with environmental determinism led to the belief that the relative position of a society in such path was determined by its geographic and climatic conditions. This understanding, which was frequently used in colonialist justifications, began to be hardly challenged at the beginning of the 20th century.[19]

2.2 Possibilism

During the 1920s, the understanding of the influence of nature on a culture began to change. The reasoning in environmental determinist statements seemed at first plausible for many researchers, but the studies of real cases kept disproving its generalizations. Systematic investigations made by historians and anthropologists, including the influential Franz Boas (1858-1942), found that the accuracy of explanations based entirely on the natural environment were insufficient and unreliable.[20]

Within American Geography, Carl O. Sauer's influential work —*The Morphology of Landscape*— played a major role in the departure from environmental determinism, redirecting the dominant ideology towards *possibilism*.[21] This ideology, initially developed in Europe after the work of Paul Vidal de la Blache, understands nature and culture as interdependent forces.[22] According to the possibilistic perspective, man and nature influence each other and therefore cultures are not perceived as being a product of their natural environment. Sauer's influential arguments turned around Semple's understanding, being now *culture* the main agent in shaping the landscape:

> "*The cultural landscape is fashioned from a natural landscape by a culture group. Culture is the agent, the natural area is medium, the cultural landscape the result. Under the influence of a given culture, itself changing through time, the landscape undergoes development (…)*".[23]

The transition of environmental determinism to possibilism was neither clear-cut nor limited to these two conflicting concepts.[24] The coexistence of different understandings of the relationship between culture and nature created several debates on the approach that Geography should take in the study of the environment. Countless American geographers, including Hall, engaged in the creation of explanatory reports that could provide some guidelines for the study and interpretation of the cultural landscape.

2.3 Interpretation of the culture-nature relation of the first settlements studies in the United States

One of the earliest examples of settlements studies within American Geography was made actually by a German geographer, Martha Krug-Genthe (1871-1945). Krug-Genthe was a student of Ratzel at the University of Leipzig (as Ellen Ch. Semple), and later completed a PhD under the supervision of the renowned Alfred Hettner (1859–1941) at the University of Heidelberg.[25] In 1907 she published an article entitled *Valley Towns of Connecticut* where the development of the main settlements of this area were examined.[26] This investigation of what for her was a foreign environment, made her question the environmental determinist assumptions learned in Europe because of what she sae in the settlements of Connecticut:

> "*an instructive example of how far man is from being helplessly dependent on his geographical environment; the most favourable conditions will be of no use to him unless he knows how to avail himself of them, just as well as it is possible for him to assert himself in spite of unfavourable ones.*" [27]

Krug-Genthe argues that while in Europe man started as a slave of his environment and slowly learned to *master* nature, he arrived at the new environment of the United States with a priori knowledge on how to interact with nature, and for this reason there is a *divergence of the actually existing conditions from the Geographic postulates.*[28] Other early examples do not share Krug-Genthe's view of the predominant role of man in the creation of settlements, and focus on the study of the geographical influences. Some examples are of these type of articles are *Geographical Influences in the Development of Wisconsin* by Mary Dopp and *Some Geographic Influences in the Settlement of Michigan and in the Distribution of Its Population*, by George J. Miller, both from 1913.[29]

Besides the examples of practical studies, several articles discussing the importance on the study of settlements were published in American geographical journals. The Australian geographer Marcel Aurousseau (1891-1983) wrote extensively on the distribution and arrangement of rural populations. He thought that settlements were "*not susceptible of systematic classification but are none the less real, being in each case a delicate expression of the social condition or physiography of the region concerned, or of both.*"[30] Regarding the relative influence of nature or culture on settlements Aurousseau makes the following observation:

> *"in civilized countries which possess a high degree of social freedom each natural region tends to develop a characteristic form of arrangement of its rural population, while in more backward countries social organization is a more powerful factor than physiography."* [31]

In opposition to Krug-Genthe's interpretation, Aurousseau believes that in more developed societies the tendency is for settlements to conform more closely to the natural conditions. These different understandings of the relations between culture and nature affected the explanations of settlements that these geographers provided.

2.4 Hall's position on the debate of the relationship between culture and nature

Besides practical studies on Regional Geography, Hall published a number of articles discussing the aims of the discipline: *Outline for a Course on the Principles of Geography* and *A Suggested Outline for the Treatment of a Geographic Region,* both co-wrote with Preston E. James and published in 1924.[32] According to James, at the time these articles were written Hall and him were "*coming out from Semple and joining Sauer*".[33]

On the one hand, they describe the field of Geography as *"the study of the influence of nature on the behavior of living things"*.[34] The term *influence,* which implied a passive attitude of man, was in later possibilist writings replaced by the term *adaptation* because it suggested a more active role of man and the idea that he can make different choices on how to relate to nature. Moreover, in *Outline for a Course on the Principles of Geography,* Hall and James state that *"unfavorable environment results in retardation or retrogression"*.[35] This statement that links so drastically the natural environment with the possibility of development of a human group was one of the inconsistent assumptions that later challenged environmental determinism since the opposite was also assumed, that is, that favorable environments promote indolence and therefore cause stagnation. In these early writings there are also statements which are closer to Sauer's ideas, particularly the emphasis made on the study of the cultural elements of the landscape, and the repeated suggestions of searching for explanations of human facts (as distribution of population) in non-geographic factors as political history.[36]

Eleven years later, in 1935, Hall published his most important article on the goals and approaches in the field of Geography entitled *The Geographic Region: A Resume*. By this time Hall's statements were far from any deterministic implications, even providing explanations against such controversial ideology. When explaining why geographers should not assume that natural regions conform to cultural regions Hall argues that geographers should note the following:

> "*(1) that human or cultural regions do not ordinarily agree in detail of distribution with natural regions, (2) that different groups have adapted themselves in different ways in similar or in the same environment, and (3) that the same people, in different cultural stages, have reacted differently to the same environment.*"[37]

Later, in 1938, Hall had the opportunity to apply these ideas in the interpretation of the political and economic situation of Japan in an article entitled *Geographic factors in Japanese Expansion*.[38] Despite the misleading title, Hall stresses on the changing role of the natural elements throughout history, presenting as an example the sea. Throughout a review of Japanese history, Hall discusses how after Meiji Restoration "*the sea, which for so long had been its main defense, had suddenly changed into a great open roadway by which the shores of Japan could be approached in any direction by any nation (…) the sea was a menace to national existence*" while later, after the military empowerment of the country the sea became the route to conquer foreign territories.[39] Furthermore, he pointed out that the geography of a country is not a fixed fact referring to the Japanese expansionism, changing therefore not only the relationship of the society with geography, but the actual geographic conditions of that society.[40]

3 The role of Possibilism in Hall's interpretation of the Japanese built environment

3.1 Explanations based on nature and expression of causation

In most of his articles, Hall avoids explanations of cultural facts that rely entirely on natural conditions or that might imply deterministic assumptions. But there is some exceptions. In the examination of an area of Yamato basin, Hall explains that the villages were located for long time below the flood line, but that at the time of his research the amount of these villages was decreasing. When looking for an explanation for this situation, Hall makes the following statement:

> "*This shifting of population (…)shows clearly that the influence of the natural environment is a persistent, ever present influence, which it is true may be retarded for centuries by man-made law or other artificial force but which will eventually assert itself and in a broad way, at least, man will adjust himself to it*".[41]

In this statement, made in a publication from 1932, Hall mixes the controversial ideas of *influence* and *adaptation*, recognizing first the limitations set by the natural conditions, but adding that man *adjust* himself to the natural situation. Still, in the vast majority of his writing Hall is extremely cautious when stating relations between culture and nature. For example, when examining the distribution of cities (Fig. 4-3, next page), the importance of the geomorphology of the country in their location is only implied instead of being presented as the cause:

> "*The size of the cities, and the size of the plains upon which they are located are in close agreement (…) (t)he pattern of city distribution, in addition to indicating the plains areas, broadly outlines the major surface areas of Japan.*"[42]

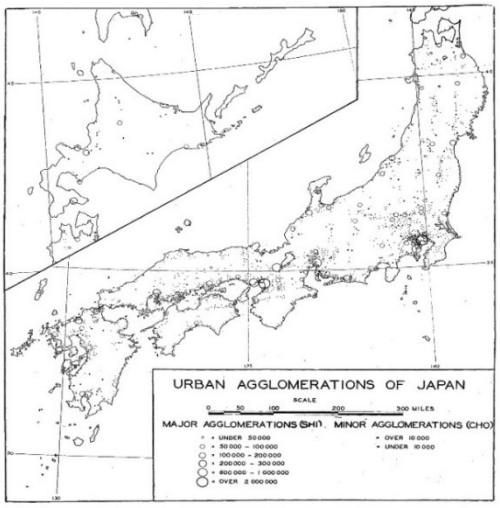


Fig. 4-3 Map of urban agglomerations of Japan. Hall points out that the distribution of cities *agrees* with the major landforms

It is important to note that Hall's possibilist attitude does not mean that he disregards nature in his explanations. Rather, Hall expresses the relationships between natural and cultural elements in terms of *correlations*, and not as cause and effect. When studying the distribution of settlements in Sado Island for instance, Hall points out that "*(t)he distribution of the springs corresponds very closely to the distribution of villages*" and that there is a "*marked correlation*" between village and spring distribution, establishing a connection that does not necessarily implies causation.[43]

3.2 Possibilistic viewpoint

Hall's interpretation of Japanese cultural facts differs from earlier explanations based mainly on geographic conditions. The best example of a determinist explanation of the Japanese cultural landscape is the work of the very initiator of the ideology in the United States, Ellen Ch. Semple. During 1911, Semple stayed in Japan for three months studying its agriculture. The following year she published an article on the subject entitled *Influence of Geographical Conditions upon Japanese Agriculture*.[44] For the analysis, Semple considers historical, economic, and cultural facts (Fig. 4-4). Nevertheless, in her interpretation, the culture, the settlements, and even the political development of Japan, are understood to be subordinated to the natural environment of the country:

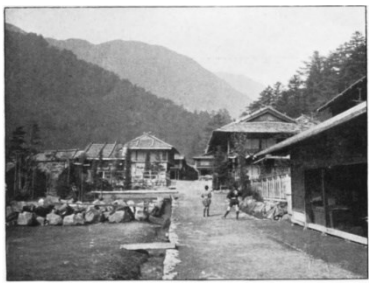


Fig. 4-4 Yumoto village (湯本) shown in Semple's article

"*Geographical conditions of climate and relief have given a peculiar character to the cultivation and settlement of the country, and hence, to its political development*".[45]

Although settlements as towns or villages are only briefly considered in her study, Semple observes that "*(t)he relief of a province determined largely the distribution of the farms in the wet and dry fields*".[46] Hall, on the other hand, includes a wider variety of factors in his explanations of agriculture and settlements. For example, in the study of Echigo area, today's Niigata prefecture,[47] Hall states that the settlement type of this region *"involves a dry point settlement which is serpentine in form owing to location upon ancient dunes and active and abandoned levees, a particular distribution of land ownership, and a house form well adapted to the local conditions*"(Fig. 4-5).[48] This explanation includes natural facts as the ancient dunes, as well as cultural facts as the ownership system. Similarly, in the explanation of the distribution of settlements in the Yamato basin (Fig. 4-6)—today's Nara province— Hall makes an important distinction between *natural landforms* and *culturally induced landforms*, distinction that was not considered by Semple. Hall recognizes that "*(a)ll hills on the plain and many of the marginal hills are either artificial or have been greatly altered by man*", pointing put the historical origins of the mound tombs, the drainage works, and the "*box like valleys*".[49]

Fig. 4-5 Map of Sonogi Mura (Misspelled from *Sinoki*) of Echigo Plain. Hall points out natural elements affecting the settlement type, as the distribution along dunes and levees, also noting the effect of cultural facts as land division

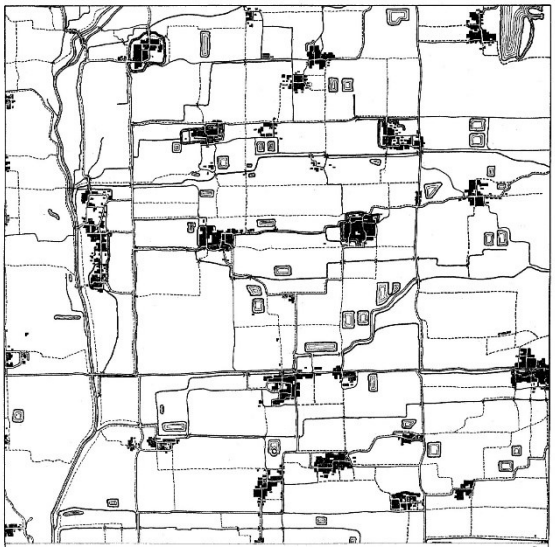


Fig. 4-6 Map of an area of Yamato Plain. Hall points out the culturally induced landforms and the influence China on the Handen system that can be seeing in the orthogonal land land division that influences the distribution of settlements

Hall's possibilistic interpretation allow him to recognize of the history of the area in the formation of the cultural landscape. For that reason Hall examines thoroughly the Chinese influence on Yamato, finding expressions of this foreign culture in the land division system (Handen), in the irrigation system, and in the aggrupation of houses within moated villages —called *Kaitos* (垣内, the forms in back in Fig. 4-6).[50] Semple, on the other hand, only notices that the "*methods of agriculture are similar to those of overcrowded China*", disregarding the careful consideration of cultural influences.[51]

3.3 Mutual influence of culture and nature

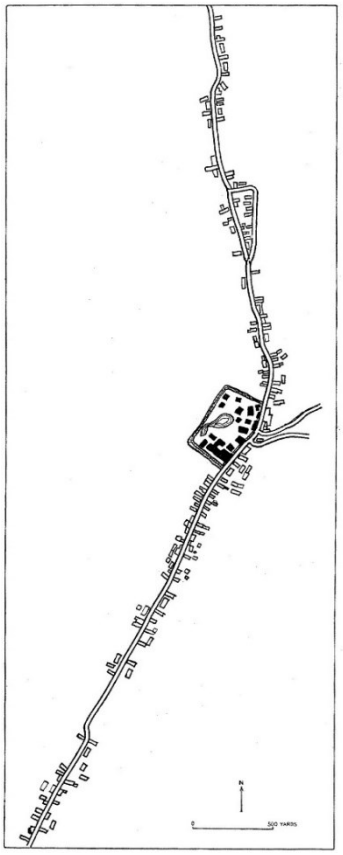


Fig. 4-7 Nakaura Mura: "*Note the large walled estate of the local landlord (buildings in solid black)"*

As shown in the previous sections, Hall's possibilist standpoint allows him to examine natural and cultural causes according to their assumed relative importance in the creation of the cultural landscape. For example, in Yamato, Hall finds the history of Chinese influence to be as important as the agricultural production in the distribution of settlements, while in Sado the pattern of dissemination of the villages is correlated to the springs' location. In the conclusion presented at the end of the article *Some Rural Settlements Forms in Japan*, from 1931, Hall makes the following statement:

> "*The form of the agglomeration is largely an adjustment to natural conditions; the structure is likely to be determined by social and economic conditions, as the kaito of Yamato and the landlord-tenant pattern at Echigo"* (Fig. 4-7).[52]

This conclusion was made after the observation of different areas of Japan, from the southern Satsuma (Kagoshima) to the north of Hokkaido. Here, *form* refers to the pattern of distribution and general shape of the villages, as a shoestring village in Echigo (Fig. 4-6, previous page), referred by Hall with its German designation "*strassendorf*". The form of the settlement is found to respond to natural conditions, which in the case of Echigo for example are the abandoned meanders or natural levees. The term *structure* refers to the arrangements of the buildings within the form. In the case of Echigo, Hall finds that an analysis of an individual village shows a "*central focal point occupied by the great enclosed estate of the local landlord or by the public building of local administration*", which is a cultural condition.[53]

3.4 Analogies between natural and cultural elements

Occasionally, Hall uses analogies as an analysis tools. Hall was aware that there were countless cultural elements that needed to be described and explained but the available terminology "*to express them lucidly"* was extremely reduced.[54] For that reason, he suggests *"to borrow both the method and terminology that has been developed in geomorphology*" to study the cultural

elements of the landscape.[55] He draws upon the terminology and relationship systems of the natural elements to explain the cultural ones.

The analogy used more frequently is the one that associates rivers with roads. There is an evident similitude of these two elements that many geographers noted. Brunhes for example even consider both facts as part of one broad category which he names simply as *roads*. Hall understands that "*as rivers excave valleys, so road systems will be generated by the development of a commercial culture*".[56] Making a direct relation, he explains that "*roads like rivers may appear at different places in different cycles and thus cause local changes in form and structure*", assigning to both elements an essential structuring role in the formation of the cultural landscape.[57] When studying the settlement distribution of Yamato, he also related this distribution with organic phenomena stating that there are "*areas of grouped habitat assembled in compact masses in villages like colonies of social plants, which are separated by wide extents of open fields*".[58] These analogies are made by way of example for specific cases, without making a general translation of the laws and systems of the natural world to the cultural elements.

Another significant term from geomorphology that is used to describe the processes of the cultural landscape is the term *rejuvenation*, which in geomorphology the term rejuvenation is used to describe a renewed period on the cycle of a river. This concept was used by Sauer in *The Morphology of Landscape* where he explains that with the introduction of a culture that is foreign to the area "*a rejuvenation of the cultural landscape sets in*."[59] Hall takes this concept of rejuvenation, and making another parallelism with geomorphology he explains that the original form or "*urformen*" of the cultural landscape can be modified by a new cultural wave as in the case of the Chinese influence in Yamato.[60] Similarly, when analyzing agricultural changes Hall states that "*(t)he economic rejuvenation which came with Westernization has wrought change in varying degrees depending upon the opportunities for industry and commerce.*"[61]

Conclusion

Although in his first writings Hall included ideas that were close to environmental determinism, his interpretations of Japanese settlements are largely possibilistic. The influence of nature is never denied, but because of the discredit that extreme environmental determinism had at the time, Hall is cautious when establishing the relations between culture and nature. In very few occasions he would attribute characteristic of settlements to nature, most of the times stating unassuming correlations. The degree of the influence of nature on cultural forms decreases together with the scale of analysis. When considering the location of cities within the country, Hall suggests that there is a close relationship between the main landforms and the distribution of cities. However, in the closer look to individual cities, or villages there is need for more references to cultural facts to explain them.

Hall's decision of not assuming correlations as causes, allowed him to include a wide variety of factors in his explanations of the Japanese cultural landscape, while in the determinist interpretation of Semple important factors as the influence of foreign cultures, or the culturally induced landforms are overlooked.

Because of the lack of knowledge on the cultural landscape Hall's analysis include several analogies between the natural elements and the cultural ones. An important concepts from geomorphology that he applied to the cultural landscape is the idea of *cultural rejuvenation*. This understanding of the introduction of another culture as part of a cultural process permitted Hall to consider the introduction of the Western culture somehow impartially, without the anxieties about the loss of the traditional culture that was so frequent in Western writings of this time.

Notes:

1 Dikshit, R. D.: *Geographical Thought: A Contextual History of Ideas*, Pretice-Hall of India Private Limited, New Delhi, 2006. p.58

2 Ritter, C.: *Comparative geography*; translated for the use of schools and colleges by William L. Gage, American Book Company, 1864, p. xv

3 Unwin, T*: The Place of Geography*, Routledge, 2013; Livingstone, David N.: The geographical tradition : episodes in the history of a contested enterprise, Blackwell Publishers, 1992

4 Dikshit, R. D., op. cit., p. 80

5 Dunbar, Gary S.: *Geography: Discipline, Profession and Subject since 1870 an International Survey*, Kluwer Academic Publishers, Dordrecht, 2001

6 See for example Demangeon, A.: *La Géographie de l'Habitat Rural*, Annales de G*é*ographie, Vol. 36 No.199, pp. 1-23, 1927; Brunhes, J.: *Human Geography. An attempt at a Positive Classification,* translated by LeCompte, I. C., Rand McNally & Co., NY, 1920; Vallaux, C.: *Les Sciences Géographiques*, Félix Alcan, 1925

7 James, Preston E. and Geoffrey J. Martins: *All Possible Worlds: A History of Geographical Ideas*, John Wiley & Sons, 1981, p. 125

8 Sauer, C. O.: *The Morphology of Landscape*, in Leighly, J. (ed.): *Land and Life, A Selection from the Writings of Carl O. Sauer*, University of California Press, Berkeley, 1963, originally published in University of California Publications in Geography, Vol.2 No.2, 1925

9 Brunhes, J.: *Human Geography*, op. cit., p.49. Within Brunhes' classification of *Essential Facts of Human Geography*, *houses* and *roads* are the first group pf factors of "*Human Unproductive Occupation"*. His classification also considers a second group of facts of *Plants and Animal Conquest*, and a third group of facts of *Destructive Exploitation.*

10 Ibid.

11 Records of the round Table of the Association of American Geographers held at Syracuse, New York, December 1936, *Round Table on Problems in Cultural Geography*, Annals of the Association of American Geographers, Vol. 27, No. 3, pp. 155-175. p.167

12 Demangeon, A: *La Géographie de l'Habitat Rural*, op. cit. p.1; quoted by Hall in Hall, R. B.: *The Yamato Basin, Japan,* Annals of the Association of American Geographers, Vol.22, No.4, pp. 243-292, 1932. p. 290

13 Hall, R. B.: *Cities, Villages and Houses of Japan*, op. cit. p.149

14 Hall, R. B.: *The Geographic Region: A Resume*, Annals of the Association of American Geographers, Vol.25 No.3, 1935, p.126

15 See for example Gregory, D.: *The Dictionary of Human Geography*, Wiley-Blackwell, 2009 (5th edition). p. 30, under the entry *Anthropography.* Despite disagreements in the interpretation of Ratzel's work its influence on geography cannot be denied. Ratzel's controversial work Antropogeographie was published in two volumes: the first one, published in 1882, was called -Grundzuge der anwendung der erdkunde auf die geschichte (Human Geography or Broad Application of Geography on the History). This first volume is the one that is said to have inspired determinism in geographers to took it too literally, while the second volume, published in 1891–Des Geographisch verbreitung des menschen(The Geographic dispersion of Man)- studies the culture relationship with the environment, and its recognized in occasions as the inspiration for possibilism.

16 Lewthwaite, G. R.: *Environmentalism and Determinism: A Search for Clarification,* Annals of the Association of American Geographers, Vol.56 No.1, pp. 1-23, 1966

17 Keighren, I. M.: *Bringing Geography to the Book: Charting the Reception of Influences of Geographic Environment*, Transactions of the Institute of British Geographers, New Series, Vol.31 No. 4, pp. 525-540, 2006

18 Churchill Semple. E.: *American History and its Geographic Conditions*, Houghton. Miffin, Boston, 1903. Another influential work of Semple was: *Influences of Geographic Environment: On the basis of Ratzel's System of Anthropogeography*, Henry Holt, 1911

[19] For a detailed discussion on environmental determinism and social Darwinism see Peet. R.: *The Social Origins of Environmental Determinism*, Annals of the Association of American Geographers, Vol. 75 No.3, pp. 309-333, 1985

[20] Marris, K.: *Islands and Human Impact: under what circumstances people put unsustainable demands on island environments? Evidence from North Atlantic,* unpublished Ph.D. thesis, University of Edinburgh, 2007. Chapter 2, p. 4. See also the arguments presented by Krug-Genthe, Martha in the following section.

[21] The term Possibilism was first used by the French historian Lucien Febvre (1878-1956) in the introduction of a work from 1922 — *La Terre et l'évolution humaine*, Paris, Albin Michel— that was published in English under the title *A Geographical introduction to History* in 1925

[22] Vidal de la Blache (French, 1845-1918) approach to human geography was dominant until World War 2. He is identified as the initiator of the concept of possibilism which believes nature sets the limits and offers possibilities or development. His method of study was inductive and historical, and introduced the terms or concepts of *milieu* and *genre de vie*

[23] Sauer, C. O.: *The Morphology of Landscape*, op. cit., p. 342

[24] For an extensive consideration of this subject see for example Campbell J. A. and Livingstone, D. N.: *Neo-Lamarckism and the Development of Geography in the United State s and Great Britain,* Transactions of the Institute of British Geographers, New Series, Vol. 8 No. 3, pp. 267-294, 1983 and Lewthwaite R. G. op. cit.

[25] Bushong, Allen D: Women As Geographers: Some Thoughts Of Ellen Churchill Semple, Southeastern Geographer, Vol. 15, No. 2, pp. 102-109, 1975; Martin, Geoffrey J.: *American Geography and Geographers. Toward Geographical Science*, Oxford University press, 2015

[26] Krug-Genthe, Martha: *Valley Towns of Connecticut*, Bulletin of the American Geographical Society, Vol. 39, No. 9, pp. 513-544, 1907

[27] Krug-Genthe, op. cit., p. 515.

[28] The discussion proceeds as follows (in Krug-Genthe, op. cit., p. 515): *"This divergence of the actually existing conditions from the geographic postulates, which always forms one of the greatest charms of anthropogeographic investigation, gives a special flavour to the political geography of America, for it is more pronounced here than in any country of the Old World. While in the latter we observe man emerging slowly and gradually from the state of slave to that of master of geographic conditions, America offers the unique spectacle of a race of masters who, suddenly and without any transition, supplant a primitive race of slaves of nature, a top layer, so to speak, being superimposed upon a bottom layer, with a wide gap between. This master race, this top layer, brings to the new soil the results of the training of centuries on the old; it applies and tests them on conditions under which they never worked before. We must, therefore, expect to obtain results often quite different from what we would conjecture in Old-World anthropogeography, and, where the results are alike, it will be a strong argument in favour of the postulates."*

[29] Dopp, Mary; *Geographical Influences in the Development of Wisconsin. Chapter III. The Settlement of Wisconsin*, Bulletin of the American Geographical Society, Vol. 45, No. 8, pp. 585-609, 1913; MillerGeorge J. : *Some Geographic Influences in the Settlement of Michigan and in the Distribution of Its Population*, Bulletin of the American Geographical Society, Vol. 45, No. 5, pp. 321-348, 1913

[30] Aurousseau, M.: *The Arrangement of Rural Populations*, Geographical Review, Vol. 10, No. 4, pp. 223-240, 1920, p. 224

[31] Ibid.

[32] James, P. E. & Hall, R. B.: *Outline for a Course on the Principles of Geography*, Ann Arbor, Mich. Edwards Bros., 1924; *A Suggested Outline for the Treatment of a Geographic Region,* Journal of Geography, Vol.23 No.7, pp. 288-291, 1924

[33] James' words from a letter quoted in Martin Geoffrey J.: *In Memoriam: Preston E. James*, *1899-1986,* Annals of the Association of American Geographers, Vol. No.1, pp.164-175, 1988

[34] James, P. E. & Hall, R. B.: *Outline for a course on the principles of geography,* op. cit., p.1

[35] Ibid.

[36] James, P. E. & Hall, R. B.: *A Suggested Outline for the Treatment of a Geographic Region,* op. cit., p.290

[37] Hall, R. B.: *The Geographic Region: A Resume*, Annals of the Association of American Geographers, Vol.25 No.3, 1935, p. 125

[38] Hall, R. B.: *Geographic Factors in Japanese Expansion,* Proceedings of the Institute of World Affairs, 16th session, pp.46-55, 1938, The University of Southern California, 1939. This article was part of an analysis of the political situation of that period, which included the analysis of geographic, economic, and social factors in World Affairs

[39] Ibid. pp. 50-52

[40] Ibid. p.53

[41] Hall, R. B.: *The Yamato Basin, Japan*, Annals of the Association of American Geographers, Vol.22, No. 4, pp. 243-292, 1932. p. 279-280

[42] Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*, Annals of the Association of American Geographers, Vol. 24, No. 4, pp. 175-200, 1934. p. 177

[43] Hall, R. B.: *Sado Island*, Michigan Academy of science Arts and Letters, Vol. 16, Ann Arbor, pp. 275-297, 1931. p. 65

[44] Churchill Semple, E.: *Influence of Geographical Conditions Upon Japanese Agriculture*, The Geographical Journal, Vol. 40 No. 6, pp. 589-603, 1912

[45] Ibid. p. 591

[46] Ibid., pp. 594, 598

[47] See Appendix 2 showing location and present status of the area

[48] Hall, R. B.: *Some Rural Settlements Forms in Japan*, Geographical Review, Vol. 21, No. 1, pp. 93-123, 1931. p. 122. p. 110

[49] Hall, R. B.: *The Yamato Basin, Japan*, op. cit., p. 251-254

[50] For a thorough study of the Kaito type of settlement see: KAKIUCHI, Gorge H. and KIKUCHI, Ichiro: *Origin, Distribution and Role of the Kaito Phenomenon in the Settlement of Japan*, (Part one of two), Bulletin of Nara University of Education, Cultural And Social Science, Vol. 21, No. 1, pp. 83-92, 1972

[51] Churchill Semple, E.: op. cit. p. 594

[52] Hall, R. B.: *Some Rural Settlements Forms in Japan*, op. cit. p. 122.

[53] Ibid. p. 115

[54] Hall, R. B.: *The Yamato Basin, Japan*, op. cit., p. 280

[55] Ibid.

[56] Ibid.

[57] Ibid. p. 283

[58] Ibid. p. 278

[58] Hall, R. B.: *Sado Island*, op. cit. p. 60

[59] Sauer, C. O.: *The Morphology of Landscape*, op. cit., p. 343

[60] Hall, R. B.: *The Yamato Basin, Japan*, op. cit., p. 280-282

[61] Hall, Robert B.: *Agricultural Regions of Asia, Part VII*: *The Japanese Empire*, Economic Geography, Vol. 10, No. 4, pp. 323-347, 1934, p. 341

Image Sources:

Fig. 4-1 Hall, Robert B. & James, P. E.: *Outline for a Course on the Principles of Geography*, Edwards Bros., Ann Arbor, Michigan, 1924, p. 2

Fig. 4-2 Brunhes, J.: *Human Geography*, trans. by LeCompte, I. C., Rand McNally & Co., NY, 1920 p. 175

Fig. 4-3 Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*, Annals of the Association of American Geographers, Vol. 24, No. 4, pp. 175-200, 1934. p. 176

Fig. 4-4 Churchill Semple, E.: *Influence of Geographical Conditions Upon Japanese Agriculture*, The Geographical Journal, Vol. 40 No. 6, pp. 589-603, 1912, p. 594

Fig. 4-5 Hall, R. B.: *Some Rural Settlements Forms in Japan*, Geographical Review, Vol.21 No.1, pp. 93-123, 1931. p. 111

Fig. 4-6 Ibid., p. 97

Fig. 4-7 Hall, R. B.: *Some Rural Settlements Forms in Japan*, op. cit. p. 122. p. 113

CHAPTER 5
HISTORICAL APPROACH

Introduction

The purpose of this chapter is to explore the difficulties that geographers had to confront with the integration of cultural elements into their studies, to then make clear how Hall deals with the subject in his studies of Japanese settlements.

In order to understand Hall's studies, the first section (1) examines the debate that that took place during the interwar period regarding the combined study of culture and nature. Then, section two (2) examines the historical approach adopted by Hall, followed by a discussion on the ways of integrating history in geographical studies in the third section (3). Section four (4) discusses the problems of the application of the historical approach, while in the final section (5) Hall's writings on Japanese settlements are analyzed from the stand point of the use of history in order to reveal the outcomes of his though in his studies of Japan.

1 Geography: natural or social science?

When the man-made elements of the landscape as land division or villages were included into the geographic studies, two subjects of very different characteristics–the *natural* and the *cultural*- had to be combined. When studying the natural landscape and its processes, geographers applied scientific methods, relying on the laws of the natural sciences for its understanding. Nevertheless, the cultural elements are the outcomes of the culture itself in its interaction with the natural environment and could not be studied in the same terms.

One of the most quoted works on the complexities of integrating the study of nature and culture was *Geography in Relation to the Social Sciences* (1934) by Isaiah Bowman (1878-1950). In this work, Bowman states that "*(t)he earth's diversity is not haphazard but rational (…) Man alone among life forms applies a mind to the frustration or adaptation of the natural forces of his environment and is less obviously distributed in a logical way.*"[1] What Bowman refers to, is to the incapacity of geographers to finds explanations to the distribution of man as easily as they did with the natural elements. To confront this problem, many geographers attempted to translate the approach of the natural sciences to study culture and society and its elements, in the hope to find patterns that could lead to the determination of laws.

To better understand the effort that was placed on the scientific study of human groups, it is important to consider the historical context of the interwar period. The pressuring social and economic situation of the Western World, particularly in the United States with the *Great Depression,* was pushing scholars to arrive at precise and clear knowledge of the cultural and social processes. The following extract from a Commencement Speech at the University of Michigan —Hall's University— made by the renowned journalist Walter Lippmann (1889-1974) in 1934, illustrates what was expected from young scholars at that time:

> "*For a generation men have been desperately insecure (…). From twenty years we have been drifting from one crisis to another. (…) I am confident that the day is past when helpless and in despair we must be swept hither and thither by uncontrolled forces of human society. (…) And to those who say that we do not know enough to control those forces, our answer must be that only by making an effort can we learn how*".[2]

Researchers were under great pressure to provide clear answers on culture and societies, and were urged to venture theories and speculative laws. The advances on scientific developments of the first decades of the 20th century boosted the confidence in the ability of scholars to discover the underlying laws that governed societies, and this motivated the emulation of the scientific methods to study culture and societies.

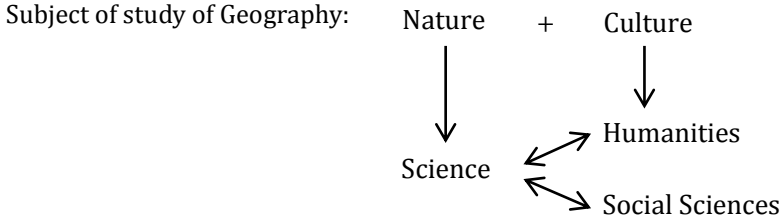
But this faith in the possibility of determining laws for societies was not shared by all scholars. During the same time, there were intense debates within Social Sciences and Humanities on whether human groups could or should be studied with the approach of the natural sciences. In an analysis of the development of the Social Sciences from 1937, the American economist Eli Ginzberg (1911-2002) argued that the "*imitation of method has not led to identity* (similarity) *of results;" the science of social behavior lag far behind the natural sciences in certainty.*"[3] In similar lines, the American sociologist Lawrence K. Frank (1890-1968) observed that some social scientists had become "*almost obsessed with the notion of social forces in operation which produce specific effects, in direct emulation of celestial mechanics*."[4] According to Lawrence, the notion of causation used by social scientists ignored the "*prior experience of the behaving entity in favor of the exclusive determining causal potency of an external factor or agency*."[5] Similarly, in the field of Geography, some scholars tried to explain culture and its elements only by its natural context, ignoring the role of culture itself.

In the Humanities, there were also attempts at studying human groups and its elements in with the approach of the natural sciences. Nevertheless, within History many influential scholars understood that the search for laws was not within the tasks of an historian. For example, the American historian Fred M. Fling (1860-1931) explained that:

> "*the historian is concerned with tracing the unique evolution of man in his activities as a social being, the unique life record of humanity. If this be history, then history cannot 'repeat itself,' there cannot be 'historical laws,' for a law is a generalization and a generalization assumes repetition*".[6]

According to Fling, if on the contrary the scholar is interested in what past social facts have in common, and if the purpose is to make generalizations or laws concerning social activities, then the research is sociology, not history.[7] Fling insists in that history concerns itself with the complex, unique evolution of man in his activities as a social being.[8]

Within Geography, the belief that man and his material expressions could be studied in the same terms as the natural world had ben by that time, in Bowman's words, "*both extolled and sharply challenged*".[9] When integrating the study of culture, some geographers aligned with the approach of the Social Sciences, which aimed at the determination of generalizations of laws, while others adopted the historical point of view on the development of cultures.



2 Historical approach

Sauer was one of the geographers who embraced the historical point of view. He does not explicitly deny the existence of laws in the processes of cultures or the cultural landscape, but in practice he never engaged in their determination. In fact, few geographers argued against the search for laws as strongly as historians, but rather they suggested that for the time being it was better to be cautious. For instance, Bowman explained how is better not to create a rigid frame of reference in Geography at the time because there was "*too vivid a sense of the incompleteness of evolving knowledge to believe that this generation has found one sure procedure and one unalterable point of view*".[10] The caution on the establishment *laws,* in the particular case of geography, was intensified as a reaction to the many *false laws* found in the natural environment by 19th century determinists.

Under this ideological situation, Sauer suggested geographers to follow the example of the discipline of History. In Sauer's view, History, when dealing with humanity, "*has been undisturbed in the main by too sweeping generalization, has been quite content to classify laboriously the records of the past, and is soberly cautious, even skeptical, regarding great trends of social forces*".[11] In his view, geographers should trace the development of cultural facts as settlements using statistical relations and carefully correlated data.[12] For Sauer, the geographic fact, to be significant, should be an average drawn from numerous unit observations.[13] It is important to note that the geographic fact refers to a physical element of the landscape, not to its causes. According to Sauer, one of the most important points to consider when studying the landscape,

was not to approach the subject with "*a priory theories"*, which should be repressed in order to maintain "*the objective quality of the scientist*".[14]

Likewise, Hall believes that the findings in the development of cultural landscapes should be expressed as *tendencies*, rather than absolute laws,[15] and disapproved of geographers who "*in their attempt to make of geography an exact science, in their haste, created false truths by mathematical formulae*".[16] In accordance with this belief, Hall turned to the historical approach to explain every particular case.

In sum, the historical approach implied the assemblage and correlation of the facts of the activities of man as a complex evolving process.[17] As applied to the study of the cultural landscape, the historical approach is the tracing of the modifications of the landscape in relation to the historical events that have created it. When studying a specific cultural fact as a town, the historical method implies the reconstruction of the process of creation and modifications of *that* particular town until the present day without relying in previous generalizations on the development of towns.

3 Integration of history in geographical studies

Since the rejection environmental determinist theories, the natural environment was no longer seen as a fixed background that influenced history. Now the natural environment was understood as an alterable setting in constant interplay with the actions of man.

The relation of history and geography was far from being a new topic, but at the beginning of the 20th century this relation was being revised. Some influential works in this respect were *The Relations of Geography and History* by the English Historian H. B. George from 1901, *La Terre et l'Évolution Humaine: Introduction Géographique à l'Histoire* by the French Historian Lucien Febvre from 1922, and *La Géographie de l'Histoire* by the French Geographers Camille Vallaux and Jean Brunhes, from 1921.[18] This last work was particularly influential in both Europe and the United States, appearing mentioned in most articles on the subject from the period.

According to Brunhes and Vallaux, "*(m)an, by making history on earth, are also making geography*".[19] This change in the understanding of the relation between history and nature made necessary a readjustment on the way these two subjects were studied. The British historical geographer Henry Clifford Darby (1909-1992) recognized three different types of academic treatment of geography in association with history at the first half of the 20th:[20]

1) the inclusion of geographic data in history works
2) the reconstruction of past stages of the landscape
3) the inclusion of the history into the geographic studies, without reconstruction

The first type, 1) the inclusion of geographic data in historical works was addressed as expected by historians. At this period, historians were having the same debates as geographers regarding the influence of geographical factors in history. The second type, 2) the reconstruction of past stages of the landscape in historical geography, concerned historical geographers who were interested in the reconstruction of a particular stage of the landscape, for example, the reconstruction of the rural landscape of 18th century England.

The last type, 3) the inclusion of history in geographic works, was the one that concerned regional geographers as Hall. The importance of including history was no longer disputed, but there was no agreement on how to do it in practice. A brief historical and cultural account had been standard procedure since the early exploratory works, particularly when dealing with a foreign region. Nevertheless, these historical introductions served as general context without taking part in the analysis of settlements, which was mostly descriptive.

These type of descriptive studies were soon considered non-academic, and by the 1920s it was accepted that the consideration of history was necessary for the understanding of the cultural elements. Sauer actively supported the inclusion of history because he believed that the understanding of human facts can o be achieved "*only if the current situation is comprehended as a moving point*".[21] According to Darby, at this time Geography was having a "*delayed impact of Darwinism",* and the idea of process and evolution as applied to the cultural landscape was just beginning to be applied in practice.[22] The examination of settlement studies of this period has revealed two main types of inclusions of history into the study of settlements. The main difference of these two types is the point of view taken, that of the (a)*Social Sciences*, or the one of (b) *History*: [23]

(a)point of view of *Social Sciences*:

> the intension when studying past stages is to recognize patterns, laws, or causal relationships that could later be applied to other settlements

(b)point of view of *History*:

> the examination of the past is made to trace the particular development of a settlement, for example a city, in order to find explanations for that specific city

The best example of the first way of including history in geographic studies of settlements (a) can be illustrated with the influential work of American Geographer Derwent Whittlesey (1890-1956) "*Sequent Occupance*" from 1929.[24] Whittlesey proposed to study the past stages of the cultural landscape in order to recognize stages to make a periodization. The aim was to eventually discover regularities between occupance processes of different areas and determine patterns of development of occupance. The identification of these patterns could then simplify and give structure to the study of the cultural landscape. Whittlesey was aware that a great deal of

studies had to be made in order to recognize such occupance patterns, but since he considered human occupance to be governed by rules analogous to those of "*biotic phenomena"*, the number of possible patterns was believed to be limited.[25]

On the other hand, other geographers were not looking to discover laws or regularities. The best example of this tendency (b) is Sauer, who was interested in tracing the development of an occupied area to understand its present stage. While some geographers opted for including the analysis of the historical development "*only when, and in so far as, this or that element cannot be explained in contemporary terms*" Sauer advice to trace the whole process of development.[26]

4 Practical application of the historical approach

Regarding the actual implementation of this approach to the study of the elements of the cultural landscape, Sauer sustains that for the study of the fats of occupation "*(t)he actual content of the inquiry is (…) less simple than the mere contrasting of original and present condition. Intermediate inquiries need to be carried out, as for available census periods, showing the trends of modification*".[27] This justifiable requirement, was nevertheless difficult to follow in practice because of the limited data available on the past stages of landscapes or settlements, and the partial knowledge that could be obtained at the time through field work.

In similar lines as Sauer, Hall believes that the present status of the landscape can be explained by the examination of its development. In a discussion of the Association of American Geography, Hall distinguishes two ways of approaching the study of settlements. The first one started from some particular aspect of the settlement, as habitation, then expand to the study to the whole settlement. The second way, the one used by him, is described as *"the reconstruction of local history, the intensive study of small localities."*[28] The same way that Hall suggested to borrow terminology from geomorphology, he advises *"to layer occupance upon occupance in much the same manner as the geologist studies stratification*" to study the development of settlements.[29]

Besides this advice explicitly given for the study of settlements, inspired in Sauer's work, Hall determined an "*irreducible minimum*" to be accomplished in any geographical study: the treatment of all forms of the landscape "*morphologically*". This morphological treatment implied four steps: [30]

1- the mapping of forms as to distribution

2, the assemblage of these forms "*as to their genetic relationships*", that is, a classification based on origin

3- the forms should be "*studied as to their origins and developments*"

4- "*attempting to synthesize them* (the forms of the landscape) *into a regional pattern*"

After achieving this irreducible minimum, the geographer was free to apply whichever method was more suitable to the study. This way, Hall disregards the establishment of strict procedures in favor of a flexibility more appropriate for the experimental conditions of the settlement research.

5 The importance of history in Hall's studies on Japanese settlements

In Hall's regional and systematic studies, history plays an integral part of the analysis. To support his research Hall referred to numerous works on Japanese history that were available in Western languages, and translations provided by Japanese collaborators as Akira Watanabe. Although studies on Japanese settlements were scarce, the examination of some aspects of the cultural landscape could be easily supported with previous studies, as in the case of Yamato's land division system that was treated in countless publications. In these cases, Hall refers to a long list of works in anthropology and economic history of both Western and Japanese authors, as Tokuzō Fukuda (福田徳三, 1874-1930), Eijiro Honjo (本庄栄治郎, 1888-1873), and Matsuyo Takizawa, (滝沢?, 1898-?) to explain the political divisions and land use.[31] In other cases, in order to trace the development of the areas and settlement studied Hall needed to relate the historical information with survey data and archival information.

5.1 Hall's application of the historical approach

To explain the development of an area Hall provides an account of its history:

> "*The Yamato Basin seems to have proved an attractive abode throughout human history. This is shown by the antiquity and great density of Ainu and other pre-historic sites. (…) The early Yamato and proto-Yamato had much the same culture and occupied the same sites. Soon, however, Chinese influences were felt and the capital towns were modeled after the Chinese form. (…) The establishment of the Nara or Heijo capital on the northern margin of the basin in the seventh century marks the first permanent capital. It was here that Chinese culture entered in full force. (…) In the ninth century the capital was moved to Kyoto. Soon the imperial power declined. The priesthood gained control. The temple towns were fortified, and became havens of refuge for the common folk. They grew rapidly. The present city of Nara grew up about the suburban temples of the old capital*".[32]

As this brief extract from Yamato's regional study exemplifies how Hall, instead of engaging in strict periodizations as advised by Whittlesey, explains the history of the area as a continuous process of development.

When studying either a settlement or an area, Hall looks for relict forms to trace the origins and historical development in order to explain them, as suggested in his morphological treatment of the landscape elements. For example, when analyzing the culturally induced land forms of the Yamato basin he provides an extensive explanation on the mound burials referred as *prehistoric tombs*.[33] But in addition, Hall includes information of past stages that are not strictly needed to explain the contemporary features of the cultural landscape, as Sauer would do (Fig. 5-1).

