How to create cultural clusters in historical regions

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Nanju Do  (Karlskrona, May 2006)
Abstract >

Title How to create cultural clusters in historical regions

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Introduction Is there a way of attempting to stabilize economy by making a cultural cluster in a historical city? This is the central question in my thesis. The cluster theory has influenced many sectors around the world. Firenze has been chosen as study case because the city is a good representative of a historical region. Additionally, the region’s system of industrial area is closer to a cluster system. Therefore, we can look into the shape of the cultural cluster in historical regions and their characteristic by analyzing Firenze’s industrial area. This analysis will be also applied to Gyeongju’s cultural cluster.

Keyword Cultural cluster, cluster, Firenze, Gyeongju, historical regions
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EU - European Union
SMEs - Small and Medium size of Enterprises
LES – Local Economy System in Firenze
MPHC – The Master Plan for Historic Cultural City
1 Introduction

1-1 background

My research question begins with how the economy can be influenced in historical regions without addressing only tourism industry. This question has been raised from the experience I have gathered when I took part in a government master plan project in Gyeongju. This is the most famous heritage place in South Korea; however its economy is heavily affected by the dominance of the tourism industry. Other famous historical regions have faced similar problems and have developed their economy in a similar way with the system found in Gyeongju. This phenomenon entails some dangers for the economic situation in historical regions because the regional economy will be severely influenced by the inflow of tourists in the city. That is the reason why the local authorities from historical regions have changed their strategy for regional planning in order to avoid focusing on tourism industry more than other sectors.

Make an alternative plan.

One possible way to solve this question is to attempt economy stabilization through the creation of a cultural cluster, especially in historical cities. Therefore, my thesis focuses on how to create cultural clusters in historical regions. The cluster theory has been widely used, more often in association with other economical sectors, but it can be successfully applied on the tourism sector with positive effects. Most clusters have been developed for a high-technology sector. But nowadays the situation has changed, with clusters taking new shapes, especially the clusters related with culture, tourism and music industry. There is not enough information or even a clear definition of a cultural cluster in a historical region. That is the reason why we need, first of all, to clarify this definition. The study area will be Firenze, as a representative of an Italian historical region; moreover, the characteristics of Firenze’s industry are closely shaped by the cluster structure. It is possible to recognize what a cultural cluster and its uniqueness is, through analyzes of Firenze’s industry. The analysis will also address Gyeongju’s cultural cluster from South Korea.
1-2 Purpose of research

In order to preserve historical regions, people have suggested different alternatives, but the world’s increased dynamic demands faster and more integrated approaches, that can easily fit as solutions to an ever changing reality. A new approach and new point of view is needed, on order to evaluate historical regions. As a new kind of approach, I am going to focus on cultural clusters. I will analyze Florence, because it is the one of the most famous historical region in the world, with high potential in the diverse structure of its traditional industry. Afterward I will explain the definition of cultural cluster in historical regions. In addition, I will analyze which factors are more important in creating a cluster, because most regions and countries have been attempting to build the cluster by bringing together various characteristics. I will compare different types of clusters and also take in consideration which attributes are contributing the most to the development of a cultural cluster.

There are four main objectives:
- Which are the input factors in cultural clusters for historical regions?
- What is the definition of cultural cluster in historical regions?
- How to make a cultural cluster, what shapes might it have?
- Can a cultural cluster be created in Gyeongju, by applying some of the characteristics of the cultural cluster in Florence? And if so, how can this be achieved?

The main aim of this study is to find out how can historical regions keep a balanced economic condition. Another aspect is that it is important to focus on historical background and it is necessary to adopt a solution based on past experiences and traditions.

1-3 Methodology

My thesis starts with the analysis of the historical background on industry structure in Firenze, because Firenze has more diverse traditional industry than other historical regions.

Based on the comprehensive analysis of the economical structure in Florence,
we could look into the characteristics of a cultural cluster and create a definition for the cultural cluster in historical regions. Specifically, I want to analyze how and when Firenze has started to develop some of the industries that made it famous. Also how did it manage to keep its traditional production attractive for such a long period of time, keeping up and evolving to become world traders in their traditional production?

While analyzing Firenze’s economical structure, I will take into account the connection with the current cultural cluster, because this is a key point in order to obtain a complete definition for the cultural cluster. For example, Firenze has many institutions and influent universities that can be easily addressed in order to create a study on a specific issue.

Furthermore, some traditional businesses in Firenze have cooperated in order to share information between each other in order to evolve together. In the same time many businesses are located close to each other and this can be seen as the shape of a cluster.

After analyzing economical structure in Firenze, I am going to define what cultural cluster in historical regions is and also provide answers which are related to topics on cultural clusters. The conclusions about cultural clusters in historical regions will be adapted to the reality from Gyeongju.

In the next step, I will focus on general information about Gyeongju, specific problems to be faced in order to develop the historical region and the economic structure. After the analysis of Gyeongju, I will able to suggest my own argument according to the analyzed methods about how can be created and supported a cultural cluster in a historical region.

**1-4 Reason why I choose Firenze and Gyeongju**

Firenze is in a way similar to Gyeongju as when it comes to statistics on population, geographic character etc. but the most important similarity is that both of them are famous historical regions. For example, Firenze is one of the most famous historical regions all over the world and Gyeongju is
one of the most famous historical regions in South Korea. Both have been supported by government for taking care of culture assets. Similarities stop when we address the evolution in the last decade, with Firenze increasing their economy and also the image as a cultural city. The two regions are showing a different image today. That is why my thesis is going to analyze Firenze and try to extract the elements of good practice that fit Gyeongju’s reality. The regions have a relatively similar population, with Firenze having 274,500 inhabitants and Gyeongju having 399,217 inhabitants.