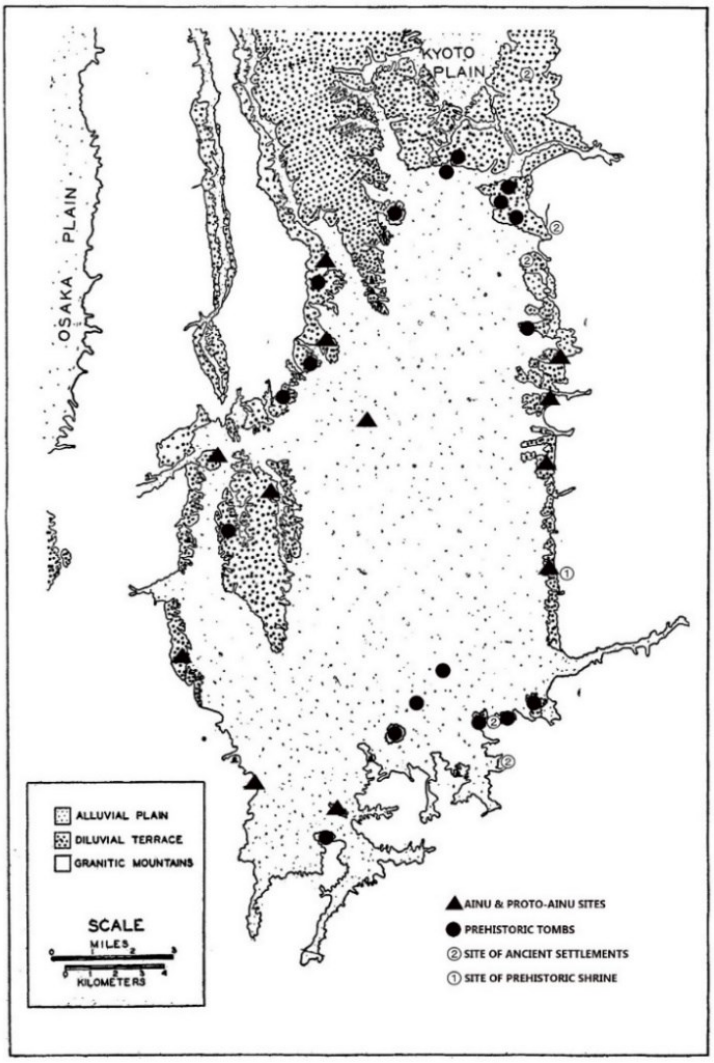


Fig. 5-1 Ancient Sites of Human Habitation in Yamato showing the sites where Hall found remnants of settlements (the notation has been altered)

Hall examines the succession of inhabitants considering the pre-historic occupants (identified as Ainu and proto-Ainu) whose traces in the landscape were insignificant if compared with the remnants of the mound toms or the Handen system. Although there is no indication on whether the data personally collected or based on previous studies, Hall's reference to Ainu sites agrees with the data of the work of American archaeologist Carl Whiting Bishop (1881-1942), whose works are referred in Hall's previous articles.[34]

Although the strategies and methods change, the historical approach is maintained in every study. For instance, the analysis of the city of Aikawa -capital of Sado Island- is a good example of how Hall proceeded in practice and how he made the graphical representation of historical data. Here he traces the changes on the shape and extent of Aikawa layering "*occupance upon occupance"*, using the method that he suggested later in imitation of geology.

To analyze this urban settlement, Hall parallels the morphological changes with the history of rise and fall of the mining industry. Aikawa's gold and silver mines had been exploited since Heian period. The mine became property of the Tokugawa family and by early 17th century the town of Aikawa was settled. The peak of production was of the mines was in 1626, then gradually declining until Meiji Restoration, when Japan reopened trade with foreign countries and gold could be imported cheaply, closing definitely in 1989.[35] To make this study Hall made use of the Collection of maps of the Sado Mine office, which had a continuous cartographic record since 1694 until 1929, time when the research was made. Hall associated survey data with historical records and economic history that explain those changes. Hall presents a graphical representation of the analysis of the morphological development showing the occupied area during its greatest extent during the 17th century-shown in grey- and the occupation at time the study was made in 1932 -shown in black (Fig. 5-2). In the field survey he could recognised scattered groups of houses as remnants of the old city. Hall identified the original Ginzan Machi or "*Silver Mountain Town*", from which the city is said to have grown to the ocean side.

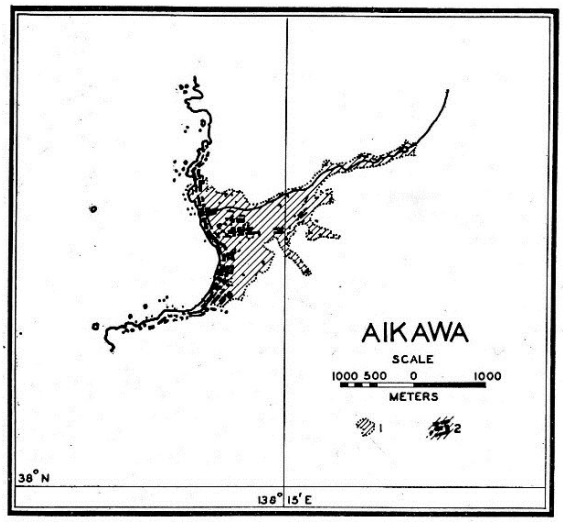


Fig. 5-2 Map of Aikawa, showing the city at the time of its greatest extent (shown diagonal lines), and the area occupied in 1932 (shown in black)

In this graphic Hall explains the effects of the increasing interest in the sea and decreasing dependence on mining —located to the East of the coast— in the evolution of the shape of the city. The correspondence between the activity center and the development of the town is made for this particular case and there are no attempts at generalizations. He recognizes a *tendency* to the growth of the city towards the sea, as the economic dependence on the mining was decreasing

and more activities related with the sea were developing, by comparing the maps of the growth of the occupation of the city with economic data, highlighting the interaction of history and material culture.

It is important to note that *development* is the subject that provides structure to the analysis, but is not the only tool of Hall's examinations. The historical approach is always associated with a detailed analysis of the present condition of the cultural landscape. In the case of rural settlements, the analysis of the present stage of the landscape is made mainly by analyzing the *functional interactions* of the different elements of the landscape. For example, in the study of Hieta Aza (misspelled from Heita aza,平和村, *aza* being a political subdivision of a village) located on Yamato basin Hall makes clear the relationship between the main activity that is the rice production, the irrigation pond, and the central location of the village that allows to reach any point of the crops in few minutes, which is important for the transportation of supplies and fertilizers (Fig. 5-3).[36] The social organization of the aza as a self-sufficient unit explains the individual cemetery and shrine.[37]

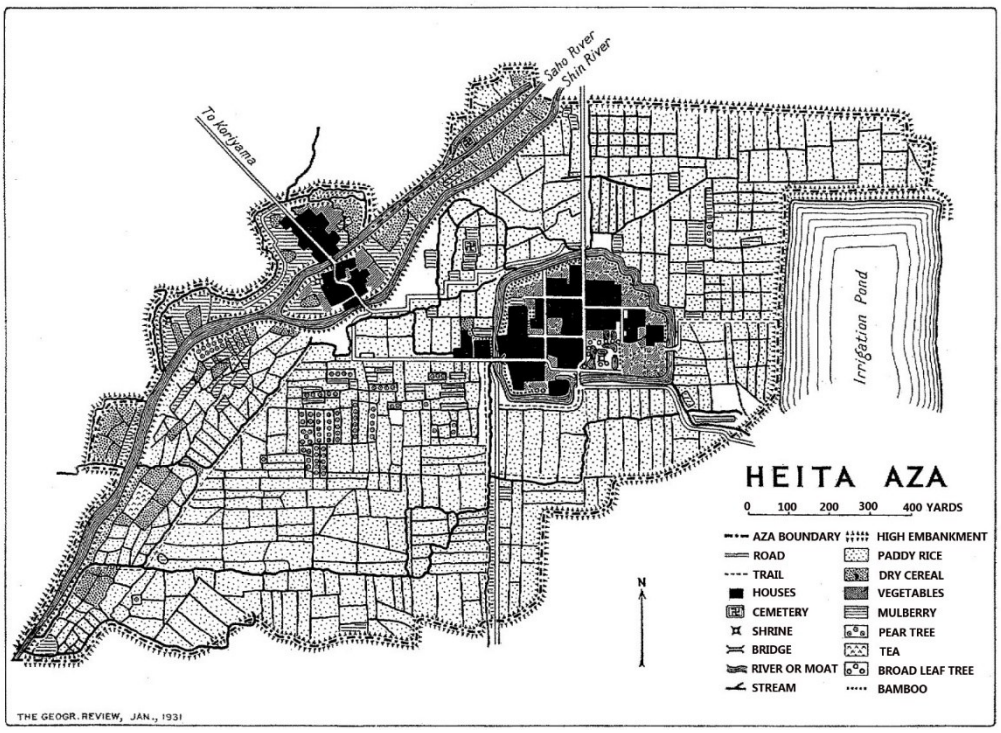


Fig. 5-3 Heita Aza (Mispelled from the original name: *Hieta aza*), Nara prefecture. Hall explains the *functional interaction* of the different elements of the settlement, as the irrigation pond, the paddy fields, and the central location of the village for functional purposes. The explanation of the formal features of the village is based on the Chinese influence

Hall's explanation of the formal features of the village is mainly based on the Chinese influence, as the the north south disposition of the roads, and the surrounding walls. This last feature of Yamato villages, the surrounding walls, had almost despaired by the time Hall made the study, but his inspection in search for remnants helped him corroborate that such walls existed.

5.2 Laws and generalizations on development

A peculiar characteristic of Hall's studies on Japan is the relative small number of generalizations and conclusions for such comprehensive studies.[38] This characteristic makes sense when considering the complex situation of the Geography's academic context, caused by the integration of natural and cultural elements as subjects of study. As explained before, one of the most difficult uncertainties was whether it was possible to recognize or establish patterns of recurrence or laws as in the natural elements.

As stated by Sauer, the geographic data was significant only if resulted from the average taken from numerous observations, if it was the product of a statistic analysis. Nevertheless, those generalizations could be easily made for elements but not of the causes of those elements. Since culture could be the cause of the cultural elements, and repetition could not be assumed for the processes of culture, the generalization of causes were problematic.

As shown before, Hall does make some generalizations regarding causes, but avoiding the statement of too specific statements. For instance, in *Some Rural Settlement Forms in Japan* he concluded that while the form of the settlement *"is largely an adjustment to natural conditions"*, the structure is *"likely to be determined"* by social and economic conditions.[39] In both statements of causation Hall is careful to leave room for some flexibility by using the adverbs *largely* and *likely.*

The situation was less complicated for the generalization of the cultural elements. This type of generalization is the basis for classification, which is an important part of the geographic study. But even in generalization and classification of elements Hall remains cautious before arriving at conclusions. For example, in Yamato Basin Hall surveys and explains ten different types of villages (Fig. 5-4).

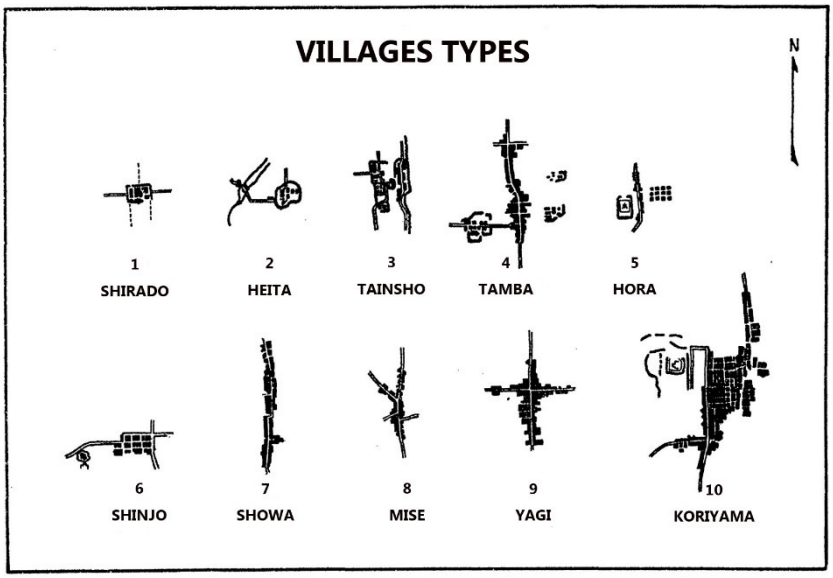


Fig. 5-4 Sample of types of villages found in Yamato basin. Hall states that "*each type warrants special investigation*"

As explained by Hall, Shirado is a simple kaido, Heita a modified kaido that has grown beyond the moat, Tainsho is made of several kaidos, Tamba contains three kaidos and a strassendorf, Hora is a modern planned village of rectangular pattern, Shinjo owes its regular pattern to the planning of its feudal lord, Showa, Mise, and Yagi are different combinations of strassendorfs, and Koriyama owes much of its form to the influence of the castle and trajectory of the Shimokaido, an important communication route. After the examination Hall adds that *(t)hese few examples do not exhaust the many individual village characteristics which are found in the basin. In fact, there are as many forms as there are villages and each one warrants special investigation*".[40] Still, the kaido is recognized as the basic settlement unit. In every region studied Hall would selects one representative type of village and habitation, but as Sauer suggested, out of the result of statistical survey.

5.3 The issue of forecast

The debate on the regularities in the development of societies was associated with the problem of forecast. If regularities or laws existed in societies, then, their development could be predicted. By extension, the same could be assumed for the material expressions of such society, as for example, settlements.[41]

Whittlesey proposed to actively look for patterns and regularities that could be translated to into laws of settlement process that could help forecast the future '*with reasonably certainty*' understood that "*normal sequences are rare, perhaps only ideal, because extraneous forces are likely to interfere with the normal course, altering either its direction or rate, or both*".[42] These unpredictable interferences were of natural origin, as earthquakes, or volcanic eruptions, and the ones occurring according to Whittlesey more commonly, the interruptions of cultural order, as creations of new laws, movements of people, and introductions of new technology, among others. In short, according to Whittlesey settlement processes could be forecasted if only nor nature or man were part of the process. Whittlesey was no stranger to this dilemma, but he encouraged nevertheless the study of *sequent occupance* because he believed that when a sufficient number of studies were available, some simplification would be possible.[43] Despite the practical difficulties, the long term objective of many studies on culture or cultural facts made in Geography was to gain the ability to make predictions.[44]

Hall does not assume that the regularities in the processes of cultures exist, therefore he studies the origin and development of each case addressed to understand its preset and does not attempt at predictions of its possible future development.

5.4 The concept of forces

Geographic works on the cultural landscape of the interwar period frequently include reference to the concept of *forces*. In the explanations of the natural landscape, Geographers used the term *natural force* to refer to a natural phenomenon that has an effect on the landscape, as for example the rain and wind when eroding a mountain. Similarly, in the explanations of the cultural landscape, since man was considered the main agent, the concept of *artificial* or *social forces* started to be considered.

For sociologist the *social-forces* concept was part of a broader theory of social causation.[45] But in the studies made within the field of Geography, the term was used to refer to human actions that had an effect on the cultural landscape, and were either unknown or too complex to address.

When analyzing foreign regions, the understanding of these artificial forces of other cultures becomes more important. When examining the progress of Regional Geography, Hall points out that "*the majority of regional workers have interpreted all regions in the light of their own culture complex*".[46] Hall's interest in development and the recognition of the importance of history help him to avoid this bias to a great extent, and recognize the origin of some of the artificial forces. For example, Hall recognizes that in the typical settlement of Satsuma, "*the structure of the local pattern bears close relation to artificial forces",* referring to the situations that can be explained by the understanding of the Tokugawa social structure.[47]

In some cases, Hall does not discuss the character of these *forces,* as when he assigns *attractive forces* to temples or castles to explain that several important functions tend to gather around these type of buildings. In other occasions he makes specific reference to what that force are. For example, in the study of Tokaido region, Hall refers to the *unifying force* that provides cohesion to this region, which are the processions that accompanied the the Daimyo in the periodic pilgrimages from Kyoto to Edo.[48] In such and extensive area, the constant transit of people made possible a relative cultural coherence that allowed Tokaido to act as a functional unity.

Conclusion

Many of the characteristics of Hall's studies can be explained when considering the debates of the ideological context of the interwar period. The complexity of integrating the study of natural and cultural elements was confronted by scholars in different ways. On the one hand, some attempted to study culture with the approach of the natural sciences in the hope to find similar explanations of cause and effect that enable them to determine the laws of culture and cultural developments.

On the other hand, other scholars as Hall believed that the study of culture and its elements with the same approach that was used for the study of the elements of nature was not possible, at least not for the time being. This did not mean that scientific methods could not be used for the survey and analysis of the cultural elements. In fact, Hall used and adapted procedures of the study of nature to the study of the cultural landscape. What geographers as Hall believed was that *it should not be assumed that the cultural elements were subject to laws comparable to those of the natural world*. Hall disproved of geographers who tried to force unreal accuracies in their studies, and adopted an historical approach for the study of the cultural landscape. The peculiar lack of statement of conclusions or final remarks in Hall's studies, which is in apparent disagreement with the thoroughness of his analysis, can be explained by the uncertainty that existed regarding regularities, generalizations, and predictions on cultural development.

The historical approach as applied by Hall was the tracing of the process of development that led to the present state of the landscape. Hall makes intensive studies of regions —as in Yamato— or particular settlements —as in Aikawa— in order to understand each specific case without attempting induce principles from his studies. He believes that every period of the history of Japan has left traces in the cultural landscape. Therefore, when studying settlements he focuses on finding these traces and, excepting for the case of Tokaido, he follows their history as continuous processes of development instead of engaging in periodizations. The examination of the development is always associated with an analysis of the present situation of the area or settlement. Hall approached this analysis usually by considering the functional interaction of the different elements of the cultural landscape, as in the example shown of his analysis of Hieta aza.

Notes:

1 Bowman, I.: *Geography in Relation to the Social Sciences*, Scribner, New York, 1934. p. 3

2 Commencement Speech by Walter Lippmann at the University of Michigan in 1934. Source: *Newspapers Archive* (Newspapersarchive.com/us/new-york/syracuse/syracuse-herald/1934/06-24/page-15) Accessed on May 2014

3 Ginzberg, Eli: *The Social Sciences Today*, Political Science Quarterly, Vol. 52, No. 4, pp. 583-587,1937, p. 585

4 Frank, Lawrence, K.: *Causation: An Episode in the History of Thought*, The Journal of Philosophy, Vol. 31, No. 16, pp. 421-428, 1934, p. 426

5 Ibid. p. 127. Lawrence also observes that the implications of the *Heisenberg's principle of uncertainty* from 1927, which for the first time set a limit on what could be known and affected profoundly the understanding of causality, had a delayed influence in the social sciences.

6 Fling, F. M.: *The Writing of History: An Introduction to Historical Method*, Yale University Press, 1920. pp. 15-16

7 Ibid., pp. 16-17

8 Ibid., p. 19

9 Bowman, I., op cit., Introduction, p. xxi.

10 Ibid., p. xi

11 Sauer, C. O.: *The Survey Method in Geography and its Objectives,* op. cit., p. 18

12 Ibid., p. 19

13 Ibid., p. 19-20

14 Ibid., p. 18; and Sauer C. O.: *The Morphology of Landscape*, op. cit. p. 326

15 James, P. E. & Hall, R. B.: *Outline for a Course on the Principles of Geography*, Ann Arbor, Mich. Edwards Bros., 1924, p. 4

16 Hall, R. B.: *The Geographic Region: A Resume*, Annals of the Association of American Geographers, Vol. 25 No.3, pp. 122-136, 1935, p. 126. Hall's disapproval of the attempt to make of Geography an *exact science* refers mostly to the work of determinist geographers who based their explanations of culture —and its elements— on the natural environment alone.

17 Fling, F. M., op. cit.

18 George, H. B.: *The Relations of Geography and History*, Oxford 1901; Febvre, L.: *La terre et l'évolution humaine: introduction géographique à l'histoire,* Renaissance du Livre, 1922; Vallaux, C. & Brunhes, J.: *La Géographie de l'Histoire, Géographie de la paix et de la guerre sur terre et sur mer ,* Felix Alcan, Paris, 1921.

19 Vallaux, C. & Brunhes, J.: *La Géographie de l'Histoire, Géographie de la paix et de la guerre sur terre et sur mer ,* Felix Alcan, Paris, 1921

20 Darby, H. C.: *On the Relation of Geography and History*, Transactions and Papers (Institute off British Geographers), No. 19, pp. 1-11, 1953. Henry Clifford Darby (1909-1992) was the first scholar to obtain a Ph.D. in geography at Cambridge University. Darby is considered pioneer in the study of historical geography through the analysis of the landscape changes.

21 Sauer, C. O.: *Foreword to Historical Geography,* Annals of the Association of American Geographers, Vol. 31, No. 1, pp. 1-24, 1941. p. 9

22 Darby, H. C.: *Historical Geography in Britain, 1920-1980: Continuity and Change*, Transactions of the Institute of British Geographers, New Series, Vol. 8, No. 4, pp. 421-428, 1983. p. 422

23 These discussions on whether the study of geography should look for laws in the development of the landscape began since the first inclusions of culture on geography in European academy. For example, in 1895 Alfred Hettner stated that urban geographers should follow the systematic approach used by physical geographers to search for generally valid laws for the development of cities (From Jauhiainen, Jussi: Edgar Kant and the Rise of Modern Urban Geography, Geografiska Annaler, Series B, Human Geography, Special

Issue: The Heritage of Edgar Kant and J. G. Granö, Vol. 87, No. 3, pp. 193-203, 2005, p.198

[24] Whittlesey, D.: *Sequent Occupance*, Annals of the Association of American Geographers, Vol. 19, No. 3, pp. 162-16, 1929

[25] Ibid., p. 162

[26] Darby, H. C.: *On the Relation of Geography and History*, op. cit., p. 10

[27] Sauer, C. O.: *The Survey Method in Geography and its Objectives,* Annals of the Association of American Geographers, Vol. 14, No. 1, pp. 17-33, 1924. p. 25

[28] Records of the round Table of the Association of American Geographers held at Syracuse, New York, December 1936, *Round Table on Problems in Cultural Geography*, Annals of the Association of American Geographers, Vol. 27, No. 3, pp. 155-175, 1937. p. 168

[29] Records of the round Table of the Association of American Geographers, op. cit., p. 168

[30] Hall, R. B.: *The Geographic Region: A Resume,* op. cit., p. 126, 128

[31] Fukuda, T.: *The Social and Economic Development of Japan -Die gesellschaftliche und wirtschaftliche Entwickelung in Japan-*, Stutgart, 1900; Takizawa, M.: *The penetration of money economy in Japan and its effects upon social and political institutions*, Columbia University press 1929

[32] Hall, R. B.: *The Yamato Basin, Japan,* Annals of the Association of American Geographers, Vol.22, No.4, pp. 243-292, 1932. pp. 280-282

[33] Ibid., p. 281

[34] Carl Whiting Bishop: *The Historical Geography of Early Japan*, Geographical Review, Vol. 13, No. 1, pp. 40-63, 1923. In this paper (pg. 41) Bishop states that"*(l)etters have reference to successive Ainu frontiers. The conquest and absorption of the Ainu had pushed the Yamato frontier as far east-ward as the Lake Biwa (...) before the close of the prehistoric period*", and presents a map which identifies the extension of the Ainu population areas as including the entire south of Honshu, Shikoku and part of Kyushu. (See Appendix 1)

[35] Hall, R. B.: *Sado Island,* Michigan Academy of science Arts and Letters, Vol. 16, Ann Arbor, pp. 275-297,1932. pp. 291-295; and Japan Aerospace Exploration Agency, http://www.eorc.jaxa.jp/en/imgdata/topics/2010/tp101129.html, visited on 2014.1.11

[36] This Village was later studied by the landscape Japanese scholar Mitsuo Yokoyama in 1952. See 横山 光雄 : 村落形態より観た奈良県平和村, 造園雑誌, Vol. 16, No. 1, pp. 13-18, 1952

[37] In Yamato land division, at that time, the smallest political division was the *mura*, which in turn is divided into economic entities called *aza*

[38] Among Hall's studies on Japan from the pre-World War 2 period, there is only two with a conclusions section: *Sado Island* and *Hiinokawa Plain*. The article *Some Rural Settlement Forms in Japan* has a final Summary section which contains the generalizations on form and structure analyzed in Chapter 4 and Chapter 5

[39] Hall, R. B.: *Some Rural Settlements Forms in Japan*, op. cit., p. 122

[40] Hall, R. B.: *The Yamato Basin, Japan*, op. cit., pp. 284-286

[41] This argument does not apply of course for cases of conscious planning, which is only but one part of the complex process of development of settlements

[42] Whittlesey, D.: *Sequent Occupance*, Annals of the Association of American Geographers, Vol. 19, No. 3, pp. 162-16, 1929. p. 164

[43] Ibid. p. 165

[44] See for example Jones, W. D.: *Procedures in Investigating Human Occupance of a Region*, Annals of the Association of American Geographers, Vol. 24, No. 2, pp. 93-111, 1934, and Parkins, A. E.: *Profiles of the Retail Business Section of Nashville, Tenn., and Their Interpretation*, Annals of the Association of American Geographers, Vol. 20, No. 3, pp. 164-175, 1930

[45] House, N. F.: The Concept of "Social Forces" in American Sociology, Section II, Ward's classification of the Social Forces and those of his more direct imitators, American Journal of Sociology, Vol. 31, No. 2, pp. 156-172, 1925. p. 156. The American Anthropologist and Sociologist Floyd Nelson House (1893-1975) traces in this

article the meanings of the concept of *social forces*, distinguishing the use of the term by historians, sociologists, or social workers.

[46] Hall, R. B.: *The Geographic Region: A Resume*, op. cit., p. 127

[47] Hall, R. B.: *Some Rural Settlements Forms in Japan*, Geographical Review, Vol. 21, No. 1, pp. 93-123, 1931. p. 122

Image Sources:

Fig. 5-1 Hall, R. B.: *The Yamato Basin, Japan*, Annals of the Association of American Geographers, Vol. 22, No. 4, pp. 243-292, 1932. p. 281

Fig. 5-2 Hall, R. B.: *Sado Island,* Michigan Academy of science Arts and Letters, Vol. 16, Ann Arbor, pp. 75-297,1932. pp. 293

Fig. 5-3 Hall, R. B.: *Some Rural Settlements Forms in Japan*, Geographical Review, Vol. 21, No. 1, pp. 93-123, 1931. p. 99

Fig. 5-4 Hall, R. B.: *The Yamato Basin, Japan*, op. cit. p. 284

PART 3: *Studies on Japanese Settlements within the Academic Framework of Geography*

CHAPTER 6
STUDIES ON JAPANESE URBAN SETTLEMENTS

Introduction

At the beginning of the 20th century, urban centers were becoming increasingly important for the life and economy of industrialized countries. In the case of Japan, which had been predominantly rural until Meiji restoration, the rapid development brought an abrupt growth in the population of cities.[1] The pressuring socioeconomic situation that demanded immediate action directed most of the efforts of scholars and professionals to the modernization of the city. As in Western countries, studies related with the planning, enlargement, and improvement of cities were by that time rather developed.[2]

On the other hand, the analysis of existing cities, as they were, with the aim of understanding the reasons behind their configuration and processes of development was only starting to be considered a subject of academic interest. Within the field of Geography, urban settlements were now seen as an integral part of the cultural landscape, and therefore were being included as one of the elements to be analyzed in Regional Studies.[3] It was within this emergent academic interest on the understanding of cities that Hall made his studies.

In the first section of this chapter, the American academic situation of the study of cities during the interwar period is discussed in order to provide the necessary context to understand Hall's studies (1). Then, in section two (2) the studies on Japanese cities of that period are examined to help recognize and asses Hall's particular method. Then, in the last section (3), Hall's writings on Japanese urban settlements are analyzed in detail from a methodological standpoint.

1 Academic study of cities in the United States

In the early decades of the 20th century, two different branches of urban studies started to develop in the United States: one within the discipline of Sociology, and another within the field of Geography.

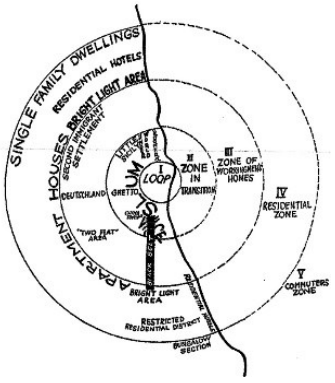


Fig. 6-1 *Concentric Zone Model* applied in the city of Chicago. Burgess and Park, 1925. Each concentric circle contains mainly one urban function

The study of cities within Sociology —later known as the Chicago or Ecological School—focused on the *social aspects* of cities and its interaction with the urban environment. As geographers, sociologists aimed at developing scientifically sound procedures for their studies. During the 1920s, a group of sociologists from the University of Chicago introduced a new approach for the study of urban societies in which they applied the concepts of biology to the study of human groups. This approach was considered at the time an important scientific innovation for the Social Sciences.[4] The most influential theory of this school was the *Concentric*

Zone Model, which was developed in 1925 by Ernest Burgess (1886-1966) and Robert E. Park (1864-1944) (Fig.6-1, previous page).[5] This model was not directly concerned with the materiality of cities, nevertheless, since social and functional differences are usually associated with differences in morphology —as the different structures of a business center and a residence area— the concepts and models created by the Chicago school became a reference to all scholars dedicated to the study of urban settlements.

The study of cities within Geography, on the other hand, was primarily concerned with the *materiality* of cities.[6] As discussed in previous chapters, it was then understood that the subject of study of geographers was the material expression of culture, while historical, sociological, and cultural facts were integrated in the analysis only to assist in the understanding of the main subject of interest.

1.1 Study of urban settlements in Geography in the United States

Western geographers had been studying cities for some time, but the study of cities was not nearly as developed as the study of rural areas.[7] In 1930, the American geographer Almon E. Parkins (1879-1940) noticed that geographers' reluctance to get involved in the study of cities was probably caused by the complexity of the problems confronting them in urban geography and *"the apparent dominance of the* anthropo *factor in city phenomena*."[8] The lack of analysis tools, theories, or models to properly handle the study of the "*anthropo factor*" was certainly one of the main deterrents for the development of urban studies. But despite the discouraging complexity of urban settlements, a number of geographers engaged in their study. Several of the most important early studies on cities were made by Midwest geographers as Charles C. Colby (1884-1965), Glenn Trewartha (1896-1984), Thomas Lewis (1887-1950), and Almon Ernest Parkins among others.[9] The University of Michigan was one of the first institutions to include lectures on the study of cities in the department of Geography, and scholars from this University were among the pioneer researchers on the subject.[10] The influence of Sauer's emphasis on the study of culture created an academic environment in which the study of settlements could be stimulated and developed. While in practice Sauer focused on rural cultural landscapes, Preston E. James and Robert B. Hall performed several practical studies on urban settlements.

The experimental studies made by these authors were somewhat isolated efforts that never became a cohesive set of premises for the study of cities, reason why they are not usually considered on reviews of the development of urban studies in the United States.[11]

At the beginning, the purpose of the study of urban settlements within the field of Geography was not clear and few articles had an explicit statement of objectives. In fact, the statement of objectives in Geography's papers on any subject was not yet common. Only after World War 2 the standards for academic writing in Geography began to demand a clear statement of objectives. In

1948 Preston E. James, wrote an article entitled *Formulating Objectives in Geographic Research* where he draws attention to the fact that, still at that time, this practice was not common for many geographers.[12] The absence of stated objective does not imply that geographers were not conscious of their own goals, but rather, that they saw the studies of urban settlements as integrated in the general objectives of Regional Geography, namely, to create a *comparative world pattern of regions*.[13]

Regarding the methodology for the study of cities, the prevalence of descriptive articles and the lack of scientific procedures worried many geographers. In response to this situation, many began to present alternatives for a more precise study of urban settlements. A good example in this regard is Parkins' study of the retail business center of Nashville. Parkins presents his study as an example of a scientific procedure, including a clear statement of objectives, followed by a strict survey in which he detailed the methodology used, and a series of well related conclusions. In this case, he objective was to determine the factors involved in the localization of commercial areas within the city, for which purpose Parkins surveyed the area and established categorization of functions and analyzed the main factors for the location of the retail business. In the conclusions Parkins finds topography to be the dominant factor in directing the expansion of the retail business (Fig. 6-2).[14] Although the validity of Parkins' methods can be today refuted, his study will remain an important step of the efforts to systematize the study of cities.

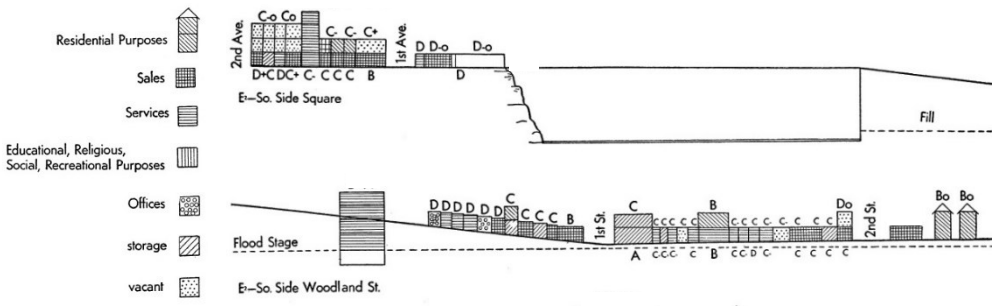


Fig. 6-2 Parkins. Sections of the retail business of Nashville (Modified from original) Parkins noted that the topography was the dominant factor in directing the expansion of the retail business. The letters (A, B, C, D) indicate the quality of the building, which is said to be assigned subjectively

In the attempt to make of the study of cities a proper science, some geographers also engaged in the creation of general theories that could be universally applied. In 1933, Charles C. Colby published an influential article entitled *Centrifugal and Centripetal Forces in Urban Geography*.[15] To make this study Colby analyzed twenty two cities in the United States, Canada, and Great Britain in order to determine what was involved in the migration of functions within a city. Colby's theory was grounded on the concentric structuration of cities and refers to the causes for the migration of functions as *forces*, according to the concept discussed in Chapter 5. These forces refer to various types of social and cultural causes or great complexity as economic prosperity and prestige of the different areas of the city, or social conflict. Colby's approach to the understanding

of the city in terms of forces that can be generalized steams from his biological conception of the city as an "*organism"* that is in "*constant evolution".*[16] But this approach to the study of cities was not shared by all scholars.

As done by Hall in the study of the cultural landscape, some geographers turned to history to explain the urban settlements. Thomas Lewis used the method of occupance periodization —*Sequent occupance*— suggested by Derwent Whittlesey for the study of Cheltenham town in St. Louise. In this study, Lewis defines five distinctive periods —pioneer, farmer, village, mining and manufacturing—before studying his contemporaneous city.[17] Another important early study that exemplifies an approach focused on the development is the research made on Vicksburg by Preston E. James in 1931, where he follows the historical development of the city's form and structure.[18] In his study, James starts with the consideration of the geographic conditions before the foundation, tracing its historical development which is illustrated by layout schemes, to finally analyze the functional distribution of the city as it was at the time the study was made. James also made this type of analysis of urban settlements within regional studies, as in the studies of Sao Paulo and Rio de Janeiro in Brazil, where he studies the historical development of the city, the functional development of the whole city and the functional distribution of a typical block (Fig. 6-3 , and 6-4).[19]

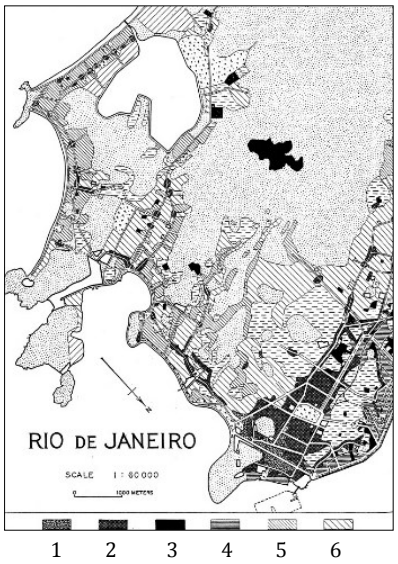


Fig. 6-3 James-Section of functional study of Rio de Janeiro, Brazil. Notation: 1- commercial core, 2-retail, 3-industries, 4-transportation infrastructure, 5-upper class residence, 6-common residence. The dotted area is vacant land

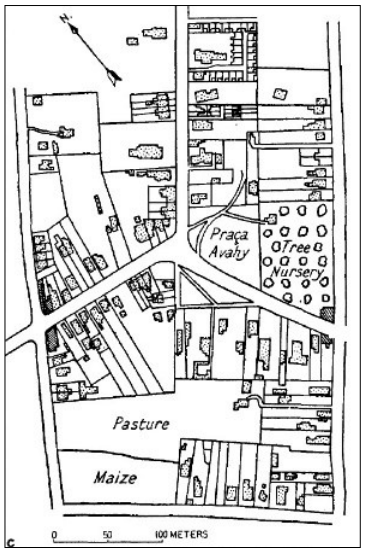


Fig. 6-4 James-original notation: "*The composition of some typical blocks in Rio de Janeiro (...) a suburban section*". The image shows the plot division and occupation

2 Studies on Japanese cities

2.1 American Geographic studies on Japanese cities

Besides Hall's studies, Glenn Trewartha and Darrell H. Davis also studied Japanese cities. These authors made several regional studies focused mostly in rural areas, but in 1934, each of them published an article on Japanese cities. These geographers shared the interest in the modern aspects of the Japanese cities, but their approach was markedly different.

Although Trewartha's study includes an introduction of the history of Japanese cities, his central analysis stresses in location and classification.[20] After analyzing the factors involved in the distribution of urban settlements, he distinguishes two broad groups of Japanese cities from the viewpoint of their "*cultural morphology*", term that refers to the characteristics of their constructions and infrastructure: (a) the Indigenous cities are the ones that have not been modernized and, according to Trewartha, "*they appear to be cast in the same mold"*; and (b) the six metropolises —Tokyo, Yokohama, Osaka, Kobe, Nagoya, and Kyoto—, which are the industrialized cities with a definite foreign imprint. According to Trewartha, these modernized cities also maintain some areas that were "*still distinctly Japanese in aspect, with flimsy oriental structures combining the functions of retail shops and residences fronting on unpaved thoroughfares*."[21]In the analysis of these metropolises, which are the cities more extensively examined, Trewartha's discusses the functional distribution in relation to the geomorphology, the distribution of industries within the city, and the influence of the location of industries in the development of the urban settlement (Fig. 6-5 and 6-6).[22]

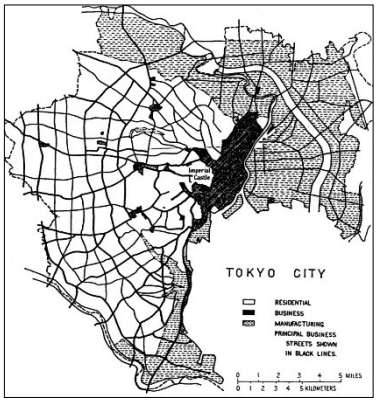


Fig. 6-5 Trewartha, 1934 -Original Notation: "*Residential Tokyo for the most part occupies a dissected diluvial terrace, while the business and industrial sections of the city are at lower*

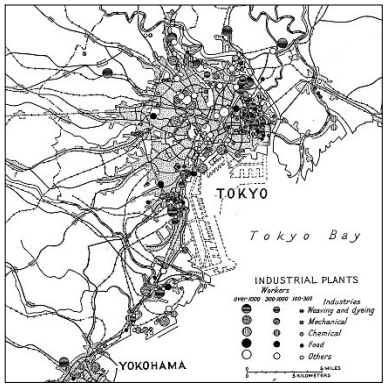


Fig. 6-6 Trewartha-Map of Tokyo showing the location of different industries within the city

Davis' article on Japanese cities, on the other hand, adopts a descriptive approach. In *Some aspect of Urbanization in Japan*, also published in 1934, Davis states that his purpose is to show the *"anomalies which have resulted from the superimposition of western industrialization on* [the] *major urban centers"*.[23] Davis focuses on the largest urban settlements, disregarding the

classification of the smaller settlements because, in his understanding, the number of village types was so large that he found "*impossible to classify the patterns satisfactorily in any simple system recognizing a small number of types*".[24]Therefore, and in line with his main objective, Davis focuses on the description of the cityscape of the biggest cities making emphasis in the modernized features (Fig 6-7 and 6-8). According to Davis, the rapid changes of Japanese cities gave rise to some incorrect assumptions among Westerners as the idea that Japanese modern cities were not different from any other industrialized city in the world. For example, regarding the appearance of the major cities, Davis explains that although a superficially they might appear similar, "*(c)loser examination, however, discloses Japanese influence on both design and building and many features not associated with American construction*".[25] When concluding the article, Davis predicts that despite the changes that Japanese cities will experiment, they will not lose the characteristics that differentiate them from Western cities.

Fig. 6-7 Davis, 1934- Original caption: *"Asashi Building, Osaka. Even a modern office building like this has a shrine on its roof"*

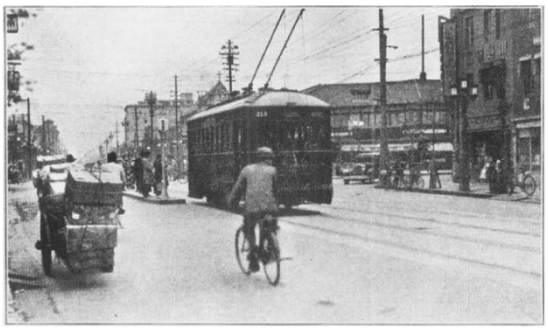


Fig. 6-8 Davis, 1934- Original caption: *"Looking north on Kawaramachi Street at its Junction with Sanjo Street"*

2.2 Japanese studies on Japanese cities

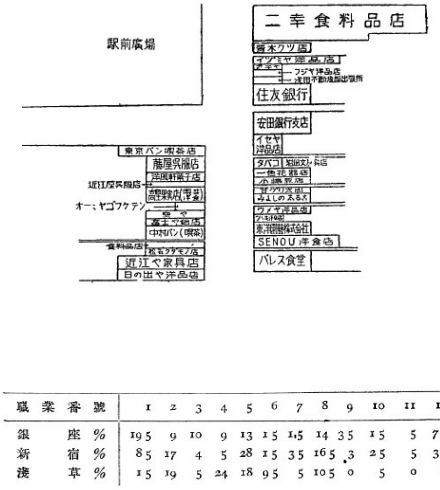
As in the United States, the greatest development in the formal study of cities was within the field of Geography.[26] At the same time, the origins and development of Japanese cities were being treated by many historians and economists whose studies served as reference to many formal studies. An important example in this regard is the work of the historical geographer Ogawa Takuji (小川琢治, 1870-1941) who, in order to determine the origin of Japanese cities, analyzed the relationship between the Chinese and Japanese layouts. In 1928 the historian Hitoshi Ono (小野均, 1904-1942) published *Study of Early Modern Castle Towns* (in Japanese, 世城下町の研究) in which he analyzes the historical development of this type of town, proving the analysis with several city layouts.[27] In 1930, the economic historian Yosaburo Takekoshi (竹越与三郎, 1865-1950) published in English language *The Economic Aspects of the Development of Japanese Civilization*.[28] Although he only considers briefly the formal aspects of the city, he made one of the most influential classification of Japanese cities that was used as reference by many Western authors, including Hall and Trewartha.

Influenced by the German school of *Landerschaft* and the Berkeley School, the Japanese

geographer Taro Tsujimura (辻村太郎 1890-1983) published in 1930 an article introducing the concept of cultural landscape.[29] Moreover, the father of Japanese human geography, Michitoshi Odauchi (小田内通敏, 1875-1954), published several works that included the study of cities.[30] As part of the study of cultural landscape he includes the analysis of the morphology of cities considering them within the wider natural context as part of the cultural landscape.[31]

The preoccupation for the formalization of the geographic study of cities as a scientific activity was also present in Japan. The geographers Shinzo Kiuchi (木内信蔵 1919-1993) and Hikoichiro Sasaki (佐々木彦一, 1901-1936), ahead of the quantitative revolution of urban geography of the 1950s, engaged in the search for a quantifiable option for the study of cities (Fig. 6-9). During the 1930s, they performed locational analysis of sectors of important urban centers as Tokyo considering the functional distribution, and mapping the different activities in an attempt to determine statistical correlations and measurable data on the position and migration of those activities.[32]

Other geographers opted for the study of the configuration and formal arrangement of the urban settlements as in the case of Nishida Yoshiro (西田與四郎, 1884-1952). In 1931 Nishida published *The Morphology of the City* (in Japanese, 都市の形態) where he considers several Western and Japanese cities analyzing them as their external shape and internal structure, both in plan and elevation.[33] Although there is no individual extensive study of Japanese cities in general, Nishida includes original analysis of particular cases as the internal structure of Kobe or the internal functional organization of a sample area of the resort town Kinosaki (城崎町)in plan and elevation (Fig. 6-10).