- **Firenze**

Great geographical circumstances result in affluence of crops, fruits and grains. Many local people still cultivate olive and wine orchard as farmers. The fact that Firenze has a lot of natural resources and the trade with other countries has helped the region to become one of the most representative cities of the Renaissance period. After accumulating wealth they have turned their attention to art. For instance, the legacy that concerns the sculptures and old buildings architecture is coming from Renaissance time. This historical background is decisive nowadays allowing Florence to have complex system of famous art museums. Therefore their industry structure is deeply related to art and nowadays this part of industry is receiving a new improved identity in Firenze.

The citizens from Firenze are considered to be sensitive persons with profound interest in arts and everything it is related with this. Firenze is a suitable place which includes not only one of the most famous historical city but also many developed SMEs (Small-Medium Sized Enterprises) and a
system, which has a similar structure with the cluster system. Basically, most industries have historical background as they had started trade business at the middle of century and nowadays. In the same time the central government in Italy starts to support New Cluster industry in Firenze.

Firenze's SMEs have been spreading around, basically any kind of industry is allowed if it is not creating a conflict with the traditional industries. In other words new industries are welcomed and supported but in the same time the old traditional industries related with culture are protected. Therefore, Firenze is preserving the status of famous historical region but also diversify their economical structure providing by this increased economical and social stability.

- **Gyeongju**

Gyeongju is a representative historical region in South Korea. There are a lot of cultural assets in the city. During the last twenty years, the local authority was able to keep a good economic position thanks to the tourism industry, by developing Bomun lakes and historical tourism. The local authority just focuses on tourism industry. It can easily provide a huge effect on local economy but when tour industry decreases it is very difficult to recover, because local economy has already been absorbed and declined through bad economic circumstances. The resulting situation is that the young generation has difficulties finding a job in Gyeongju so that they leave the region to look for a livelihood in other regions.
1-5 Limitation and problems of the research

My research is composed of all of those aspects that are related to historical background based on specific economic sectors. It was not easy to find the suitable information through searching website and other literature.

Especially, it was more difficult to obtain English information, because my case area is located in Italy, whose regional website was only written in Italian.

Due to limited time to research, when I investigated about which input can be called cultural cluster in historical regions, I could not consider all cases in Firenze and Gyeongju. I just focused on a representative sphere.
2. Analysis of Firenze

This chapter addresses the industrial history of Firenze. According to this analyze, it is shown the evaluating method of traditional industry as well as its characteristics. Finally, this chapter will focus on which aspects are related with cluster structure, and what can be called cultural cluster in historical regions.

![Firenze's landscape](source: edited by Author)

2-1 General information of Firenze

Florence is one of the most famous historical city, with numerous well preserved heritage assets, as the core of Renaissance, as well as the capital city of Tuscany region. It is located in northern Italy, in the cross-road between Rome and Milan. It covers an area with abundant natural resources such as grape and olive orchards. The city, which is crossed by Arno River, is surrounded by two mountains named Apennines and Chinati hill, famous for its vineyard; and Valdarno plain also very popular. The total population in Florence is approximately 400,000 people in 102 km2.
2-2 History of Firenze (economical part)

Firenze’s origins date back to 59 BC with the inflow of Roman people who wanted to retire from Rome. (Julius Caesar founded the colony of Florentia in 59BC). The Goths and Byzantines ruled this city in the fourth century AD, and in the sixth century the territory was invaded by barbarians (Mehling. J, 1986). People created a lot of trade businesses via the river, which crosses Firenze. As a result of their successful businesses, urban sprawl was promoted by industry development by allowing many people immigrated.

Early the 12th century, most merchants became wealth people via dynamic trade business, which resulted in the improvement of a capital in Firenze. In 1182, the city grew up as an international city, with around 30,000 people including many immigrants. Population gradually increased and economic activity was steadily improved through cooperation between business and similar branches, such as a guild for wool industry.

In particular, in the 14th and 15th centuries, the collaborative system of craft guilds was affected by several significant changes and famines, and repeated episodes of plague. For example, with the Black Death in 1348, a third of the Florentines were killed which resulted in a dramatically population decreased which affected the region’s economy. As a result of this sad event; Florentine citizens were forced to be restrictively attired through using basic tones of colors such as red, brown, gray, or black, even in luxurious textiles, which were the main string of their thriving economy.¹

Florence in the Renaissance became an economic and cultural giant. The city was a haven for artists as well as merchants and bankers. An intricate and far-flung web of trade allowed for the accumulation of unprecedented wealth. The Dominican Order also had a major role in Florence after the Middle of Ages. And the Medici ruled from 1434 to 1737, although their power was repeatedly contested. Often ruling with a cruel hand, they were nevertheless probably the greatest artistic patrons in history. (Mehling. J,1986)

Until now I addressed the history of Firenze, especially focusing on the related

¹ http://www.macalester.edu/geography/courses/geog261/mmalecha/urbanstructure.htm
economic part.

Since many roman people have immigrated to Firenze, an active trade had started, which could provide an opportunity to make a strong economy. Moreover, Firenze could be an international region through the trade industry. The main trade businesses were wool and clothes industry. Therefore, Firenze was able to become a wealthy region by having a capitalist system which allowed the accumulation of a lot of money from trade industry.