職業番號		1	2	3	4	5	6	7	8	9	10	11	12
銀座	%	19.5	9	10	9	13	15	1.5	14	35	15	5	75
新宿	%	85	17	4	5	28	15	35	16.5	3	25	5	35
淺草	%	15	19	5	24	18	9.5	5	10.5	0	5	0	0

Fig. 6-9 Sasaki- Upper image: Distribution of functions of a commercial street in Tokyo. Lower image: Percentage of function (code numbered) by street (Modified from original)

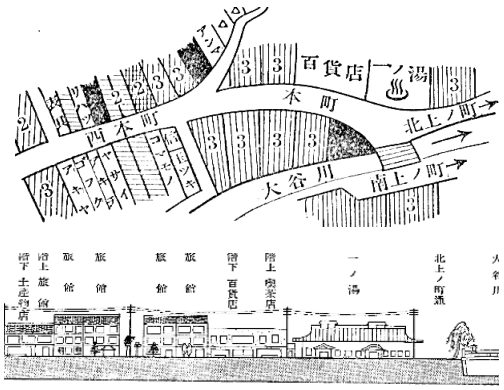


Fig. 6-10 Nishida-Upper image: Functional scheme of the resort town of Kinosaki. Lower image: section of Kinosaki showing facades, and functions of the buildings

3 Hall's translation of Geography's methods to the study of Japanese cities

As discussed before, Hall's studies on Japanese urban settlements were intended to be a contribution to the wider field of Regional Geography. Hall's most extensive the work on urban settlements is *Cities of Japan: Notes on Distribution and Inherited Forms* from 1934. In the same year it was published *Cities, Villages, and Houses of Japan,* which contains a brief synthesis of Hall's studies on Japanese rural and urban settlements. Besides these works, Hall includes the examination of urban settlements in the study of regions which contained cities, as Aikawa in Sado Island, Nara in Yamato Basin, and the study of Tokaido where he considers the most important urban centers of the country in relation to this road. Hall had influence of European works.

Hall, for instance, included explicit objectives only in some of his studies on settlements, but he did declare that the purpose of the study of settlements should be considered a part of the major goal of Regional Geography, that was "*the creation of a sound, comparative world pattern*".[34]

Regarding methodology, Hall did not discuss any particular procedure for the study settlements but determined an "*irreducible minimum*" for the study of the elements of the landscape which implied, first, the mapping of forms as to distribution; secondly a classification based on origin; third, the study of origins and developments, and finally the synthesis of the elements into a regional pattern.[35] Due to the circumstances, Hall, as the rest of the geographers, engaged in the study of towns and cities without a clear purpose or methodology, testing with their studies a variety of approaches that responded to different concerns.

Because of the exploratory character of Hall's studies on urban settlements, the contents vary in depth and approach. Nevertheless, the analysis of these studies has revealed certain characteristics that are directly related with the geographical framework in which these studies were made. The following analysis of Hall's work is structured around the five main research subjects that have been recognized in his work: (1) distribution, (2) classification, (3) development (4) functional analysis, and (5) structuring elements.

3.1 Distribution

According to Hall's *morphologic approach* suggested for the study of the cultural elements, the first step is to map their distribution. In each regional study, Hall provides a map showing the distribution of rural and urban settlements of the area. In addition, he made two studies considering the distribution of towns and cities within the whole country. The first one, published in 1934, is made with the information of the 1930's Japanese official census, and it was shown in an approximate scale of 1:1,000,000. This first map was not exceptional since in the same year Trewartha and Davis had also published similar graphics. However, in 1936 -in Hall published a second map on the distribution of settlements in Japan -in the approximate scale 1:625,000-

where he tests a method developed by himself for the collection and management of settlement data. As discussed before, when addressing the subject of the methodology for the study of the built environment, Hall gave general guidelines allowing for the flexible appropriated for the experimental stage of the studies. However, this does not mean that he did not use precise methods for the study of settlements. In the case, Hall's aim is to translate the accuracy of the methods for the record and management of the natural landscape in order to achieve "*a similar precise treatment of the cultural forms of the landscape*" (Fig. 6-11).[36]

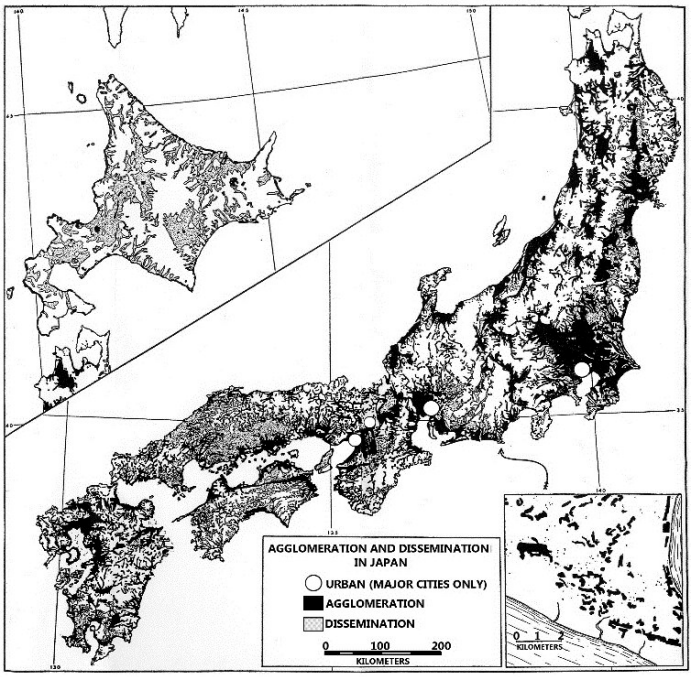


Fig. 6-11 Agglomeration and Dissemination in Japan. (Modified Notation). The detail in the lower right of the main map shows the original scale of the map where the data on settlement distribution was recoded- 1:2,000,000

By sampling several parts of the world from which detailed maps were available, Hall determines four categories of settlement densities: "*total agglomeration*", defined as areas where 85 per cent or more of all habitations occur in groups of six or more houses; "*agglomeration tending toward dissemination*", where the density of houses associated in groups of six was between 51 and 85 percent; "*dissemination tending toward agglomeration*", where the grouping of six houses occur between 15 and 51 percent; and "*true dissemination*", where less than 15 per cent of the area is occupied by groups of six houses.[37]

When applying the defined categorization to Japan, Hall finds that the two intermediate ones are largely absent. For that reason, only the two extreme categories *where used,* renamed simply as *agglomeration* and *dissemination.* A third category identifying the high density *major urban centers,* was included for the cities with more than 1,000,000 inhabitants, assign to *Osaka*, *Kyoto*, *Nagoya*, and *Tokyo.*[38] The map combined official data from the Imperial Survey maps of Japan (unknown year) and records collected personally by Hall and his team. The resulting map was

presented without much discussion since, in this case, Hall's stated purpose was to answer to "*(t)he most elemental and basic geographical question concerning human settlement* (…:) *whether or not an area is inhabited (…) and determine where habitations occur in agglomeration and where they appeared in disseminated pattern*".[39]

Hall's concern with the lack of information on settlements was continuously mentioned in his works. The urban settlements that Hall would studies in detail in the rest of his articles are mostly within the category of *agglomeration*.

3.2 Classification

In accordance with the second point of Hall's *morphological approach* for the study of the landscape's elements -the assemblage of the forms as to their genetic relationship- he classifies the urban settlements according to "*primary causes of urban growth",* or in other words, by their original function.[40] This classification is presented in the two articles published in 1934: *The Japanese Cities: Notes on Development and Inherited Forms,* and *Cities, Villages and Houses of Japan*.

As shown in the previous chapter, history plays an important role in Hall's studies. This characteristic is also reflected in some analytic decisions as the classification. According to Hall, "*(e)ach major change in the long economic and political history of Japan has left its impress upon the urban plan*", and it is in those inherited forms that he is most interested.[41] His classification of Japanese urban settlements is based on previously identified typologies by the Japanese scholars Yosaburo Takekoshi and Nishida Yoshiro. Nevertheless, Hall chooses to use only those classifications to which he could trace back an identifiable settlement form or structure.[42] For example, he discards the category of free ports used by Takekoshi since he could not find any "*distinctive morphological expression in present Japanese cities traceable to this cause*", also ignoring the category of resort centers that was part of Nishida's classification.[43]

Hall chooses three main categories or patterns related to original function: (1) *Administration and Defense*, (2) *Religious*, and (3) *Commercial*. Within administration and defense Hall establishes two subcategories: Castle towns (*joka-machi*-城下町) and Kyoto, as the only representative of the capital cities. The religious towns were grouped under only category (*monzen-machi*-門前町), and within commercial towns there are identified two subcategories: post-towns (*shukuba-machi*-宿場町), which are those created in the main routes as resting and supply points, and market towns (*ichiba-machi*-市場町).[44]

The analysis of urban settlements is organized according to this classification. This decision reveals a significant difference between the study of urban and rural settlements. For example, in the article *Cities, Villages and Houses of Japan,* where both rural and urban settlements are treated, the study of rural settlements is organized by region, finding one representative

settlement type for each area. However, when addressing the urban settlements, Hall treats them under a different heading using the classification by original function and ignoring the location. In short, rural settlements are studied by region, while urban settlements are studied by original function. For a regional geographer, to find the local characteristics of an area is an important part of his investigation, but in cities this task becomes difficult. In his analysis, Hall does mention that sectionalism had encouraged local changes in Japanese cities, nevertheless there is no discussion or identification of those local differences. Instead, when studying towns and cities, Hall focuses on the more salient features afforded by the original functions, as the castles or temples.

Hall's classification does not intend to be rigorous and is also not expected for towns to have one single original function. Nara for example, which was originally planned as an imperial capital, is treated within religious towns since Hall understands that such function had left a stronger imprint in the city. The same way, the multiplicity of functions is acknowledged by referring to a distinction made by Mitsutoshi Odauchi who classified Japanese cities as *complex,* which were those presenting various functions, and *uni-functional*, but it was understood that these were very rare.[45]

In line with the criteria for the classification, Hall wants to focus in the study of urban settlements "*which because of isolation or other causes have kept their ancient character*."[46] For this reason, in the articles dealing with several cities, Hall selects for detail analysis one representative example for each main category that still maintained pre-restoration characteristics: *Matsue* located in Shimane Prefecture as representative of Administration and Defense, *Nara* for religious town, and *Mikkaichi* of Toyama prefecture as representative of commercial towns.

3.3 Functional analysis

Functional studies were a normal procedure in geographic studies of the landscape since, according to Demangeon, Geography's concern was the areal distribution of man's activities and their material representations.[47] In regional rural studies, Hall analyzes the functional interaction between land use, village, and habitation as shown in the example of the Heita village of Yamato basin.[48]

Continuing with the same line applied to the urban settlements, Hall analyzes their functional distribution. However, in the case of urban settlements the establishment of functional interactions within the city and between the city and its environment is more difficult to achieve. Moreover, contrary to the rural settlements, in towns and cities the relationship with the land is not as evident, especially in modernized cities. Besides his interest in history, Hall's selection of traditional case studies also corresponds with his interest in the relationship between man and land. For example, when dealing with Matsue, Hall refer to this type of castle town as "*a relic of*

the days of a land economy and the feudal city bore strong relationship with the land".[49] Still, because of the difficulty of establishing functional relations and the lack of established concepts on urban settlements, particularly on Japanese ones, a recurrent tool used in Hall's formal analysis is the comparison.

The contrast with Western urban settlements does not appear very frequently, but when examining the city of Nara (Fig. 6-12, published in approximate scale 1: 50,000) Hall noted that this functional map "*shows first of all a surprising lack of conformance with the concentric circular zoning of Western cities*".[50] This characteristic was so prominent in Western cities that the few existent theories of urban studies were related to the concept of centrality, as the concentric model of the Chicago School or the centripetal and centrifugal forces presented by Colby.[51]

Hall's realization on the lack of concentric zoning became a generalization of all Japanese cities, referring to it as "*the most obvious distinctive characteristics of Japanese cities*".[52] The only zoning that Hall can find in Nara are the commercial activities gathered along the streets, even beyond the city limits. Within the study of Nara another functional comparison is made illustrated with a detailed functional scheme of a block of Matsue (published in approximate scale 1:1,500). Although there is no similar scheme made of Nara in the same scale, Hall describes the differences between the block of a typical castle town and Nara, a typical religious town, where shrines or small temples occupy the interior of most blocks.

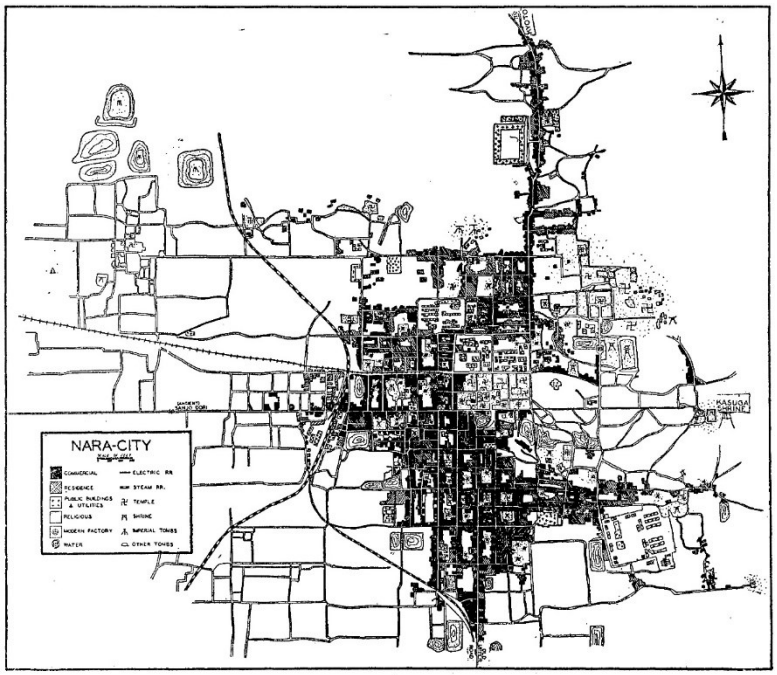


Fig. 6-12 Functional distribution in Nara (modified from original). Hall calls attention to the lack of concentric zonification. Commercial function, (shown in black) along the main roads is the only functional aggrupation identified by Hall.

When, In the case of Matsue, Hall considers the changes in the location of function as he studies its development. Assisted once again by a comparative map crafted with the data provided by the municipal office, Hall compares the functional occupation of the town during feudal times with the situation after Meiji restoration (Fig. 6-13), published originally in approximate scale1:4,500). The functions recorded on the left map, the feudal time, show the structure of the society mapping the residence areas of the feudal lords and samurais by rank. In the map at the right, showing the changes after Meiji Restoration, Hall charts the new functions indicating the governmental buildings around the castle within the former feudal lord lands, and the new growth along the rail road.

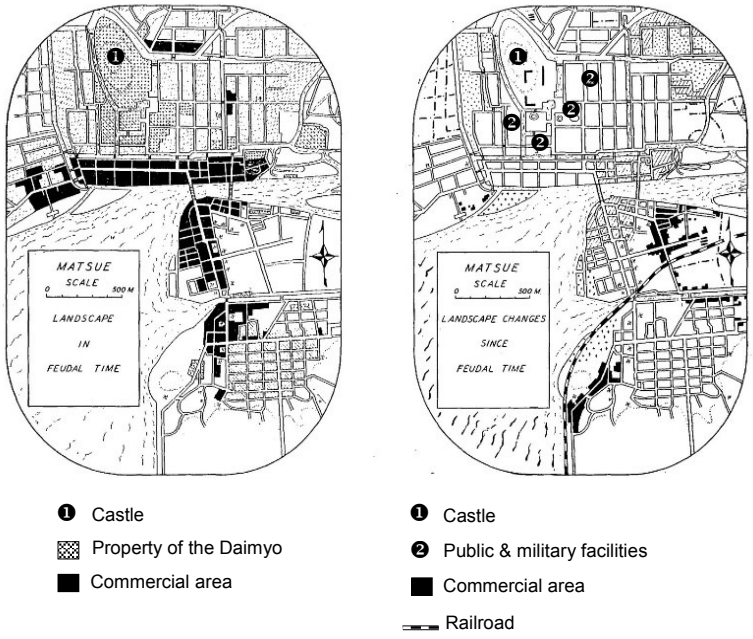


Fig. 6-13 Matsue functional schemes. Left: Matsue in feudal times;
Right: landscape changes since feudal times. (Modified notation)

In the case of the functional study of Mikkaichi comparison is not used. Mikkaichi is presented as an example of a typical town generated in the intersection of two important roads, pointing out the emphasis on the road and the predominance of commercial functions along these roads. In this example, as in the functional analysis of Matsue, another characteristic of Hall's studies can be recognized: the constant reference to a series of *structuring elements* around which the functions and development are explained.

3.4 Structuring Elements

In the case of urban settlements, the examination of Hall's analysis on cities has revealed that, Hall constantly refers to two main structuring elements to explain his observations of form and organization. These structuring elements are: the power centers (as palaces, castles, and temples), and the roads.

As it has been explained before, the same way that geographers looked for the *natural forces* involved in the formation of the landscape, they looked as well for the *artificial* or *social forces* involved in the creation of the cultural landscape. Hall uses this concept in the study of rural settlements establishing that, while the form of Japanese rural settlements respond to the natural environment, the structure -or functional arrangement- is guided by *artificial forces*.[53] The analysis of Hall's writings has shown that when analyzing urban settlements, Hall looks again for the *forces* involved in their formation, and he does this by assigning *attractive forces* to the two main structuring elements that he identified.

The concept of forces to explain urban settlements could be used in other ways, as exemplified with Colby's determination of centrifugal and centripetal forces in the functional distribution within the city. In this case, Colby's forces are mainly activities or non-material conditions as economic prosperity. In Hall's case, these forces are associated to material facts, more specifically, to the structuring elements.[54]

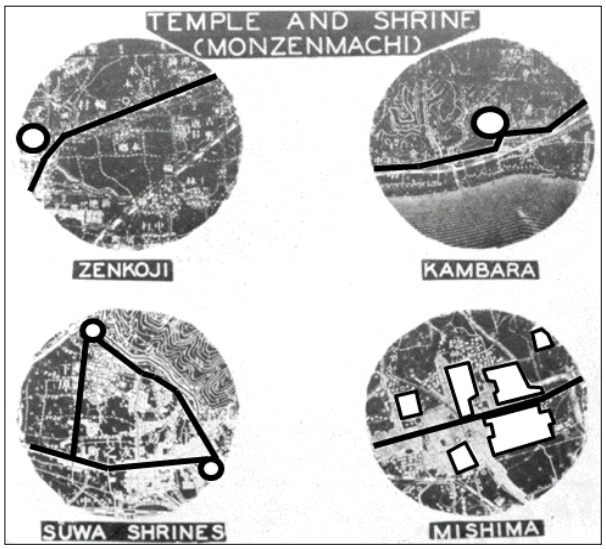


Fig. 6-14 Ground plans of temple and shrine towns. The intention of Hall's comparison is to show different outcomes of the location of the temples (○) and their structuring role. (Modified from original)

For example, when explaining the functional distribution of Nara, Hall explicitly refers to the roads as "*lines of attraction to commercial establishments*", while in a comparative study of temple towns layouts (Fig.6-14), he shows the "*attractive force of the great religious centers*".[55] The graphic showing four religious towns intends to show how the structuring elements, in this case the temples and roads leading to them, have shaped the towns that grew around them. *Zenoji* (善光寺) is described as a simple type of temple town, one temple one road, while the dispositions of *Suwa Shrines* (諏訪神社) and *Mishima* (三嶋) with their respective roads have created more complex types of towns. In this comparison, Hall calls the attention to the example of *Kambara* (蒲原) where the road deviates from the best available trajectory in order to reach the temple, while the train line does follow the most convenient route.

In Hall's studies on rural settlements the artificial forces are most of the times clearly identified and explain, but in the case of urban settlements the attractive force of roads and power center is not explained, being assumed as self-evident, since the importance of the religion and the political power of the Daimyo is discussed in several occasions through the articles.

The structuring elements most discussed by Hall are the ones determined by the original function of the towns, disregarding for example industries to which other Japanese and Western geographers as Trewartha assigned great importance. A good example of Hall's emphasis on the traditional elements are his analysis of greater cities as Tokyo or Nagoya. These bigger urban centers are examined in much lesser extent than the non-modernized towns since Hall perceives that "*(…) the coming of industry, power transportation, and world markets has so stimulated and change them that they do not differ greatly from the cities in the Western world*".[56] Contrary to Trewartha and Davis, Hall maintains the focus on the *inherited forms* even when analyzing cities as Tokyo, concentrating in the structuring elements of the original function. This way, when analyzing Tokyo, Hall makes emphasis in the fact that "*(e)ven (…) after its great growth and modernization and in spite of nearly complete destruction at the time of the great earthquake and fire it is still a castle town. (…) The street pattern, the distribution of public buildings and parks, and the zoning of utilities is still largely controlled by the ancient pattern*".[57] As in the case of Matsue, Hall notes that the public buildings are located in the areas that previously belonged to the Daimyo and that the original layout of the caste town and its moats is still evident in Tokyo.

These structuring elements are also dominant in the explanations of the section studies. Hall made sections of the chosen representative towns of the three main categories to compare their outline (Fig. 6-15).

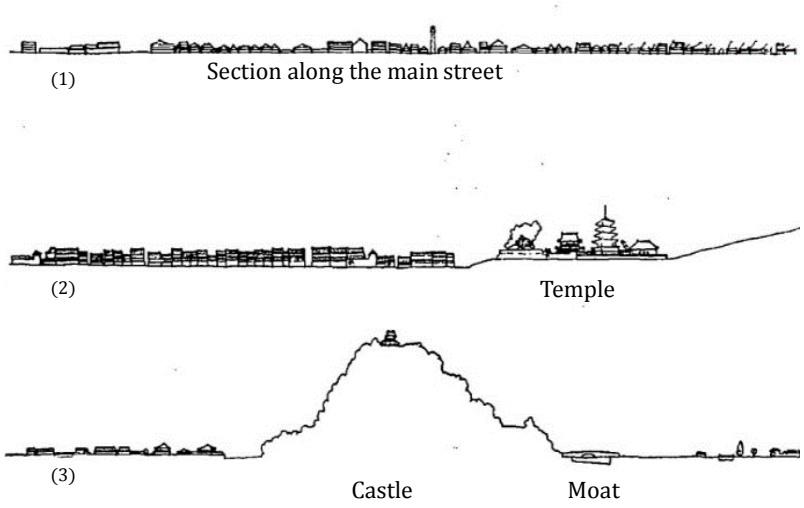


Fig. 6-15 Comparison of the sections of the representative cities of each original function. (1) Market town (市場町): Mikkaichi (三日市); (2) Religious town (門前町): Nara (奈良); (3) Castle town (城下町): Matsue (松江). (Modified notation)

This comparison was presented in the articles from 1934, *The Cities of Japan* and *Cities, Villages and Houses of Japan*. Here too, Hall points out the relative location of the temple in Nara and the castle in Matsue, recognizing them as the only salient feature of an otherwise uniform townscape. In the case of Mikkaichi the section is made along the main street along which are grouped the stores, pointing out only the flattish profile.

The only modern structuring element that Hall includes in his analysis are the train lines, whose influence even in the most traditionally preserved urban settlements as Nara and Matsue is too strong to avoid (as seen in previous Fig. 6-14).

Other issues related with modernization are as well recognized by Hall, but their role in the analysis is secondary. A good example are the "*two new forces at work"* in the changes of the landscape that Hall identifies in the study of Tokaido region. The first force refers to the concrete highway, but in the case of the second force, instead of being assigned to an element is assigned to a trend, to "*the trend toward the decentralization of industry*" and not to the industries themselves.[58] Hall only acknowledge these modern forces, but maintains the study focused on the inherited structuring elements.

The same way that modern aspects of the city are mostly kept aside from the analysis, the buildings of the city, those which are not considered within the structuring elements, do not receive much attention. In the article *The Cities of Japan*, Hall includes a short account of the characteristics sights, smells, and sounds of the Japanese cityscape. In this section, Hall considers urban architecture, which was only addressed in this here and briefly in the study of the city of Nara in the regional study of Yamato Basin (Fig. 6-16). Hall's description of the townscape has the always present Western statement of the uniformity of Japanese houses.[59] However, Hall admits that "*(t)here is probably little more justification for this claim than there is for the Oriental observer to state that all American houses are the same*".[60]

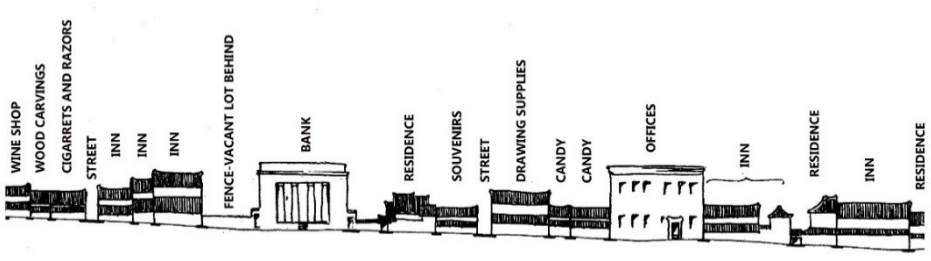


Fig. 6-16 Section of the East-West section of the entire city of Nara. In the explanation of the section Hall notes that there is no difference from place to place in materials and design of structures other than the occasional *exotic* Western building destined to public offices or banks

Although there is no detailed analysis of the urban architecture, contrary to writers of other fields Hall attempts at explaining the *apparent sameness* of Japanese houses offering the following causes: *"(1) the similarity of construction materials, (2) a more crystallized type of architecture than is to be found at least in the United States, (3) the ancient law that no private residence can reach the vertical dimensions of the temples, and (4) the fact that the ground plan in Japanese houses must conform to multiples of standard size "tatami" or floor mat."*[61] While reasons one,

three, and four had were noticed by most authors writing on Japanese architecture, the second reason -*a more crystallized* (that is more developed) *type of architecture*- is a particular comment of Hall. This perception is most probably related with the fact that that time, the understanding of America was as a relatively new nation when compared to Europe or Japan it was a common in studies of the cultural landscape, and although Hall does not make direct reference to this when addressing architecture.[62] Besides these considerations, Hall's only other mention of urban settlements' architecture are made when pointing the Western style buildings, which are referred as *exotic*, showing an unusual correct usage of the term in its original meaning of "not native".[63]

3.5 Development

Consistent with his historical approach, Hall addresses the development of cities in every article that includes urban settlements except in *Tokaido*, where Hall considers the joint development and interaction of the cities of the region with this important route. This interest in development also corresponds to the third condition of Hall's *morphological approach* that establishes that the elements of the landscape should be studied "*as to their origin and development*".[64] This issue would be the one receiving most of Hall's attention within the analysis of urban settlements, expressed in Hall's interest in the tracing of the inherited forms of the urban settlements.

The procedure to analyze the development of the city varies from case to case, but it is always addressed. For example, as explained in the previous chapter, the study of Aikawa was made by combining graphic archival information and historical accounts. In the case of Nara, the graphic shown is a superimposition of the original planned layout for the imperial capital and the shape pf the city at the time made the research (Fig. 6-17, next page).

In this case, Hall explains the development, focusing in the changes in shape and extent, explaining it in relation with history. As in the study of landscapes, Hall presents the development using a narrative style that transmits an impression of continuous process of change: "*The original Nara was founded as the imperial capital in the seventh century. It grew up suddenly about the imperial palace (…) Buddhism was then at its zenith and great temples were built on the eastern and western outskirts of the city. In the ninth century, when the Nara capital was abandoned for Kyoto, the city disappeared and the land reverted to agriculture. The temples, however, gained power during the following century* (…) *During the long feudal period, it gained considerable commercial significance (…) With the coming of the railroads, its temples and antiquities, its cherry blossoms and maples have attracted increasing numbers of pilgrims and tourists each year (…) This has become its primary industry and consequently has encouraged the persistence of the ancient urban landscape*".[65] This brief extract of the study of Nara also illustrates how the structuring elements play a significant role in the explanation of the development, explaining the development in relation to the structuring elements around which

the city grew: first the imperial palace, then the temples, and finally the temples in association with the commercial streets.

Fig. 6-17 Original caption: "*Nara, ancient and modern*". Superimposed layouts maps of the original plan and the 1930s extension of the city

Hall also makes an examination of the development of Tokyo, as explained in the previous section, and Yokohama. This last city is presented as the example of a small fishing village that has grown to become a modern port town as Kobe and Niigata. To examine the development of Yokohama, Hall traces again the development through ancient maps. He presents three maps comparing the extension of the city in three different periods (Fig. 6-18 to 6-21, next page): the lower map shows the bay before reclamation in 17th century, the middle map shows the area after at the end of 19th century with the reclamation of the the bell-shaped bay for paddy fields, and the upper map shows the layout in the 1920s.[66] Hall got the maps from a direct descent of Kanabe Yoshida (吉田勘兵衛), a merchant from Edo period who was responsible for the land reclamation of Yokohama bay. Besides this analysis, there is no other comment on Yokohama since for Hall the modernized aspects of the city are not easily distinguishable from other port cities of other countries.[67]

Fig. 6-19 Aerial photography of Yoshida Shinden shown already urbanized during the lates1920s
This image is different from the one originally appearing in Hall's article (shown in Fig. 6-19)

Fig. 6-20 Yoshida Shinden map of the Reclaimed land for paddy fields, during 19th century.
Same map shown by Hall (shown in Fig. 6-19)

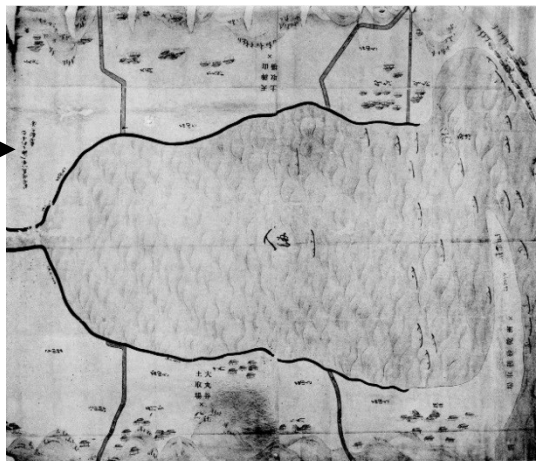


Fig. 6-21 Yoshida Shinden area before the reclamation of the bay area for paddy fields during the 17th century.
Same map shown by Hall (shown in Fig. 6-19)

Fig. 6-18 Maps shown by Hall of Yoshida Shinden (吉田新田) in the article *The Cities of Japan* from 1934. The

Conclusion

The lack of determined standards for the study of cities propitiated the variety of approaches and methodologies in the study of urban settlements. Japanese cities were analyzed from several perspectives, as the quantitative example of Sasaki and Kiuchi, the formal approach of Nishida, or the descriptive style of Davis.

Hall's disciplinary context led him to conceive the city as an integral part of the cultural landscape.[68] In his regional studies, Hall considered the cities located in the area, and the same way, when analyzing cities in systematic studies, he considered the location in the country and the region. His approach to the city always included the regional area. As a consequence of this understanding of urban settlements as part of the region, Hall translates the regional geographer's methodology for the study of the cultural landscape to the study of the urban settlements. Such translation would determine Hall's main research interest: (1) *distribution*, (2) *classification*, (3) *functional analysis*, (4) *structuring elements* (power centers and roads), and (5) *development*. To describe and explain the Japanese urban settlements, Hall treats this five research issues within an historical approach –explained in the previous chapter-, supported by formal and functional analysis of particular case studies.

In some cases, the translation was relatively direct, as in the study of the distribution, but in other cases as in the functional analysis, the translation was not possible and adaptation of methods used for regional studies had to be made. When analyzing functions in a rural settlements, the studies were made by analyzing the functional interactions. In the case of a city, these functional interactions were too complex, therefore Hall resorted to comparisons to analyze functions. The comparative analysis was a recurrent tool used also when studying for example the structuring elements, and development. It is worth observing that of Hall's own "*morphological treatment"* for the forms of the landscape, he followed all but the forth step: *the synthesis*. Hall recognized the limited development of settlement studies and the complexity of factors involved in their understanding.

Hall's method for the study of cities, is similar to the approach of his colleague Preston E. James, with whom he worked in close association, for example, they share the historical approach, and the inclusion of several scales of study in the analysis. On the other hand, the reliance in the structuring elements with *attractive forces*, and the comparative functional analysis are Hall's personal contribution.

Contrary to Davis and Trewartha that showed more interest in the modernization of the Japanese cities, Hall concentrated in the study of the cities that maintain their original character. Hall's interest in the inherited forms does not have to be mistake with an appreciation of only what was traditionally Japanese as it was the case for other Western writers as Edward Morse or Bruno Taut. These cities were of interest to Hall because they maintained the ancient character, and therefore the inherited forms are more easily traced and recognized.

Notes:

[1] At the beginning of the 20th century the population of Japan was predominantly rural with only ten percent living in cities, while by the 1930s the rate of urban population grew to more than one quarter of the total population of the country. See: Ishida, Y.: *Local initiatives and the decentralization of planning power in Japan*. In: Hein, C. and Pelletier, P. eds.: *Cities, Autonomy, and Decentralization in Japan*, New York, Routledge, 2006.

[2] That is the case for example of the prominent Japanese physician Mori Ougai (森鷗外, 1862-1922). Trained in Germany in the study of hygiene, zoning, and related urban issues, Ougai made valuable studies on the housing conditions of the lower classes of Tokyo that became very influential in the creation of Tokyo urban regulations. See: Hein, C.: *Shaping Tokyo: Land Development and Planning Practice in the Early Modern Japanese Metropolis*, Journal of Urban History 36, No. 4, pp.447-484, 2010

[3] The first steps in the academic systematic study of the materiality of cities took place in Germany, England and France. Although these studies were made within a wide range of different disciplines that included from epidemiology to sociology the most important and uninterrupted advances were made in the field of Human Geography.

[4] Gaziano, E.: *Ecological Metaphors as Scientific Boundary Work: Innovation and Authority in Interwar Sociology and Biology*, American Journal of Sociology, Vol. 101, No. 4, pp. 874-907, 1996. p. 874

[5] The theory was presented in Burgess E., McKenzie, R. D., and Park, R. E.: *The City*, University of Chicago Press, 1925

[6] The described distinction between Sociological and Geographical study of cities refers only to the early stages of development. After World War 2 the boundaries between these two approaches became less clear.

[7] In Europe, the study of cities within Geography had its major impulse in Germany and France. For a thorough account on the development of the study of cities in Germany and France see Hofmeister, Burkhard: *The study of urban form in Germany*, Urban Morphology, Vol. 8, No. 1, pp. 3-12, 2004; and Darin, Michael: *The study of urban form in France*, Urban Morphology, Vol: 2, No. 2, pp. 63-76, 1998.

In Germany, the most important Geographic works on cities were *On the Layouts of Towns* (1899) by Otto Schlüter, *The Geographical Position of the Big Cities* (1903) by Friedrich Ratzel, *The layout of German Settlements* (1926) by Rudolf Martiny, and *Townscapes of the World* (1930) by Siegfried Passarge. Schlüter, O.: *Über den Grundriss der Städte,* Zeitschrift der gesellschaft für erdkunde zu berlin, No.34, pp. 446-462, 1899; Ratzel, F.: *Die geographische Lage der grossen Städte*, Die Großstadt, Jahrb. der Gehe- Stiftung. Bd. IX, S. 33-72, Dresden 1903; Martiny, R.: *Die Grundrißgestaltung der deutschen Siedlungen,* Justus Perthes, 1928; Passarge, Siegfired: *Stadtlandschaften der Erde*, Bruno Dietrich, Hamburg, 1930. In this last book there is a chapter on Japanese Townscapes — Japanische Stadtlandschaften—written by Ludwig Mecking. Although Hall was familiar with other works of Passarge, there are no indications of him knowing about this particular book on townscapes or Mecking's work on Japan.

In France, the most influential work was *Grenoble, a study in Urban Geography* (1911) by Raoul Blanchard (1877 - 1965). Blanchard, R.: *Grenoble. Etude de géographie urbaine*, Paris, A. Colin, 1911. Another influential work of Blanchard was *Un Méthode de Geographie Urbaine*, Revue de Greographie Alpine, Vol. 16, N.1, pp-193-214, 1928. In other academic fields the study of citifies was also developing at this time. An important contribution was made by the historian Pierre Lavedan (1885-1982) who published in 1926 two very important works *What is Urbanism — Qu'est-ce que l'urbanisme*?— and the first volume of *The History of Urbanism* — Histoire de l'urbanisme.

[8] Parkins, A. E.: *Profiles of the Retail Business Section of Nashville, Tenn., and Their Interpretation*, Annals of the Association of American Geographers, Vol. 20 No.3, pp. 164-175, 1930, p. 164

[9] Vance, J. E. Jr.: *Geography and the Study of Cities*, American Behaviorist Scientist, Vol.22, pp.131-149, 1971. The section *Urban Geography before 1953* (pp. 135-136) includes the review of pre-World War 2 studies on cities including several doctoral thesis.

[10] Shaw W. B. (Ed.): *The University of Michigan, an encyclopedic survey*, Vol. 2, parts III, IV and V, Ann Arbor,

University of Michigan Press, 1951. P. 582

[11] See for example Conzen, Michael P.: *The study of urban form in the United States*, Urban Morphology, Vol. 5, No.1, pp. 3-14, 2001

[12] James, P. E.: *Formulating Objectives of Geographic Research*, Annals of the Association of American Geographers, Vol14 No.1, pp. 271-276, 1948

[13] Robert B. Hall words, referring to Alfred Hettner's definition of the overall goal of Geography, Hall, R. B.: *The Geographic Region: A Resume,* Annals of the Association of American Geographers, Vol.25 No.3, 1935, p.126

[14] Parkins, A. E.: *Profiles of the Retail Business Section of Nashville, Tenn., and Their Interpretation*, Annals of the Association of American Geographers, Vol. 20 No.3, pp. 164-175, 1930

[15] Colby, C. C.: *Centrifugal and Centripetal Forces in Urban Geography,* Annals of the Association of American Geographers, Vol. 23, No. 1 , pp. 1-20, 1933

[16] Ibid., p. 1

[17] Lewis, F. T.: *The Sequence of Areal Occupance in a Section of St. Louis, Missouri*, Annals of the Association of American Geographers, Vol.21 No.2, pp. 75-90, 1931

[18] James, P. E.: *Vicksburg: A Study in Urban Geography*, Geographical Review, Vol.21 No.2, pp. 234-243, 1931

[19] James, P. E.: *Rio de Janeiro and Sao Paulo*, Geographical Review, Vol. 23, No. 2, pp. 271-298, 1933. Another good example of James's regional studies is *The Blackstone Valley: A Study in Chorography in Southern New England*, Annals of the Association of American Geographers, Vol. 19, No. 2, pp.67-109, 1929

[20] Trewartha, G.: *Japanese Cities Distribution and Morphology*, Geographic Review, Vol.20 No 3, pp. 404-417, 1934. The contents of this article is also part of the book Trewartha, G. T.: *A Reconnaissance Geography of Japan*, University of Wisconsin Studies in the Social Sciences and History, No 22, 1934

[21] Ibid., p. 412

[21] For example, when studying Tokyo Trewartha makes the following observation: "*The core of the city completely occupies a small wedge of alluvium between diluvial uplands, but the settlement has expanded northward along the coastal strip and up on the crests of the terraces as well.*" Trewartha, G: *Japanese Cities, Distribution and Morphology*, op. cit., p. 415

[22] The work of the German geographer Ludwig Mecking on Japanese cities is many times referred in Trewartha's study.

[23] Davis, D. H.: *Some Aspects of Urbanization in Japan*, Journal of Geography, Vol.33 No.6, pp. 205-220, 1934. p. 210

[24] Ibid. p. 206

[25] Ibid. p. 216

[26] A good sample of various studies on rural and urban settlements can be found in 地球, 博文館, Vol. 5m No. 4, April 1926. The whole volume was dedicated to studies on settlement containing nine articles on Japanese settlements by Ogawa T., Odauchi M., Nishida, Y. among others

[27] 小野均:近世城下町の研究, 至文堂, 1928

[28] Takekoshi, Y.: *The Economic Aspects of the History of the Civilization of Japan*, George Allen & Unwin, 1930

[29] Takeuchi, K: *Japan-pre-war heritage*. In Johnston, R. and Claval, P. (eds.): *Geography since Second World War*, Rowman & Littlefield, 1984. Also Okada Toshihiro makes an analysis of the development of the concept of landscape in Japan in 岡田 俊裕 : 敗戦前の日本における「景観」概念と「景観」学論, 人文地理, Vol. 39, No. 5 , 1987

[30] See for example: 小田内通敏: 帝都と近郊, 大倉研究所, 1918; 郷土地理研究, 刀江書院, 1930; 日本・風土と生活形態: 航空写真による人文地理学的研究 [普及版], 鉄塔書院, 1931

[31] 岡田 俊裕:戦中・戦後の小田内通敏, 季刊地理学, pp. 14-32, Vol.48 No.1, 1998

[32] 木内信蔵: (PHYSIOGNOMIE 通リ 東京市に於ける都市景観地理 第 1 報及第 2 報, A Study of the Landscape of Tôkyô (I. Physiognomy; II. Streets), 地理学評論, Vol. 12 , No. 2, pp. 96-125, 1936; 都市發展に於ける轉移現象と景觀地域の分化 (Migrations of Functions and Differentiation of Landscape Region in Urban Development),

地 理学評論, Vol. 13, No. 12 , pp. 1108-1125, 1937. 佐々木彦一:東京の都心調査,地理学評論, Vol. 9 No. 9, pp. 755-765, 1933; 都市の構造形態の一分類(第 1 報),地理学評論,Vol.10 No.10, pp.882-891, 1934

[33] 西田與四郎:都市の形態-岩波書店, 1931

[34] Hall, R. B.: *The Geographic Region: A Resume,* Annals of the Association of American Geographers, Vol.25 No.3, 1935, p.126

[35] Ibid., p. 126 and 128

[36] Hall, R. B.: *A Map of Settlement Agglomeration and Dissemination in Japan,* Papers of the Michigan Academy of Science Arts and Letters, Vol. XXII, p.365-367, Ann Arbor, Michigan University Press, 1937. p. 365

[37] A *group of houses* is defined as habitation units which are not separated by fields.

[38] Hall, R. B.: *A Map of Settlement Agglomeration and Dissemination in Japan,* op. cit., p. 365

[39] Ibid. p. 365

[40] Hall, R. B.: *Cities, Villages, and Houses of Japan*, Quarterly Review of the Michigan Alumnus, pp. 138-149, 1934 p. 183

[41] Hall, R. B: *The Cities of Japan: Notes on Distribution and Inherited Forms*, Annals of the Association of American Geographers, Vol. 24, No. 4, pp. 175-200, 1934. p. 182

[42] Ibid., p. 183 (Note 6)

[43] Ibid., p. 183

[44] Ibid.

[45] Ibid., p. 198 (Note 24)

[46] Ibid., p. 183

[47] Demangeon, A.: *Problèmes de la Géographie Humaine*, Librairie Armand Colin, Paris, fourth edition, 1952. p.31

[48] Example shown in Chapter 5, p. 88

[49] Hall, R. B: *The Cities of Japan: Notes on Distribution and Inherited Forms,* op. cit. p. 185

[50] Hall, R. B.: *The Yamato Basin, Japan*, Annals of the Association of American Geographers, Vol.22, No. 4, pp. 243-292, 1932. p.287

[51] The centrality concept was not only applied to individual urban settlements, as in the examples of the Chicago School and Colby, but also to the distribution of these settlements within an area. Another influential model based on the idea of centrality was developed in 1933 by the German geographer Walter Christaller (1893-1969). Christaller's *Central Place Theory* sought to explain the way in which urban and rural settlements were distributed within an area, based on an understanding of settlements as providers of services for the surrounding areas. See Ullamn, E.: *Theory of Location for Cities*, American Journal of Sociology, Vol.46 No. 6, pp. 853-864, 1941. Central Place Theory was first published in Christaller, W.: *Die zentralen Orte in Süddeutschland,* Gustav Fischer, 1933

[52] Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms,* op. cit., p. 181; *Cities, Villages and Houses of Japan,* op. cit., p.147

[53] Hall, R. B.: *Some Rural Settlements Forms in Japan*, Geographical Review, Vol.21 No.1, pp. 93-123, 1931, p. 122

[54] The term "structuring elements" was chosen by the author to explain Hall's analysis. The term "structuring elements" was not used by Hall.

[55] Hall, R. B.: *The Yamato Basin, Japan,* op. cit, .287; *The Cities of Japan: Notes on Distribution and Inherited Forms,* op. cit., p. 195

[56] Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms,* op. cit., p. 183

[57] Ibid., p. 188

[58] Hall, R. B.: *Tokaido: Road and Region*, op. cit., p. 373

[59] Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms,* op. cit., p. 181

[60] Ibid. p. 181

[61] Hall, R. B.: *The Cities of Japan*, op. cit., p. 181

[62] See for example Bowman, I.: *Geography in Relation to the Social Sciences*, Scribner, New York, 1934. p.vii; Sauer,

Carl O: Foreword to Historical Geography, Annals of the Association of American Geographers, Vol. 31, No. 1, pp. 1-24, 1941. pp. 3-4 Here Sauer discusses how the particular condition of the colonization and growth of Midwest American culture, where there was no visible layers of history, let to the disregard of with serious consideration of cultural or historical processes.