2-3 Analysis of Firenze’s economy (focus on past times)

- Art
As capitalists increased in number and wealth, they started to be interested in art and decided to invest in sculptures, painting and architecture. This made it possible to accumulate both cultural assets and production and restoration techniques in the region’s know-how.

- Agriculture (olive and wine industry)
Agriculture was composed especially of two kinds of productions: olive and wine. Firenze had an optimum location to grow olive and wine because these kinds of crops need more warm whether and sun than other crops. To better understand the historical background of agriculture in Firenze, we have to go back to the past.

First, to find out more specific details about the olive culture’s historical background, I have to go back to the 15th century. Olive oil holds an ancient tradition that has been handed down from one generation to the next since the 14th century.

Demographic growth, religious motives linked with Christian rites and ceremonies that require the use of oil and, last but not least, nutritional requirements of the diet of inhabitants of the zone extending from Florence to Siena, gave a strong impulse to the production of olive oil, which led to the clearance of wooded areas to make space for orchards. Olive oil has been growing from Firenze to Sienza (south and east of Florence – in the Sieve Valley,
with Dicomano, Londa, Pelago, Pontassieve, Rufina, San Godenzo)

Second, the Chianti wine was well established and trademarked by the early fifteenth century, although the wine known as Chianti in those days was almost certainly a white wine. As late as the 1960's there was still a Chianti Bianco and even the DOC laws of 1967 allowed 30% of white grapes in the red wine. By the early 1900's the wines of Chianti had become very popular.

- Textile
  History of Textile products has to go back to the 12th century, when cloth manufacture was regulated by the Wool Guild. The political and economic decline of Italy in the 16th and 17th century led to a drop in textile production that was resumed late in the 18th century with the production of woolen fezzes exported to the Arab market. In the second half of the 19th century, the craft was industrialized.

Firenze's economy started earlier than we might think. All kinds of traditional industry have a much longer time history, dating back more than 1000 years. Therefore, current characteristic of Firenze's economy can benefit from the know-how, embedded in local culture and traditions, about trade technique and traditional industry. This circumstance can strengthen local economy.

I will now address more specifically the historical background of representative traditional industries. First of all, we have to define what we mean by traditional industry in Firenze.

I have analyzed the historical background to better understand the connection between the past and the present. That is to say what are the industries that still exist in Firenze today and that date back in time? Next step is to analyze these industries which we know already, had been composing the economy in Firenze under the influence of clothe traditions and agricultural products such as wine and olive oil.
One of the strong points of the production system of the province of Florence is the concentration. South of central Florence we can see diversified industrial accumulation of related fashion, ICT/IT, and restoration technique. The apparel chain has its LES in the Empoli area (the city itself and the towns around it, including Cerreto Guidi, Capraia, Limite, Montelupo Fiorentino, Montespertoli and Vinci) and in the LES of the central Florentine area (Florence and its suburbs including Fiesole, Bagno a Ripoli, Campi Bisenzio, Calenzano, Scandicci and Lastra a Signa) one of the most active clusters.

- **Restoration industry**

The golden age of the Renaissance donated a lot of cultural assets to the following generations. But almost the entire cultural heritage needs to be managed with special techniques for protecting the original form. How can we...
make this kind of technique? Firenze is trying to promote a sphere of new industries in this field, integrated in a network that also comprises universities, institutions, private companies and the government as well. Most of the projects have been supported with funds from EU.

Many similar clusters which concern restoration of cultural heritage has been scattered allover Firenze and they try to promote co-operation and sharing of up-to-date information between the industries and other institutions. It is the case of Arno Valley cluster in which only one part is for restoration. But the traditional industry cooperates with new industries in the fields of research and development potential, especially conservation and restoration of cultural heritage, multimedia and the environment. This vast network of cooperation aims to make this cultural heritage a factor in regional competitiveness. This project met by participants in the RIS+ project in Tuscany, has the support of the ERDF.

As other case, the "RIS+ Toscana - L'elettronica per i beni culturali" was carried out from 1999 and 2001: its cultural capital, the local presence of nationally renowned research institutes, and SMEs specializing in diagnostic research and conservation of the patrimony. The propose of this project was to focus on making a cluster of enterprises and research centers and thereby strengthen Tuscany’s position on specialist markets worldwide. Therefore this project had established international partnership with Toledo in Spain. This part of the cluster is getting a kind of new business because nowadays all of country has realized that preserving culture is important as well as starting some project about restoration of culture heritage. That is why sectors of this kind of business are expected to grow.

Specifically, there are special programs being promoted, such as carry out and training courses organized to introduce both students and specialized heritage conservation professionals to the use of this equipment as well as Conferences, specialist international trade fairs in Italy and elsewhere, technical workshops, publications, etc

- **Textile industry**

Related textile industry is transformed to fashion industry on modern times. Especially the fashion industry in Firenze has many connections with other regions. Because fashion has separated branches, between different parts of cloth and brand etc. it is interesting to analyze one kind of a representative
fashion cluster which is supporting the production of clothes for Firenze and has a long history. Fashion cluster is located in Prato near central of Firenze. The real boom of the Prato district came after World War II. Between 1950 and 1981 the number of employees in the textile industry jumped from 22,000 to 60,000, at a time when, elsewhere in Europe, unemployment was rife.

Other character has the ring of districts around Florence, connected to the fashion industry, or the integration between gradational activities and sectors producing technologies and complementary products for them.