[63] Hall, R. B.: *The Yamato Basin, Japan,* op. cit., p.287

[64] Hall, R. B.: *The Geographic Region: A Resume,* op. cit. p. 126 and 128

[65] Hall, R. B.: *The Yamato Basin, Japan,* op. cit., p. 286-287

[66] Kanabe Yoshida (吉田勘兵衛), a merchant from Edo period reclaimed land from the bell-shaped bay in Yokohama (吉田新田)

[67] Hall, R. B: *The Cities of Japan: Notes on Distribution and Inherited Forms*, op. cit., p. 198

[68] Although this was a common understanding within the discipline, it was not as common in practice as shown in the context analysis

Image Source:

Fig. 6-1 Burgess E., McKenzie, R. D., and Park, R. E.: *The City*, University of Chicago Press, 1925. p. 55

Fig. 6-2 Parkins, A. E.: *Profiles of the Retail Business Section of Nashville, Tenn., and Their Interpretation*, Annals of the Association of American Geographers, Vol20 No.3, pp. 164-175, 1930. p. 175

Fig. 6-3 James, P. E.: *Rio de Janeiro and Sao Paulo*, Geographical Review, Vol. 23, No. 2, pp. 271-298, 1933. p. 288

Fig. 6-4 Ibid. p. 290

Fig. 6-5 Trewartha, G.: *Japanese Cities Distribution and Morphology*, Geographic Review, Vol.20 No 3, pp. 404-417, 1934. p. 412

Fig. 6-6 p. 414

Fig. 6-7 Davis, D. H.: *Some Aspects of Urbanization in Japan*, Journal of Geography, Vol.33 No.6, pp. 205-220, 1934. p. 215

Fig. 6-8 Ibid., p. 213

Fig. 6-9 佐々木彦一: 東京の都心調査, 地理学評論, Vol. 9 No. 9, pp. 755-765, 1933. pp. 11, 15

Fig. 6-10 西田與四郎: 都市の形態, 岩波書店, 1931. pp. 36, 37

Fig. 6-11 Hall. R. B.: *A Map of Settlement Agglomeration and Dissemination in Japan,* Papers of the Michigan Academy of Science Arts and Letters, Vol. XXII, p.365-367, Ann Arbor, Michigan University Press, 1937. Unnumbered, Map 12

Fig. 6-12 Hall. R. B.: *The Yamato Basin, Japan*, Annals of the Association of American Geographers, Vol.22, No. 4, pp. 243-292, 1932. p. 287

Fig. 6-13 Hall, R. B: *The Cities of Japan: Notes on Distribution and Inherited Forms*, Annals of the Association of American Geographers, Vol. 24, No. 4, pp. 175-200, 1934. p. 184

Fig. 6-14 Ibid. p. 194

Fig. 6-15 Ibid. p. 187

Fig. 6-16 Hall. R. B.: *The Yamato Basin, Japan*, op. cit. unnumbered attachment

Fig. 6-17 Hall, R. B: *The Cities of Japan: Notes on Distribution and Inherited Forms*, op. cit. p. 195

Fig. 6-18 Ibid., p. 199

Fig. 6-29 石野瑛: 吉田新田古圖文書 : 横濱郷土史料, 吉田家, 1928, unnumbered plate

Fig. 6-20 Idem.

Fig. 6-21 吉田一太郎: 横濱吉田新田圖繪,吉田家, 1935, unnumbered plate

CHAPTER 7
STUDIES ON JAPANESE RURAL ARCHITECTURE

Introduction

Geographers from the early 20th century understood the rural house as *a* phenomenon of mutual adaptation between man and his environment.[1] Initially, the study of rural houses was an optional part of regional studies, and the extent and depth of the examination of the habitation varied from geographer to geographer.

Hall's studies on Japanese rural architecture are among the few Western works on the subject made before World War 2, and are the most complete made within Geography. In this chapter Hall's writings on rural architecture are examined to make clear his approach to the subject. To this aim, the first section (1) discusses how rural architecture was studied and understood within the field of Geography in the early 20th century in order to understand Hall's academic background. The second section (2) reviews the studies on Japanese rural architecture made during the interwar period to recognize the state of the development of the study of rural houses at that time. Section three (3) examines the rural housing types determined by Hall, and in section four (4) Hall's house types are compared with the ones studied by Japanese scholars. Finally, in section five (5), Hall's studies are compared with the studies made by the German Architect Bruno Taut on the same subject. This comparison allows for the location of Hall's works in a familiar academic context and help explain two dissimilar Western perspectives on Japan.[2]

1 Study of rural architecture within the field of Geography

1.1 Development in Europe

Contrary to the study of urban settlements, research on rural habitation somewhat more developed. The studies made by A. Demangeon and J. Brunhes were frequent references on how to proceed in the study of rural habitation. As with the study of any other element of the landscape, the first task of the geographer was to examine their distribution within the area. Then, the geographer should search for the most representative type of a given region since, as explained by Brunhes, "*the exceptional has less value (…) than that which conforms more closely to a 'type'*".[3]

Regarding the analysis of the physical aspects of the habitation, Brunhes understood that "*(t)he form of the house interests the geographer not so much in its details as taken as a whole, or, more exactly, insofar as the materials of construction bring about a certain form,*" as a log houses determines constructions at rig angles while mud constructions allow for rounder shapes.[4] For Brunhes "*(c)limate expresses itself chiefly through the form of the roof,"* reason why many geographic analysis of habitation dedicate great amount of attention to this feature.[5] Besides considering the characteristics of the house that are related to the natural environment, Brunhes considers other questions "*to which is proper to reply with explanations human rather than geographical*".[6] These questions included how the elements of the house are combined and

arranged, or if they have some ornamentation.

For Demangeon, the most important of the cultural factors was the agricultural exploitation. In his *Dictionary of Geography* from 1907 he begins the description of *Habitation* by stating that each region has its "*maison-type*" that varies according to three characteristics: 1) the materials provided by the soil and subsoil, 2) the climate, and 3) the agricultural exploitation.[7] As Brunhes, Demangeon also identifies cultural factors as important for the study of habitation, explaining that houses also reveal the social organization as when a large estate surrounded by huts exposes a system of large ownership.

In 1905 Demangeon published a regional study of the northern French province of La Picardie that became very influential among Western geographers.[8] In this work, Demangeon includes the study rural habitations (Fig. 7-1 and 7-2). He had a functionalist understanding of the floor plan of the house, stating that the arrangement of the house "*was the slave of the services to which it was intended*", while he considered the materiality of the house to be "*a direct product of the soil that bears it.*"[9] Consequently, the floor plan is analyzed as to its use in relation to the agricultural activity. In most rural houses the outbuildings as sheds or stables, the yards for the drying crops, as well as the poultry houses, have a significant importance in the examination of functional interaction of the house and the land. The structural characteristics or formal and aesthetic aspects are of secondary importance for the geographer. The materials and exterior appearance of the habitation were studied, by Demangeon and other geographers, inasmuch as they are responses to the natural conditions of the area.

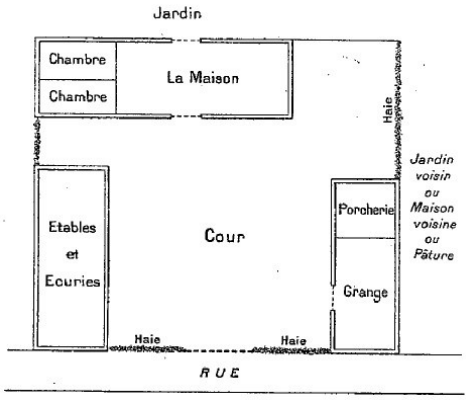


Fig. 7-1 Demangeon, 1907-Farms from the coastal region, arrangement scheme showing the function of each room

Fig. 7-2 Demangeon, 1907-House in the area of Prédefin, pointing out the materials of the construction thatch and slats

Both Brunhes and Demangeon pointed out the importance of considering past stages of the human facts, including habitation. Nevertheless, in their practical studies the emphasis was placed in the relationship of the house with the agricultural activity and natural environment.[10]

1.2 Development in the United States

In the United States, the first studies of rural houses were also made within Regional Geography. An important early example from the late 19th century is the work of the British-American geographer George W. Featherstonhaugh (1780-1866), who provided thorough descriptions of the houses of the frontier lands of America.[11]

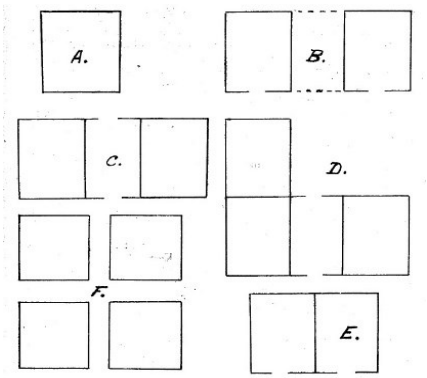


Fig. 7-3 Scofield, 1936- Schematic floorplan of rural houses, Tennessee. "*all houses have sprung from simple one-room constructions* (type"A")"

Two of the most important studies on American rural houses of the interwar period were made by Sauer's former students. One was made by Edna L. Scofield (1906-1986) who received his master degree in Geography from Berkeley in 1930.[12] In 1936, Scofield published a study entitled *The Evolution and Development of Tennessee Houses*.[13] Here the author makes a direct parallelism with the practice of natural sciences stating that "*(g)eographers should proceed, as the biological scientists have done, from the classifications of forms and the study of their structure and evolution, to distributional studies, and then finally to the study of geographic associations or landscapes*."[14] Scofield wanted to classify the house types of Tennessee on the basis of their shape and structure, and to trace their evolution from a common origin. In a reconstruction made from historical data drawn from the work of the previously mentioned Featherstonhaugh and the historian Ulrich Bonnell Phillips (1877-1934), Scofield traces back an original "*species",* the one room habitation (Fig. 7-3).[15]

Also in 1936, Fred B. Kniffen (1900-1993) published a study entitled *Louisiana House Types*. Kniffen had been a student of Carl O. Sauer at the University of Michigan, where he was introduced to cultural geography. Most of Kniffen's work is dedicated to the understanding of the "*geographic expression of culture*," one of which is the rural habitation.[16] He believes that "*the primary concern of cultural geography is with the nature, genesis, and distribution of the observable phenomena of the landscape directly or indirectly ascribable to man."*[17] Later in his career, Kniffen came to be recognized as a "*leading interpreter of the cultural landscape"* because of his important work on American material culture.*[18]*

In his article on Louisiana houses, Kniffen focuses on the recognition of house types by formal characteristics. He is mainly concerned with the distribution of the different types and presents a schematic diagram of nine types of houses determined by their morphological characteristics —especially the type or roof— which he later recorded and mapped to recognize their distribution on the area (Figs. 7-4 to 7-6).

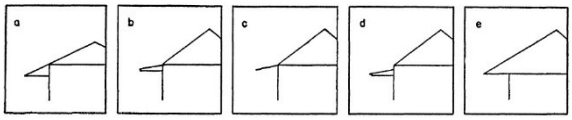


Fig. 7-4 Kniffen, 1936- Four systems of attached porches (a-d), and a built-in porch (e)

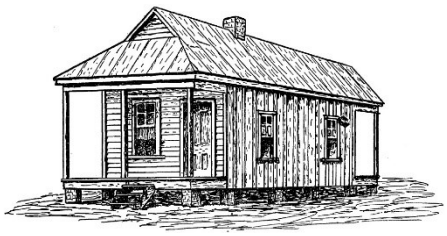


Fig. 7-5 Kniffen, 1936-Shotgun type

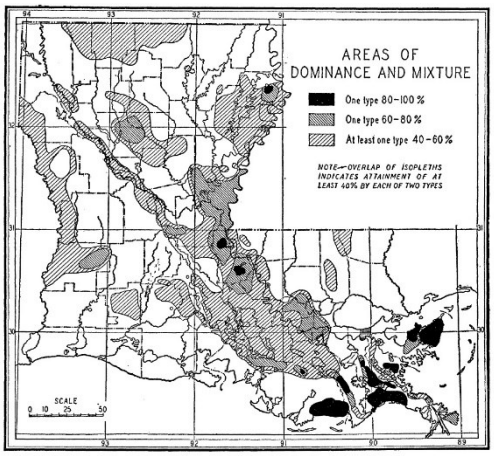


Fig. 7-6 Kniffen, 1936-Ares of dominance and mixture of house types

Contrary to Scofield, Kniffen discusses the limitations of the study of cultural facts as compared to the studies made of natural elements by other scientists arguing that "*(n)either houses nor other cultural forms can be classified in a manner exactly analogous to that used by biologists."* [19] Moreover, although Kniffen recognized the varied cultural influences in Louisiana, he limits himself to the study of the physical features that can be directly observed. He believe that *"(w)ithout the necessary historical and comparative data* [the geographer] *cannot safely accept apparent genetic relationships. In his morphologic data he must look for central themes, and must temporarily obscure minor variations in the individual forms*."[20]

In 1940 Robert Finley and E. M. Scott published an article made out of the data and discussion of a seminar in population, house types, and settlements directed by Trewartha at the University of Wisconsin in 1936-1937.[21] This article also deals with the distribution of houses types, in this case along a route from Madison to Beaumont. The purpose in this article is to determine the variations in house types.[22] The classification of the houses was made —as in the other cases— by formal features as floorplan, number of stories, and shape of roof (Fig. 7-7).

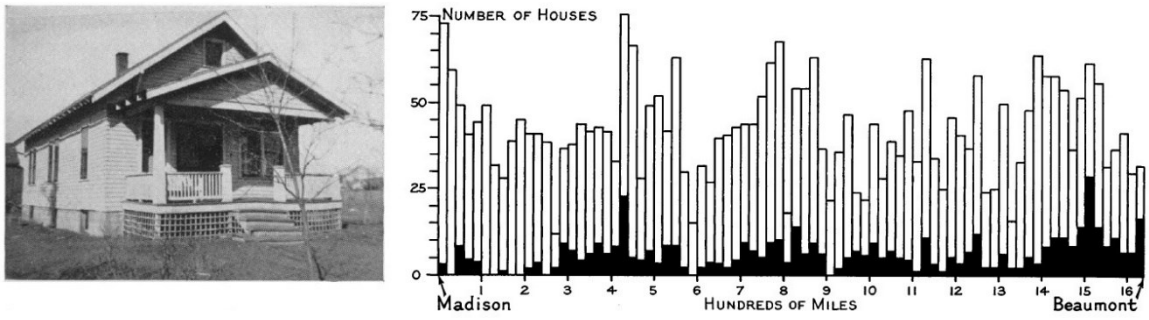


Fig. 7-7 Finley & Scott, 1940-Distribution of "*Bungalow A"* type (one story high, two rooms wide, two rooms or more, deep; ridge of roof perpendicular to front). The black bars indicate the number of this type as compare to the total of houses shown in white bars

2 Academic interest in Japanese Rural Architecture

2.1 Japanese scholars

Until after World War 2 most of the Japanese population lived in rural areas. Nevertheless, the academic interest in architecture was mostly directed to religious and residential architecture of the elites.[23] The attention to Japanese rural architecture began in the first decades of the 20th century with the folklore movement initiated by Kunio Yanagita (柳田國男 1875-1962).[24] This movement was born as a reaction to the social and political changes created by the growing foreign influences. This group was in search of a Japanese identity and cultural coherence, which they found in the traditional dwelling of the rural population that became an extraordinary source of national authentic character.

In 1917 Yanagita founded the Thatch Group (白茅会), together with the architects Kon Wajiro (今和次郎, 1888-1973) and Sato Koichi (佐藤 功一, 1878-1941) with the intension of documenting and maintaining traditional Japanese rural houses.[25] These scholars were also interested in the regional differences of the rural architecture and took great care in their classifications. In this respect, the publications made by Kon Wajiro were particularly important. In his book *Japanese Minka* (日本の民家 ： 田園生活者の住家)published in 1922, Kon presented the data surveyed by him and his colleagues in the form of schematic floor-plans and elevations explaining the internal use of the uses of the house and its materiality (Fig. 7-8).[26]

The aim of the Thatch Group was the search for the elements of tradition accountable for what it was understood to be the distinctive Japanese national character. According to Kon Wajiro "*(…) in the country side, not only Edo period, but Momoyama and Muromachi period culture are also preserved (…) The study of rural houses is important to understand the different phases of Japanese culture*".[27] Other folklorist associations also published works on Japanese rural architecture as the renowned survey of rural houses made by the Green Reed Group (緑草会) from 1933 Illustrated Minka (民家図集) (Fig. 7- 9).[28]

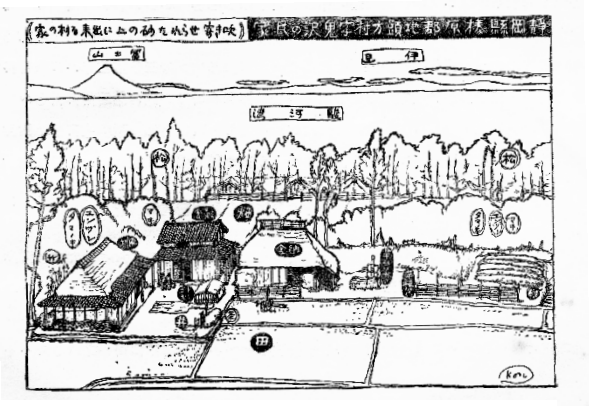


Fig. 7-8 Kon, 1922- Illustration showing three different types of rural houses of Surugawa, in Shizuoka Prefecture, showing the agricultural context

Fig. 7-9 Green Reed Group, 1931-House in Yamanashi prefecture

2.2 Western publications on Japanese rural architecture

Among the numerous Westerner publications dedicated to Japanese architecture, only a few included examples of rural architecture. One of the best exceptions is the renowned work of the German geographer Bruno Taut (1880-1938), *Houses and People of Japan* from 1937. In this book Taut described and analyzed the rural house considering the construction methods, relation with the natural environment, and aesthetic characteristics. Besides Taut's publication, —which will be analyzed in detail in the final section of this chapter— the only other Western works that included Japanese rural architecture were made within Geography.

Fig. 7-10 Davis, 1934- Ainu house. Original caption: "*The wall of rice straw (…) is designed to afford protection from cold winds*"

The American geographers Wellington D. Jones and Darrell H. Davis considered briefly the rural house in their regional studies. Their research was mostly confined to Hokkaido area, which had been by that time only recently settled by Japanese farmers after great governmental incentive to promote the development of the area.[29] Therefore, Hokkaido rural houses had been developed mostly after Meiji Restoration and were not representative of Japanese traditional culture. Due to this situation, it is not surprising that Jones and Davis focused most of their attention to the analysis of the new development of the area, showing great interest in the distribution of habitation and its relation with the railroad and land exploitation.[30] They described the houses of Hokkaido pointing out mainly the materials used for the construction and the general formal features of the construction (Figs 7-10 to 7-12). Both Jones and Davis noted the variety of houses that resulted from the different origin of the settlers of the area, who were mixed with few Ainu residents that still inhabited the area in their traditional dwellings, which were shown in pictures by Davis but not discussed.[31]

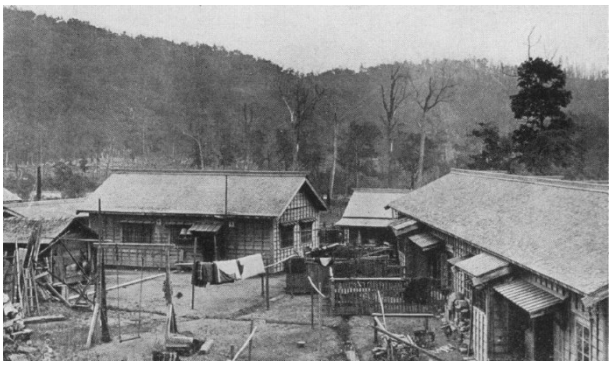


Fig. 7-11 Jones, 1921- Original caption: "*The substantial frame buildings of Hokkaido are the result of climatic conditions plus the foreign influence introduced by the group of American experts employed by the Japanese Government*"

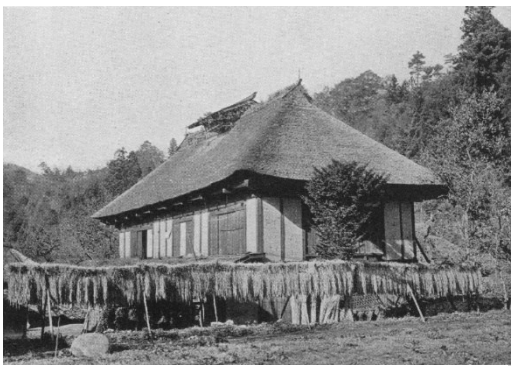


Fig. 7-12 Jones, 1921- Original caption: "*The thin-walled paper and bamboo buildings typical of Old Japan present a marked contrast to the solidly built structures shown in Fig. 10* "(Fig 7-11 at the left)

3 Hall's studies on Japanese rural architecture

According Brunhes and Demangeon geographers should focus on the average and not on exceptional cases.[32] Hall attempts to follow this rule for the regions studied in Japan, but he makes two exceptions. One is for the area of Tokachi, in which he could not determine a representative type, and the second exception is made by the examination of the Shirakawa house that is considered without analysing the region in which is located.

In all cases but Shirakawa and Tokachi, Hall examines particular habitation types for specific regions. To do so, he samples several settlements before arriving at a conclusion of the average type. In the cases of Yamato and Satsuma Hall states to have surveyed twelve villages in each case before arriving at a conclusion.[33] The selected typologies are analyzed as the last step of a systematic study of the region. These representative types are either isolated houses or village houses. In the cases of Echigo and Yamato, the houses shown belong to rural villages, being this outcome most certainly a result of selecting the hose type out of a statistical average.[34]

This way, Hall establishes four typologies which are representative of a region (*Satsuma, Izumo, Yamato*, and *Echigo*) and, going against the standard procedures of Geography, he also addresses the exceptional cases of the *Shirakawa* and *Ainu* dwellings. Each rural house is examined case by case in relation to the region's characteristic natural environment and their different cultural and historical background.[35]

3.1 Yamato type

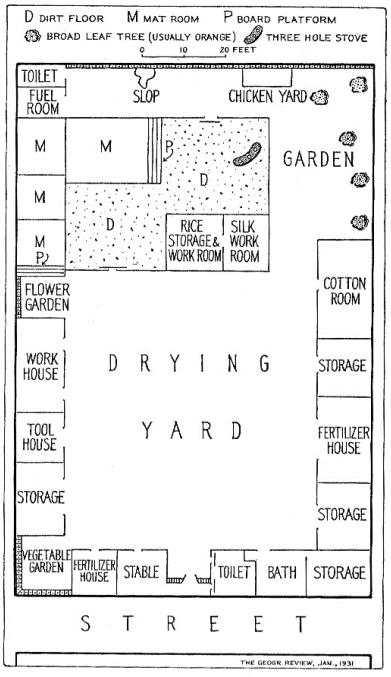


Fig. 7-13 Floor plan of Yamato house type showing the house and outbuildings.

In the study of the Yamato basin, Hall emphasizes in the importance of the Chinese imported cultural forms. Also in the house, Hall finds elements that are reminiscent to Chinese rural architecture. This conclusion was the continuation of the recognition that the land division, as well as the village type were imported from China. He arrived at this conclusion after surveying twelve villages in order where he found that 70 per cent of the houses were enclosed by walls and/or sheds, being these intact or in decay but still recognizable.[36]

Hall's examination of the house focuses on the distribution of areas and their relative position, in the horizontal organization of areas, as extending the geographer's interest in the aerial distribution of man activities on the land to the study of the house. The general floor plan is described as having five rooms, of which all but the kitchen are raised and covered with tatami mats. The areas that Hall registers in the graphic are the

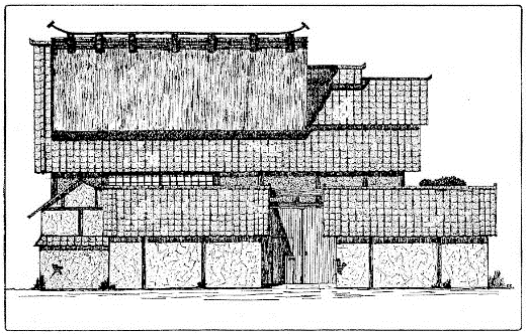


Fig. 7-14 Yamato house type elevation facade

ones who reveal the relation with the agricultural activity as the drying yards and storage rooms. The arrangement of these areas, which does not strictly depend on the agricultural activity, is explained by Hall to be a reminiscence of Chinese structures (Fig. 7-13).[37]The organization of outbuildings around the drying yard in combination with the surrounding walls creates an enclosed space which is characteristic of the rural houses of eastern China. Later studies made by Ishihara K. show the same comparison between houses of Nara and Chinese rural houses from Jinan area (济南市).[38]

The materiality of the Yamato house is only briefly discussed by making a connection between materials and the weather, always present in geographic studies, but in this case is an indirect one. The deficiency of rainfall is explained to result in frequent fires, and therefore the materials of the house (tile roofs and awnings, thick plaster over wattle) are said to respond mainly to this hazard.[39] The examination of the Yamato house is also illustrated by an elevation of the façade (Fig. 7-14), most probably sketched out of a picture. Being a geographer, Hall does not take note of the aesthetic features, nor discusses details of the life of the farmer. Being the only comment on the interior the mention of the hibachi that is described as an "*artistic charcoal brazier*", the hibachi.[40]

3.2 Satsuma type

The Satsuma house of the southern portion of Kyushu (Kagoshima Prefecture) is described by Hall as "*a true product of its environment*" and accordingly, the explanation of the house relies largely in the natural conditions.[41] Still, cultural factors play also a role in the examination, which in this case is the influence of the nearby Loo Choo Islands that stretch southwest from Kyushu until Taiwan (now called Ryukuy islands, 琉球諸島). The relation with the Loo Choo islands is made through the association of common agricultural practices and crops as the sweet potato, whose origin is traced to the islands. Whether Hall was personally in these islands is not known, but in the analysis he refers to publications on the islands made by of Chamberlain which contains descriptions of the constructions.[42]

As in Yamato basin, Hall surveys twelve villages establishing that "*the great majority of the country houses bear crude, roughly trimmed thatch roofs; about a tenth of them have shingle roofs, and of these about a half are capped on the crest by cut stone slabs*"(fig. 7-15).[43] In this case, since the hose is found to be a product of its environment, and according to Brunhes climate express itself mainly through the roof, this feature receives a great deal of attention describing in detail the different varieties and uses. For example the steep-pitched roofs, whose crest line

reaching as much as 5 meters, are explained to be made in this manner to allow the run off of the heavy rains, and in addition, to provide room to dry the tobacco which is the chief crop of the area. The roof also serves as protection against typhoons by extending to the back of the back and south side of the house.

The explanation of the house distribution (Fig. 7-16) is brief and based on the weather: "*The house, except for the kitchen portion, is raised on stilts about two-and-a-half feet above the ground and is open on one or more sides the year around. This affords adequate aeration in the warm, moist climate of southern Kyushu*".[44]

Fig. 7-15 Satsuma type. Hall finds reminiscence with houses of the southern Ryukyu Islands

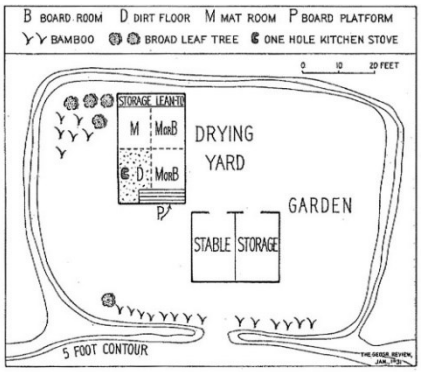


Fig. 7-16 Original caption: "Ground floor of a Satsuma occupation unit"

The inside of the house is only referred to point out that the sliding doors are replaced by heavy doors similar to those of Loo Choo. More attention is given to the description of the use of the outer areas of the house where the storage and shed which are detached from the house. As opposed to Yamato, reference is made to local materials to point out the universal use of the a soft, and easy to manipulate ash-colored rock (ash stone, 灰石) that is used for surrounding walls, as crest mounts, for making bath tubs, and for a variety of other purposes and is characteristic of Satsuma houses.[45]

3.3 Echigo type

In the examination of the Echigo type of rural house, which is located in Niigata Prefecture, Hall emphasizes again in the weather and local conditions. For example, when explaining the house Hall points out that "*(t)he roofs are of crude but heavy wooden shingles held in place by stones. The roof is asymmetrical with the shortest slope on the leeward side or facing the street. This is to retard accumulation of snow and to minimize the danger of snow falling from the roof*" (Fig. 7-17, next page).[46]

In this case there is no explicit reference as to how many habitations were surveyed to find the average, yet there is a description of a general floor plan. The representative Echigo type is described as being elongated, with the sheds and outbuildings located at the back of the living

quarters (Fig. 7-18). This elongated shape is explained to be the result of an adaptation to the limited ground space, which also encouraged the construction of two-story houses which are not common in other areas.

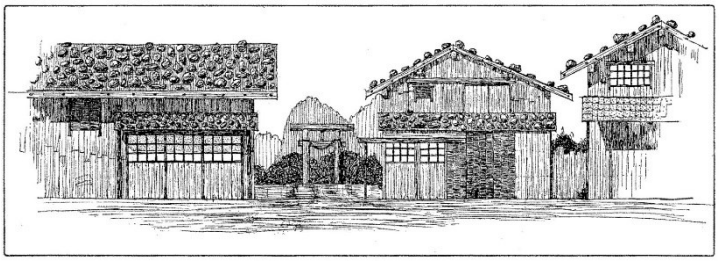


Fig. 7-17 Echigo type. Illustration showing various fronts of the elongated Echigo type showing the particular roof of heavy wooden shingles held in place by stones

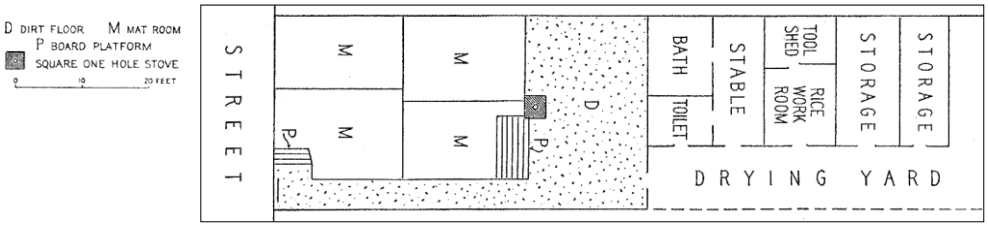


Fig. 7-18 Echigo type. Floor plan showing the house at the side of the street and the outbuildings in the back

The activities that occur outside of the house related with the agricultural production are explained by Hall, as the long poles where the crops are set to dry that cover all isolated houses during the drying season. Echigo habitation type (Figs. 7-19, 7-20), is explained to be located either in a strassendorf, where they have the long axis at right angle to the street, or isolated, where the long axis of the house is parallel to the closest route. Although in most cases Hall focuses on the description of one representative type of house, in the case of Echigo he mentions some particular cases as the house of Takata area, where the snow is very heavy and therefore the roofs are unusually extended into the street.

Fig. 7-19 Echigo type. Photography shown the article Some Rural Settlement Forms in Japan (1931)

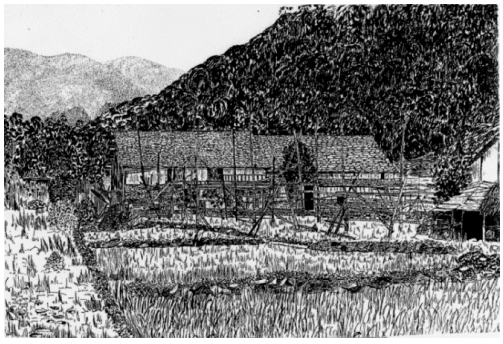


Fig. 7-20 Echigo type. Sketch shown in the regional study of Sado Island (1932), made out the photography at the left

3.4 Izumo type

The Izumo type, of Shimane Prefecture, appears explained in the regional study of Hikawa and again in in the systematic study *Cities, Villages, and Houses of Japan*. The characteristics of the house are explained as follows: "*(1)each habitation forms an individual unit with the houses, outbuildings, and dry gardens located on platforms or 'lots' raised one or two meters above the paddy level;(2) each house and yard is surrounded by a hedge of great trees which rises to about twice the height of the house and, (3) the architecture is differentiated from all other in Japan in that all buildings have a swaled roof crest*" (Fig. 7-21, 7-22).[47]

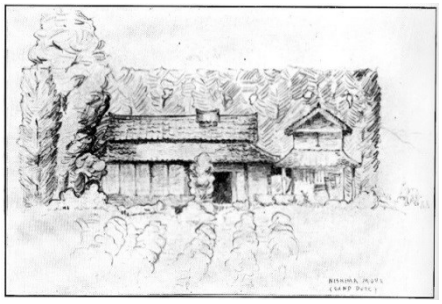


Fig. 7-21 Izumo type as published in 1933. The sketch is most probably made from a photography

Fig. 7-22 Izumo type as published in 1934. The illustration accentuated the curvature of the ridge and the tree hedge around the house, which are the elements explained in the text

To illustrate the Izumo house, Hall provides a very detailed floor plan showing the occupation unit indicating the use of each room (Fig. 7-23, next page). Besides the explanation that each house owns a boat to serve as in flood periods, the rest of the description in the text is dedicated entirely to describe the Korean features and the traditions related with the tree fence. For example, Hall points out that "*(t)he swaled ridge is a distinctive feature and is strongly reminiscent of southern Korean architecture*".[48] Another relation that Hall finds with Korean traditions is the "*guardian tree*", which in its lower part is surrounded by a straw that represents a snake, *Kojin*, the god kitchen.[49] Hall explains that the hedges that surround the Izumo house type were originally only for protection, but they have become a local culture trait and "*(t)he older dwellers of the plain find great personal satisfaction in that their hedges are higher than those of the newer settlers eastwards.*"[50]

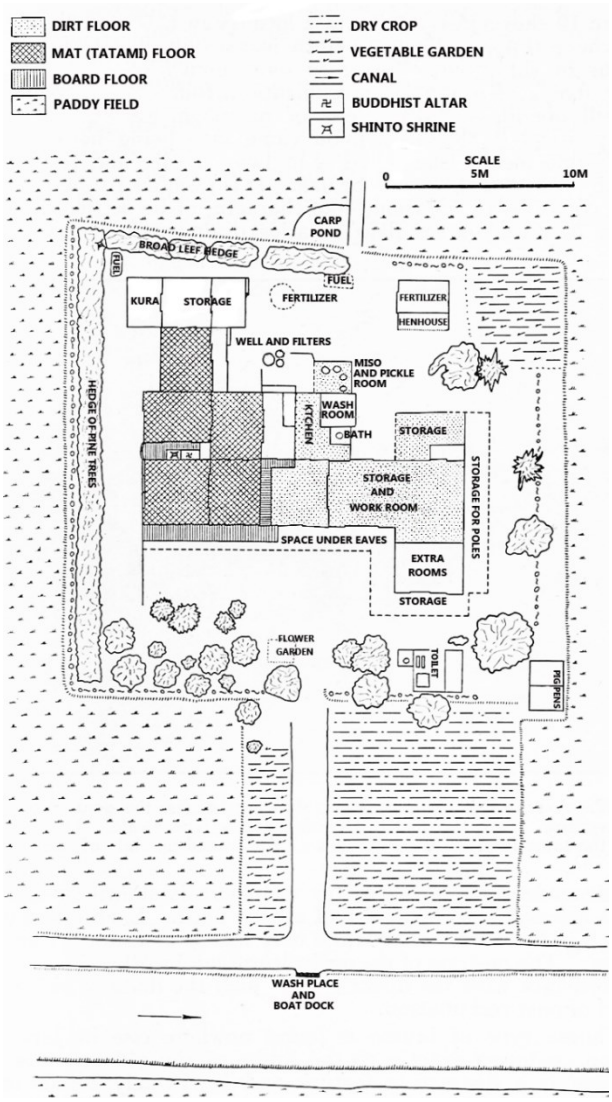


Fig. 7-23 Izumo type. Floor plan indicating different uses of the rooms and showing the location of the house in relation to the canal below

3.5 Shirakawa type

This habitation type is found only in certain valleys of Gifu and Toyama prefectures. Among the Japanese rural houses the Shirakawa type stands out because of their exceptional large size (having some of them up to five stories) and construction style. Because of the unique character of these houses, Hall presents only in this occasion a typology from an area for which no regional study was made.

Fig. 7-24 Shirakawa type referred by Hall as "*Giant*" house

This type is explained in the article *Cities, Villages, and Houses of Japan,* and is illustrated by a single illustration of the exterior appearance of the house (Fig 7-24). According to Hall, the Shirakawa type "*grows out of the severe demands of a most niggardly natural environment and is perhaps also related to the fact that the great Taira clan found refuge in this mountain fastnesses* (secure place protected by natural features) *when they were driven from the imperial court*".51 The members of the Taira clan (also called Heish, 平氏, or Heike, 平家) established in the valleys of Gifu prefecture around the end of Heian period, and were believed to be linked with the origin of these distinctive houses. The relation of the Shirakawa houses with this clan does not explain any particular feature of the construction, but this presumed relation was at the time one of the few available postulates on the origin of these houses. Later research on Shirakawa houses, now categorized as *Gassho-zukuri*, do not mention the connection with the Taira (Heishi) clan and associate the particular arrangement and shape of the house with the requirements of the rural activities performed in the house.[52]

The description of this type of house is brief, but Hall explains the construction as being of typical Japanese material and construction, without further details, and points out the outbuildings as stables, fuel sheds and storage rooms are include under the same roof. As in the rest of the examples there are not many comments of the interior of the house, but the size of the house is overstated presuming that it can shelter "*under a single roof as many as a hundred persons*", when the maximum recognized by a Japanese author was forty-three people at the late 19th century.[53]

Another important fact for Hall is the location of the house in relation to the fields, and is noted that Shirakawa houses, referred as "*Giant*" houses are individual and located in the middle of small fields, scattered with no fixed pattern. Although in this case there is no explanation about the natural environment, land division, and agricultural activities as in the previous explanation of houses, which are in every case preceded by regional analysis, it is explained that all Shirakawa houses possess a grain mill ran by water power that comes from a mountain brook and then the same water is used for silk spinning, to feed the carp ponds, and irrigate the paddy fields.

3.6 Tokachi (Ainu) type

As explained before, this region of extreme cold winters was at that time being populated with incentives from the Japanese government. New settlers were coming from all over Japan, and in addition experimental farms were set after the plans of foreign advisers, particularly American.[54]

Each settler constructed the rural houses according to their tradition, resulting in a diverse cultural landscape for which Hall could not establish a representative type. While for each region studied Hall dedicates a section to the house type, in the case of Tokachi the section is entitled "*Lack of Homogeneity in House Types*".[55] Because of the variety of house types there is no type of house selected as representative, nevertheless the house type chosen by Hall to present in the graphics is the Ainu house (Figs. 725-7 to 7-27) Hall does not day much about the Ainu or their houses, only that "*half-century ago the Tokachi Plain was inhabited only by Ainu tribes except for a few Japanese fishing villages along the seashore. The Ainus were a fishing and hunting people settled along the banks of the rivers*".[56] Besides this brief comment the only other mention of the Ainu is to explain that "*Ainu houses of marsh reed and grass with protecting split-log palisades are frequently adopted by the newcomers for temporary occupation*".[57]

According to Hall "*(t)he house structure of Old Japan cannot be used in Hokkaido without difficulty*".[58] Although in other examples there are not many details about construction or availability of materials for construction, in the case of Tokachi Hall points out that the traditional cedar tree used for construction on the rest of the country is not found in this area, and the local varieties are not strong for construction. In addition, it is noted that the marked changes of temperature break the Japanese tile, and the freezing and later melting of ice in the grounds causes the Japanese structures to pull the frameworks out of line. In his understanding, the house type of Tokachi is "*still in the experimental stage aiming to preserve the chief elements of Japanese culture and still afford comfort during the rigors of the long winter*"[41]. Hall's appreciation of this situation as an *experimental stage* seems to indicate that he believes that at some point a particular type will be prevalent in the area.

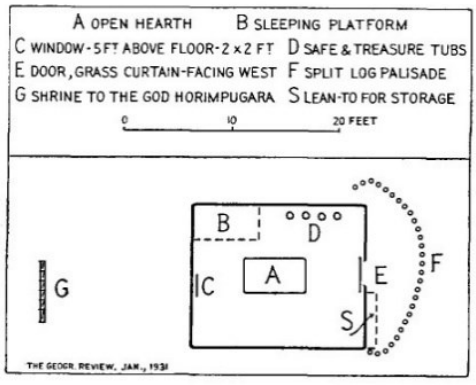


Fig. 7-25 Ainu house floor plan

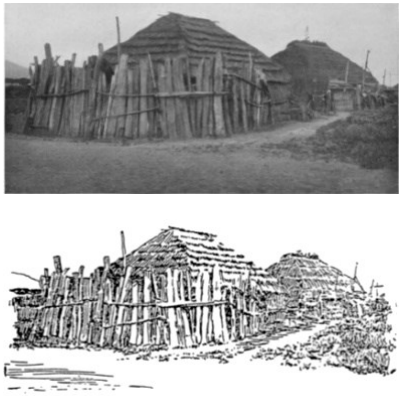


Fig. 7-26-27 Ainu house. Upper photo published in 1931, lower sketch published in 1934

4 Hall's habitation types as compared with the houses studied by Japanese scholars

In order to assess the accuracy of Hall's habitation types, these were compared with the three works from the interwar period by Kon Wajiro, Kenji Ishihara, and the Green Reed Group, and with the renowned work made by Chikada Kurata in the 1950s.[59] The table below shows the coincidences of two different aspects: main features referring to their materiality and main formal characteristics of the house, particularly the roof type; and floor plan.

Table 7-1 Hall's habitation types as compared with studies made by Japanese scholars

	Kon Wajiro		Kenji Ishihara		Green Reed Group		Chikatada Kurata	
Hall's types (1931-1934)	Main features	Floor-plan	Main features	Floor-plan	Main features	Floor-plan	Main features	Floor-plan
Satsuma	…	…	●	●	…	…	●	…
Izumo	●	●	…	…	…	…	●	…
Yamato	●	●	●	●	●	●	●	…
Echigo	●	●	x	x	●	●	x	…
Shirakawa	…	…	●	…	…	…	●	…
Tokachi	…	…	…	…	…	…	…	…

As shown in the table above, most of the types identified by Hall match the habitations shown by the Japanese scholars for those areas. Only in the case of Echigo the houses shown by Ishihara, and the representative type provided by Kurata do not agree with Hall's type. The house that Hall selects as representative of Echigo is a typical rural house from a village, with elongated floorplan and narrow front, while the houses of this area shown by Ishihara and Kurata are isolated dwellings (Fig. 7-28). The houses from Echigo (Niigata) shown by Kon Wajiro and the Green-reed group included village houses that correspond with the types selected by Hall (Figs. 7-29, 7-30)

Fig. 7-28 Ishihara, 1934-Niigata rural house

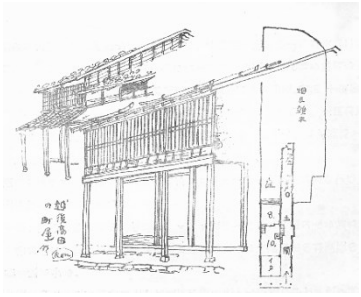


Fig. 7-29 Kon Wajiro, Niigata village house

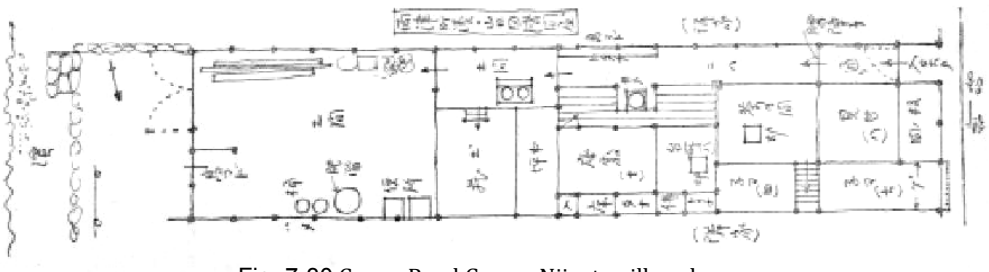


Fig. 7-30 Green-Reed Group, Niigata village house

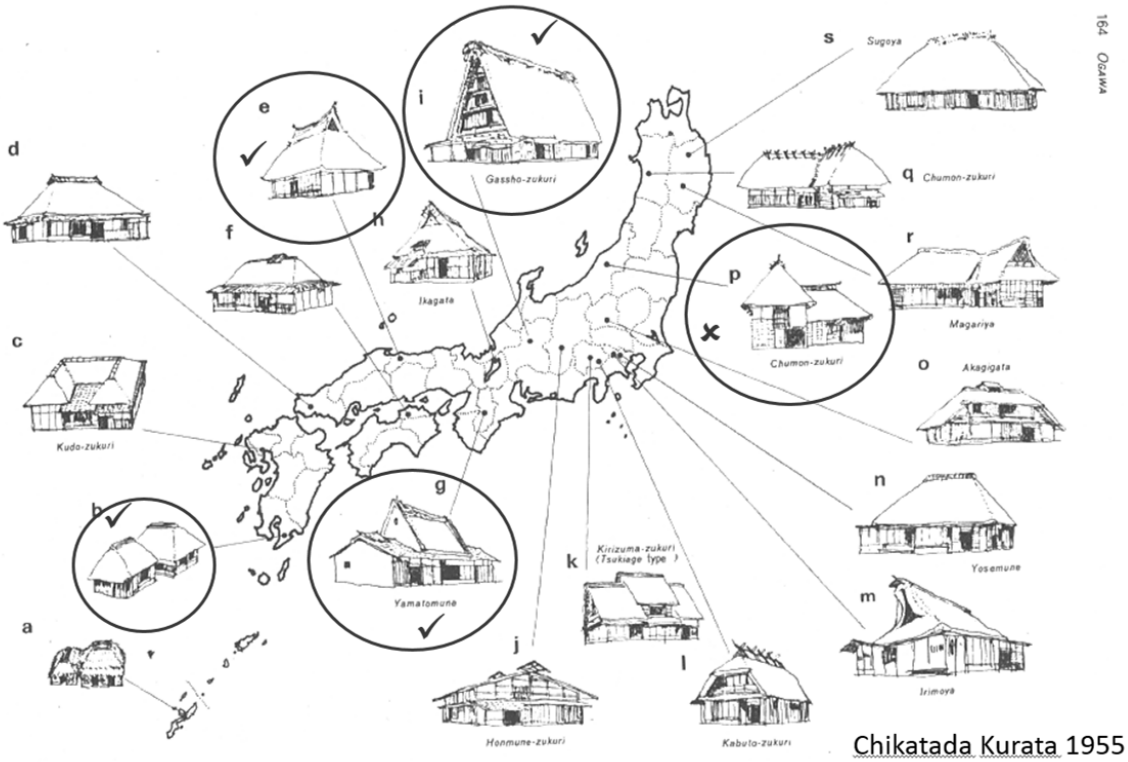


Fig. 7-31 Ogawa-Regional Perspective of Farmhouses with their Nomenclature (after the work of Chikatada Kurata, 1955), 1980. The houses encircled are the ones belonging to the areas studiesd by Hall, and the tick indicates a correspondence between Kurata's and Hall's works.

5 Comparison of Hall's and Taut's studies on Japanese rural architecture

Among the numerous Westerner publications dedicated to Japanese architecture that appeared after Meiji Restoration, only a few included examples of rural architecture. In this section, Hall's studies on Japanese rural architecture will be compare with the work on the same subject of the renowned German geographer Bruno Taut.

Bruno Taut's publications on Japan are probably the best known Western works on Japanese architecture. Taut's studies have for long monopolized the studies on the Western perception of Japan, and are still shaping Western ideas about Japanese architecture and culture. The German architect was in Japan for three years during the 1930s, time during which he was dedicated to the study of Japanese culture and architecture. The outcome of his investigation was captured in several publications, being the most important the book *Houses and People of Japan* from 1937.

Contrary to Taut's publications, Hall's studies on Japanese rural architecture remain largely unknown. The academic articles made by Hall were published only in specialized geographic journals and were not available for large audiences.

The ground for the comparison of these two disparate but related works lies in the fact that both Hall and Taut (1)performed field work in Japan during the same period (1930's), (2)based their studies primarily on their personal field work, (3) they analyzed a common subject (Japanese rural housing), but (4) within the frameworks of rather dissimilar disciplines. With these conditions in mind, the aim of the present comparison of Hall's and Taut's studies is to make clear how their different ideological and disciplinary frameworks affected their interpretation of Japanese rural architecture.

To examine how their different approaches influenced their interpretation of the subject, four particular points are here compared: first, the context and their intentions when studying rural architecture (section 5.1), second, their respective approaches for the study of Japanese rural architecture (section 52), where it is discussed Hall's and Taut's general strategies or methods to address the subject as a whole; third, it is examined how each author analyzed a single habitation unit (section 5.3); to finally consider (section 5.4), the characteristic features found common to all Japanese rural architecture, comparing their respective view of such common characteristics.

The comparison will be based on the contents on Japanese rural architecture of the author's most relevant publications. In the case of Bruno Taut, the comparative analysis is mostly based on evidence drawn from his most popular work on Japan, *Houses and People of Japan* from 1937, which is also where Taut made the most extensive analysis of Japanese rural houses.[60] To support this analysis, previous analysis of Taut's writings are considered, particularly the work of Esra Ackan and Astrid Edlinger.[61]

In the case of Hall, the evidence for the comparative analysis comes mainly from the previous analysis of this chapter, including as well the analysis made in chapters 4 and 5, on Hall's

possibilistic tendencies in the interpretation of the Japanese architecture, and his historical approach.

5.1 Context and intentions of Taut's and Hall's studies

Taut's studies on Japanese rural houses are part of an examination of the county's architecture which is largely based on his personal experience.[62] In *Houses and People of Japan,* Taut wants to show the "*general tendencies and developments in Japanese architecture and its relation to Japanese civilization"*.[63] His study of Japanese architecture is guided by the drive to prove that Japanese architecture responds to logical and understandable causes. Taut's intention to demonstrate that *"strange and unaccustomed ways have very natural and simple reasons"* is a reaction against Western claims, common at that time in popular publications, which portrayed Japanese architecture as exotic.[64] Taut's particular interest in rural houses comes from his understanding of the fundamental role of the farmers within the complex of Japanese culture. According to Taut, the culture of the farmer is "*the true key to all Japanese culture up to the present day"* since despite all changes in Japanese history the farmers were always the majority of the population, being in addition the only class that survived all cultural and social readjustments (Fig. 7-32).[65]

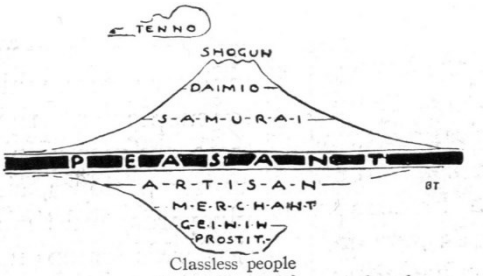


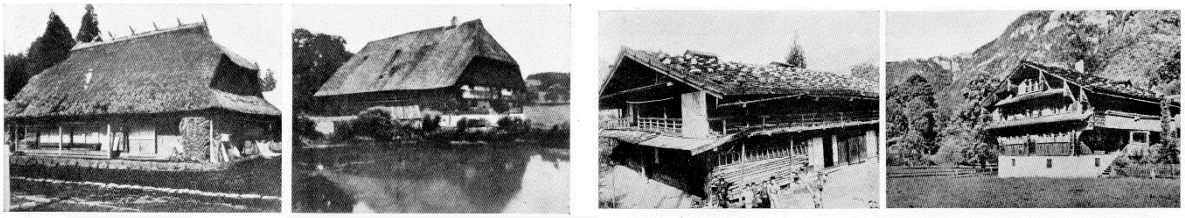
Fig. 7-32 Taut- Japanese class system in Tokugawa Regime. The peasants are the base of the system

On the other hand, Hall's intentions when studying Japanese rural architecture are related with an interest of his academic discipline. As regional geographer, Hall is interested in the rural habitation as an implement of agriculture and therefore he integrated the study of the house into the analysis of the region. Hall's studies on rural architecture are part of broader regional studies and his writings maintain distance from personal intentions, avoiding value judgments on any aspect of Japanese culture or society.

5.2 Approach to the study of rural architecture

In order to support his argument that Japanese houses should not be regarded as exotic, Taut's chosen approach is the comparison between Japanese and European houses. Their resemblance is taken as the central theme from the beginning of the discussion. To demonstrate this resemblance, Taut presents Six pairs of photographs paralleling European and Japanese examples with very similar exterior appearance (Fig. 7-33, next page). To confirm his observation on the similitude of these houses, Taut stated to have shown a several pictures of farmhouses from Europe to a Japanese person who would not believe that the houses were from other countries.[66]

Since the direct influence between the Japanese and European cultures at the time these houses were built was not a possible explanation, Taut speculates on the reasons for such resemblance. In his understanding, the similarities are related to a common human origin, suggesting that to find the causes of the similitudes of rural houses "*researches* (…) *would have to go back to the remotest prehistorical ages, to the time of the first primitive creation of human language".*[67] By referring to the common origin of all humans Taut is defying the accepted academic doctrines of his time —which denied the possibility of a shared ancestor of Indo-Europeans with people from other areas— in order to establish a link between the Japanese and the European cultures.[68]



Japan | Germany, "Schwarzwald" (Black Forrest) | Japan | The Balkans (Serbia)

Fig. 7-33 Taut's comparisons of Japanese rural houses (at the left) with European houses (to the right. Taut's original captions are reproduced at the bottom of the pictures). Six pairs of houses are compared

At the time Taut made this research on Japanese rural architecture, the 1930s, the discourse of the vernacular types and the revival of traditional styles, as the *Heimatstil*, were becoming a political tool for the German nationalism. According to the analysis of Taut's writings made by Esra Akcan, Taut disapproves of this movement and instead wants to promote the study of architecture to disclose the principles of cosmopolitanism, not nationalism.[69] For this reason Taut stresses that the Japanese farmer has kept "*the equality of human production with an astounding fidelity and stand to-day as the truest witness that all men are brothers*".[70]

Although the similarity of the houses paralleled in pictures is not further explained by Taut, in several occasions throughout his writings he makes reference to the fact that people have come to similar architectural results as a response to similar climates. When contrasting the different characteristics of the light and open Japanese construction with the secure and heavy walls of the houses in Ibiza, Taut explains how it is possible to see "*the same process of reasoning operating everywhere, producing divergent results only as the consequence of varying local conditions*," adding that "*farmers in Ibiza would act as logically as the Japanese and would undoubtedly live and build in Japan as their Japanese collegues* (sic) *do, just as the Japanese also would change their style on the Baleares in response to the different climatic conditions* (…)".[71] With this statements Taut does not imply that man and his culture are determined by the natural environment, but rather that men of different cultures arrive to the same logical conclusions because they are equally logical.[72] Therefore, although Taut considers an extensive array of factors when studying architecture including from history to ergonomics, he relies strongly on the natural conditions to base his explanations of rural architecture to back his argument of the

equality of human production.

In opposition to Taut's convictions, Hall affirms that "*different groups have adapted themselves in different ways in similar or in the same environment, and* (…) *that the same people, in different cultural stages, have reacted differently to the same environment*".[73] This statement does not intend to disregard the relationship between the man-made elements of the landscape and the natural environment. What Hall refers to with this account is to the impossibility of basing the explanations of any aspect of culture in the natural environment alone.

5.3 Explanation of a house unit

Fig. 7-34 Taut-Rural house in Shirakawa. Taut provides an insight of the life of the farmer in his dwelling

Taut's discussion on Japanese rural houses addresses a generic type, focusing on specific features as roofs, fireplaces, or working areas. Because of his interest in the life and work of the farmer, Taut chooses to describe the elements of the house from an experiential point of view, assessing them as to their practical use and aesthetic qualities, and using these elements as means to describe the house (Fig. 7-34). Of the fireplace for example, which receives particular attention, Taut makes the following appreciation: "*Farmhouses all over the world once had the same open fireplace as is found nowadays in Japan,* (…) *(t)he smoke fills the whole room and some skills is needed to sit at right angles to the fire so as to keep your eyes from watering. But as the hall of the farmhouse has no ceiling, the smoke rises freely up to the roof, blackening all the wood,* (…) *which* (…) *has a beautiful red- brown tinge*".[74]

Taut's descriptions are not intended to provide a classification or an exhaustive display of Japanese rural houses since he was aware, as shown by his references, of the numerous Japanese works on the subject.[75] His explanations provide the reader with an insight of the life of the farmer and the routine of a house while describing its construction.

Also when discussing particular features of the house, Taut compares them with their counterparts in Europe, more specifically, with examples from Scandinavia. A Norwegian house from the 15th century —shown in plan, section, and photographs— is presented by Taut to point out the similarity of the veranda projecting form the south side and the thick layer of earth with overgrown grass, which he recognizes as a feature often appearing in Japanese houses.[76] The Japanese corresponding features are not actually shown. In fact, the similitudes found by Taut are partial and do not have exact equals nor correspond to the same functions. For example, a similarity that interests Taut is the Swedish custom to keep the valuable goods in a separate

building, as is done in Japanese houses. The construction of the Swedish storehouse is compared nevertheless to a Japanese Shinto shrine, and not with the Japanese storehouse. This fragmentary comparison process does not provide irrefutable evidence for Taut's arguments on humanity's shared logic, but conveys an identification between the European and Japanese cultures. Taut looks for familiar features in an environment that had been described as exotic to express the idea that there is certain common ground between the two cultures.

In Hall's case, since within Geography the rural habitation was considered to be mainly an implement of the land exploitation system, the study of land use plays an important role in his analysis of settlements.

Fig. 7-35 Hall-The Satsuma habitation type, The exterior appearance is compared with the houses of the Ryukyu Islands

Hall's schematic graphics of the floor plans show mainly its functions, and indicate the flooring materials of each area. He considers the materials of roofs, walls, and floors inasmuch as they are responses to environmental conditions, either climatic or geographical. Although this seems to be a contradiction with Hall's previously stated opinions suggesting a causation found in the natural environment, there is never assumed or indicated that there is a single way of adapting to a climate. Hall does consider the relation of the natural environment with the habitation, in fact, it is in the relation of man and land that he is mostly interested, but he does not found all the explanations directly in nature, for example, assigning also great importance to the foreign cultural influences.

Among all the different types of Japanese rural housing, there is one that receives attention from both authors: the houses of Shirakaw. Although Taut describes most of the Japanese houses looking for general characteristics without specifying any particular type or category, the houses of Shirakawa are singled out from the rest and examined at length. Hall, meanwhile, refers to them as the "*Giant houses*", and describes and examined them in the article *Cities, Villages, and House of Japan* (Fig. 7-24 previously shown in p. 143).[77]

Taut was particularly interested in the Shirakawa habitation because, in his understanding, "*(t)hey show logical and rationalistic construction in the manner of ancient Europe*", which strengthen his argument on the shared logic of all humanity.[78] Hall, on the other hand, pays attention to the distribution and disposition of these *giant* houses finding them particular because they are detached, located in the midst of small fields, noticing the singularity that these are the only type of Japanese rural houses without sheds.

5.4 Characteristic features common to all Japanese rural houses

Despite the differences in their studies, when considering common features of Japanese rural housing, Taut and Hall arrive at the same conclusions: (a) the Japanese rural house is adapted mainly to the summer weather, (b) the rural house is an implement of rice agriculture, and (c) in spite of great formal variation, Japanese rural houses have certain features that gives them an apparent unity.

(a) Taut and Hall recognize that the Japanese rural architecture is well suited for the summer weather, describing the houses using both the same terms: "*lightly constructed*".[79] They also point out that these houses are not prepared for the cold winters of the northern areas of Japan. The adaptation of the house to the natural environment is prevailing throughout Taut's explanations, and therefore the presence of these same *lightly constructed* houses in cold areas is for him the only remaining of the "*great mysteries in regard to the climate",* finding no explanation for this fact.[80] Hall, on the other hand, attributes the unsuitability of the house to colder areas to the fact that the Japanese rural house is still in a process of adaptation —as in the case of Hokkaido.

(b) The connection between the Japanese rural house and rice agriculture is naturally acknowledged by both authors, but they use this fact to clarify different things. Despite Taut's associations between Japanese and European houses, there are variances that he explains by stating that "*(t)he nature of the farm work, which is almost entirely confined to the cultivation of rice and mulberry-trees* (…) *explains all the differences from farmhouses elsewhere".*[81] The differences pointed out by Taut, such as the small scale exploitation and the smaller amount of animal shelters unnecessary for the rice production, can be explained by the type of production. Hall, on the other hand, states that "*as most farm families carry on a highly similar agriculture, the majority of rural habitations have many features in common*", using the extended practice of rice agriculture as part of the explanation for the resemblance he finds among all Japanese rural houses.[82]

(c) Although Taut recognizes that "*in particular regions one special type, which has stood the test of time, is often repeated"*,[83] he finds more interest in the coexistence of different types of roofing, materials, and shapes within the same region. Still, within this diversity he notes a "*peaceful union*" that prevails despite variations.[84] In Taut's words, in the varied styles "*there is ever the same spirit which unites all the many variations and produces an aesthetic whole*".[85] Taut does not discuss in detail such union, but the way he analyzes the rural houses focusing on common features and underemphasizing the differentiation of types is consistent with his perception of unity.

Hall also perceives an overall uniformity in the Japanese culture that he finds represented in the farm houses, despite the establishment of different types by region.[86] Besides being partially a consequence of the same type of agriculture as explained before, Hall understands that the

common origin of Japanese rural houses is also responsible for their resemblance. According to Hall, all Japanese houses have developed from *"a thatch covered lean-to made of two crossed beams supporting a longer ridge pole and covering a shallow pit"*, presumption that has been confirmed by post-World War 2 archeological studies.[87] Following the considerations on the evolution, Hall describes the common features of Japanese houses as follows: "*The basic house* (…) *seems to be a rectangular structure of three rooms. At one end is the dirt floored kitchen, which serves as the main entrance.* (…) *The middle room in the ancient house had a bare board floor and, although this later came to be covered with a matting, a narrow board platform persists on the kitchen side.* (…) *The floor of the third room is covered by thick woven mats, or* tatami*, which are of a standard size throughout Japan.* (…) *Sliding doors with light wooden frames, covered by* shoji *of thin rice paper, separate the rooms*".[88] This general description is the only occasion in which Hall talks about the interior features of the house since these types of architectural features were considered of secondary interest for the geographer.

Conclusion

As a regional geographer, and following the guidelines of French Geographers, Hall attempted to determine one representative rural house typology for each region studied. Other works made by contemporaneous American geographers do not show the same procedures. For example, while Nash makes a categorization by material, Scofield and Kniffen are interested in determining the distribution of different types within a region. This difference in approach might find an explanation in the fact that in the United States most the rural population is integrated by immigrants —as noted by Krug-Genthe, discussed in chapter 4, page 69—, and that situation resulted in a combination of varied type of settlements and house types. This circumstances are similar to the case of Tokaido, which was at the time a frontier region with various influences, and in this case Hall could not find one representative type.

Hall analyzed and explained the habitation units according to the factors that were considered of more importance. In some cases the predominance was given to the natural environment, as in the case of the Satsuma type, and in other cases to the cultural factors, as in the case of Yamato type. While Hall's examinations of cultural factors that could explain the habitations focused on foreign influences, Japanese scholars as Wajiro Kon studied rural houses placing the emphasis also in cultural factors that could explain them, but focusing on finding what was originally Japanese.

Another example of the different results that can appear from different intentions of the research, is revealed in the comparison of Hall's and Taut's works. Near the end of his study, Taut makes the following observation while assessing his own work: "*I came to the conclusion that the practical work and researches of an author* (…) *are based entirely on his leading idea*. (…) *There must always be a selection. And that selection, as to material, methods and terms of reference, will*

be fixed by the point of view taken by the scholar".[89] The differences in the studies on Japanese rural architecture compared in this article seem to confirm Taut's statement.

For Taut, architecture is the center of attention of his studies, and his main intention is to show that these houses were not *exotic*, but that they have simple and logical explanations. Hall, on the other hand, is interested in rural architecture as an implement of agriculture. Taut's comparison between Japanese and European houses allows him to illustrate how both cultures have developed similar responses to similar environments.[90] From Hall's stand point, such comparison would act against his belief that cultures can adapt differently in similar environments. Hall addresses the relation of Japanese houses with foreign cultures only when there has been a direct influence as in the case of the China in the Yamato house, or Korea in the Izumo house.

Notes

[1] Demangeon, A.: *La Picardie et les Regions Voisines,* Armand Colin, Paris, 1905. p. 360.

[2] See Santini, T and Taji, T: *Robert b. Hall's Studies on Japanese Rural Architecture. Through a Comparison with Bruno Taut's Writings*, Journal of Architecture and Planning of the Architectural Institute of Japan, Vol. 80, No. 713, pp. 1661-1670, Jul., 2015

[3] Brunhes, J.: *Human Geography. An Attempt at a Positive Classification Principles and Examples*, Rand Mc. Nally & Co., New York, 1920, p. 75

[4] Ibid., p. 76

[5] Ibid., p. 86

[6] Ibid., p. 88

[7] Demangeon, A.: *Dictionnaire-manuel-illustré de géographie*, Armand Colin, 1907

[8] Demangeon, A., *La Picardie et les Regions Voisines.*, p. 360.

[9] Ibid.

[10] Demangeon, A.: *Problemes de la Geographie Humaine*, Armand Colin, Paris, 1942. *Troisieme principie de la geographie humaine*, p. 33

[11] Featherstonhaugh, George W.: *Excursion through the Slave States*, Harper & Brothers, New York, 1844. The examples from

[12] http://passporttoknowledge.com/storm/who/bios/women3.htm (last accessed on 2015.06.09)

[13] Scofield, Edna: *The Evolution and Development of Tennessee Houses*, Journal of the Tennessee Academy of Sciences, Vol. II, No. 4, pp. 229-240, Oct., 1936, p. 230

[14] Ibid., p. 230

[15] Ibid. Work referred: Phillips, U. B.: *Life and Labour in the Old South*, Little, Brown, Boston, 1929

[16] Kniffen, Fred B.: *Louisiana House Types*, Annals of the Association of American Geographers, Vol. 26, No. 4, pp. 179-193, Dec., 1936, p. 192

[17] Records of the round Table of the Association of American Geographers held at Syracuse, New York, December 1936, Published as: *Round Table on Problems in Cultural Geography*, Annals of the Association of American Geographers, Vol. 27, No. 3, pp. 155-175, 1937, p. 163

[18] Vlach, John Michael: *Fred B. Kniffen's Milestones in American Folklife Study*, The Journal of American Folklore, Vol. 108, No. 429, pp. 328-333, 1995, p.

[19] Kniffen, Fred B., op. cit., pp. 180-181

[20] Ibid., pp. 180-181

[21] Finley, Robert & Scott, E. M.: *A Great Lakes-to-Gulf Profile of Dispersed Dwelling Types*, Geographical Review, Vol. 30, No. 3, pp. 412-419, 1940

[22] Finley, Robert & Scott, E. M., op. cit., p. 412

[23] Randolph, J.: *Population Pressure in Japan, Far Eastern Survey*, Vol. 5, No.13, 1936

[24] Morse Ronald A.: *Yanagita Kunio and the folklore movement : the search for Japan's national character and distinctiveness*, New York,Garland Pub., 1990

[25] Weldelken-Mortensen, C.: *Living with the Past: Preservation and Development in Japanese Architecture and Town Planning*, MIT, PhD. Dissertation, 1994. p. 35

[26] 今和次郎: 日本の民家 : 田園生活者の住家,鈴木書店, 1922

[27] Weldelken-Mortensen, C., op. cit. p. 37

[28] 緑草会編:民家図集, 第 1 輯 山梨県 - 第 12 輯 長野県,大塚巧芸社, 1930-1931

[29] Davis, D. H.: *Agricultural Occupation of Hokkaido*, Economic Geography, 10:4, 1934, pp. 348-367. p.348

[30] Jones, W. D.: *Hokkaido, the Northland of Japan*, Geographical Review, Vol. 11 No.1, 1921, pp. 16-30

[31] Davis D. H.: *Type Occupance Patterns in Hokkaido*, Annals of the Association of American Geographers, Vol. 24,

No. 4, pp. 201-223

[32] Brunhes, J., op. cit., p.75

[33] Hall, R. B.: *Some Rural Settlement Forms in Japan,* op. cit., pp. 101, 107.

[34] Some of the results of investigations made by Japanese scholars during the same period do not agree in the typology found average for the regions of Yamato (Nara) and Echigo (Niigata). For example, the typology selected as representative of Niigata by Ishihara Kenji (in 日本農民建築, 聚楽社, 第 14 輯, 1934) corresponds to the isolated typology. Nevertheless, Hall's typology have been confirmed by the authors of this paper by a comparison made with the work the Green Reed group (*Illustrated Minka* from 1933 -民家図-see note 2) that confirms that Hall's selected typology for Niigata and Nara, are the types found in the villages.

[35] In the article *Some Rural Settlement Forms in Japan*, Hall presents the studies of the rural settlement of *Satsuma, Yamato, Echigo*, and *Tokachi*. In the regional study of the Hiinokawa plain, he presents the study of the Izumo habitation type. Then, in *Cities, Villages, and Houses of Japan*, he makes a summary of the types studies before, adding the Izumo and Shirakawa types.

[36] Hall, R. B.: Some Rural Settlement Forms in Japan, op. cit., p.101

[37] Ibid.

[38] Later, Ishihara K. makes the same comparison between houses of Nara and Chinese rural houses from Jinan area (济南市). 石原憲治 : 日本農民建築の研究, 南洋堂書店出版部, 1976.

[39] Hall, R. B.: *Some Rural Settlement Forms in Japan,* op. cit.,p.101

[40] Ibid.102

[41] Ibid. 107

[42] The information of the Loo Choo or Luchu or Rykyu the information referred by Hall is the article Chamberlain B. H.: *The Luchu Islands and their Inhabitants*, Geographical Journal, Vol. 5, 1895

[43] Hall, R. B.: *Some Rural Settlement Forms in Japan,* op. cit.,p.107

[44] Ibid.

[45] Ibid. p. 102

[46] Ibid., p. 116

[47] Hall, R. B.: *Cities, Villages, and Houses of Japan*, Quarterly Review of the Michigan Alumnus, pp. 138-149, 1934, p. 143

[48] Hall, R. B.: *The Hiinokawa Plain,* Papers Fifth Pan-Pacific Science Congress, pp.1359-1371, 1933. p. 1370

[49] According to Kym Yulkyu, Prof. of the department of Literature of Inje University, these guardian tress can be still be found in the entrance of some Korean villages. From Kym, Y: Shamanistic Images in Korean Mythology, Quarterly on Korean Art and Culture, Vol. 22, No. 4, pp. 24-29, 2008

[50] Hall, R. B.: *Cities, Villages, and Houses of Japan,,* op. cit. p. 144

[51] Ibid., p. 145

[52] 新福 祐子 : 富山県の合掌住宅 (第 1 報), 家政学雑誌, Vol.26, No.3, pp.217-224, 1975.

[53] Nishi, Midori: *Regional variations in Japanese Farmhouses,* Annals of the Association of American Geographers, Vol. 57, No. 2, pp. 201-223 1967

[54] Davis, D. H.: Agricultural Occupation of Hokkaido, *Economic Geography*, Vol.10, No.4, pp. 348-367, 1934.

[55] Hall, R. B.: *Some Rural Settlement Forms in Japan*, op. cit., p.121

[56] Hall, R. B.: *Some Rural Settlement Forms in Japan,* op. cit.,p.119

[57] Ibid., p. 121

[58] Ibid., p. 121

[59] The works consulted were 今和次郎: 日本の民家 : 田園生活者の住家,鈴木書店, 1922; 石原憲治 : 日本農民建築, 第 1 輯-第 16 輯, 1934; 緑草会編:民家図集, 第 1 輯 山梨県 - 第 12 輯 長野県,大塚巧芸社, 1930-1931; and 蔵田周忠 : .民家帖, 古今書院, 1955.

[60] Taut. B.: *Houses and People of Japan*, Sanseido, Tokyo, 1937

[61] Ackan, E.: Bruno Taut's translations out of Germany. In Lejeune, J. F. and Sabatino, M. (eds.): *Modern*

Architecture and the Mediterranean: Vernacular Dialogues and Contested Identities, Routledge, New York, 2010; and Edlinger, A.: The Japanese Example-or the art of appropriation. In Herrle, P. and Wegerhoff, E. (eds.): *Architecture and Identity*, Münster, Lit Verlag, 2008

62 Taut. B., op. cit., Foreword

63 Ibid.

64 Ibid., p. 70.

65 Ibid., p. 101.

66 Taut, B., op. cit., p. 105. The exact location of most of the Japanese houses shown in the comparative pictures is not specified by Taut.

67 Ibid., p. 108.

68 The idea of the *monogenesis* of a proto-human language (*proto-welt-sprache*) and all subsequent languages descending from a single ancestral type had been abandoned during the late 19th century, because of the myth of the Indo-Europeans were unrelated to any other family in the evolution line. This idea of monogenesis began to be considered seriously again only in the last decades of the 20th century. For a detail discussion on the subject see Ruhlen, M.: *On the origin of languages: studies in linguistic taxonomy*, Stanford University Press, pp. 122-136, 1994, p. 28.

69 Ackan, E., op. cit., p. 203.

70 Taut, B., op. cit., p. 108

71 Ibid., pp. 67, 68

72 According to Astrid Edlinger's analysis of Taut's writings, the subject of the modern separation of man and nature was a concern for Taut, and through his practical and theoretical work he looks for a reconnection with nature. This inclination of Taut's thought might have encouraged his interest in rural habitation and the emphasis on nature in the explanations of such houses.

73 Hall, R. B.: The Geographic Region: A Resume, *Annals of the Association of American Geographers*, Vol.25, No.3, pp. 122-136, 1935, p. 125

74 Taut, B., op. cit., pp. 111-112.

75 Taut refers for example to the work of Kenji Ishihara, from which he took a series of floor-plans. Taut, B., op. cit., p. 116

76 Taut, B., op. cit., p.111

77 Hall, R. B.: *Cities, Villages and Houses of Japan* , op. cit., p.145

78 Ibid., p. 127

79 Taut, B., op. cit., p. 95. Hall, R. B.: *Some Rural Settlement Forms in Japan*, op. cit., p.123.

80 Taut, B., op. cit., p. 95

81 Ibid., p. 120

82 Hall, R. B.: *Cities, Villages, and Houses of Japan*, op. cit., p 139

83 Taut, B., op. cit., p. 108.

84 Ibid., pp. 108-109.

85 Ibid.

86 Hall, R. B.: Cities, Villages, and Houses of Japan, op. cit., p 139.

87 Ibid. The source of Hall's data on the origin of Japanese houses is not known, but later research made by Japanese scholars confirms Hall's speculation on the origin of Japanese rural housing. See for example Ogawa, Tohru: "Geographical Distribution and Historic Development of Rural House Types in Japan, A Cultural Geography", in Association of Japanese Geographers (eds.): *Geography of Japan*, Teikoku-Shoin, 1980.

88 Hall, R. B.: Cities, Villages, and Houses of Japan, op. cit., pp. 139-140

89 Taut. B., op. cit., p. 252.

90 Taut does not imply that it is the natural setting which determines man's responses to it, but rather, that man of all cultures are equally logical and therefore they arrive at similar housing solutions. Taut's position is close to

the concept of *Probabilism*, put forward by O. H. K. Spate in 1957, which is a mid-point between environmental determinism (ideology according to which culture is determined by nature) and possibilism (ideology according to which man and nature influence each other and is culture which creates the cultural landscape). According to probabilism, although nature does not determined culture, it sets constrains and limitations, and therefore there are certain responses that are more probable than others.

Image sources:

Fig. 7-1 Demangeon, A: *La Picardie et les Régions Voisines, Artois, Cambrésis, Beauvaisis,* Armand Colin, Paris, 1905. p. 368

Fig. 7-2 Ibid. Plate XIV

Fig. 7-3 Scofield, Edna: *The Evolution and Development of Tennessee Houses*, Journal of the Tennessee Academy of Sciences, Vol. II, No. 4, pp. 229-240, 1936, p. 231

Fig. 7-4 Kniffen, Fred B.: *Louisiana House Types*, Annals of the Association of American Geographers, Vol. 26, No. 4, pp. 179-193, Dec., 1936, p. 184

Fig. 7-5 Ibid., p. 186

Fig. 7-6 Ibid., p. 192

Fig. 7-7 Finley, Robert & Scott, E. M.: *A Great Lakes-to-Gulf Profile of Dispersed Dwelling Types*, Geographical Review, Vol. 30, No. 3, pp. 412-419, 1940, p. 414

Fig. 7-8 今和次郎: 日本の民家 ： 田園生活者の住家,鈴木書店, 1922 p. 166

Fig. 7-9 緑草会: 民家図集, 第 1 輯 山梨県 - 第 12 輯 長野県, 大塚巧芸社, 1930-1931. Unnumbered plate

Fig. 7-10 Davis, D. H.: *Type Occupance Patterns in Hokkaido*, Annals of the Association of American Geographers, Vol. 24 No.4, pp. 201-223, Dec. 1934 p. 217, Plate XII

Fig. 7-11 Jones, W. D.: *Hokkaido, the Northland of Japan*, Geographical Review, Vol. 11, No. 1, pp. 16-30, 1922. p. 28

Fig. 7-12 Ibid., p. 28, Fig. 11

Fig. 7-13 Hall, R. B.: *Some Rural Settlements Forms in Japan*, Geographical Review, Vol.21 No.1, pp. 93-123, 193, p. 101

Fig. 7-14 Ibid., p. 100

Fig. 7-15 Ibid., p. 106

Fig. 7-16 Ibid., p. 107

Fig. 7-17 Ibid. p. 114

Fig. 7-18 Ibid.

Fig. 7-19 Ibid., p. 116

Fig. 7-20 Hall, R. B.: *Sado Island*, Michigan Academy of science Arts and Letters, Vol. 16, Ann Arbor, pp. 275-297, 1931, plate XVIII

Fig. 7-21 Hall, R. B.: *The Hiinokawa Plain,* Papers Fifth Pan-Pacific Science Congress, pp.1359-1371, 1933. p. 1370

Fig. 7-22 Hall, R. B.: *Cities, Villages, and Houses of Japan*, Quarterly Review of the Michigan Alumnus, pp. 138-149, 1934. p. 143

Fig. 7-23 Hall, R. B.: Hall, R. B.: *The Hiinokawa Plain,* op. cit., p. 1369

Fig. 7-24 Hall, R. B.: *Cities, Villages, and Houses of Japan*, op. cit. 145

Fig. 7-25 Hall, R. B.: *Some Rural Settlements Forms in Japan*, op, cit., p. 107

Fig. 7-26 Hall, R. B.: Ibid., p. 118

Fig. 7-27 Hall, R. B.: *Cities, Villages, and Houses of Japan*, op. cit. 146

Fig. 7-28 石原憲治 ： 日本農民建築, 第 1 輯-第 16 輯, 1934, Image 21

Fig. 7-29 今和次郎 ： 日本の民家 ： 田園生活者の住家,鈴木書店, 1922, p. 19

Fig. 7-30 緑草会編:民家図集, 第 1 輯 山梨県 - 第 12 輯 長野県,大塚巧芸社, 1930-1931 , plate 20

Fig. 7-31 Ogawa, Tohru: *Geographical Distribution and Historic Development of Rural House Types in Japan. A*

Cultural Geography. In Nishikawa, Osamu; Noh, Toshio, et. al. (Eds.): *Geography of Japan*, Teikoku-Shoin, 1980, p. 164

Fig. 7-32 Taut. B.: *Houses and People of Japan*, Sanseido, Tokyo, 1937, p. 122

Fig. 7-33 Ibid., pp. 106, 107

Fig. 7-34 Ibid., p.111

Fig. 7-35 Hall, R. B.: *Some Rural Settlement Forms in Japan*, p. 108

PART 4: Discussion and Conclusions

CHAPTER 8

HALL'S CONTRIBUTIONS AND POST WW2 DEVELOPMENT OF THE STUDY OF THE CULTURAL LANDSCAPE

Introduction

After having analyzed in the previous sections the studies made by Hall in his early career, it is necessary to put these findings together to highlight their relevance within the context of the development of American Geography, and examine the reasons why Hall —as well as other geographers— abandoned these type of comprehensive regional studies.

For this purpose, the first section of this chapter (1) revises the contributions of Hall's works to the knowledge about Japan, and to the theory and practice of the field of Geography in the United States. In section two (2), the development of the studies on the cultural landscape after World War 2 is discussed to understand the change of approach to the study of the cultural landscape. The section is structured around the discussion of two articles that were particularly influential for the development American Geography after the War: *The Nature of Geography,* 1939, by Richard Hartshorne, and *Exceptionalism in Geography,* 1953, by Fred K. Schaefer. The examination of Hall's works from the perspective of these writers provides an understanding of how regional studies were regarded in the second half of the 20th century.

1 Hall's contribution to American Geography

1.1 Contribution to the knowledge of the Japanese built environment and its settlements

Before the beginning of World War 2, only four American geographers studied Japan (see tables 8.1 and 8.2).[1]

Table 8.1 Geographical studies of Japan made by American geographers published during the interwar period

	Robert B. Hall	Glenn Trewartha	Darrell Haugh Davis	Wellington D. Jones
Year				
1921				Hokkaido, The Northland of Japan
				Hokkaido and its Resources
1926	Quelpart Island and Its People			
1928		A Geographic Study in Shizuoka Prefecture		
1930	The Geography of Manchuria	The Suwa Basin		
		Land Utilization Maps of Manchuria		
1930		The Iwaki Basin		
1931	**Some Rural Settlemen forms in Japan**			
1932	Sado Island			
	The Yamato Basin			
1933	Landforms of Japan			
	The Hiinokawa Plain			
1934	**Cities, Villages, and Houses of Japan**	**Japanese Cities Distribution and Morphology**	**Some Aspects of Urbanization in Japan**	
	Agricultural Regions of Asia 1	Notes on a Phyisiographic Diagram of Japan	**Present Status of Settlement in Hokkaido**	
	The Cities of Japan: Notes on Distribution and Inherited Forms	A reconnaissance geography of Japan	**Type Occupance Patterns in Hokkaido**	
1935	Agricultural Regions of Asia 2			
	Agricultural Regions of Asia 3			
1937	**A Map of Settlement Agglomeration and Dissemination in Japan**			
	Tokaido: Road and Region			
	Geographic Factors in Japanese Expansion			

Articles on settlements Regional studies with analysis of settlements

Table 8.2- American geographers who made field studies on Japan before WW2

	University	Years in Japan	Funding Grantor
Robert Burnett Hall (1896-1975)	Michigan	1928, 1929, 1931, 1933, 1935-36	Social Science Research Council Fellowship in 1929; and Social Science Grant-in-aid in 1931
Glenn T.Trewartha (1896-1984)	Wisconsin / Harvard	1926-27; 1932	Goggenheim Memorial Foundation 1926; and Grants for the National Research Council at the U. of Wisconsin 1932
Darrell Haug Davis (1879-1962)	Minnesota / Michigan	1932	Fluid Research Founds of the U. of Minnesota, 1932
Wellington D. Jones (1886-1957)	Chigago	1914	Grant from Swift Family

For Davis and Jones, the study of Japan was of secondary importance to their main academic interest. Jones was deeply engaged on the study of methodology for geographic studies, subject in which he made important contributions. His discussion on survey procedures were referred by countless American geographers, including Hall.[2] Davis was committed to education, first at the University of Michigan until 1923, and later at the University of Minnesota where he directed the Department of Geography.[3] His most important work, *The earth and man: a human geography,* was published in 1942 and is today referred to illustrate the Geographic thought of that period.[4]

In their studies of Japan, Jones and Davis focused mainly on Hokkaido. Jones published only two regional studies six years after his visit to Japan, in which focused on the agricultural development and resources of that area addressing the descriptions of settlements only superficially. Davis studies, on the other hand, are focused on settlements but his main concern is the distribution of occupation and not the analysis of the settlements themselves. In the articles dedicated to Hokkaido, Davis focuses in the distribution of settlements in relation to the development of railroads, the topographic conditions, and the influence of foreign and Japanese agricultural incentives in the area.[5]

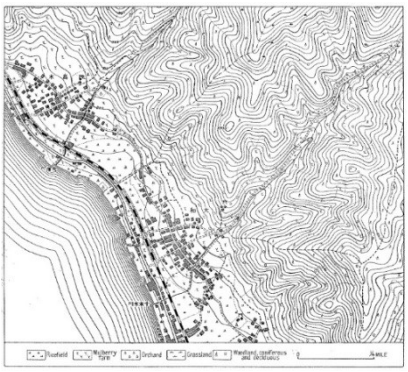


Fig. 8-1 Trewarta, 1930- Distribution of crops and settlements in relation to geomorphology

As shown in the table above (Table 8.1), the most extensive studies on Japan were made by Hall and Trewartha. As in Hall's case, Trewartha's regional studies —as *The Iwaki Basin* and *The Suwa Basin*— include analysis of settlements. Nevertheless, while in Hall's studies the comprehensive examinations are presented in differentiated sections, Trewartha's considerations on rural settlements are interweaved into the descriptions of the cultural landscape. His comments on towns and villages are mainly concerned with location, offering observations on the layout disposition in relation to the topography (Fig. 8-1):

"*Footpaths or even narrow cart roads follow the crests of the dikes, while in places lines of rural residences likewise occupy the higher and better-drained sites adjacent to the stream channels*. (…) *The rural villages tend to concentrate around the margins of the valley at the base of the foothills and more particularly on the tiny alluvial fans at the mouths of the gullies and ravines*"[6]

Regarding the study of Japanese cities, the most complete articles on the subject made by Davis, Trewartha, and Hall, were all published in 1934. The three images shown below of the distribution of cities within Japan appeared in these articles.[7] While Davis locates only the cities of more than 100.000 inhabitants —which are the ones treated in his article—, Hall and Trewartha include a wider range of urban settlements and make a thorough examination of the distribution and its possible causes. Trewartha's explanations are based mostly on topography, but Hall also considers historical events that affected the distribution of cities as the Tokugawa government or the establishment of the railroad.[8] In these studies, the three geographers provided updated data of Japanese urban settlements from different perspectives, being Hall's analysis the most comprehensive regarding the morphological and formal analysis of the urban settlements per se.

Maps of urban settlements distribution within Japan

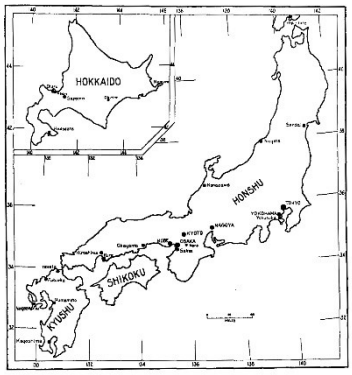


Fig. 8-2 Davis, 1934

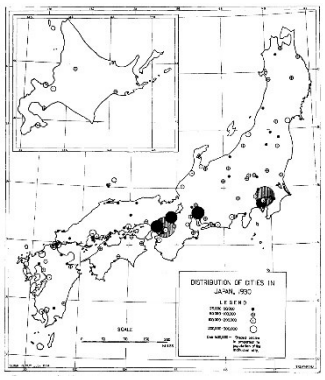


Fig. 8-3 Trewartha, 1934

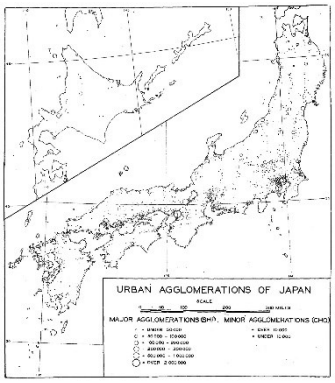


Fig. 8-4 Hall, 1934

The works of Hall, Trewartha, and Davis can be considered complementary. Their regional studies have many similarities, but while Hall's studies emphasize on settlements, Trewartha makes a more extensive analysis of agriculture, and Davis of distribution of settlements. Hall's wide-ranging examinations explore the relation between culture, economy, natural resources, and settlements, and thanks to his historical approach, they provided a view of the process of the creation of the Japanese cultural landscape.

1.2 Contribution to the theory and practice of Geography

Regarding Historical Geography

Some of Hall's articles had been recognized as valuable and used as reference by his contemporary colleagues. In the United States, Hall's study of *Tokaido* from 1937 was recognized as important in the development of Geography by his colleagues. Although this work was not strictly made within the field of Historical Geography, it is considered as part of the development of this sub-discipline because of the emphasis made in the historical events rather than on the physical features of the region. For the renowned geographer Richard Hartshorne (1899-1992), Hall's study of Tokaido is among the studies that *"much more closely approaches history"*,

qualifying the study as a *comparative historical geography* because it analyzes one specific area in three different periods —*Early Days*, *The Golden Age* (from 16th century), and *Since the Restoration* (from 1868).[9] Tokaido's article was again recognized by Andrew H. Clark (1911-1975) in his review of *Historical Geography in North America* form 1954.[10] According to Clark, Hall's study of Tokaido is among the *outstanding publications* on historical geography of his time, and is presented to illustrate how American geographers were mainly concerned with the changing of geographies through time, as opposed to the reconstruction of past geographies.[11]

Although it is true that Tokaido's article is the most distinctly historical, some of Hall's earlier regional studies could be also considered as contributions to Historical Geography. To set some examples, in the studies made of Yamato, Hikawa, and Sado, Hall traces the development of the area as well as the development of particular settlements as Nara and Aikawa. In these analyses history and cultural events are not the subject of study, but they are well acknowledged and included into the analysis of the development that led to the formation of the cultural landscape. While Tokaido is an example of a study made with limited *cross sections* of past periods, as Hartshorne pointed out, the studies of Nara and Aikawa could be consider as examples that trace the development of particular features, in this case, settlements.