- Multi cluster industry (Arno Cluster)

Florence has taken many kinds of clusters. I will focus on the Arno cluster which is one of the most representative clusters in Firenze. The city is located along Arno River that starts from Firenze to Pisa. There are roughly composed of three kind of cluster structure (agriculture, up-to-date technology as IT, Biotechnology, related fashion). These clusters started to develop bases on Local Economic System (LES). They could take advantage as SMEs in terms of relation, exchanges and services with the prospect of innovation. A more precise definition of the cluster’s composition, identifying clearly the agents of its productive potential, is crucial for a thorough analysis of the regional innovation system with a framework of policy design.

Specifically if we go to inside of Northern Arno Velly, we could know that is composed of fashion industry as Figline Valdarno, Incisa, Reggello and Rignano sull’Arno where more than 50% of production of leather goods (Gucci, Prada, Ferragamo, Louis Vuitton, Fendi, Gherardini, Arfango), over 6000 employees and a total turnover of about 600 million €(Euro) as well as almost all of production have been export to abroad². And every sector are becoming increasingly dynamic.

Other sites of Arno valley have approximately 4,300 Tuscan enterprises in the ICTs sector, 3.0000 based on "Information Society” Programme, which allocates some 5.6 million euro in terms of resources. This figure is low as compared to the 14,000 ICT firms in Lombardy, but it indicates a significant concentration rate per inhabitant. The focus on up-to- date part site of Arno velly follows as

1) spin-off high tech firms in the areas of Florence and Pisa
2) spin-off in the public research sector(universities and research centers)

² http://www.firenzebusiness.it
3) further development of firms that sold and/or distributed information products in the eighties and have availed themselves of new technological advanced to start their autonomous production and/or renew the previous one
4) spin-off of big enterprises of the region. (Boscherini. 2003)

Arno ICT site has many connections with other actors like government, SMES, institutions and the university. Especially Middle size of Companies are concerned many foreign operations as Mitsuba, Siemens, Alenia Marconi System and Austria micro system International as well as many domestic companies like Principal ICT companies, Engisanità Intecs, List Group, Sesa Group, Marconi Communications, ISL (Logistical Systems Engineering), Siemens.

The cluster of Arno has been able to absorb high-quality human resources in local universities such as Florence University, Pisa University, Principal ICT research centers, Sant’Anna Secondary School, Sant’Anna Valdera/Pont-Tech Pole, Scuola Normale Secondary School of Pisa, Pisa branch of CNR, Florence branch of CNR, Pisa Ricerche Consortium

The cluster of Arno is supported by capital in the LES of Valdesano (the area west of Florence, around Valdesano, which includes Castelfiorentino, Certaldo, Gambassi Terme, Montaione), where there is also a large number of companies operating in the mechanical industry and production of means of transportation, as well as companies linked to the Piaggio factory, and in the LES of the Mugello area (the area east of Florence in the Mugello highlands, including Barberino, Borgo San Lorenzo, Firenzuola, Marradi, Palazzolo sul Senio, San Piero a Sieve, Scarperia, Vaglia, Vicchio).

- **Agriculture industry (Wine and Olive)**

Running the current of the times, wine and olive industry has been starting a new system to gain a more efficient structure of industry. Even if they are a sphere of agriculture, they try to use innovation system for evolution to become more cluster organized, cooperating with same kinds of agriculture companies, sometimes for marketing and share estate and institution etc.

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3 Boscherini. F(2003) ICTs and the creation of non-traditional productive sectors: some considerations about the Arno Valley cluster in ITALY.
4 http://www.investinitaly.com
For example, the case of Chianti wine and olive, whose brand has a long history and is famous, has been doing consortium with local institution and they make other business to use mansions that are located in near grape, olive orchard for tourist with some programs like guided tours on how to make wine in factory or short courses on how to recognize a good wine.

They also adopted a new system for making consortium. In 1924, the Consorzio Chianti Classico, was founded to control production. This signifies that a bottle was “Consorzio approved”-contained the Ricasoli blend of grapes, minimum alcohol content, minimum ageing and so on-a special sticker was placed around its neck carry the symbol of the Consorzio, a black cockerel (gallo nero), Three years later, the satellite Chianti Putto, which took as its symbol a Putto, or cherub. (Discovery, 2003)

Firenze wine is one of most famous wines in the world. Therefore production has been exported abroad, giving it a huge economic effect, especially outside of Firenze, in the Chianti region that was delimitated in 73.043 hectares.5

Wind and olive orchard have dispersed in district of Chianti (south of Florence, in the Chianti zone which includes Greve in Chianti, Impruneta, S. Casciano Val di Pesa, Tavarnelle Val di Pesa) and the Sieve Valley (south-east of Florence – in the Sieve Valley, with Dicomano, Londa, Pelago, Pontassieve, Rufina, San Godenzo).

2-5 Summaries

- There are connections between past and present.