Regarding the *graphical* and *formal* study of settlements

A characteristic that makes Hall's studies stand out at first sight from the other regional studies of his time is the great amount of graphics that he uses for the studies of settlements. The originality of Hall's studies is not in the techniques themselves —from which there are examples of other geographers of the time— but in the diversity of graphics used and its integration of this tool into the formal analysis of settlements. His comparative maps of Matsue or superimposed maps of Nara allow to visualize the historical and morphological information of these cities in a way that was familiar for geographers. (See Appendix 4, showing Hall's graphics used to study settlements as compared to the graphics used by other American and Japanese geographers of his time)

Hall made several functional schemes of Japanese towns and cities that were available for a Western audience for the first time. Although the emphasis that urban geographers laid on functional distribution studies has been in occasions explained by the influence of urban planners, it might also be related with the type of study that the first regional geographers who studied cities were used to make. Functional maps were used for the study of regions, indicating the areal distribution of natural resources or land use. On the regional maps, the distribution of settlements was recorded, and when translating this tool to the closer study of settlements geographers applied the same criteria indicating the areal distribution of functions.[12]

Another graphic presented in Hall's studies that was recognized as a contribution to urban studies were the complete profiles of the city of Nara.[13] At the time Hall made this cross-sections

this type of graphic was not conventional, but there were some examples that show different ways of using this resource (see Appendix 4). As in the case of the functional maps, making a profile of the area studied was a common procedure for the study of the natural landscape, and therefore is understandable that geographers translated this graphic tool to the study of settlements. In the early 1930s, Thomas Lewis and Alfred H. Meyer (1893-1988) used section sketches to illustrate different occupance stages.[14] In the study of cities, this type of profile graphic was used by Parkins in 1930 and Van Cleef in 1933.[15] In Japan, Wajiro Kon made sections of suburban regions in 1922, while Yoshiro Nishida used the section of the Kinosaki town in 1931 to show the relation between function and morphology. Hall's profiles show the entire city of Nara along two directions, North-South East-West, through Nara's commercial streets. The buildings are outlined showing the main characteristics of the buildings, and the functions of each building are displayed in a similar manner to the section published earlier by Nishida.

Regarding contribution to geographical thought

Hall's most important discussion on the field of Geography was presented in 1935 in the article *The Geographic Region: A Resume*. This work was recognized by authors of his time and it is still included in the list of important bibliography for the development of Western Geographic thought.[16] Hartshorne for example, presents it as one of the few discussions on "*what geography ought to be"*, [17] and the American sociologist Harry Estill Moore (1897-1966) includes this article as an example writing which support the idea that "*the physical aspects of a region should* follow *instead of precede that of the cultural features*".[18] *The Geographic Region* was part of a conference on regions made on December 1934, and the paper presented together with the discussion generated after its presentation, were published in 1935. In this article, Hall discusses three important things. First, the problems on the definition of *region* —the subject study of regional geographers—; second, the problem of the lack of knowledge on the cultural elements of the landscape; and third, some tentative guidelines for the study of the elements of the landscape, both natural and cultural. The discussion over the definition of the concept of *region* was particularly important because this approach, which would eventually disappear by half of the 20th century, was by the 1930s starting to the challenged. The main argument of the detractors of this approach was that regional studies lacked of a coherent and unified framework, and Hall provided insightful discussion on the benefits and limitations of the regional approach to the study of the cultural landscape.

1.3 Hall's involvement in the education of Geography in the United States

In addition to being a university professor, Hall was engaged in the development of the education of Geography in schools. While promoting the idea of performing regional surveys in schools, he presents the Japanese education as an example to follow stating that "*(i)n Japan (…)*

there is a nation-wide exploration into the locality –its resources, its settlement, its history, its folk-lore and legends and in fact into almost every conceivable condition. (…)We would like to make the statement here that Japan's strength and efficiency, in spite of her limited area and resources, lies to a large extent in its people who, possibly more than any other, know their homeland."[19] He believed that by personally researching the area, the student *"will be able to interpret the present life and landscape of his locality in terms of its historical development and to some degree see into its future."*[20] These statements on education confirm two characteristics of Hall's thought: first, that he believes that *Japan's strength* is a result of its people and education system and not of the natural conditions; and second, that he considers the study of the development of the area as essential to understand its present.

At the University of Michigan, Hall had a great influence on his students to whom he passed the interest in Japan. Hall encouraged Joseph K. Yamagiwa (1906-1968) −a second generation Japanese— to travel to Japan to perfect his Japanese.[21] At his return in 1940 Hall and Yamagiwa organized the military language school at Michigan.

Hall also mentored of Forrest R. Pitts (1924-2014) who received a Master in Far Eastern Studies with a thesis on Mt. Fuji which aimed at finding the reasons of the "*prosperity amidst adversity*" of Kagawa area. [22] According to Pitts, Hall's students learned from him a "*problem orientation in writing a dissertation*."[23] Moreover, the first Geography PhD dissertations on Japan of the United States were submitted by Hall's graduate students.[24] One was presented by Douglas Dunham Crary (1910-2005). After being a prisoner in Japan during World War 2,[25] Crary presented in 1947a dissertation on *Iga-no-kuni*. He was one of the students that accompanied Hall in his visits to Japan, and the dissertation was made from the data collected in the field survey for the study of Tokaido.[26] The second dissertation on Japan, also presented in 1947, was made by Curtis Alexander Manchester. The subject in this case was *the development and distribution of sekisho* (関所) *in Japan*, that addressed the study the routes system in Japan and the check point barriers from Edo period.

2 Post World War 2 view of Regional Studies on the cultural landscape

2.1 Hall's publications after World War 2

After the beginning of World War 2 the focus of Hall's studies changed (Table 8-3). The first two articles of this period are dedicated to geopolitics and discuss the new problems confronted by Asian and Western industrialized countries, particularly the access to raw materials and its political implications.

Table 8-3 Hall's publications after 1939 (* the articles in Japanese were made in collaboration with Toshio Noh)

	Title of publication	Subject
1940	American Raw Material Deficiencies and the Regional Dependence	Geopolitics
1941	Conflict for Lebensraum: South China Sea and the Strategic Materials	Geopolitics
1942	The Road in Old Japan	Historical Geography
1947	Area Studies: with special reference to their implications for their research in the social scien	Education
1949	地域研究と日本研究*	Education
1951	Japanese Studies at Ann Arbor and Okayama	Education
1952	アンナーバーと岡山とにおける日本研究*	Education
	Yakihata, Burned-Field Agriculture in Japan with its Special Characteristics in Shikoku	Agriculture
1960	Revolution in Asian Agriculture	Agriculture
1962	A Map of "Buraku" Settlements in Japan	Population Geography

Only a few months after the attack on Pearl Harbor in 1942, the article *The Road in Old Japan* was published.[27] As *Tokaido: Road and Region*, this article can be classified as Historical Geography, and is among Hall's best known works.[28] In *The Road in Old Japan,* Hall studies the development of the road system in Japan since prehistoric periods until Meiji restoration, including some brief examination of the development until the 1930s. His sources include Japanese authors (particularly the work of the historian Tarō Sakamoto, 坂本太郎,1901-1987)[29], Chinese and Japanese official records, traditional books as the Kojiki (古事記, "Records of Ancient Matters"), and Nihon-shoki (日本書紀, Chronicles of Japan), from the 8th century, and his own notes and data from the field survey made for the study of Tokaido. Hall begins his study with a thorough examination of the Chinese post system of T'ang dynasty, which according to Hall, "*furnished the immediate pattern for the road system which was extended and standardized under the Taihō code in Japan.*"[30] He describes the main roads of each period in relation of the location of the power centers. At first, the road system was not designed as a public high way but was a post system of the ruling power: "*As in Persia, Rome, China and the Inca Empire a strong imperial government found it necessary to establish and control a wide system of post roads in order to facilitate political control, to collect taxes and enforce law.*"[31] Hall examines and explains the importance of the roads and their development in relation the successive powers and their migrations. According to Hall's study, only in Tokugawa period (徳川時代 1603-1868) the route system was open for public traffic.[32] He provides eight woodblock prints of the Japanese artist Andō Hiroshige (安藤 広重, 1797-1858) and five reproductions of original pilgrim maps from the Tokugawa period, with information about the location of post towns facilities, prices, and historical places. Hall believed that *"(t)he road is among the most fundamental institutions of a*

people."[33] He understood that within the history of Japan, "*(g)eographically and otherwise, the road has been a major integrating force in developing and maintaining the Japanese state*" which explains his interest in this subject.[34]

After this last study on the routes of Japan, Hall's following publications focused on education, particularly the study of Japan. In an article dedicated to the promotion of Area Studies Hall refers to the importance of the study of Japan under the new political order, pointing out the responsibility of American Universities in forming specialists on foreign areas.[35] After World War 2, the Japanese geographer Toshio Noh (能登志雄, 1912-1988) work together with Hall at the University of Michigan and published a comprehensive guide of Japanese research materials that remains to this day as a valuable reference for scholars interested in the study of Japan.[36]

After a couple of articles on agriculture, in 1962 Hall published his last article related to the study of settlements. This article — *A Map of "Buraku" Settlements in Japan*— was dedicated to the outcast classes of Japan, groups of citizens with professions that involved dealing with dead bodies of animals or people.[37] Buriers, hunters, fisherman, and people who work with leathers or boneswhere among these "buraku" (部落), which literally means "village people".

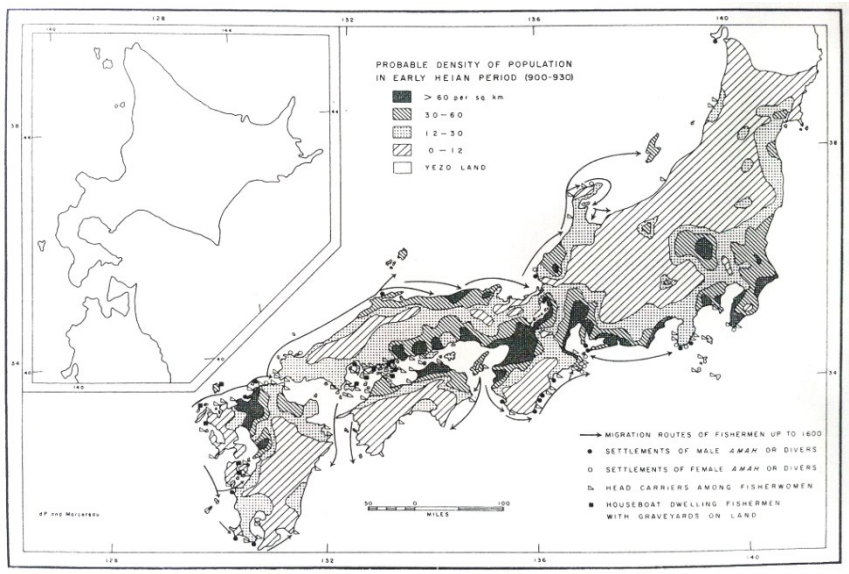


Fig. 8-5 Hall, 1962, Density of population in Heian period, and location and migration of boat-dwelling fisherman

The spirit of the article is not of denunciation, although the selection of the subject might indicate a certain concern with the fate of this group of Japanese citizens. He makes some comments on their conditions of life, but the main focus of the article stays geographical, that is, in the areal distribution of the outcasts and their migration over the years. At the end of the article, Hall states that the Japanese government is taking measures to correct the inequalities making a comparison with the problem of the United States in achieving equality for all its citizens.

2.2 Regional Studies after WW2

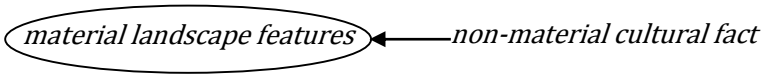
The change in Hall's career path was perhaps not the only reason for the abandonment of the comprehensive study of regions. During the late 1930s, the comprehensive regional studies in which Hall included the study of Japanese settlements became to be regarded as inappropriate. After World War 2, these type of studies were substituted by more fragmented examinations of particular subjects (as population or land use) with a stronger quantitative approach.

On the verge of World War 2 (1939), Richard Hartshorne published a very influential article entitled *The Nature of Geography: A Critical Survey of Current Thought in the Light of the Past.*[38] This article was the first thorough examination of the developments of the geographical thought in the United States.[39] In this work, Hartshorne hardly criticizes Sauer's ideas on cultural geography, ideas that had been tremendously influential in the American geographic environment until the late 1930s. But before addressing Hartshorne's arguments it is important to first consider the academic context in which they was made. Hartshorne was dedicated to *political geography*, which had in turn been criticized by Sauer who thought of this branch as foreign to the concerns of Geography. Several of the arguments presented by Hartshorne *The Nature of Geography* are intended as a defense of his own approach to geography. As part of his defense, Hartshorne scrutinizes Sauer's work and presents a series of critiques of his writings. For example, Hartshorne pointed out that Sauer had led American geographers "*to think of geography in terms of the study of material landscape features, both natural and cultural, and to consider these features according to their chorographic, or regional, interrelations*".[40] This comment is intended to be a critique of the excessive concern with the *physical components* of the landscape that followers of Sauer, among them Hall, often practiced.[41] Although Hartshorne considers Hall's work as worthy of mention, he believed that a complete integration of history and geography is *in practice utterly impossible* and, geographers could only at most compare a relatively small number of *cross sections* of past periods, or follow the development of particular features.[42]

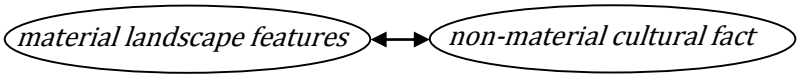
If we consider Hall's studies on Japan under the light of Hartshorne's argument, it is possible to classify them under three categories according to how he uses the *material landscape features* (including natural and cultural) and *non-material cultural fact* (historical or political events as for example the introduction of Buddhism) to explain one another. In regional and settlement studies, Hall makes use of historical and political data to explain settlements and their development, but he did not examine the history itself. Nevertheless, in the articles on roads (Tokaido and The Road of Old Japan) he stresses on the interaction of the cultural elements with history, and besides using history to explain the elements, he considers the role of roads on history. Hall' articles on geopolitics reverts the interest of the regional studies, focusing on non-physical subjects that have as part of their explanation based on physical aspects.[43]

In the scheme below, the ellipse shows the subject in which the article focuses the analysis, and the arrows indicate which subject is mainly used to explain the other:

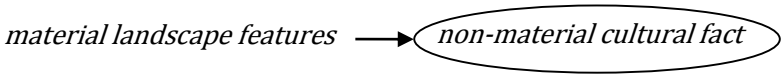
1- Regional and settlement studies:



2- Historical geography:



3- Geopolitics:



Another work that further encourage the abandonment of the comprehensive regional studies was *Exceptionalism in Geography: A Methodological Examination* written by the German geographer Fred K. Schaefer (1904-1953). This article, published in 1953, evaluates the methods used by geographers and the apparent dichotomy of quantitative procedures and the methods of geographers interested in culture (as economic or political geography). The title of the article refers to the claim that Geography was *in an exceptional position* different from the systematic sciences, and that because of this exceptional situation geographers were not obliged to search for patterns and laws in their object of study.[44] Schaefer's article became an important landmark in the change to the quantitative approach, which had its peak in the 1970s.[45] As other writers before him, Schaefer redefines once again the appropriate goal of Geography. In his understanding, professionals of this field should care for the *spatial arrangement of phenomena* and not for the phenomena itself:

"*(s)patial relations are the ones that matter in geography, and not others. Non-spatial relations found among the phenomena in an area are the subject matter of other specialists such as the geologist, anthropologist, or economist.*"[46] Schaefer insists in that "*the geographer's specific task in the analysis of a region is limited to spatial relations only*".[47]

Regarding the approach that geographers should take in their studies, Schaefer makes his argument through a comparison of Geography with other sciences. He explains that although the causes of complex phenomena cannot be fully explain by a *unitary theory*, laws can be established to understand the phenomena partially. For example, when economists make generalizations and determine laws, they also deal with complex situations that must take into account political,

physiological, and social factors.[48] Schaefer explains that "*(p)ractically, no single (…) law or even body of laws will fit any concrete situation completely. In this noncontroversial sense every region is, indeed, unique. Only, this is nothing peculiar of geography. As in all other fields, the joint application of the laws available is the only way to exhibit and to explain what is the case*"[49]

Schaefer criticizes Hartshorne and Sauer on the basis that their *historicism* encourages the idea of the exceptionalism of Geography,[50] since for him "*contemplating the successive stages of an unfolding process*"—the "*genetic method*"—*yields nothing*.[51] By making a parallelism with history, Schaefer explains that as a historian can use the laws of economic theory to explain market prices in some particular period, the regional geographer can use the laws found by *systematic geography* to explain the facts of the particular regions.[52] Schaefer does not consider, nevertheless, that the raw material for the creation such laws will have to come from the comparison of several particular studies, as the ones made by the regional geographers from the interwar period.[53] Before judging Hall's articles according to Schaefer's arguments, the reasons for regional geographers not to engage in the determination of laws have to be understood through an historical contextualization. Hall —as Sauer— never acknowledge or denied the existence of patterns on the development of cultures. At the time Hall made his studies most geographers were aware that the knowledge of the cultural facts was limited, that the study of these elements was experimental, and that they should be cautious in the statement of laws. In addition, the mistaken generalizations made by environmental determinists had discouraged the statement of definitive conclusions.

According to Schaefer's explanation, most of Hall's studies on Japanese settlements would fall outside of the field of Geography they dedicate much of the analysis to the cultural elements themselves, as the study of habitation typology or the studies of shape and structure of cities. Judged by Schaefer's standards, the only article made by Hall that could be considered as truly geographical is his study of Buraku people from 1960. This article is the only one strictly concerned with *spatial relations* as distribution and migration, perhaps because of the influence of Schaefer's perspectives.

In the decades after the publication of Schaefer's article, the debates on how to determine or approach the study of causality in human geography continued.[54] Geographers were very active in analyzing, challenging, and questioning all the decisions made in practice by their colleagues, and in trying to determine a clear theoretical framework for their studies. But the discussions on the place of the field of Geography were unsuccessful. During the 1970s, thirty-two Geography departments were closed in American Universities, and in the 1980s the Geography Department of the University of Michigan where Hall made his career was reorganized.[55] Nowadays, after the several subdivisions of the field, there is usually a clear division between the professionals dedicated to cultural and physical Geography. In the University of Michigan, the department of *Geography* is now part of the College of Arts, Sciences, and Letters, within the Social Sciences

Department, while *Geology* is in Natural Sciences. But the role of Geography in the academic world is still a concern for the professionals of this field. The Japanese geographer Kazutoshi Abe has noted that while Geographers tend to refer to articles from various disciplines, citations of geographic articles are few, and that the level of citation from the discipline has declined in recent years.[56]

2.3 Contemporary studies on the built environment

Although regional geography did not continue in its original form, it gave impulse to different sub disciplines focused on economy, history, politics, and urban and rural settlements. Despite the quantitative revolution of the 1970s the sub-field of Historical Geography continues to be a respected branch of Geography. In Japan, some geographers and historical geographers are dedicated to the study of the cultural landscape as *Akihiro Kinda* and *Kentaro Kobayashi*.[57] After World War 2, Japanese human geography has laid emphasis on socio-economic and historical causalities, and important contributions were made to the in the understanding of the history of the Japanese cultural landscape, particularly from the geographical department of Kyoto University.[58]

In recent years, environmental issues are encouraging the study of the interaction of culture and nature within various disciplines from different approaches. Most universities have departments of global and environmental issues where the subject is treated with an interdisciplinary approach. In the United States, there is new interest in the legacy of Carl O. Sauer, and his involvement in the 1950s with his efforts to raise awareness on *man's role in changing the face of the earth*.[59] The studies made within the relatively new field of *Environmental History* have several points in common with the regional studies made by Hall and his colleagues.[60] When tracing the beginnings of Environmental History, the American Historian Alfred W. Crosby (1931) includes most of the works that were reference for Regional Geography as Von Humboldt a, and Lucien Febvre.[61] Moreover, according to the Historian Mart A. Stewart Environmental History could be defined as "*the history of the role and place of nature in human life, the history of all the interactions that societies have had with the nonhuman past, in their environs*."[62] This objective could have been adopted by regional geographers of the interwar period, but there is an important difference in the overall goal of their research. In view of the environmental problems cause by the overexploitation of the natural resources, contemporary studies examine the interactions of culture and nature in order *to evaluate the choices that humanity has made*.[63]

Several approaches are used for the historical study of an area, but a common strategy of environmental historians is to focus on one of the elements of the landscape and trace the history of that particular element from several perspectives. A good example in this regard is *Environmental History of the Hudson River,* where a selection of articles made by historians, scientist, and social scientists analyze different aspects of the interaction of the Hudson River with

the societies that have made use of it over history.[64] Regarding the study of settlements, in recent years the sub-field of Urban Environmental History is becoming more defined and independent. According to the American Historian Martin V. Melosi (1947) Urban Environmental History combines "*the study of the natural history of the city with the history of city building and their possible intersections*".[65]

Notes:

[1] Other important works made by American scholars during the interwar period are John E. Orchard (1893-1962) and Dorothy Johnson (1897-?) whose work entitled *Japan's Economic Position,* Whittlesey House, from 1930 is many times classified as economic geography.

[2] His most referred works are: Jones, W. D.: *Procedures in Investigating Human Occupance of a Region*, Annals of the Association of American Geographers, Vol. 24, No. 2, pp. 93-111, 1934; Jones, W. D. & Finch, V. C.: *Detailed Field Mapping in the Study of the Economic Geography of an Agricultural Area*, Annals of the Association of American Geographers, Vol. 15, No. 3, pp. 148-157, 1925; and Jones, W. D. & Whittlesey, D. S.: *World-maps for use with an introduction to economic geography*, University of Chicago Press, 1927

[3] Sheppard, E & McMaster, R. B. (eds.): *Scale and Geographic Inquiry: Nature, Society, and Method*, Blackwell publishing, 2004, p. xv (Preface)

[4] Davis, D. H.: The earth and man: a human geography, Macmillan, 1943

[5] Davis, Darrell. H.: *Present Status of Settlement in Hokkaido*, Geographical Review, Vol. 24, No. 3, pp. 386-399, 1934, p. 394-399

[6] Trewartha, Glenn T.: *The Suwa Basin: A Specialized Sericulture District in the Japanese Alps*, Geographical Review, Vol. 20, No. 2, pp. 224-244, 1930, p. 234-235

[7] For a comparison of these works see chapter 6, page 109

[8] Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*, Annals of the Association of American Geographers, Vol. 24, No. 4, pp. 175-200, 1934. p. 177-180

[9] Ibid., p. 363

[10] Clark, Andrew H.: *Historical Geography*. In James, P. E. and JONES, C. F. (Eds.): *American Geography: Inventory & Prospect*, Association of American Geographers by Syracuse University Press, 1954

[11] Ibid., p. 84-85

[12] See also the examples of Preston E. James study of Rio de Janeiro, and Murphy, R.E.: Johnstown and York: A *Comparative Study of Two Industrial Cities*, Annals of the Association of American Geographers, Vol. 25, No. 4 , pp. 175-196, Dec., 1935, and Wright, J. K.: *The Diversity of New York City: Comments on the Real Property Inventory of 1934*, Geographical Review, Vol. 26, No. 4, pp. 620-639, Oct., 1936 which presents besides of the functional distribution, maps showing the areal distribution of several themes as density of population, income of population, and time required to go to work.

[13] Fead, M. I.*: Notes on the Development of the Cartographic Representation of Cities*, Geographical Review, Vol. 23, No. 3, pp. 441-456, Jul. 1933. p. 455

[14] Lewis, F. T..: *The Sequence of Areal Occupance in a Section of St. Louis, Missouri*, Annals of the Association of American Geographers, Vol. 21 No. 2, pp. 79-90, 1931, p. 76. Meyer, A. H.: *The Kankakee "marsh" of northern Indiana and Illinois*, Michigan Academy of Science, Arts and Letters, Vol. 21, pp. 359-396, 1936. Meyer studied in the University of Michigan at the time Hall was instructing courses in settlements, and he receive his PhD in Geography in 1934.

[15] Van Cleef, E.: *The Urban Profile*, Annals of the Association of American Geographers, Vol. 22, No. 4, pp. 237-241, Dec., 1932, p. 240

[16] See for example Chorley, R. J. and Haggett, P. (Eds.):*Integrated Models in Geography*, Methuen & co, 1967; Johnson, N. C.; Clark University Reference Bibliography for the syllabi of the course *Development Of Western Geographic Thought, 1997,* https://www.clarku.edu/departments/geography/graduate/documents/Geog368Koelsch.pdf (Last accessed on March 24, 2015); and Schein, R. H., and Winders, J. (Eds.): *The Wiley-Blackwell companion to cultural geography*, Wiley-Blackwell, 2013

[17] Hartshorne, op. cit., p. 201-202

[18] Moore, Harry E.: *Social Scientist Explore the Region*, Social Forces, Vol.16, No. 4, pp. 463-474, 1938, p. 467

[19] Hall, Robert B.: *Local Inventory and Regional Planning in the School Curriculum*, Journal of Geography, Vol. 33,

No. 1, pp. 12-22, 1934, p. 20

[20] Ibid.

[21] Goodman, Grant K.: *America's Japan. The first year 1945-1946*, Fordham University Press, 2005, p. 11-12

[22] Newspaper: *The Interpreter*, The US Navy Japanese/Oriental Language School Archival Project, Archives, University of Colorado at Boulder Libraries, Number 214, December 1, 2015, (pages unnumbered)

[23] Pitts, F. R.: *Sliding Sideways into Geography.* In Gould, P & Pitts, F. R.(Eds.): *Geographical Voices*, Syracuse University Press, New York, 2002, p. 277

[24] McDonald, Mary: *Geography's contributions to Japanese Studies*. In BABB, James D. (Ed.): *The SAGE handbook of Modern Japanese Studies*, SAGE Publications, 2015, p. 106

[25] WWII U. S. Prisoners of War Database.
http://www.japanesepow.info/index.php?page=directory&rec=4458&do=ab. Last accessed on 22/05/2015.

[26] McDdonald, M., op. cit., p. 106

[27] The Road in Old Japan was published in *Essays Studies in the History of Culture: The Disciples of the Humanities* by the Conference of Secretaries of the American Council of Learned Societies in 1942.

[28] The article *The Road in Old Japan* is referred in several contemporary works on Japan. See for example: Ennals, P.: *Opening a window to the West: the foreign concession at Kōbe, Japan, 1868-1899,* University of Toronto Press, 2014; and Vaporis, C. N.: *Breaking Barriers: Travel and the State in Early Modern Japan*, Harvard East Asian Monographs, 1995

[29] 坂本太郎 : 上代驛制の研究, 至文堂, 1928; and 大島延次郎 : 日本交通史論叢, 国際交通文化協会, 1939

[30] Hall, R. B.: *The Road in Old Japan,* op., cit., p. 126

[31] Ibid., p. 130

[32] Ibid., p. 152

[33] Hall, R. B.: *The Road in Old Japan*, Studies in the History of Culture, February, pp. 122-155, 1942., p. 131

[34] Ibid., p. 122

[35] Hall, R. B.: *Area Studies: with special reference to their implications for their research in the social sciences,* Social Sciences Research Council, New York, 1947;: *Japanese Studies at Ann Arbor and Okayama*, Michigan Alumnus Quarterly Review, Vol. 57, No. 10, pp. 166-174, 1951

[36] Hall, R. B. & Noh, T.: *Japanese Geography: A Guide to Japanese Reference and Research Materials*, Center for Japanese Studies of the University of Michigan Bibliographical Series, No. 6, Ann Arbor, University of Michigan Press, 1956

[37] Hall, R. B.: *A Map of "Buraku" Settlements in Japan*, Papers of the Michigan Academy of Science, Arts, and Letters, Vol. 47, 1962

[38] Hartshorne, R.: *The Nature of Geography: A Critical Survey of Current Thought in the Light of the Past*, Annals of the Association of American Geographers, Vol. 29, No. 3, pp. 173-412, 1939

[39] See for example Dittmer, J & Sharp, J.: *Geopolitics: An Introductory Reader*, Routledge 2014; Unwin, T*: The Place of Geography*, Routledge, 2013; and Martin, G: *Geography*. In Rothenberg, M (Ed.): *History of Science in the United States: An Encyclopedia*, New York, Garland Publishing, 2001

[40] Hartshorne, R.: *The Nature of Geography,* op. cit*.,* p. 200

[41] Hartshorne's arguments against Sauer's emphasis on the physical aspects is intended as a defense of his own approach to geography. Hartshorne was dedicated to political geography, which had been criticized in turn by Sauer who thought of this branch as foreign to the concerns of Geography.

[42] Ibid., 364

[43] Hall's articles on geopolitics are *Geographic Factors in Japanese Expansion,* and after the beginning of World War 2, in *American Raw Material Deficiencies and the Regional Dependence* and *Conflict for Lebensraum: South China Sea and the Strategic Materials.*

[44] Schaefer, op. cit., p. 232

[45] Unwin, T*: The Place of Geography*, Routledge, 2013, p. 124; and Rana, L.: Geographical Though. A systematical

record of evolution, Concept Publishing Company, 2008

[46] Schaefer, op. cit., p.228

[47] Ibid., p. 231

[48] Ibid.

[49] Ibid., p. 230

[50] Ibid., p. 239

[51] Schaefer, op. cit., p. 237. Despite his criticism to historicism, Schaefer himself turns to historical contextualizations when trying to explain the development of ideas, as when trying to prove that the idea that laws cannot be found for geography is incorrect (pages 233 and 234)

[52] Schaefer, op. cit., p.237

[53] Ibid., p. 236

[54] See for example Miller, David L.: *Explanation versus Description*, The Philosophical Review, Vol. 56, No. 3, pp. 306-312, 1947; Johnston, R. J.: *On the Nature of Explanation in Human Geography*, Transactions of the Institute of British Geographers, Vol. 5, No. 4, pp. 402-412, 1980; Eyles, John & Lee, Roger: *Human Geography in Explanation*, Transactions of the Institute of British Geographers, New Series, Vol. 7, No. 1,pp. 117-122, 1982

[55] Murphy, Alexander B.: *Geography's Place in Higher Education in the United States*, Journal of Geography in Higher Education, Volume 31, Issue 1, pp. 1221-141, 2007, p. 128

[56] Abe, K: *On the identity of human geography: Focusing on the results of urban geography studies in Japan,* Japanese Journal of Human Geography, Vol. 59, No. 5, pp. 52-66, 2007, English abstract

[57] Kinda, A. & Kobayashi, K.: *Research Frontiers in the Historical Geography of Japan in 1978-1987*, Geographical Review of Japan, Vol. 61(Ser. B), No. 1, pp. 78-98, 1988

[58] Johnston, R. J. & Claval, P. (Eds.): *Geography since the Second World War*, Barnes & Noble, 1984, p. 244

[59] Williams, M: To Pass On a Good Earth: The Life and Work of Carl O. Sauer, University of Virginia, Press, 2014. In 1955 Sauer was chairman on the symposium entitled "*Man's Role in Changing the Face of the Earth".* This symposium is considered a landmark on American environmentalism

[60] Isenberg, A. (Ed.): *The Oxford Handbook of Environmental History,* op. cit.

[61] Crosby, A. W.: *The Past and Present of Environmental History*, The American Historical Review, Vol. 100, No. 4, pp. 1177-1189, 1995, p. 1187

[62] Stewart, Mart A.: *Environmental History: Profile of a Developing Field*, The History Teacher, Vol. 31, No. 3, pp. 351-368, 1998, p.352

[63] Crosby, A. W.: *The Past and Present of Environmental History*, op. cit.

[64] Henshaw, R. E. and Dunwell, F. F. (Eds.): *Environmental History of the Hudson River. Human Uses that Changed the Ecology, Ecology that Changed Human Uses,* State University of New York Press, 2011

[65] Melosi, Martin V.: *The Place of the City in Environmental History*, Environmental History Review, Vol. 17, No. 1, pp. 1-23, 1993, p. 2

Image Sources:

Fig. 8-1 Trewartha, Glenn T.: *The Suwa Basin: A Specialized Sericulture District in the Japanese Alps*, Geographical Review, Vol. 20, No. 2, pp. 224-244, 1930, p. 232

Fig. 8-2 Davis, D. H.: *Some Aspects of Urbanization in Japan*, Journal of Geography, Vol.33 No.6, pp. 205-220, 1934, p. 207

Fig. 8-3 Trewartha, G. T.: *Japanese Cities, Distribution and Morphology*, Geographical Review, Vol. 24 No.3, pp. 404-417, 1934, p. 407

Fig. 8-4 Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*, Annals of the Association of American Geographers, Vol. 24, No. 4, pp. 175-200, 1934, p. 176

Fig. 8-5 Hall, R. B.: *A Map of "Buraku" Settlements in Japan*, Papers of the Michigan Academy of Science, Arts, and Letters, Vol. 47, 1962, p. 524

CHAPTER 9
CONCLUSIONS

1. Summary: Importance of Hall's studies on Japanese settlements and framework of the analysis

During the interwar period Robert B. Hall conducted pioneer studies on Japan. His subject of study was the *cultural landscape*, which is the combination of all the natural and cultural elements of the earth's surface. Although most geographers recognized cities, towns, and architecture as integral parts of the cultural landscape, the integration of these elements in practical studies was not so common. Hall's publications stand out from other geographical studies made on Japan for the amount and depth of the examination of settlements.

At the time Hall made his research the study of settlements within Geography was only beginning. Besides the complications created by the lack of theory, standardized methods, and even lack of terminology, these studies had to be made within a complex ideological and academic context that was full of debates. As I argued in this dissertation, Hall's studies were significantly shaped by two issues, both consequence of the integration of the cultural elements into the geographic study. The first issue was how to interpret the causal relationships between culture and nature, and the second one was how to integrate in practice the study of these two dissimilar elements.

Until late 19th century, it was generally accepted among American geographers that the natural environment was the main factor in forming a culture (*environmental determinism*). However, by the time Hall made his studies on Japan this understanding began to be challenged and culture and nature started to be understood as having a relationship of mutual influence (*possibilism*). At the same time, there were intense debates on how to approach the study of culture, being the main concern whether the elements of culture could be analyzed in the same way as the natural ones. Some geographers wanted to translate the procedures used for the study of the natural world to study culture in order to find patterns and regularities that allowed them to establish laws. Other, alternatively, believed that such laws could not be found in cultures, at least not for the time being and therefore relied on the historical approach.

In this thesis the significance of these issues for Hall's interpretation of Japanese settlements has been made clear to then analyze the practical and methodological aspects of the study of cities and rural architecture from a geographical perspective.

2. Findings in relation to the ideological context

The significance of Hall's studies lies not only in that they were one of the first and most complete Western attempts at a systematic study of Japanese settlements, but in that they also capture the dynamics of the debates around the acquisition of knowledge of culture and its material expressions

As I showed in part 2, Hall's interpretations of the built environment are largely possibilistic. In his explanations, Hall emphasizes in either culture or nature (or a combination of both) according to their assumed relative importance in the creation of the cultural landscape. This way, the distribution of villages is sometimes explained as being an adjustment to the land ownership system, while other times was found to be a respond to the natural configuration of the land. By comparing Hall's studies with earlier deterministic studies where the explanations of the cultural were based on the natural environment alone,[1] it has been made clear that Hall's possibilistic interpretation allowed him to acknowledge the central role of Japanese culture and history in the creation of its own cultural landscape.

Although the conflict between determinist and possibilist ideas reached all academic fields involved with the study of culture and nature —as Anthropology or History—, within the the field of Geography it was particularly strong. In other fields were the debate was not as prevalent —as in Architecture— statements that might imply environmental determinist ideas were not as controversial. As shown with the comparison of the works of Taut and Hall, the idea that *different peoples respond in similar ways to similar environments* had a different meaning for these authors. In Hall's academic context it was associated with the deterministic assumption that cultures were shaped by their natural environment. Since this assumption had been used to support arguments on the superiority of some cultures over others it had a strong negative connotation. For this reason, Hall —as most geographers of his time— was careful not to make claims that could be interpreted as deterministic. On the other hand, for Taut the same idea —that *different peoples respond in similar ways to similar environments* — was used as evidence of just the opposite, that is, that all man are equal. Taut believed that the fact that different cultures adapted in similar ways to the same environment was solid proof that all men were equally logical, and therefore, he looks for the verification of this idea in architecture.

Besides the problems of understanding the causal relationships between culture and nature, geographers also faced the difficult task of integrating the analysis of the cultural elements into geographical studies. As I pointed out in chapter 5, to do so, Hall adopts an historical approach.

The analysis of Hall's writings has shown that the historical approach —as applied by Hall to the study of settlements— consisted in tracing the history of a particular settlement in order to understand its origin and process of development. Hall's study of the development is associated with an analysis of the present status of the settlements, making this examination for each specific

example, consciously avoiding the search for regularities and the statements of generalizations or laws. While some geographers tried to understand settlements as if they were governed by laws analogous to those of biotic phenomena, Hall never assumes that the characteristics of the natural world can be translated to the cultural elements and relies on the examination of the development of each case to understand their present status.

As pointed out before, it was Carl O. Sauer who first transmitted to Hall the importance of understanding the development of the cultural landscape. This interest was further encouraged by Hall's appreciation of the work of French human geographers as Jean Brunhes, who discussed at length the relationship between history and geography. In addition, Hall's colleague Preston E. James, with whom he worked in close association, shared the view that the study of the development was a tool to understand the present status of the cultural landscape.[2]

Hall's interest in the history of Japanese settlements does not have to be mistaken with the concern of the loss of the traditional culture. Hall was interested in Japanese history because it helped him understand the Japan of his days. Contrary to most Western authors of his time, nowhere in his writings Hall expresses melancholy for a culture that is disappearing or criticism of the modernization efforts of the country. This position is shared by most geographers as J. J. Rein, Davis, or Trewartha, for whom the modernization of Japan is seen as a positive sign. From the geographer's perspective, the *westernization* of Japan is in fact just another episode of *rejuvenation* as it had been before the introduction of Buddhism.

3. Findings in relation to Hall's practical studies on settlements within the framework of Regional Geography

The academic context in which Hall's studies on settlements were made, shaped them in several ways. Although there is no fixed methodology common to all studies on settlements because their experimental character, the examination made of Hall's works in chapters 4 to 7 has revealed the main characteristics, strengths, and limitations of the study of settlements from a geographical perspective.

A fundamental consequence of the geographical framework is that Hall sees settlements as an integral part of the cultural landscape. Although settlements are not the focus of his studies, he placed *overwhelming emphasis* on their study because he understands that in they are a synthesis of all the cultural and natural elements of the landscape. In his studies, Hall begins by considering the broad regional context then followed by a series of approaching scales of analysis of smaller areas, concluding with a close look at the habitation unit. By the time he arrives at the examination of settlements he already has a deep understanding of the regional situation, its natural characteristics, its history, and cultural influences. The later analysis of cities, towns, villages, and rural architecture benefits significantly from this comprehensive knowledge.

The first characteristic of settlements that Hall examines is their areal distribution, which according to the standards of the time was the geographical concern par excellence. He examines the pattern of distribution (dissemination or agglomeration) in each region studied and within the whole country, explaining it by correlating the data with the history and natural features of the area. Although most regional geographers ended the settlement analysis after the examination of distribution, but Hall extended his survey to include closer examinations of individual settlements and selects for each region one representative town or village type, and one habitation type by statistical average.

When analyzing villages, towns, or cities Hall is interested mainly in their morphology, that is, their shape and structure. This interest is an inheritance of geomorphology, field from which Hall consciously borrowed terminology and methodology. In the case of simpler rural villages the study of shape is integrated within the analysis of development of the region, while in more complex towns and cities from which there is data available, Hall relies on comparisons of the settlement in different periods often illustrating the changes with comparative or overlapped layout maps.[3] Hall's procedures for the analysis of the structure —which refers to how the different elements of the settlement are arranged within it—vary according to their complexity. In the study of habitation the functional analysis is the only strategy while in cities there is also a consideration of the roads and power centers as structuring elements. Still, there is always a predominance of the concern for the functional distribution, which is another extension of the geographic interest of the areal distribution of man activities applied to settlements.

The Regional Geography framework of Hall's studies on settlements posed some limitations. The proposition of choosing one representative type of settlement for each region proved to be unsuitable, particularly for areas with complex cultural contexts as Hokkaido. In this case, Hall could confront the limitation by making some exceptions. Nevertheless, other limits set by the geographic framework were much more difficult to cross. For example, the interpretation of architecture from a geographical approach was effective for rural habitation, but limited in situations where the close environment and agricultural economy were not sufficient for the explanation, as in the case of urban architecture.

4. Significance of the examination made of Hall's studies on Japanese settlements:

The previous analysis of Hall's studies makes clear an important and overlooked series of studies that are relevant to the field of Architecture and Urban studies. By explaining a geographer's understanding of settlements as part of the cultural landscape, this study provides new evidence on a Western understanding of Japanese cities and architecture of the interwar period which was not considered before. Moreover, this thesis also discusses how an important ideological change (from determinism to possibilism) affected the way in which Japan was interpreted by Hall.

By explaining how Hall combines the study of nature and culture, this study also links the significant early 20th century debate on the acquisition of knowledge on cultures to the study of Japanese towns, cities, and architecture. The analysis of Hall's studies on cities and the examination of it context shows and explains important studies on Japanese urban settlements that will help correct the misconception that there were no academic Western interest in Japanese cities until after World War 2.

5. Future Research

The examination of Hall's studies on Japanese settlements has opened possibilities for further research, two of which are considered as a subject for postdoctoral research.[4]

The first project will focus on the development of Settlement Studies. The objective is to compare Japanese and American studies from the interwar period to make clear the mutual influences and differences in approach. This project requires a framework of analysis different from the one established for this dissertation, which must include a careful examination of the Japanese academic and ideological context.

The aim of the second project is to examine the possible influence of Hall's studies on Japan in the development of American Settlement studies. Hall's courses on settlements at the University of Michigan were among the first on the subject in the United States, and since his practical experience was almost exclusively on Japanese cities and towns it is expectable that he used these examples in his lectures. By examining the contents of Hall's lectures and the works of his disciples, this project could reveal links between Hall's pioneer studies on Japanese settlements and the development of Urban and Settlement studies in the United States.[5]

Notes:

[1] See the comparison made with Semple's work in Chapter 4, page 72-73

[2] Examples of the works of James and Hall can be seen in Chapter 6, sections 1.2 and 3

[3] See Appendix 4, page 219. He presented comparative graphics of *Nara, Aikawa, Hiinokawa, Matsue*, and *Tokaido* using his own graphics, and also provided reproductions of Japanese ancient and contemporary maps of Kyoto and *Tokyo*.

[4] These proposals have been presented in the JSPS (Japan Society for the Promotion of Science) fellowship program 2015

[5] In addition, I would like to note that there are some issues addressed in this work that need further investigation: 1 -the possible influence of *Kunio Yanagita's* thoughts on Hall's work could not be fully explored because their association was noticed just before the publication of this work, and 2- the possible influence of *Ludwig Mecking* and *Siegfried Passarge* has been limited because of the limited access to their work and the limitations of the language.