Representative industries of Firenze are composed of agricultural related products such as olive and wine and the restoration industry of culture heritage and fashion, the later being the most famous industry in Firenze. Famous industries have an historical background dating back 1000 years. They had to go through many different phases in order to succeed. For example, the case of the fashion industry dates back to the early 15th century, the same time Firenze's history started, with the retired roman people. They were making trade

5 http://www.chiantishire.org/territorio2.php
business that usually concerned wool which is one kind of textile. After the related textile industry was enlarged to other similar industries. And nowadays a sort of fashion business has been occupying more wide businesses as we need to cooperate with other country. (The point is able to be only applied some kind of IT sector as restoration of culture heritage in related IT, ICT industry)

- **Cooperation of the existing actors according agglomeration**

Almost all of traditional industry in Firenze has accumulated in the same place. This situation dates from historical restraints, when transportation wasn’t as developed. It is easier to manage if they are together or disperse along only river, same street. And nowadays this phenomenon is more preferred in many industries. Because of it could be saved traffic fee as well as they can share many kinds of things and more agglomeration can create a stronger identity.

- **They are always trying to search for new ways to innovate.**

In Firenze, traditional industries with an historical background always try to evolve through innovation and adopt new ideas. This means that even traditional industries have been making an effort to communicate with present situation. They have been processing step by step. This might be the reason why more traditional industries can be more famous and take a better leading position in the international market. For example, the case of the fashion industry, based on brilliant human power and always trying to make new and unique productions. Their efforts result in some of the most famous brands. This brands’ power brings out a stronger economic effect and incentives foreign investors to turn to the fashion industry in Firenze.

- **Industrial districts in Firenze are a mixing of traditional industries and Hi-tech, looking at international business and gaining strength from education.**

The reason for the evolution in traditional industries comes from the cooperation between traditional industries and hi-tech technology. A representative example is the case of the restoration industry of cultural heritage. This sector shows a huge evolution based on high-technology and related IT industry. Also fashion industry tries to adopt high-technology when making own cloth and design. A more flexible structure in traditional industry has been seen to contribute to the upgrade. That is the reason why traditional industries want to be close to high-technology.
All of traditional industries have been looking at international business. Firenze was and is famous in trade business. Nowadays market is getting wider and consequently many countries are developing and using internet. Also traditional Firenze industry has been trying to go forward in global market.

Traditional industry in Firenze is based on a diversified offer of the education system, which includes national institutions, university, private education as well as many kind of international, domestic conference. This creates the possibility of forming a well prepared workforce, which can live and get employed in Firenze.

- These industrial have been naturally evolving into a cluster system.

Traditional industry of Firenze has been naturally gaining the characteristics of a cluster structure. That is to say, traditional industry which is based on historical background tries to locate near similar industries already in the area.

Cooperation is usual while the companies have a small size. But even when the company grows, it still maintains a policy of information sharing with other companies, contributing to the exchange of new techniques and knowledge and strengthening the region as a whole.

After the cluster’s boom, Firenze’s LES has become the coordinator, trying to propose the introduction of a fund to traditional industry and thinking on how they can promote cooperation between the traditional industry and the hi-technology.

After analyzing the traditional industries’ structure in Firenze, I come to the conclusion that there have been changes that naturally brought up a cluster; above all, every sector is connected with a long history. In other words, industries have been trying to evaluate their position according to the trend of the times. This means that the shape of Firenze’s industry naturally was acquiring a cluster structure, based on culture. We can say this is a cultural cluster in an historical region.

- Weakness of cultural cluster of Firenze

The cultural cluster of Firenze is not perfect. Its weakness resides on the fact that it is a naturally created system. It brings despite Firenze’s many and varied
cultural clusters, relatively few policies directed at groups of collaborating firms. There is not enough coordination among initiatives, not enough processes of monitoring and evaluation. Firenze needs a more wide perspective in domestic affairs because policy is only effective where regional structures are already efficient and globalization is taken into consideration. Basically, this means that the region needs more connection to the central government.
3. Theory on cultural clusters in historical regions

To clarify a definition of a Cultural Cluster, I have searched the meaning of “Culture” and “Cluster” in a dictionary.

Culture is defined as “Integrated pattern of human knowledge, belief, and behavior that is both a result of and integral to the human capacity for learning and transmitting knowledge to succeeding generations. Culture thus consists of language, ideas, beliefs, customs, taboos, codes, institutions, tools, techniques, work of art, rituals, ceremonies, and symbols. It has played a crucial role in human evolution, allowing human beings to adapt the environment to their own purposes rather than depend solely on natural selection to achieve adaptive success.”

This definition implicates that culture has to take historical aspects into consideration and during a reasonable amount of time period. It means that each culture has its own different character and history background and this point can make the distinction between different cultures. Therefore every different kind of culture will be more diversified for us.

3-1 What is a cluster?

“Clustering” is the tendency of vertically and/or horizontally integrated firms in related lines of business to concentrate geographically.

Cluster is the ability to take incentives through the integration of geographic position that can strengthen and stimulate a more effective management in an industrial district. This can be explained because if they are located in closeness to each other, they can reduce expenses with freight and more easily exchange new information. An OECD report has showed that this kind of character in cluster increases competitiveness for SMEs in globalize economies through the competitive peer pressure to innovate, co-operation and competition, specialized labor force/concentration of industry-specific skills engaged in learning.

6 http://www.britannica.com
7 Kostajinica H(what are cluster, CEI workshop on clusters, OECD LEED Programme
3-2 What is the difference?

Table 1: comparing different kind of Cluster

<table>
<thead>
<tr>
<th>What is different?</th>
<th>Culture cluster (in historical region)</th>
<th>Culture cluster (general region)</th>
<th>cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Sphere is different, depends on what kind of historical background it has; - Every kind of sphere can be factors of cultural cluster in historical regions but they have to connect with history.</td>
<td>- They are focus on current production - For example: broadcasting, music, tourism</td>
<td>- focus on high-tech industry</td>
<td></td>
</tr>
</tbody>
</table>

Source: Edited by author

Additionally, a cultural cluster is one kind of cluster. Therefore it looks different according to the input, which has to be related to the historical background as well. After the cluster construction boom, many countries have been carrying out systems of cluster. We are able to use this system to cultural clusters.