BIBLIOGRAPHY

Hall's Bibliography

Books:

HALL, Robert B. & JAMES, Preston E.: *Outline for a Course on the Principles of Geography*, Edwards Bros., Ann Arbor, Michigan, 1924

HALL, Robert B. & McMURRY, K. C.: *Sourcebook of Primary Production*, Edward Bros., Ann Arbor, Michigan, 1925

HALL, Robert B.: *A Geography of Primary Production*, Edward Bros., Ann Arbor, Michigan, 1932

HALL, Robert B.: *Area Studies: With Special Reference to Their Implications for Research in the Social Sciences*, Social Sciences Research Council, New York, 1947

HALL, Robert B. & NOH, Toshio: *Japanese Geography: A Guide to Japanese Reference and Research Materials*, Center for Japanese Studies of the University of Michigan Bibliographical Series, No. 6, Ann Arbor, University of Michigan Press, 1956

Book chapters:

HALL, Robert B.: *The Land*. In *Japan,* by Borton H. (ed.), Ithaca, Cornell University Press, 1950

HALL, Robert B.: *Political Divisions and Population*. In *Japan,* by Borton H. (ed.), Ithaca, Cornell University Press, 1950

HALL, Robert B.: *Japan: Geography, Japan: People*. In *Japan*, by Borton H. (ed.), Ithaca, Cornell University Press, 1953

HALL, Robert B.: *Monsoon Asia*. In *An Introduction to World Geography*, by Kish, G. (ed.), Engelwood Cliffs, Constable, 1956

HALL, Robert B. & WATANABE, Akira: *Hokkaido.* In *Regional Geography of Japan,* by the Society of Japanese Regional Geography, International Geographical Union, Japan, 1957

Articles published before 1939:

HALL, Robert B. & JAMES, Preston E.: *A Suggested Outline for the Treatment of a Geographic Region*, Journal of Geography, Vol.23, No.7, pp. 288-291, 1924

HALL, Robert B.: *Quelpart Island and its People*, Geographical Review, Vol. 16, No. 1, pp. 60-72, 1926

HALL, Robert B.: *The Island of Gonave: A Study in Karst Landscape,* Papers of the Michigan Academy of Science, Arts, and Letters, Vol. 14, 1928

HALL, Robert B.: *Société Congo of the Ile á Gonave*, American Anthropologist, Vol. 31, No. 4, pp. 685-700, 1929

HALL, Robert B.: *The Geography of the Republic of Haiti*, Scottish Geo.l Magazine, Vol. 46, 1930

HALL, Robert B.: *The Geography of Manchuria*, Annals of the American Academy of Political and Social Science, Vol. 152, pp. 278-292, 1930

HALL, Robert B. & KENDALL, H. M. : *The Climates of the Republic of Haiti*, Papers of the Michigan

Academy of Science, Arts, and Letters, Vol. 14, 1930

HALL, Robert B.: *Sado Island*, Michigan Academy of science Arts and Letters, Vol. 16, Ann Arbor, pp. 275-297, 1931

HALL, Robert B.: *Some Rural Settlements Forms in Japan*, Geographical Review, Vol. 21, No. 1, pp. 93-123, 1931

HALL, Robert B.: *The Yamato Basin, Japan*, Annals of the Association of American Geographers, Vol. 22, No. 4, pp. 243-292, 1932

HALL, Robert B. & WATANABE, Akira.: *Landforms of Japan*, Michigan Academy of Science, Arts, and Letters, Vol. XVII, Ann Arbor, pp. 157-207, 1933

HALL, Robert B.: *The Hiinokawa Plain,* Papers Fifth Pan-Pacific Science Congress, pp. 1359-1371, 1933

HALL, Robert B.: *Manchuria and Immigration*, Phi Beta Kappa Journal, Vol .13, No. 4, 1933

HALL, Robert B.: *Agricultural Regions of Asia, Part VII*: *The Japanese Empire*, Economic Geography, Vol. 10, No. 4, pp. 323-347, 1934

HALL, Robert B.: *Local Inventory and Regional Planning in the School Curriculum*, Journal of Geography, Vol. 33, No. 1, pp. 12-22, 1934

HALL, Robert B.: *Cities, Villages, and Houses of Japan*, Quarterly Review of the Michigan Alumnus, pp. 138-149, 1934

HALL, Robert B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*, Annals of the Association of American Geographers, Vol. 24, No. 4, pp. 175-200, 1934

HALL, Robert B.: *Agricultural Regions of Asia, Part VII*: *The Japanese Empire (Continued),* Economic Geography, Vol. 11, No. 1, pp. 33-52, 1935

HALL, Robert B.: *Agricultural Regions of Asia, Part VII*: *The Japanese Empire (Concluded),* Economic Geography, Vol. 11, No. 2, pp. 130-147, 1935

HALL, Robert B.: *The Geographic Region: A Resume*, Annals of the Association of American Geographers, Vol.25, No. 3, pp. 122-136, 1935

HALL, Robert B.: *A Map of Settlement Agglomeration and Dissemination in Japan*, Michigan Academy of Science, Arts, and Letters, Volume XXII, Ann Arbor, University of Michigan Press, pp. 365-367, 1937

HALL, Robert B.: *The Expansion of the Japanese Empire*, Fifth Annual Adult Education Institute, 1937

HALL, Robert B.: *Tokaido: Road and Region*, Geographical Review, Vol. 27, No. 3, 1937

HALL, Robert B.: *The Institute of Far Eastern Studies*, The Quarterly Review of the Michigan Alumnus, Vol. 44, No. 10, pp.83-86, 1937

HALL, Robert B.: *Geographic Factors in Japanese Expansion*, Proceedings of the Institute of World Affairs, Sixteenth edition, Vol. XVI, pp. 46-55, Published by the Institute of World Affairs, 1939

Articles published after 1939:

HALL, Robert B.: *American Raw Material Deficiencies and the Regional Dependence*, The Geographical Review, Vol. 30, No. 2, pp. 177-186, 1940

HALL, Robert B.: *Conflict for Lebensraum: South China Sea and the Strategic Materials*, Michigan Alumnus Quarterly Review, Vol. 47, No. 15, pp. 93-100, 1941

HALL, Robert B.: *The Road in Old Japan*, Studies in the History of Culture, February, pp. 122-155, 1942

HALL, Robert B.: *Area Studies: with special reference to their implications for their research in the social sciences,* Social Sciences Research Council, New York, 1947

HALL, Robert B.: 地域研究と日本研究, (能登志雄譯), 能登志雄訳, 掲載誌 地学雑誌, Vol. 58, No. 1-4, 1949

HALL, Robert B.: *Japanese Studies at Ann Arbor and Okayama*, Michigan Alumnus Quarterly Review, Vol. 57, No. 10, pp. 166-174, 1951

HALL, Robert B.:アンナーバーと岡山とにおける日本研究、掲載誌瀬戸内海研究, No.3, pp.34-38, 1952

HALL, Robert B. & NOH, Toshio: *Yakihata, Burned-Field Agriculture in Japan with its Special Characteristics in Shikoku*, Papers of the Michigan Academy of Science, Arts, and Letters, Vol. 38, 1952

HALL, Robert B.: *Revolution in Asian Agriculture*, Journal of Geography of the Tokyo Geographical Society, Vol. 69, No. 3, 1960

HALL, Robert B.: *A Map of "Buraku" Settlements in Japan*, Papers of the Michigan Academy of Science, Arts, and Letters, Vol. 47, 1962

Articles written or translated to Japanese:

HALL, Robert B. (ホール, ロバート):1933, 佐渡が島 (上), 矢沢大二訳, 島, Vol. 1 No. 3, pp. 43-48, 1933

HALL, Robert B. (ホール, ロバート):1933, 佐渡が島 (中), 矢沢大二訳, 島, Vol. 1 No. 4, pp. 23-28, 1933

HALL, Robert B. (ホール, ロバート):1933, 佐渡が島 (中), 矢沢大二訳, 島, Vol. 1 No. 5, pp. 49-54, 1933

HALL, Robert B. (ホール ロバート・ビー): 地域研究と日本研究所, 地学雑誌, Vol. 58, No. 3, pp. 97-100, 1949

Encyclopedia Britannica Films:

HALL, Robert B. (Dir.):1962-*Japanese Boy- The Story of Tars*

HALL, Robert B. (Dir.):1963-*Japan-Harvesting the Land and the Sea*

HALL, Robert B. (Dir.):1963-*Japan-Miracle of Asia*

Reference bibliography

ABE, Kazutoshi: *Urban Geography in Postwar Japan*, Geographical Review of Japan, Vol. 69, No. 1, pp.70-82, 1996

AUROUSSEAU, Marcel: *The Arrangement of Rural Populations*, Geographical Review, Vol. 10, No. 4, pp. 223-240, 1920

A. M. T.: Notes and News, American Anthropologist, New Series, Vol. 45, no. 1, pp. 163-167, 1943

BABB, James D. (Ed.): *The SAGE handbook of Modern Japanese Studies*, SAGE Publications, 2015

BENKO, Georges B. & STROHMAYER, Ulf (Eds.): *Geography, history, and social sciences,* Kluwer Academic Publishers, 1995

BISHOP Carl W.: *The Historical Geography of Early Japan*, Geographical Review, Vol. 13, No. 1, pp. 40-63, 1923

BOWMAN, Isaiah: *Geography in Relation to the Social Sciences*, Scribner, New York, 1934

BRUNHES, Jean: *Human Geography. An attempt at a Positive Classification, Principles and Examples*, translated by LeCompte, I. C., Rand McNally & Co., NY, 1920, p.42

CAMPBELL, J. A. and LIVINGSTONE, D. N.: *Neo-Lamarckism and the Development of Geography in the United States and Great Britain*, Transactions of the Institute of British Geographers, New Series, Vol. 8 No. 3, pp. 267-294, 1983

CAMBERLAIN, Basil H.: *Things Japanese: Being Notes on Various Subjects Connected with Japan*, K. Paul, Trench, Trübner, 1890

CORNISH, Vaughan: *The Great Capitals: an Historical Geography*, Methuen, 1923

CORTAZZI, Hugh &Webb, George (eds.): *Kipling's Japan: Collected Writings*, Athlone Press, 1988

COUSINS, James H.: *The New Japan: Impressions and Reflections*, Ganesh, 1923

COLBY, Charles C.: *Wellington Downing Jones, 1886-1957*, Annals of the Association of American Geographers, Vol. 50, No. 1 , pp. 51-54, 1960

COLBY, Charles C.: *Centrifugal and Centripetal Forces in Urban Geography,* Annals of the Association of American Geographers, Vol. 23, No. 1 , pp. 1-20, 1933

CONZEN, Michael P.: *The study of urban form in the United States*, Urban Morphology, Vol. 5, No.1, pp. 3-14, 2001

CRAM, Ralph A.: *Impressions of Japanese Architecture and the Allied Arts*, George G. Harrap & Co. Ltd., London, 1905

CROSBY, Alfred W.: *The Past and Present of Environmental History*, The American Historical Review, Vol. 100, No.4, pp. 1177-1189, 1995

DARBY, Henry C.: *Historical Geography in Britain*, 1920-1980: Continuity and Change, Transactions of the Institute of British Geographers, New Series, Vol. 8, No. 4, pp. 421-428, 1983

DARBY, Henry C.: *On the Relation of Geography and History*, *Transactions and Papers* (Institute off British Geographers), No. 19, pp. 1-11, 1953

DARIN, Michael: *The study of urban form in France*, Urban Morphology, Vol. 2, No. 2, pp. 63-76, 1998

DAVIS, Darrell H.: *Some Aspects of Urbanization in Japan*, Journal of Geography, Vol.33 No.6, pp. 205-220, 1934

DAVIS, Darrell H.: *Type Occupance Patterns in Hokkaido*, Annals of the Association of American Geographers, Vol. 24 No.4, pp. 201-223, Dec. 1934

DAVIS, Darrell. H.: *Present Status of Settlement in Hokkaido*, Geographical Review, Vol. 24, No. 3, pp. 386-399, 1934

DAVIS, Darrell H.: *The Earth and Man: a Human Geography*, Macmillan, 1943

DEMANGEON, Albert: *La Picardie et les Régions Voisines, Artois, Cambrésis, Beauvaisis,* Armand Colin, Paris, 1905

DEMANGEON, Albert: *Dictionnaire-manuel-illustré de géographie*, Armand Colin, 1907

DEMANGEON, Albert: *La Géographie de l'Habitat Rural, Annales de Géographie*, Vol. 36 No.199, 1927

DEMANGEON, Albert: *Problèmes de la Géographie Humaine*, Librairie Armand Colin, Paris, fourth edition, 1952

DENEVAN, William M. & MATHEWSON, Kent (Eds.): Carl Sauer on Culture and Landscape: Readings and Commentaries, Louisiana State University Press, 2009

DIKSHIT, R. D.: *Geographical Thought: A Contextual History of Ideas*, Pretice-Hall of India Private Limited, New Delhi, 2006

DODGE, Richard E.: *The Interpretation of Sequent Occupance*, Annals of the Association of American Geographers, Vol.28 No.4, pp 233-237, 1938

EYLES, John & LEE, Roger: *Human Geography in Explanation*, Transactions of the Institute of British Geographers, New Series, Vol. 7, No. 1,pp. 117-122, 1982

EYRE, John D.: *Robert Burnett Hall*. In Armstrong P. H. and Martin G. J. (Eds.): *Geographers: Bibliographical Studies*, Vol. 25, London, Continuum, 2006

FEAD, Margaret I.: *Notes on the Development of the Cartographic Representation of Cities*, Geographical Review, Vol.23, No.3, pp. 441-456, Jul. 1933

FEBVRE, Lucien: *La Terre et L'Évolution Humaine: Introduction Géographique à l'histoire*, Renaissance du Livre, 1922

FINLEY, Robert & SCOTT, E. M.: *A Great Lakes-to-Gulf Profile of Dispersed Dwelling Types*, Geographical Review, Vol. 30, No. 3, pp. 412-419, 1940

FLING, Fred M.: *The Writing of History: an Introduction to Historical Method*, Yale University Press, 1920

FRANK, Lawrence K.: *Causation: An Episode in the History of Thought*, The Journal of Philosophy, Vol. 31, No. 16, pp. 421-428, 1934

FUKUDA, Tokuzo: *The Social and Economic Development of Japan -Die gesellschaftliche und wirtschaftliche Entwickelung in Japan*- Stutgart, 1900

GAZIANO, Emanuel: *Ecological Metaphors as Scientific Boundary Work: Innovation and Authority in Interwar Sociology and Biology*, American Journal of Sociology, Vol. 101, No. 4, pp.

874-907, 1996

GEORGE, Hereford B.: *The Relations of Geography and History*, Oxford, 1901

GINZBERG, Eli: The Social Sciences Today, Political Science Quarterly, Vol. 52, No. 4, pp. 583-587,1937

GOODMAN, Grant K.: *America's Japan. The first year 1945-1946*, Fordham University Press, 2005. The first publication was in Japanese: グラント・K. グッドマン: アメリカの日本・元年 1945—1946 単行本, 1986

GRIFFIS, Elliot.: *Japan, Geographical and Social*, Journal of the American Geographical Society of New York, Vol. 10, No. 10, pp. 77-92, 1878

GREGORY, Derek: *The Dictionary of Human Geography*, Wiley-Blackwell, 2009 (5th edition)

HARTSHORNE, R.: *The Nature of Geography: A Critical Survey of Current Thought in the Light of the Past*, Annals of the Association of American Geographers, Vol.29, No.3, pp.173-412, 1939

HARTSHORNE, R. and BORCHERT, J.: *In Memoriam: Glenn T. Trewartha, 1896-1984*, Annals of the Association of American Geographers, Vol. 78, No. 4, pp. 728-735, 1988

HAUSHOFER, Karl E.: *Japan und die Japaner: eine Landeskunde*, B. G. Teubner, 1923

HALL, John W.: *Japanese Studies in the United States*, *A Report on the State on the Field, Present Resources and Future Needs*, Newsletter of the Association for Asian Studies, Vol.16, No.1, Association for Asian Studies, Ann Arbor, 1971

HEARN, Lafcadio: *Glimpses of unfamiliar Japan*, Houghton, Mifflin, 1894

HIRAI, Kinza R. M.: *Life and Customs as Contrasted with Those of the Western World (With the Treaty Question)*, Journal of the American Geographical Society of New York, Vol. 26, No. 1, pp. 123-158, 1894

HOHMANN, Joseph: *Johannes Justus Rein*, Erdkunde, Vol. 22, No. 1, 1968.

HONJO, Eijiro: The social and economic history of Japan, Institute for Research in Economic History of Japan, 1935

HOUSE, Nelson F.: *The Concept of "Social Forces" in American Sociology*, Section II, Ward's Classification of the Social Forces and those of his more Direct Imitators, American Journal of Sociology, Vol. 31, No. 2, pp. 156-172, 1925

HOFMEISTER, Burkhard: The study of urban form in Germany, Urban Morphology, Vol: 8, No. 1, pp. 3-12, 2004 (open access: http://urbanform.org/pdf/hofmeister2004.pdf)

HUGHES, Donald J.: *An Environmental History of the World: Humankind's Changing Role in the Community of Life*, Routledge Studies in Physical Geography and Environment, 2002

ISENBERG, Andrew (Ed.): *The Oxford Handbook of Environmental History*, Oxford University Press, 2014

JAUHIAINEN, Jussi: Edgar Kant and the Rise of Modern Urban Geography, Geografiska Annaler, Series B, Human Geography, Special Issue: The Heritage of Edgar Kant and J. G. Granö, Vol. 87, No. 3, pp. 193-203, 2005

JAMES, Preston E.: *The Blackstone Valley: A Study in Chorography in Southern New England*, Annals of the Association of American Geographers, Vol. 19, No. 2, pp. 67-109, 1929

JAMES, Preston E.: Vicksburg: A Study in Urban Geography, Geographical Review, Vol.21 No.2, pp. 234-243, 1931

JAMES, Preston E..: *Rio de Janeiro and Sao Paulo*, Geographical Review, Vol. 23, No. 2, pp. 271-298, 1933.

JAMES, Preston E.: *The Terminology of Regional Description*, Annals of the Association of American Geographers, Vol. 24, No. 2, pp. 78-92, 1934

JAMES, Preston E. and JONES, Clarence F. (Eds.): *American Geography: Inventory & Prospect*, Association of American Geographers by Syracuse University Press, 1954

JAMES, Preston E. and GEOFFREY J. Martins: *All Possible Worlds: A History of Geographical Ideas*, John Wiley & Sons, 1981

JANSEN, Marius. B.: *The Making of Modern Japan*, Belknap Press of Harvard University Press, 2000

JEFFERSON, Mark: *The Distribution of People in Japan in 1913*, Geographical Review, Vol. 2, No. 5, pp. 368-372, 1916

JONES, Wellington D.: *Hokkaido and Its Resources*, Geographical Journal, Vol. 58, pp. 245-246, 1921

JOHNSON, Douglas W.: *The Geography of History: A Review*, Geographical Review, Vol. 12, No. 2, 1922

JONES, Wellington D.: *Hokkaido, the Northland of Japan*, Geographical Review, Vol. 11, No. 1, pp. 16-30, 1922

JONES, Wellington D. & FINCH, V. C.: *Detailed Field Mapping in the Study of the Economic Geography of an Agricultural Area*, Annals of the Association of American Geographers, Vol. 15, No. 3, pp. 148-157, 1925

JONES, Wellington D. & WHITTLESEY, Derwent S.: *World-maps for use with an Introduction to Economic Geography*, University of Chicago Press, 1927

JONES, Wellington D.: *Field Mapping of Residential Areas in Metropolitan Chicago*, Annals of the Association of American Geographers, Vol. 21, No. 4, pp. 207-214, 1931

JONES, Wellington D.: *Procedures in Investigating Human Occupance of a Region*, Annals of the Association of American Geographers, Vol.24, No.2, pp. 93-111, 1934

JOHNSTON, R. J.: *On the Nature of Explanation in Human Geography*, Transactions of the Institute of British Geographers, Vol. 5, No. 4, pp. 402-412, 1980

JOHNSTON, R. J. & CLAVAL, P. (Eds.): *Geography since the Second World War*, Barnes & Noble, 1984

KEIGHREN, Innes M.: *Bringing Geography to the Book: Charting the Reception of Influences of Geographic Environment*, Transactions of the Institute of British Geographers, New Series, Vol.31 No. 4, pp. 525-540, 2006

KIRK, H. Stone: *The Development of a Focus for the Geography of Settlement*, Economic Geography, Vol. 41, No.4, pp. 346-355, Oct. 1965

KINDA, Akihiro & KOBAYASHI, Kentaro: Research Frontiers in the Historical Geography of Japan in 1978-1987, Geographical Review of Japan, Vol. 61(Ser. B), No. 1, pp. 78-98, 1988

KAKIUCHI, Gorge H. and KIKUCHI, Ichiro: *Origin, Distribution and Role of the Kaito Phenomenon in the Settlement of Japan*, (Part one of two), Bulletin of Nara University of Education, Cultural And Social Science, Vol. 21, No. 1, pp. 83-92, 1972

KNIFFEN, Fred B.: *Louisiana House Types*, Annals of the Association of American Geographers, Vol. 26, No. 4, pp. 179-193, Dec., 1936

KOBAYASHI, A.**:** *People, Place, and Region: 100 Years of Human Geography in the Annals*, Annals of the Association of American Geographers, Vol. 100, No. 5, pp. 1095-1106, 2010

KRUG-GENTHE, Martha: *Valley Towns of Connecticut*, Bulletin of the American Geographical Society, Vol. 39, No. 9, pp. 513-544, 1907

KUROISHI, I.: *Constructing the Colonized Land: Entwined Perspectives of East Asia around WWII*, Ashigate, 2014

LEWIS, F. Thomas.: *The Sequence of Areal Occupance in a Section of St. Louis, Missouri*, Annals of the Association of American Geographers, Vol.21 No.2, pp. 75-90, 1931

LEWTHWAITE, Gordon R.: *Environmentalism and Determinism: A Search for Clarification*, Annals of the Association of American Geographers, Vol.56, No.1, pp. 1-23, 1966

LIPPMANN, Walter: *Commencement Speech* at the University of Michigan in 1934. From the newspaper Syracuse Herald, Sunday, June 24, p.15. Source: Newspapers Archive (Newspapersarchive.com/us/new-york/syracuse/syracuse-herald/1934/06-24/page-15. Accessed on May 2014

MacARTHUR, Douglas: Letter from General Douglas to Robert B. Hall, date 5th June 1949. From the Center for Japanese Studies of the University of Michigan, Okayama Field Station official site (www.ii.umich.edu/cjs/aboutus/historyofcjs/okayamafieldstation, accessed 2014/01/15)

McDONALD, Mary: *Geography's contributions to Japanese Studies*. In BABB, James D. (Ed.): *The SAGE handbook of Modern Japanese Studies*, SAGE Publications, 2015

MARTIN, Geoffrey J.: *In Memoriam: Preston E. James*, 1899-1986, Annals of the Association of American Geographers, Vol. No.1, pp.164-175, 1988

MECKING, Ludwig: *Kult und Landschaft in Japan,* Geographische Anzeiger 30, pp. 137-146, 1929

MECKING, Ludwig: *Japanische Stadtlandschaften*. In Passarge, S.: *Stadtlandschaften der Erde* -Comparative Study of City Landscapes- , Gruyter & Co, 1931

MECKING, Ludwig: *Japans Hafen; ihre Beziehungen zur Landesnatur und Wirtschaft*, Friedrichsen de Gruyter, 1931

MELOSI, Martin V.: *The Place of the City in Environmental History*, Environmental History Review, Vol. 17, No. 1, pp. 1-23, 1993

MILLER, David L.: Explanation versus Description, The Philosophical Review, Vol. 56, No. 3, pp. 306-312, 1947

MORSE Ronald A.: *Yanagita Kunio and The Folklore Movement: The Search for Japan's National Character and Distinctiveness*, New York, Garland Publications, 1990

MORSE, Edward S.: *Japanese Homes and their Surroundings*, New York, Harper & Bros, 1885

MORRIS DAVIS, William: A Retrospect to Geography, Annals of the Association of American Geographers, Vol.22, No.4, pp. 211-230, 1932

MOORE, Harry E.: Social Scientist Explore the Region, Social Forces, Vol.16, No. 4, pp. 463-474, 1938

MURPHY, Alexander B.: Geography's Place in Higher Education in the United States, Journal of Geography in Higher Education, Volume 31, Issue 1, pp. 1221-141, 2007

NASH, Roy: *The Houses of Rural Brazil*, Geographical Review, Vol. 13, No. 3, pp. 329-344, 1923

NISHI, Midori: *Regional Variations in Japanese Farmhouses,* Annals of the Association of American Geographers, Vol, 57, No. 2, pp. 201-223

OGAWA, Tohru: *Geographical Distribution and Historic Development of Rural House Types in Japan. A Cultural Geography*. In NISHIKAWA, Osamu; NOH, Toshio, et. al. (Eds.): *Geography of Japan*, Teikoku-Shoin, 1980

OKADA, Toshihiro: *A Bibliography of Japanese Geographers in Early-Modern and Modern Japan— Foundation for Editing a Biographical Dictionary of Japanese Geographers* —, 高知大学教育学部研究報告, 第69号, pp.161-194, 2009

PARKINS, Almon E.: *Profiles of the Retail Business Section of Nashville, Tennessee, and Their Interpretation*, Annals of the Association of American Geographers, Vol. 20, No.3, pp. 164-175, 1930

PEET, Richard: *The Social Origins of Environmental Determinism*, Annals of the Association of American Geographers, Vol. 75, No.3, pp. 309-333, 1985

PITTS, Forrest R.: *Sliding Sideways into Geography*, in Gould, P & Pitts, F. R. (Eds.): *Geographical Voices*, Syracuse University Press, New York, 2002

PONSONBY-FANE, Richard A. B.: *Kyoto: The Old Capital of Japan, 794-1869*, Kyoto: The Ponsonby Memorial Society, 1956; first published in Transactions of the Japan Society of London 22 (1925)

REIN, Johannes J.: Japan: *Travels and Researches Undertaken at the Cost of the Prussian Government*, Hodder and Stoughton, London, 1884

RITTER, Carl.: *Comparative geography*; translated for the use of schools and colleges by William L. Gage, American Book Company, 1864

SAUER, Carl O.: *Foreword to Historical Geography,* Annals of the Association of American Geographers, Vol.31, No.1, pp.1-24, 1941

SAUER, Carl O.: *The Morphology of Landscape*. In LEIGHLY, John (ed.): *Land and life: A Selection from the Writings of Carl Ortwin Sauer,* The University of California Press, 1963. The

Morphology of Landscape was originally published in University of California Publications in Geography, Vol.2 No.2, 1925 (Reprinted 1938)

SAUER, Carl O.: *The Survey Method in Geography and its Objectives*, Annals of the Association of American Geographers, Vol.14, No.1, pp.17-33, 1924

SCHAEFER, K. Fred: Exceptionalism in Geography: A Methodological Examination, Annals of the Association of American Geographers, Vol. 43, No. 3, pp. 226-249, 1953

SCOFIELD, Edna: The Evolution and Development of Tennessee Houses, Journal of the Tennessee Academy of Sciences, Vol. 11, No. 4, pp. 229-240, 1936

SEMPLE, C. Ellen: *American History and its Geographic Conditions*, Houghton. Miffin, Boston, 1903

SEMPLE, C. Ellen: *Influences of Geographic Environment: On the basis of Ratel's System of Anthropogeography*, Henry Holt, 1911

SEMPLE, C. Ellen: *Influence of Geographical Conditions upon Japanese Agriculture*, The Geographical Journal, Vol.40, No.6, pp.589-603, 1912

SHAW Wilfred B. (Ed.): *The University of Michigan, an Encyclopedic Survey*, Vol. 2, parts III, IV and V, Ann Arbor, University of Michigan Press, 1951.

SHEPPARD, E & McMASTER, R. B. (eds.): *Scale and Geographic Inquiry: Nature, Society, and Method*, Blackwell publishing, 2004

STONE, Kirk H.: *The Development of a Focus for the Geography of Settlement*, Economic Geography, Vol. 41, No. 4, pp. 346-355, 1965.

STEWART, Mart A.: *Environmental History: Profile of a Developing Field,* The History Teacher, Vol. 31, No. 3, pp. 351-368, 1998

TAKAKI, Yasaka: *Japanese Studies in the Universities and Colleges of the United States, Institute of Pacific Relations*, Hawaii, 1935

TAKIZAWA, Matsuyo: *The Penetration of Money Economy in Japan and its Effects upon Social and Political Institutions*, Columbia University press, New York, 1929

TAUT. Bruno: *Fundamentals of Japanese Architecture*, Kokusai Bunka Shinkokai, K. B. S. publications; ser. B. No.231936

TAUT. Bruno: *Houses and People of Japan*, Sanseido, Tokyo, 1937

T. C. W.: *Obituary: Dr. Vaughan Cornish*, Geography, Vol. 33, No. 3, pp. 572-573, Sept., 1948

TREWARTHA, Glenn T.: *A Geographic Study in Shizuoka Prefecture*, Japan, Annals of the Association of American Geographers, Vol. 18, No. 3, pp. 127-259, 1928

TREWARTHA, Glenn T.: *The Iwaki Basin: Reconnaissance Field Study of a Specialized Apple District in Northern Honshiu*, Japan, Annals of the Association of American Geographers, Vol. 20, No. 4 , 1930

TREWARTHA, Glenn T.: *The Suwa Basin: A Specialized Sericulture District in the Japanese Alps*, Geographical Review, Vol. 20, No. 2, pp. 224-244, 1930

TREWARTHA, Glenn T.: *Japanese Cities, Distribution and Morphology*, Geographical Review, Vol. 24 No.3, pp. 404-417, 1934

TREWARTHA, Glenn T.: *A Reconnaissance Geography of Japan*, University of Wisconsin-Studies in the Social Sciences and History No.22, University of Wisconsin, 1934

TREWARTHA, Glenn T.: *French Settlement in the Driftless Hill Land*, Annals of the Association of American Geographers, Vol.28, No.3, pp. 179-200, 1938

TURNER, B. L. II: *Contested Identities: Human-Environment Geography and Disciplinary Implications in a Restructuring Academy*, Annals of the Association of American Geographers, Vol. 92, No. 1, pp. 52- 74, 2002

VALLAUX, Camille & BRUNHES, Jean: *La Géographie de l'histoire, Géographie de la Paix et de la Guerre sur Terre et sur Mer* , Felix Alcan, Paris, 1921

VAN CLEEF, Eugene: The Urban Profile, Annals of the Association of American Geographers, Vol. 22, No. 4, pp.237-241, Dec., 1932

VIDAL DE LA BLACHE, Paul: *Principes de Géographie Humaine*, Armand Colin, Paris, 1922

VLACH, John Michael: *Fred B. Kniffen's Milestones in American Folklife Study*, The Journal of American Folklore, Vol. 108, No. 429, pp. 328-333, 1995

VON MISES, Ludwig*: Epistemological Problems of Economics*, New York University Press, 1976

WARD, Robert E.: *Reflections on the Origins of the Center for Japanese Studies: A tribute to Robert Burnett Hall (1896-1975)*. In, Center for Japanese Studies (Ed.): *Japan in the World, the world in Japan: fifty years of Japanese studies at Michigan*, University of Michigan, 2001

WHITTLESEY, Derwent: *Sequent Occupance*, Annals of the Association of American Geographers, Vol.19, No.3, pp. 162-16, 1929

WRIGHT, Frank L.: *The Japanese Print: an Interpretation*, Horizon Press, New York, 1967(first edition 1912)

No author:

Records of the round Table of the Association of American Geographers held at Syracuse, New York, December 1936, Published as: *Round Table on Problems in Cultural Geography*, Annals of the Association of American Geographers, Vol. 27, No. 3, pp. 155-175, 1937

Bibliography on Land Settlement with Particular Reference to Small Holdings and Subsistence Homesteads, U.S. Department of Agriculture, 1934.

NEWSPAPERS: The Michigan Daily, *Hall Receives Award*, undated; The Ann Arbor News, *Japanese Crown Prince Tours University Campus*, Ann Arbor, Mich., Wednesdat September 23, 1953; The Ann Arbor News, The Emperor's Old Ties, November 14, 1990; Asahi Evening news, *Dr. Hall Honored*, 1957

References in Japanese

石田寛: 外国人による日本地域研究の軌跡, 東京: 古今書院, 1985

SMITH, H. D.: 村<ヴィレッジ>としての東京：変転する近代日本の首都像, シリーズ都市・建築・歴史６：都市文化の成熟

BEDFORD, Yukiko: アメリカにおけるエアリア・スタディによる日本研究と日本近代化 Japanese Journal of Human Geography 32(6), 504-517, 1980

木内信蔵:都市地理学研究, 増補版.古今書院, 1956

山鹿誠次: 都市地理学のあゆみ, Geographical review of Japan Vol.46, No. 7, pp. 488-491, 1973

西田與四郎:都市の形態, 岩波書店, 1931

木内信蔵: (PHYSIOGNOMIE 通リ 東京市に於ける都市景觀地理 第 1 報及第 2 報, A Study of the Landscape of Tôkyô (I. Physiognomy; II. Streets), 地理学評論, Vol. 12, No. 2, pp. 96-125, 1936

都市發展に於ける轉移現象と景觀地域の分化 (Migrations of Functions and Differentiation of Landscape Region in Urban Development), 地 理学評論, Vol. 13, No. 12, pp. 1108-1125, 1937

佐々木彦一: 東京の都心調査,地理学評論, Vol. 9 No. 9, pp. 755-765, 1933

佐々木彦一: 都市の構造形態の一分類(第 1 報),地理学評論,Vol. 10 No. 10, pp .882-891, 1934

小田内通敏: 帝都と近郊, 大倉研究所, 1918; 郷土地理研究, 刀江書院, 1930

小田内通敏: 日本・風土と生活形態: 航空写真による人文地理学的研究, 鉄塔書院, 1931

岡田俊裕: 戦中・戦後の小田内通敏, 季刊地理学, pp. 14-32, Vol. 48, No. 1, 1998

岡田 俊裕 : 敗戦前の日本における「景観」概念と「景観」学論, 人文地理, Vol. 39, No. 5, 1987

小野均: 近世城下町の研究, 至文堂, 1928

石野瑛: 吉田新田古圖文書 : 横濱郷土史料, 吉田家, 1928

吉田一太郎: 横濱吉田新田圖繪,吉田家, 1935

今和次郎: 日本の民家 : 田園生活者の住家, 鈴木書店, 1922

今和次郎:民家論,ドメス出版, 今和次郎集, 第 2 巻, 1971

尾崎甫四郎: 房總東南部の微細地誌(第 1 報) 2, 地理学評論, Vol. 9, No. 2, pp. 128-144, 1933

APPENDIXES

APPENDIX 1

Carl Whiting Bishop: *The Historical Geography of Early Japan*, Geographical Review, Vol. 13, No. 1, pp. 40-63, 1923. In this paper Bishop states that"*(l)etters have reference to successive Ainu frontiers. The conquest and absorption of the Ainu had pushed the Yamato frontier as far east-ward as the Lake Biwa (…) before the close of the prehistoric period*" (page 41), and presents a map which identifies the extension of the Ainu population areas as including the entire south of Honshu, Shikoku and part of Kyushu.

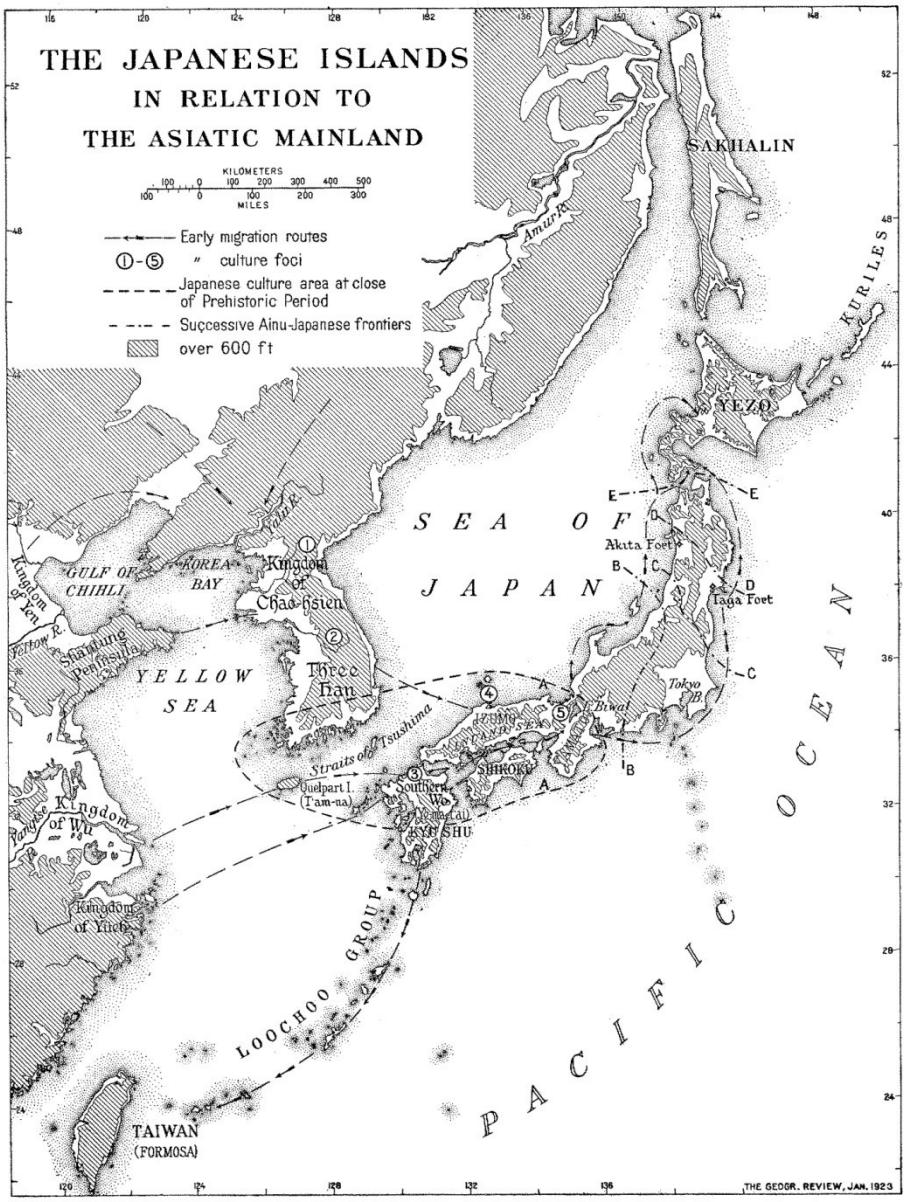
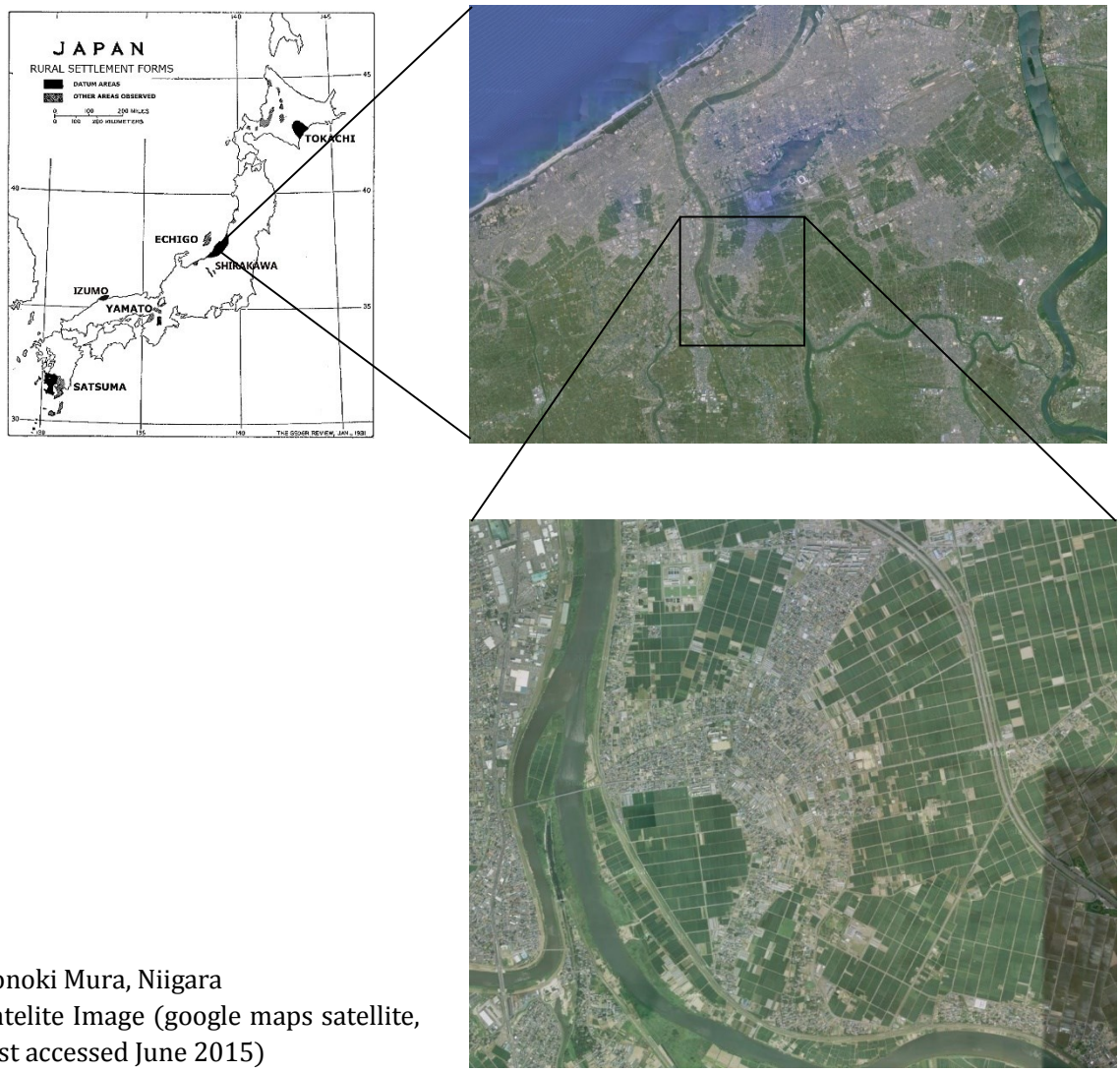


FIG. 1—Map to illustrate geographical relationships in early Japanese history. Numbers indicate the main cultural foci: 1, northern Korea (the kingdom of Chao-hsien is here shown in its later stages, earlier it extended across the Yalu basin); 2, southern Korea; 3, Kyushu; 4, Izumo; 5, Yamato. Letters have reference to successive Ainu frontiers. The conquest and absorption of the Ainu had pushed the Yamato frontier as far eastward as the Lake Biwa region (A) before the close of the prehistoric period. The line B—B represents the next great advance, just at the dawn of the historical period, and C—C the frontier as it existed about the time of the loss of the continental possessions of the Yamato. The line D—D was reached by the Japanese about the beginning of the eighth century, and the occupation of the main island may be regarded as completed, in its broad outlines, by the close of the tenth century. Scale of map approximately 1: 22,500,000.

Image source: Carl W. Bishop: *The Historical Geography of Early Japan*, Geographical Review, Vol. 13, No. 1, pp. 40-63, 1923、p. 41

APPENDIX 2

Location of the area studied by Hall in Niigata



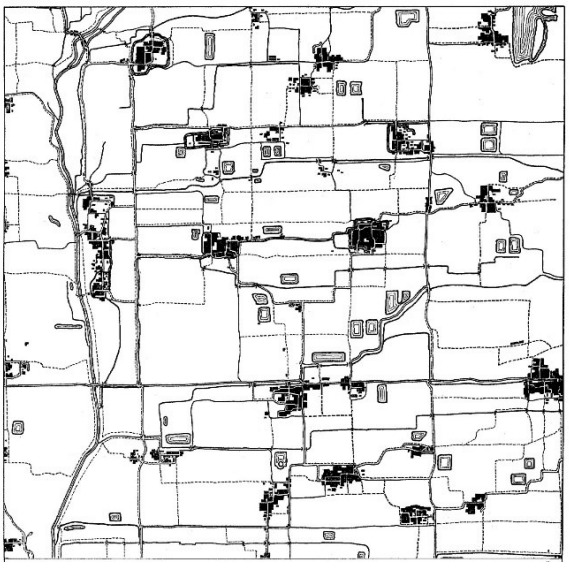
Sonoki Mura, Niigara
Satelite Image (google maps satellite, last accessed June 2015)

Sonoki Mura, Echigo
Image published by Hall in 1931
(Hall, R. B.: *Some Rural Settlement Forms in Japan*, Geographical Review, Vol. 21, No. 1, pp. 93-123, 1931, p. 111)

APPENDIX 3

Location of the area studied by Hall in Nara Prefecture

Heiwa Mura, Nara Basin
Satelite Image (google maps satellite
last accessed June 2015)



Heiwa Mura, Nara Basin
Image published by Hall in 1931
(Hall, R. B.: *Some Rural Settlement Forms in Japan*, Geographical Review, Vol. 21, No. 1, pp. 93-123, 1931, p. 97)

APPENDIX 4

GRAPHIC ANALYSIS

In this section the graphics used by geographers during the interwar period to survey and analyze settlements are put together to provide a comprehensive view of the graphical tools that were being tested, and places Hall's graphic research within this context. All images are shown without modifications.

1-SECTION PROFILES

1.1-Section profiles made by American geographers

Sections used to illustrate different occupance stages of an area:

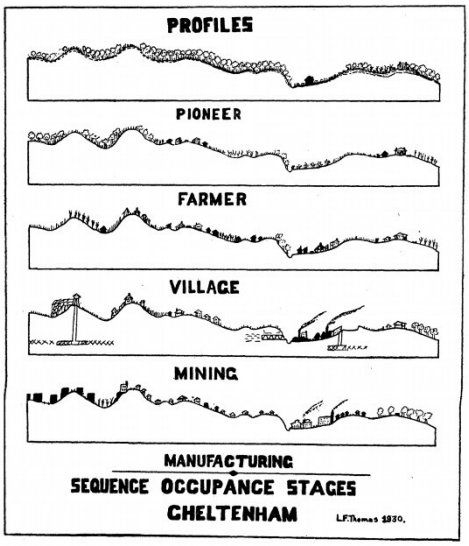


Fig. A4.1 Lewis, Sequence of occupance profiles, 1931

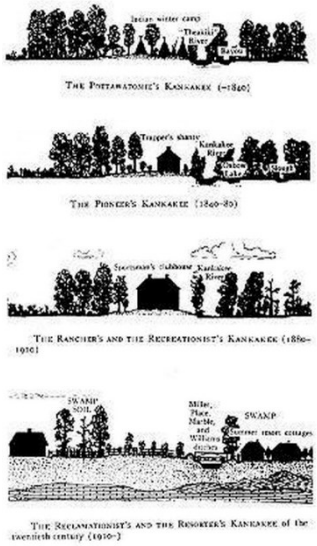


Fig. A4.2 Meyer, Kankakee occupance stages, 1935

Comparative urban profiles:

FIG. 3—Columbus; population 290,564. Horizontal distance 1½ times Cleveland.

FIG. 4—Alliance; population 23,047. Horizontal distance equal to Cleveland.

FIG. 5—Troy; population 8,675. Horizontal distance equal to Cleveland.