3-3 What is the basic step to shape a cluster, above all, to shape cultural clusters?

We have to follow some basic processes of cluster system, according The Cluster Initiative Greenbook (Potter M, 2003)

First (step of setting: objective of the cluster initiative) we should be concerned with settings: when the cluster make to new one, who will support it? The government or a private company etc. What purpose does the cluster serve: what is the rationale intended with the cluster? What is it objective: commercial cooperation, education and training, innovation and technology, cluster expansion?

Second (step of process) we have to consider this question: who takes the lead, who can join; consider the resources and facilitators, build a framework - is everyone on the same stage, reaching momentum.

Finally (step of performance) we have to consider some matters as improved competitiveness of the cluster, cluster growth and goal fulfillments.
A cluster initiative is an innovative way to organize cluster firms, government and/or the research community in order to coordinate the prioritization and implementation of policies and strategies for cluster competitiveness upgrading.

3-4 which factors have to greater impact in a cultural cluster in a historical region?

Representative elements for composition of cluster are proximity, flexibility, small and medium size of economic activities, efficiency, co-operation, competitiveness; proximity can take merit as the privileged relationships that emerge from direct contact, knowledge spillovers, human capital development and circulation and common physical infrastructures. Flexibility is essential as it serves as a facilitator in the adoption to changing external and internal circumstances in competitive circumstances. Small and medium size economic activities are more flexible, which is crucial for the adaptability of clusters to a changing environment. Efficiency can improve quality according to the feedback system, in which stimuli move back and forth in the chain of value. Co-operation is necessary between horizontal and vertical alliances (ranging from knowledge sharing limited to some parts of the production process to large scale involvement), competition which can better evaluate and promote innovation according to new ideas and systems.8

3-5 How to promote a more dynamic cultural cluster in historical regions based on the cluster theory?

- Continuous upgrading and change and creating a foundation for a more advanced and diverse supplier base (especially for new cluster)
- Continuous entry of new firms, including spin-offs from larger incumbents.
- Intense cooperation organized between such as professional organizations, chambers of commerce, cluster organizations, etc. because clusters also need to exhibit intense informal interaction based on personal networks as well as linkage between all involved actors.9

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4. Analysis of Gyeongju

4-1 General information

Gyeongju is located in Gyeongsangbukdo, the largest province in Korea. Around Gyeongju there are big cities with a population of approximately 10 million such as Busan, Daegu, Ulsan and Pohang. Gyeongju belongs to their economic and political influence sphere. Therefore, Gyeongju enjoys rich transportation infrastructure such as highways, harbors and airports compared to its size.

The size of Gyeongju is 1,323.85㎢ and is 2.3 times as large as Seoul. The population of Gyeongju has been decreasing by 0.6% every year since 1999 and now it amounts to 282,955 (2003). The population density is quite high in the city center, which means almost all of them want to live only in the center. The following table shows the population fluctuation, by age group, between 2001 and 2003. We can observe that the age group of 20 - 39 represents over 32% of the whole population.

<table>
<thead>
<tr>
<th>age</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>total</td>
<td>male</td>
<td>female</td>
</tr>
<tr>
<td>0 ~ 19</td>
<td>75,637</td>
<td>40,376</td>
<td>35,261</td>
</tr>
<tr>
<td>20 ~ 39</td>
<td>97,446</td>
<td>50,955</td>
<td>46,491</td>
</tr>
<tr>
<td>40 ~ 59</td>
<td>70,192</td>
<td>34,712</td>
<td>35,480</td>
</tr>
<tr>
<td>Over 60</td>
<td>44,231</td>
<td>16,986</td>
<td>27,245</td>
</tr>
<tr>
<td>Foreigner</td>
<td>1,409</td>
<td>1,012</td>
<td>397</td>
</tr>
<tr>
<td>Total</td>
<td>288,915</td>
<td>144,041</td>
<td>144,874</td>
</tr>
</tbody>
</table>

Source: Handbook (white paper) of Gyeongju published by City Gyeongju in 2004

4-2 History of Gyeongju

Gyeongju has been an urban structure for two thousand years. The city flourished economically, culturally and politically especially during its time as a Royal Capital for 992 years (B.C. 57-A.D. 935) during the Silla times. Its historic significance originates from the features of being the center of Buddhism, Confucianism and indigenous religion. the ancient Royal Capital (Wanggyeong, 王京) of Silla (B.C57-A.D935), One of three Capitals in Goryeo (A.D. 918-1392), and as a political, cultural and economic center in the past, there are huge and
numerous archaeological sites and many tumuli from the Bronze Age and Silla which have research potential and provide historical evidence of culture of Scythian or Nomad through the Silk Road.

4-3 Traditional industry of Gyeongju

Geongju traditional industries don’t have enough economical significance in the regional society because most of them have only small private shops and based on that a limited number of costumers. I will now focus on the more representative productions in Gyeongju.

- **Hwangnam bread (one kind of traditional bread)**

"Hwangnam bread " dates back to 1939, 61 years ago and its production was started by Mr. younghwa Choi who had been persisting in making and selling the hwangnam bread with only traditional Korean red beans, overcoming all kinds of difficulties by trial and error. Choi Sang-eun - the present representative of Hwangnam bread - devoted himself to maintain the tastes of the bread with a sincere responsibility, following in his father's footsteps. This bread became knowned as 'The Hwangnam bread' by those who bought and ate it in those days, because it was first made in Hwangnam-dong. In 1974, 'Hwangnam bread' factory was moved to Hwano-dong. Since the main office was opened in 1998 at Gyeongju, it has played a great role as a supporter of 'the global cultural expo of Gyungju in 1998 as well as 'the global cultural expo in 2000'. Moreover, this bread was designated to be 'the special product of kyung-ju' from the city of Kyung-ju and to be 'the 2nd special product of kyungsangbukdo', after it was recognized by the ministry of administration in 1998. It was the first food product to be recognized in this way.10

Nowadays this bread is becoming famous in domestic as well as international markets, through broadcasting and being tested by many foreigners. Hwangnam bread is still made by a family company which does not have franchises besides of its main office. This helps to protect the breads unique taste.

- **Gyodong Beopju( one kind of traditional alcoholic drink)**

10 http://www.gyeongju.go.kr/
Gyodong beopju name comes from Bae Young-shin who invented it through trial and error, fifty six years ago in Gyeongju. After she was designated an Intangible Cultural Asset for her unique skill in distilling Gyodong beopju, Mrs Bae married into the Chae family in 1939, and ever since then she has been distilling beopju. When she was first learning the technique, she often stayed up all night. Gyodong beopju is made from the following ingredients: glutinous rice, yeast cultivated on wheat, and spring water. The original recipe had an alcohol content of over 19% (ABV), but in 1990, a new recipe was devised with reduced alcohol content. A license was then obtained from the National Tax Administration.

- Shilla handicraft community (for traditional handcraft)

Here we can find a traditional cloth house, 15 traditional pottery houses and a simulation museum on the Shilla century. There is an exhibition where they can sell traditional productions which have to be produced in community to consumer.

Every kinds of shops are focus on Shilla times which had been decided by the government in the 1970's, because the community wanted to preserve traditional techniques through accumulation of handicraftsman.

- One representative traditional shop: Ceramics of the Shilla Dynasty

The ceramic of the Shilla Dynasty has been reproduced (around the first century BC and was in use for the next thousand years). The current production looks different from the original one because they are using different oil which is obtained from natural oil of pine needles. They have been producing diversified pottery in cooperation with new design. Because even when it comes to traditional production, it needs to adjust and acquire a comfortable design suitable for everyday current life. But basically the design of Shilla pottery is based on traditional design of Shilla which have been found in the tombs of Shilla kings, such as Chenmachong, Hwangnamdaechong, and Geumgwanchong. Accordingly, many royal tombs in Gyeoungju are looked upon as treasuries of ceramics. The skills were greatly influenced by Japanese Seuhyechi earthenware in the middle of the fifth century AD.

4-4 Problems of economy and traditional industry in Gyeongju
Recently, Gyeongju tourism market has been showing signs of depression and the number of domestic tourists has been decreasing every year since 1999 (See Fig.3.3). However, there are exceptional cases, for example when the number of visitors was increasing during the EXPOS held in 1998, 2000 and 2003. On the other hand, the acute fall of 1999 was a result of the national economic crisis.

As Gyeongju is always a popular destination for school excursions, the facilities for group tourist have been developed in the Bomun area since the 1970s. However, students have recently been going abroad to China, Japan or other Southeastern countries due to the similar expenses. It is one of the main reasons for the reduction in the number of domain visitors.

Although the total number of foreign visitors to Korea has been gradually increasing up to 5 Millions in 2000, the fact that the number of visitors has been decreasing or stagnant is more critical. Since 1990, it has been decreasing 0.3% annually, compared to an increase of 13% between 1976 and 1989. Especially Japanese and Chinese visitors are nearly half of the foreign visitors but their visits have been gradually decreased.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total (Mil.)</th>
<th>Domestic</th>
<th>Foreign</th>
<th>(B)/(A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>9.603</td>
<td>8.558</td>
<td>505</td>
<td>5.60%</td>
</tr>
<tr>
<td>1999</td>
<td>6.555</td>
<td>6.053</td>
<td>502</td>
<td>7.70%</td>
</tr>
<tr>
<td>2000</td>
<td>8.084</td>
<td>7.511</td>
<td>573</td>
<td>7.10%</td>
</tr>
<tr>
<td>2001</td>
<td>6.741</td>
<td>6.242</td>
<td>499</td>
<td>7.40%</td>
</tr>
<tr>
<td>2002</td>
<td>6.857</td>
<td>6.319</td>
<td>538</td>
<td>7.80%</td>
</tr>
<tr>
<td>2003</td>
<td>7.948</td>
<td>7.442</td>
<td>506</td>
<td>6.40%</td>
</tr>
</tbody>
</table>

Source: MPHC 2004

The persistence of the current situation has put a burden in Gyeongju, because on a labor market point of view, tourism related jobs amount to 55% of the whole places of business in Gyeongju as a typical tourism town. Remarkably, the financial dependence of Gyeongju is quite low. The percentage is 33% compared to 57% of the average of the country and even to 38.8% of other local governments.