Fig. A4.3 Van Cleef, Comparison of Urban Profiles, 1932

1.2 Section profiles made by Japanese geographers

Comparative rural settlement profile:

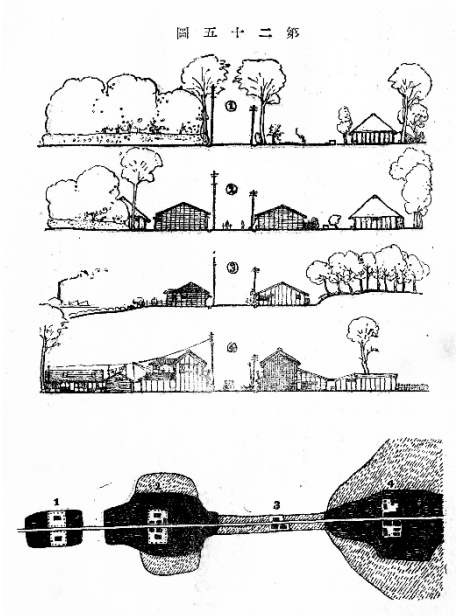
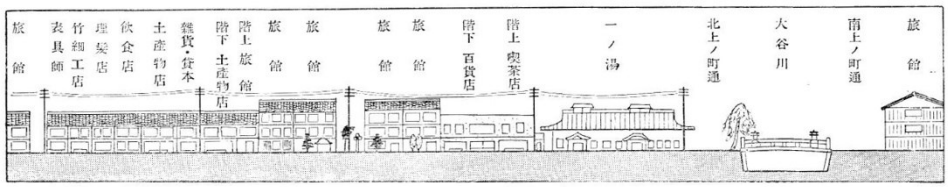


Fig. A4.4 Kon Wajiro, four sections along a rural street, 1922

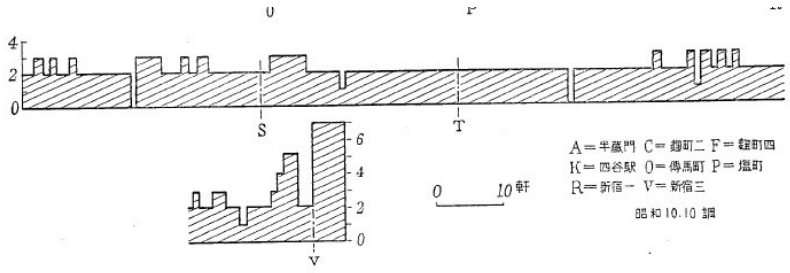
Town morphological profile:



第十二圖　城崎町一ノ湯附近（本町）の立面圖　（昭和六年八月）

Fig. A4.5 Nishida Yoshiro, section of Kinosaki town(城崎町), 1931

City profile:



第10圖　半藏門—新宿三，家屋階數

横軸は軒數によつて示さる。但し 10m 以上間口のものは 1.5 倍，20m 以上のものは 2.0 倍にて示せり。普通間口 4—8m 階數 0 のものは空地を示す。

Fig. A4.6 Kiuchi, profile of a Tokyo district, 1936

1.3 Section profiles made by Robert B. Hall

Comparative profiles of cities with different original functions:

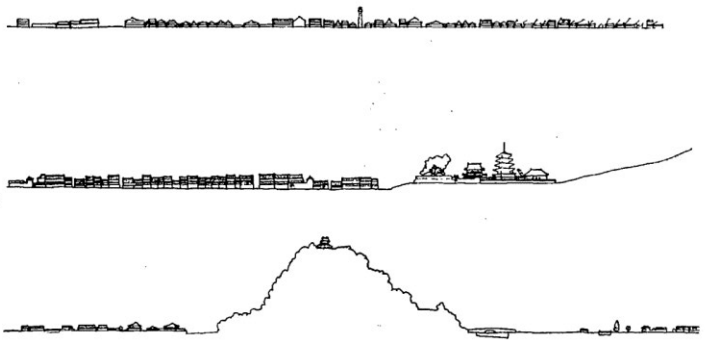
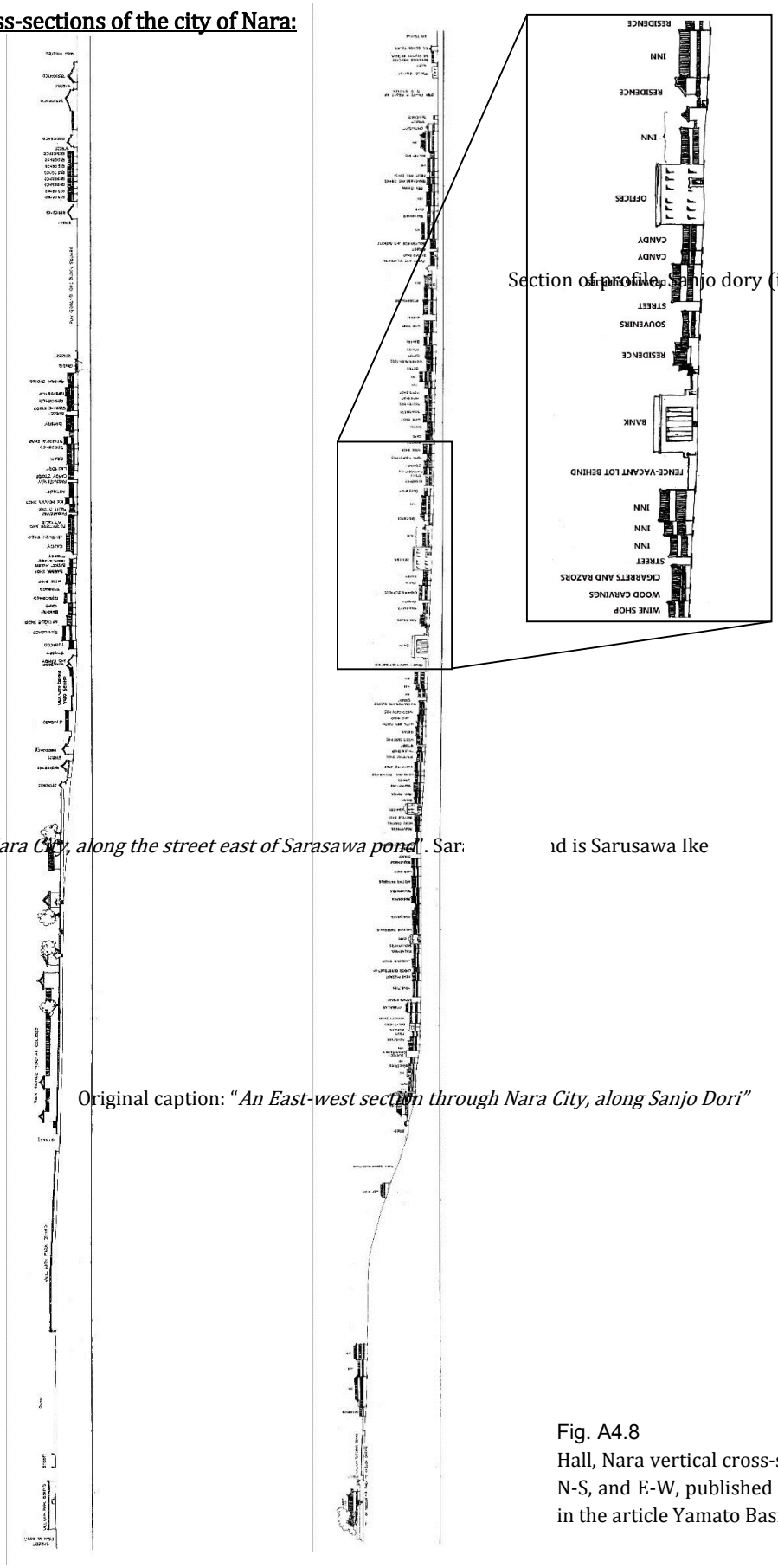


FIG. 5.—Cross-section profiles of three Japanese cities. a. The upper profile is an exact cross-section of Mikkaichi, an "ichibi-machi." The long axes of all buildings are at right angles to the road. b. The middle profile is a composite, but to exact scale, of parts of Nara, a "monzen-machi." c. The lower profile is an exact cross-section of a part of Matsue, a "joka-machi" Horizontal and vertical scales are the same—approximately 1 inch to 700 feet.

Fig. A4.7 Hall, Comparative profiles with original notation, published in two articles from 1934

1.3 Section profiles made by Robert B. Hall

Complete cross-sections of the city of Nara:



Section of profile Sanjo dory (intersection with Konishisak

rofile A- North-South section through Nara City, along the street east of Sarasawa pond". Sar ıd is Sarusawa Ike

Original caption: "*An East-west section through Nara City, along Sanjo Dori"*

Fig. A4.8
Hall, Nara vertical cross-sections N-S, and E-W, published in 1932 in the article Yamato Basin.

2-FUNCTIONAL SCHEMES

2.1 American geographers

Regional scale functional distribution:

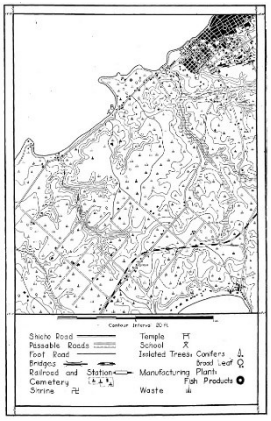


Fig. A4.9 Davis, Distribution of activities in a fishing and grazing area, Hokkaido, 1934

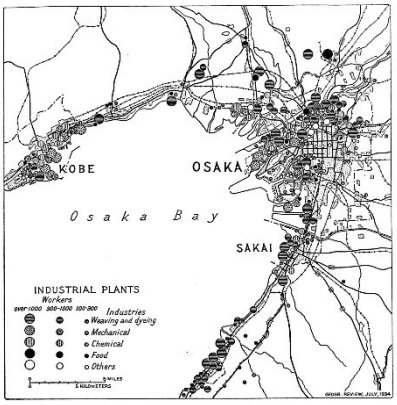


Fig. A4.10 Trewartha, Osaka, distribution of industries, 1934. Redrawn from "The New Atlas of Japan", 1929

Development of the functional distribution:

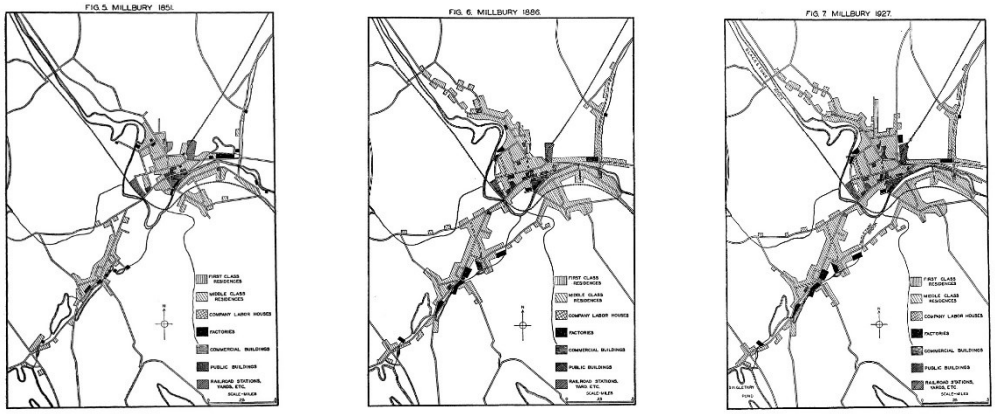


Fig A4.11 Preston E. James, study of functional distribution of Millbury (in Southern New England, U. S.), 1929

Functional distribution of a section of a city:

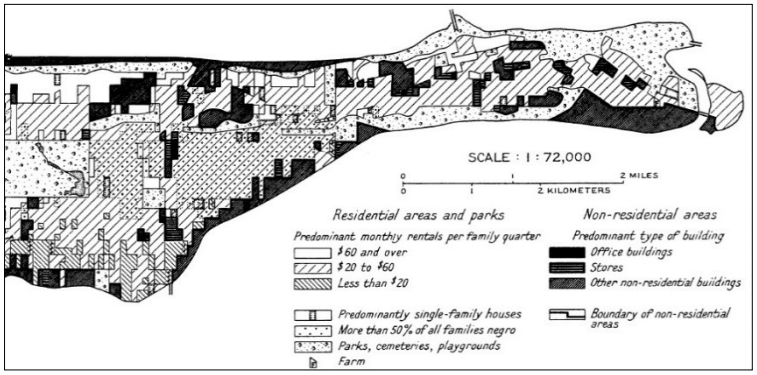


Fig. A4.12 Wright, J. K., Functional distribution in New York, 1936

2.2 Japanese Geographers

Location of specific functions within a city:

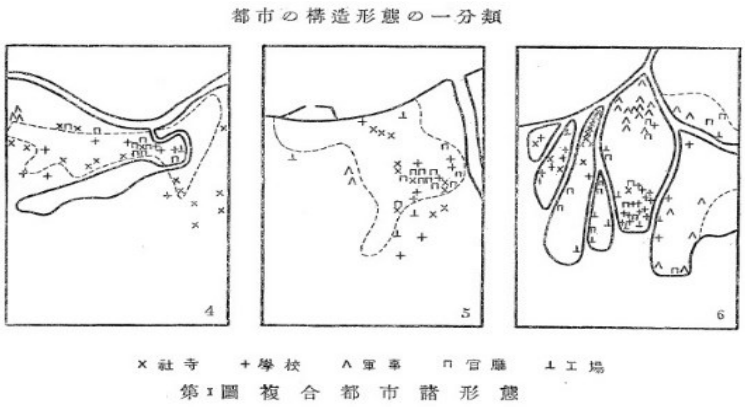


Fig. A4.13 Sasaki, Location of government, military, education and religious facilities in Japanese cities, 1934

Functional distribution of a section of a city:

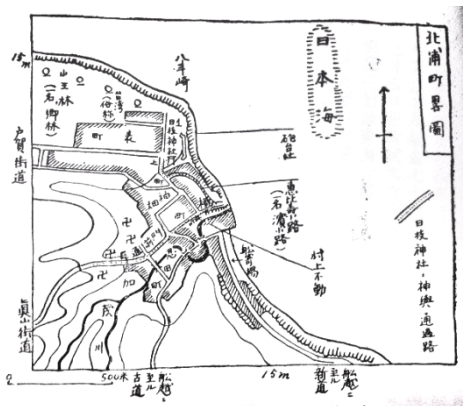


Fig. A4.14 Odauchi, Kitaura (北浦町) in Oga Peninsula, Japan, 1926

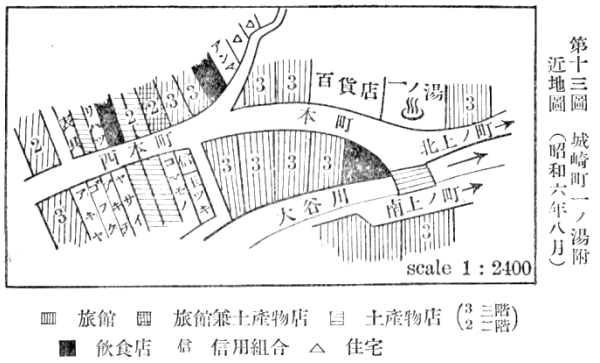


Fig. A4. 15 Nishida, Distribution of functions in Kinosaki, 1931

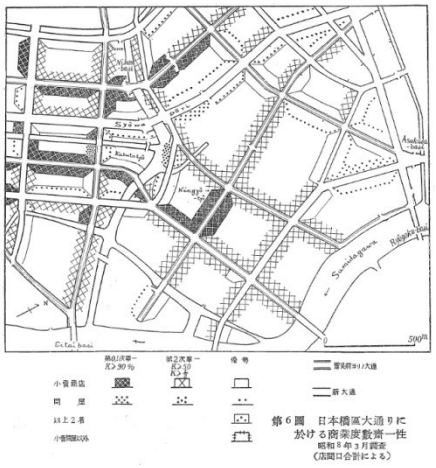


Fig. A4.16 Kiuchi, Number of business in Nihonbashi, 1936

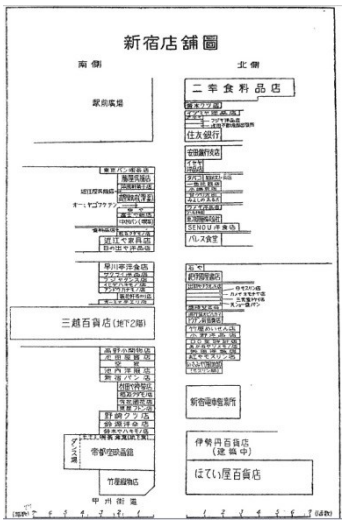


Fig. A4.17 Sasaki, Distribution of functions of a commercial street in Tokyo, 1933

2.3 Functional schemes made by Robert B. Hall

Regional scale functional distribution:

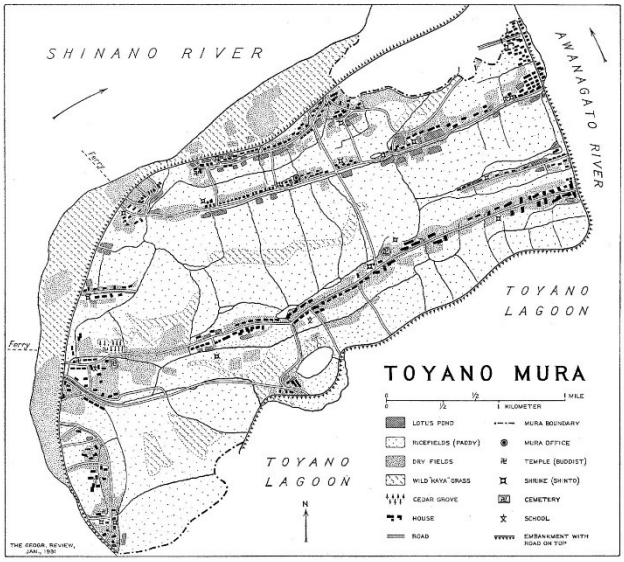


Fig. A4.18 Hall, Toyano Mura crops and buildings distribution, in Yamato Basin, 1931

Functional distribution a city:

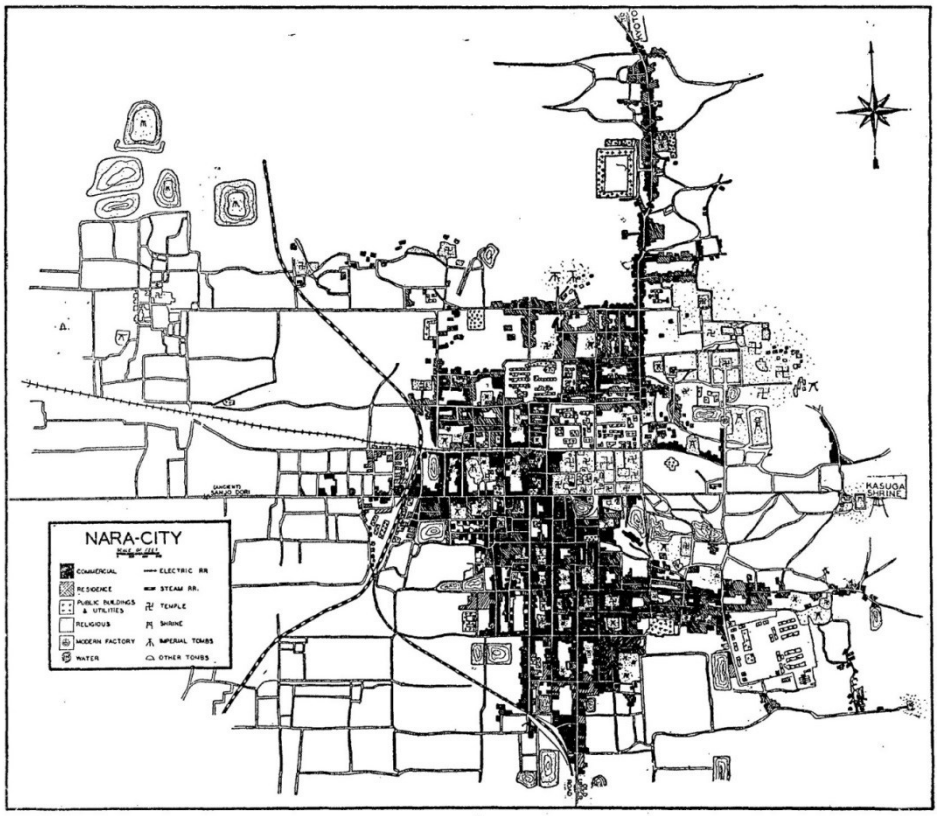


Fig. A4.19 Hall, Functional occupance in Nara, 1932

2.3 Functional schemes made by Robert B. Hall

Functional distribution of a block:

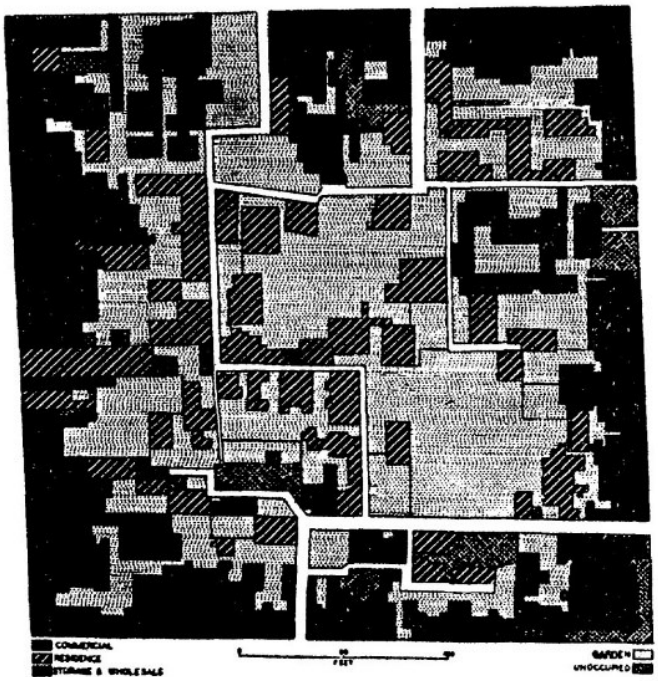


Fig. A4.20 Hall, Functional occupance a block of Matsue with original caption, 1932

Functional distribution of a city:

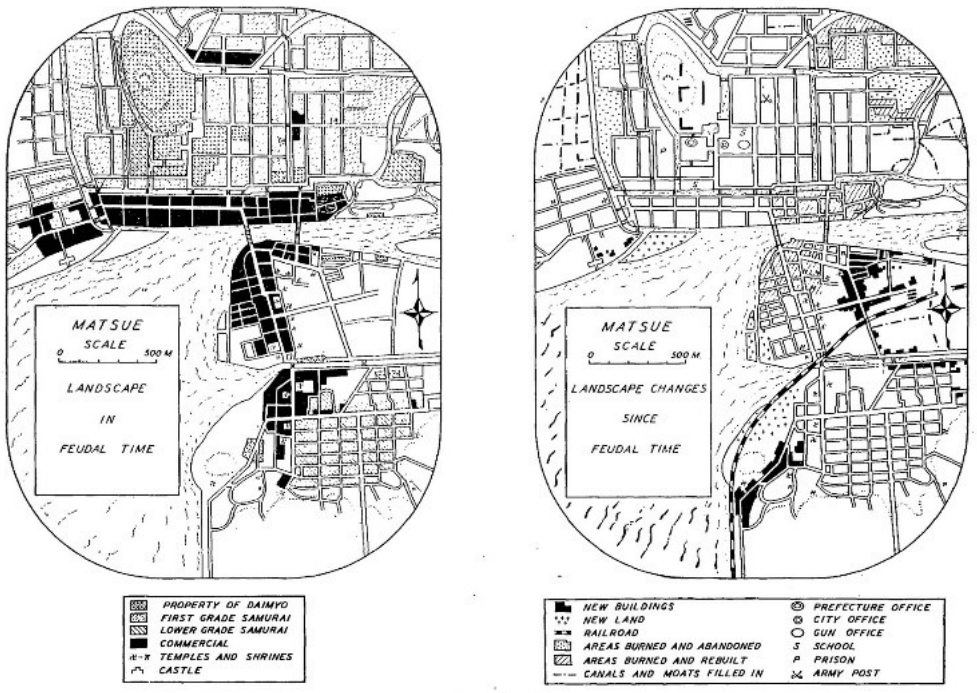


FIG. 3.—The data for the map of feudal Matsue are by courtesy of the Matsue government offices and Messrs. Mori, Nosu, and Kusamitsu.

Fig. A4.21 Hall, Comparison of functional distribution of Matsue, with original caption, 1934

2.3 Functional schemes made by Robert B. Hall

Functional distribution of towns:

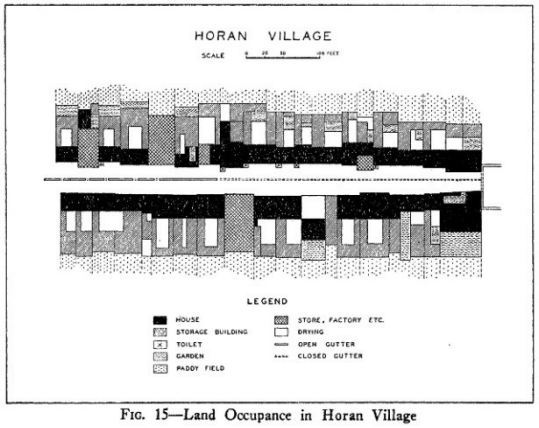


FIG. 15—Land Occupance in Horan Village

Fig. A4.22 Hall, Land occupance of Horan village of Yamato Basin, 1932

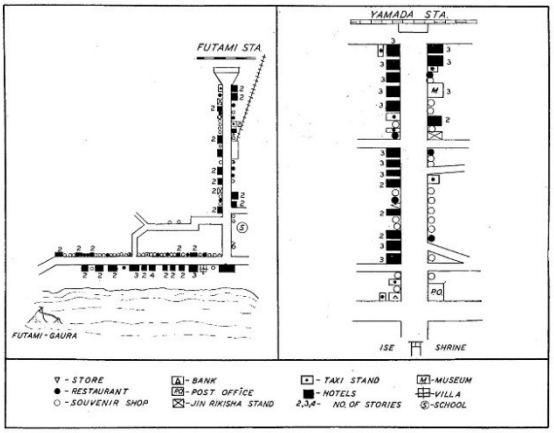


FIG. 11.—Futami and Yamada, simple forms of "monzen-machi."

Fig. A4.23 Hall, Location of functions of Futami and Yamada towns, 1934

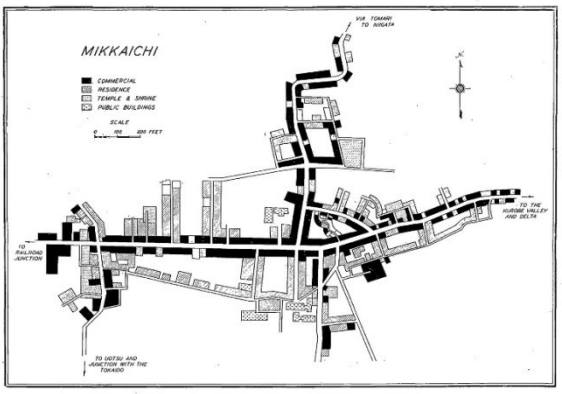


FIG. 14.—Mikkaichi, an "ichiba-machi."

Fig. A4.24 Hall, Functional distribution of Mikkaichi 1934

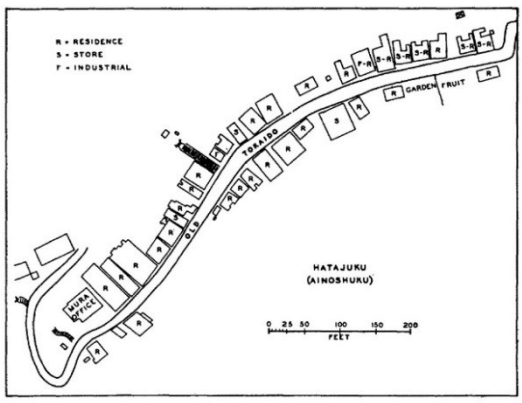


FIG. 16—Plan of a middle stage, *aino shuku*, on the Tokaido. Note the right-angled jogs in the road.

Fig. A4.25 Hall, Plan of a post town of Tokaido indicating the function of the buildings, 1937

3 Hall's use of comparative graphics

Comparison of towns of different original function:

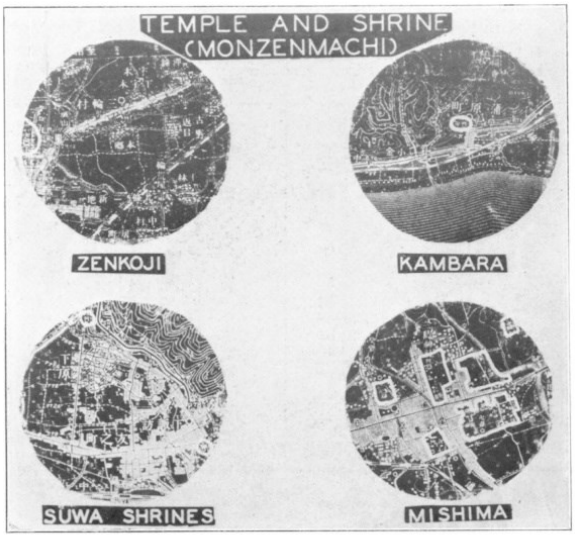


FIG. 12.—Ground plans of "monzen-machi." Reduced about one quarter from sections of sheets of the Japenese Imperial Survey on the scale of 1 : 50,000.

Fig. A4.26 Hall, Comparison of layouts of religious towns, 1934

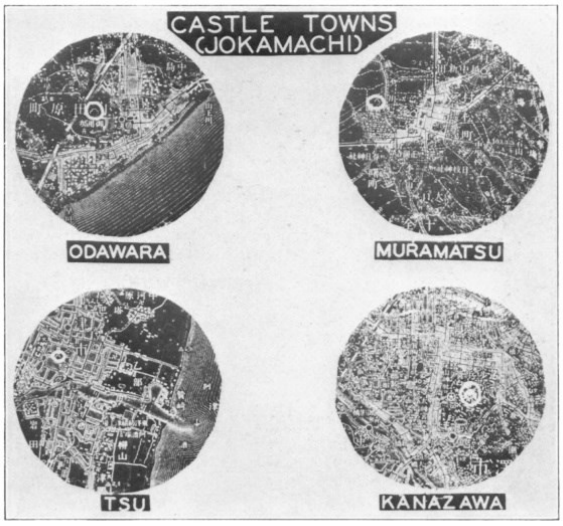


FIG. 7.—Ground plans of "joka-machi." Reduced about one quarter from sections of sheets of the Japanese Imperial Survey on the scale of 1 : 50,000.

Fig. A4.27 Hall, Comparison of layouts of castle towns, 1934

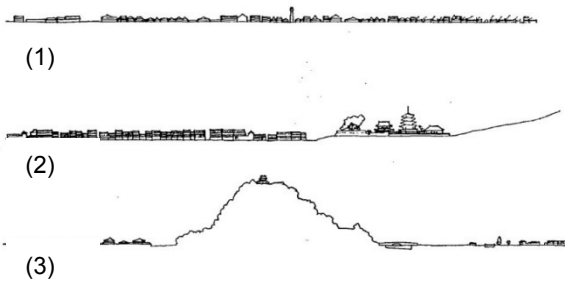


Fig. A4.28 Hall, Comparison of profiles of a (1) commercial town , (2) a temple town, and (3) a castle

Comparison of towns of different development:

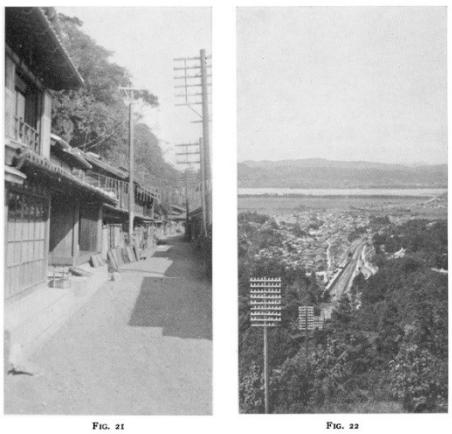


FIG. 21 FIG. 22

Fig. A4.29 Hall, Comparison of development of towns along Tokaido. At the right a town near a motor road, in the left, a town far from the motor road, 1937

3 Hall's use of comparative graphics

Development graphed through comparison of different stages:

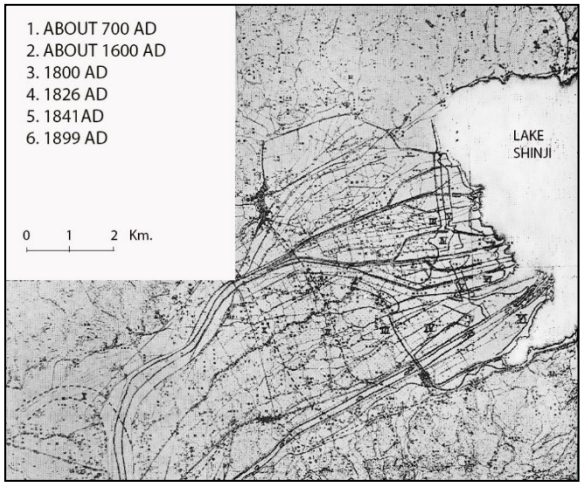
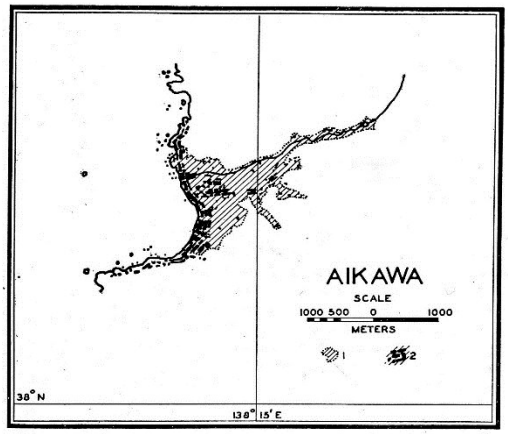


Fig. A4.30 Hall, Progression of the shoreline over the lake Shinji in Hiinokawa, 1933



MAP 20. Map of Aikawa, showing the ancient extent of the city and the present occupied area. Explanation of symbols: 1, Aikawa at the time of its greatest extent; 2, area occupied at present

Fig. A4.31 Hall, Comparison of extension of Aikawa in the 19th century and the 1920s, 1931

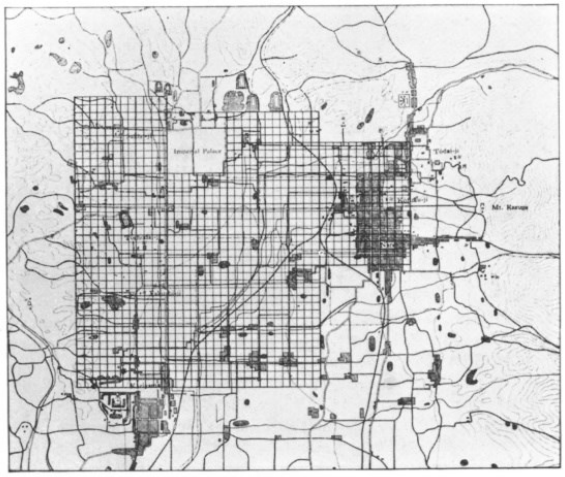


FIG. 13.—Nara, ancient and modern. The ancient settlements are marked by dark shading; the modern city is the area within the heavy grid.

Fig. A4.32 Hall, Comparison of the original plan of Nara and its extension in the 1930s in black, 1934

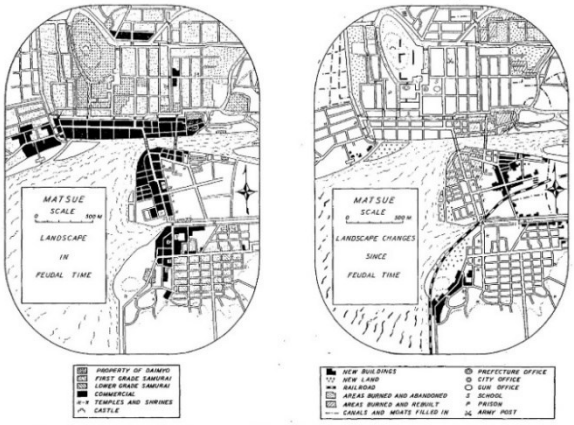


Fig. A4.33 Hall, Comparison of functional distribution of Matsue, 1934

Development graphed through comparison of different stages:

Fig. A4.34 Hall, Comparison of the extension of Yoshida Shinden (吉田新田). From bottom up: 17th, 19th and 20th century, 1934

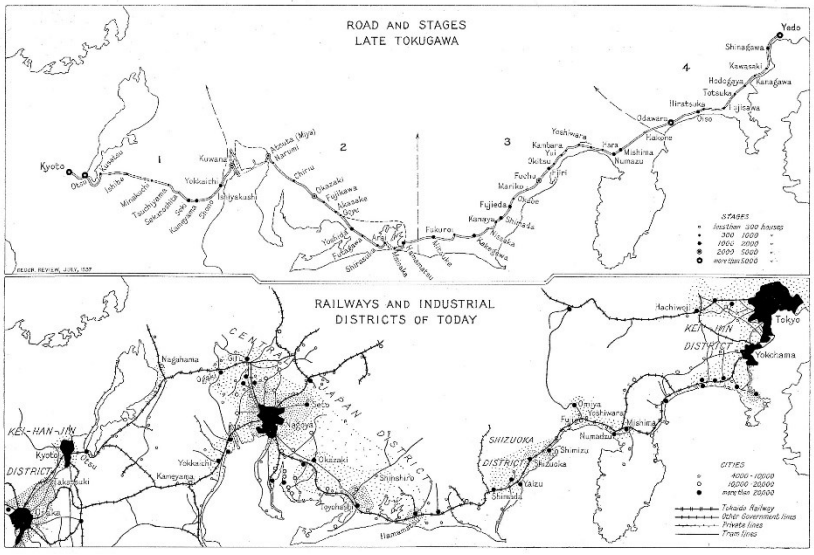


Fig. A4.35 Hall, Comparison towns along Tokaido in Tokugawa and in the 1930s, 1937

Image sources of Annex 4:

A 4.1- Lewis, F. T.: *The Sequence of Areal Occupance in a Section of St. Louis, Missouri*, Annals of the Association of American Geographers, Vol. 21, No. 2, p. 76, 1931

A 4.2- Meyer, A.: *The Kankakee "marsh" of northern Indiana and Illinois*, Michigan Academy of Science, Arts and Letters, Vol. 21, pp. 359-396, 1936.

A 4.3 Van Cleef, E.: *The Urban Profile*, Annals of the Association of American Geographers, Vol. 22, No. 4, pp.237-241, Dec., 1932, p. 240

A 41.4 今和次郎: 日本の民家 : 田園生活者の住家,鈴木書店, 1922. p. 98

A 4.5-西田與四郎: 都市の形態, 岩波書店, 1931. pp. 36, 37

A 4.6 木内信蔵: (PHYSIOGNOMIE 通リ 東京市に於ける都市景觀地理 第 1 報及第 2 報, A Study of the Landscape of Tôkyô (I. Physiognomy; II. Streets), 地理学評論, Vol. 12, No. 2, pp. 96-125, 1936. p. 118

A 4.7 Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*, Annals of the Association of American Geographers, Vol. 24, No. 4, pp. 175-200, 1934. p. 187

A 4.8 Hall, R. B.: *The Yamato Basin, Japan*, Annals of the Association of American Geographers, Vol. 22, No. 4, pp. 243-292, 1932. Unnumbered annexed pages.

A 4.9 Davis, D. H.: *Type Occupance Patterns in Hokkaido*, Annals of the Association of American Geographers, Vol. 24, No. 4, pp. 201-223, Dec. 1934, p. 219

A 4.10 Trewartha, G.: *Japanese Cities Distribution and Morphology*, Geographic Review, Vol. 20, No 3, pp. 404-417, 1934, p. 415

A 4.11 James, P. E.: *The Blackstone Valley: A Study in Chorography in Southern New England*, Annals of the Association of American Geographers, Vol. 19, No. 2, pp. 67-109, 1929, p.

A 4.12 Wright, J. K.: *The Diversity of New York City: Comments on the Real Property Inventory of 1934*, Geographical Review, Vol. 26, No. 4, pp. 620-639, 1934, p. 631

A 4.13 佐々木彦一: 都市の構造形態の一分類(第 1 報),地理学評論,Vol. 10 No. 10, pp .882-891, 1934, p. 887

A 4.14 小田内通敏:, 男鹿半島に於ける二つの港町の特色—Two Harbor towns in Oga Peninsula—地球, 博文館, Vol. 5m No. 4, April 1926, p. 331

A 4.15 西田與四郎: 都市の形態, 岩波書店, 1931. pp. 36, 37

A 4.16 木内信蔵, op. cit., p. 109

A 4.17 佐々木彦一: 東京の都心調査,地理学評論, Vol. 9 No. 9, pp. 755-765, 1933, p. 757

A 4.18 14 Hall, R. B.: *Some Rural Settlement Forms in Japan*, Geographical Review, Vol. 21, No. 1, pp. 93-123, 1931, p. 112

A 4.19 Hall, Robert B.: *The Yamato Basin, Japan*, Annals of the Association of American Geographers, Vol. 22, No. 4, pp. 243-292, 1932, p. 287

A 4.20 Ibid, p. 288

A 4.21 Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*, Annals of the Association of American Geographers, Vol. 24, No. 4, pp. 175-200, 1934, p. 184

A 4.22 Hall, Robert B.: *The Yamato Basin, Japan*, op. cit., p. 285

A 4.23 Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*, op. cit., p. 193

A 4.24 Ibid., p. 197

A 4.25 Hall, R., B..: *Tokaido: Road and Region*, Geographical Review, Vol. 27, No. 3, 1937, p. 366

A 4.26 Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*, op. cit., p. 194

A 4.27 Ibid., p. 189

A 4.28 Ibid., p. 187

A 4.29 Hall, R., B..: *Tokaido: Road and Region*, op. cit., p. 371

A 4.30 Hall, R. B.: *The Hiinokawa Plain,* Papers Fifth Pan-Pacific Science Congress, pp. 1359-1371, 1933, p. 1362

A 4.31 HALL, Robert B.: *Sado Island*, Michigan Academy of science Arts and Letters, Vol. 16, Ann Arbor, pp. 275-297, 1931, p. 293

A 4.32 Hall, R. B.: *The Cities of Japan: Notes on Distribution and Inherited Forms*, op. cit., p. 195

A 4.33 Ibid., p. 184

A 4.34 Ibid., p. 199

A 4.35 Hall, R., B.: *Tokaido: Road and Region*, op. cit., p. 100

PUBLICATIONS

Peer reviewed Journals:

SANTINI Tyana, TAJI Takahiro: *Robert B. Hall's approach to the study of the Japanese Built Environment* —ロバート・B・ホールの日本の建造環境に対する研究アプローチ–, Journal of Architecture and Planning of the Architectural Institute of Japan, August, Vol. 79, No. 702, pp. 1799-1807, August, 2014.

SANTINI Tyana, TAJI Takahiro: *Robert b. Hall's Studies on Japanese Rural Architecture. Through a Comparison with Bruno Taut's Writings*, Journal of Architecture and Planning of the Architectural Institute of Japan, Vol. 80, No. 713, pp. 1661-1670, Jul., 2015

SANTINI Tyana, TAJI Takahiro: *Robert B. Hall's Methodology in the Early Studies on Japanese Urban Settlements*, Journal of Architecture and Planning of the Architectural Institute of Japan, vol. 80, No. 714, 1945-1955, Aug., 2015

Peer reviewed conference publications:

SANTINI Tyana, TAJI Takahiro: *Understanding Japanese Cities*, Proceedings of the Asian Conference in the Social Sciences (ACSS),(ISSN – 2186-2303), pp. 465-471, Osaka, Japan 2014

SANTINI Tyana, TAJI Takahiro: *Early Academic Studies on Japanese Cities*, AIJ Annual Meeting, 学術講演梗概集 2014(建築歴史・意匠), pp. 187-188, September, 2014

SANTINI Tyana, TAJI Takahiro: *The Studies of Robert B. Hall (1896-1975) on Japanese Built Environment. Part 2: Rural Architecture*, AIJ Conference, Kinki Branch, 日本建築学会近畿支部研究報告集. 計画系, No. 54, pp. 881-884, May, 2014

SANTINI Tyana, TAJI Takahiro: *The Geographic Approach to the Study of Japanese Architecture of Robert B. Hall (1896-1975)*, 学術講演梗概集, pp. 975-976, August, 2013

SANTINI Tyana, TAJI Takahiro: *The Studies of Robert B. Hall (1896-1975) on Japanese Built Environment. Part 1: Cities and Settlements*, 日本建築学会近畿支部研究報告集. 計画系 (53), pp. 809-812, May, 2013

SANTINI Tyana, TAJI Takahiro: *Appreciation of Japanese Cityscape in Western Publications from Meiji Restoration until WWII*, Proceedings of ISAIA (International Symposium on Architectural Interchanges, Korea), 2012

Conference Presentations:

SANTINI Tyana, TAJI Takahiro: *Cities and the Cultural Landscape*, The Asian Conference on the Arts, Humanities, and Sustainability (ACAHS), Hiroshima, Japan, December, 2014

SANTINI Tyana, TAJI Takahiro: *Graphing History: The example of the early American studies of Japanese settlement forms*, ISUF (International Conference on Urban Form), Porto, July, 2014

SANTINI Tyana, TAJI Takahiro: *Western Understanding of the Japanese Built Environment; Geographic and Architectural approach*, AJJ (Anthropology of Japan in Japan), Tokyo, 2013