4-5 Summaries
As the result, Gyeongju economy excessively has been relying on tourism industry which has been creating a weaker and unstable regional economy. Regional economy is always unstable, due to its dependence on tourism industry. After Gyeongju tourism industry started to decline, simultaneously there was a recession in the regional economy. This has had several negative effects: the young generation moved out to other regions which have a higher chance of finding a job. And more decreased population rate had been making recession of regional economy. This theory shows that a depressed tourism industry promotes a vicious cycle of ‘fall of tourism attraction - decrease of visitors - depressed local economy - increase of local conflicts’. To try to create a more stable economy phenomenon, I can recommend the creation of a cultural cluster system applied to Gyeongju economy. We have know-how about cultural cluster, especially through the analysis of Firenze.

The economic value of Gyeongju is mainly associated with the heritage industries including tourism. In spite of increasing concerns about the decline in the tourism market, the following changes could bring about the advantages in Gyeongju tourism in the coming future^{11}

5. Conclusion

5-1 Recommendations

I believe that a new approach is needed in order to promote a cluster, which can be based on the information obtained from the analysis of Firenze.

Gyeongju’s unique antiquities are now regarded as a main obstacle toward development let alone as an out-of-date and unbalanced city image. Now the city is shrinking, local economy is getting worse and the environment of a city center is declining as the population is decreasing.

But fortunately according to estimated opening date for the Korean Transit Express and Asian Highway Project, Gyeongju will increase its potential based on the anticipated plan.

Which spheres are needed to make a cultural cluster in a historical reason (especially Gyeongju)

- Need for Co-ordination
  To keep going on making a cultural cluster, it’s important to have a coordinator which can take the lead in the promotion of a new system among the regional actors. The leader can be a person of an existing industry and they will be coordinators in the cultural cluster for historical regions.

- We have to use the existing facilities: rearrangement
  Cultural clusters have to check which of the existing accumulation complexes are, in order to save time, energy and on every kind of infrastructure. After analyzing which spheres are not working in the new cultural cluster, we need to find a replacement.

- We have to be concerned with the Spin-Off effect
  The power of success in Firenze cultural clusters comes from going on Spin-offs, this happens after they have developed new productions or new ideas. They are able to create their own new company. Directly this phenomenon is able to reflect in the regional economy.

- We have to face the global market
  Gyeongju industry has been focusing only on domestic, regional market.
Existing industry were not stabling because changing depends on regional economy. And they don’t have enough chance to exchange new knowledge and trend with other country. It is becoming an increasingly smaller market. Making a cultural cluster implies, simultaneously the incentive for new connections with other countries and regions for a global market.

- Transforming Shilla handcraft community into a cultural cluster.

Shilla handcraft community is making and selling traditional handicraft, pottery, jewelry, tea inspired in Shilla times. Shilla handcraft has infrastructures to make a cultural cluster. These infrastructures are composed of useful space and exhibition, museum, many kinds of shops; shops that also have their own space for exhibitions. That is why if we want to see or experience, directly we can do it and can learn how to make the craft production from host (artists). They have enough physical infrastructures. They lack enough knowledge infrastructure and co-operation with each other. They have been focusing only on technique but nowadays also they are still using the same pattern. This is another reason why they are making and simultaneously selling in same place. Therefore it is quiet difficult to innovate the design and to think more wide. One of host has to take the initiative in shaping a cultural cluster – has to be leader, coordinator. These period needs to be supported from government with funds and incentive. It is one of most important steps. After they take stable step, they have to try to innovate according to new ideas, a lot of thinking and then some of them might be able to create spin-offs. Finally they should look at the future to increase the economy effect and develop the cluster through the promotion of networks with global companies.

5-2 Conclusion

In cultural clusters in historical regions the input factors can differentiate depending on the historical background of the city. For example, the case of Firenze is the use of wine, olive, fashion and restoration technique in order to make a cultural cluster in a historical region. Every element can be an important material in the attempt to create a cultural cluster, if the material has a good relationship with the historical background.

In addition, it also depends on their time circumstance; therefore, each cultural cluster in historical regions is able to process diversely. As a result of the analysis of characteristics of historical regions, some regions make man-made
goods using natural resources; the others make them artificially with mixed shapes.

The success of the cluster system would be allocated in the local context, the local traditions and the local forms, regarding the social and economic organization. Any attempt at nurturing the development of a cluster, it likes agglomerations of small firms that must build upon the particular characteristics of the area in a question.

Therefore, through the analysis of Firenze regarding the cultural cluster, it is possible to conclude that it can be applied to Gyeongju case in order to create such a cluster by using information from Firenze.
6 References

- From Books
Mehling, J,(1986) Florence and Tuscany, A Phaidon cultural guide
Discovery (2003) insight guides Tuscany
Kostajnica H( ) what are cluster, CEI workshop on clusters, OECD LEED Programme
Boscherini. F (2003) ICTs and the creation of non-traditional productive sectors: some considerations about the Arno Valley cluster in ITALY.
Dallari, F( ) Cultural heritage as a territorial innovation in the protected mountain area theory.
P,Mulholland( ) A cultural heritage forum celebrating technological innovation at station X, The open university united kingdom
Rinaldi P(2005) Tuscany interiors, Taschen
Bertini S(1997) The Italian SME experience and possible lesson for emerging countries, UNIDO
Salimbeni,R( ) Opro-electronics and information science for conservation of cultural heritage, N. Carrara
Wyatt, F(2002) Cluster innovation system, enterprising partnership
Gagneux, D(2001) World congress on local cluster, Forums

- From website
http://www.chiantishire.org/territorio2.php
http://www.britannica.com