CONSIDERATION ABOUT A FUTURE COURSE OF TRADITIONAL CRAFTWORK INDUSTRY

Prospect for new traditional craftwork industry taken root in the region

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Abstract: In this report, the author considered about conditions for development of traditional craftwork industry as regional industry, using the functions to plan and to coordinate molding with technology that design have. As a key to rebuild the current traditional craftwork industry that continued the decline, universality as a tool was focused its attention on. And the following two viewpoints were suggested.

1) Place the various natures that traditional craftwork industry has as local resources.
2) Look for new value of traditional craftwork to contribute to society and life of the present age, as well as value such as tradition and culture.

Furthermore, based on this viewpoint, a direction to review the material, technology and talented person, which are main elements of traditional craftwork industry, were considered. As a result, that design played an important role for the new traditional craftwork industry that rooted in an area was pointed out.

Keywords: Traditional Craft, Design as the Dominant Conception, Local Industries

1. Introduction

The author examined the role for design in regional traditional craftwork industry and the direction of current situation and its practical use in the report titled, "Use and Expansion of Design for Regional Traditional Craftwork Industry" [1] in 2004. As the result, the following matters were concluded.

1) A design of a traditional craftwork is an act to develop and to practice a product plan and a molding plan for reasonable correspondence to the time according to the traditional technology and technique that an area and local industry cultivated. 2) About a practice of a design, Nature of the craftsman who had new knowledge based on traditional technology and an experience of technique that an area and local industry succeeded to is necessary as well as ability about molding of product shape about practice of a design.

When such a design concept is utilized as a superordinate concept of traditional craftwork development adequately, it enables to create products beyond the framework of style cultivated by tradition. The products being developed like this way, is evaluated as existing genealogy in the practical use of material and manufacturing technique.

Although the regional characteristic remains strong, it is no longer to be restrained by existing regional culture and history. And it will be developing into tools acquiring a high universality. This development leads traditional craftwork industry to a whole new world. In this report, the direction and means and a future image is surveyed about development of traditional craftwork industry led by a design.

2. Outline of Traditional Craftwork Development

Most of traditional craftwork industry exists in various regions in Japan. A lot of living ware has been produced using materials secured in each region and skills, which has
been sophisticated over the years. These products were mainly made by handwork of craftsmen. Attachment of individuality of handicrafts, fineness and expression of aesthetic appreciation was fermented their unique value along with the use of natural materials. And these products are called traditional craftwork by their value [2]. However, the main products had been living ware until the prewar-era, and the market was for also daily living ware. By this market, traditional craftwork in Japan had supported the regional economy. In Meiji era, when Japan started to modernize, traditional craftwork was expected to contribute to Japanese economy as Japanese main exported goods. But the value that traditional craftwork appealed to the foreign country was Japanese tradition and culture. Japanese traditional craftwork had been developed continuously till fifties of Showa era (1975-1984) by using above value, and expanded its industrial scale [3]. But it had declined drastically after twenty years. About this decline, it is said as foreign factors as follows [4]. 1) The traditional craftwork couldn't deal with a change of their life style and life space such as the development of Western-style and the reduction of the floor space in their houses. 2) They showed little interest in a high-price traditional craftwork having little appreciation for the single round because the national perception of the commodities changed and cheaper things were more likely to be thrown away. 3) The high-quality and cheaper commodities by mass production methods became available, and the traditional crafts have been avoided all the more. 4) Cheaper imported products came into fashion, and competed with the traditional crafts drastically. After all, it can be said that the traditional craftwork lost an opportunity and a place of use.

In order to prevent the decline and to urge development of traditional craftwork industry, various attempt have been implemented in traditional craftwork industries all over Japan. They were to develop technique, training of successors, to strengthen the publicity and so on. And the main activity was to develop new products. However, the most of development of traditional craftworks till today have been valuing Japanese tradition and culture, trying to respond to new fields by changing appearance image only. Such a development admitted the value of existing products, and slightly expanded purchasing of customer segments who want to buy the products. But couldn’t lead to rouse new demand, nor create field for new use.

3. Problems and Issues

Most of traditional craftwork industries in Japan have been supporting their regional economy for a long time as regional industries. But currently these industries are declining drastically. The status of scale of traditional craftwork industry is shown at Table 1, and the change of volume of production of lacquer ware as a case example is shown at Fig 1 [5].

This decline has given a serious blow to every region all over Japan having traditional craftwork industry. The decline is obvious in the regions where large-scale traditional craftwork industries are located. As for Yamanaka lacquer ware in Ishikawa Prefecture, its volume of production per year has decreased from 40 billion yen in 1989, to 18.5 billion yen in 2001, which is less than half the number. This decrease of production volume can also be seen in Wajima City (with a population of 27,000), a producing region of lacquer ware, decreasing its amount from 14.8 billion yen to 7.6 billion yen in the same period of time. And the decrease can be guessed to be very serious for Yamanaka with a population of 9,400 [6].

Table 1. The Present Conditions of Traditional Craftwork Industry

<table>
<thead>
<tr>
<th>Item</th>
<th>2006</th>
<th>Reference (The peak year and value)</th>
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<tbody>
<tr>
<td>The number of the people of engagement</td>
<td>93,000 people</td>
<td>290,000 people (1979)</td>
</tr>
<tr>
<td>The number of the companies</td>
<td>16,700 companies</td>
<td>34,043 companies (1979)</td>
</tr>
<tr>
<td>The amount of production</td>
<td>1,773 hundred million yen</td>
<td>5,400 hundred million yen (1983)</td>
</tr>
<tr>
<td>The person of engagement ratio under 30 years old</td>
<td>6.1%</td>
<td>28.6% (1974)</td>
</tr>
</tbody>
</table>

The Association for the Promotion of Traditional Craft Industries

Figure 1. A Change of the Age Production Total Sum (Seven high-ranking producing districts)

Also, when Japan achieved a dramatic development, especially of manufacturing industry, the scale rapidly
expanded. Many of them were located in the suburbs of metropolitan cities in terms of transportation, cooperation with other industries, and to secure employees. But it didn’t lead to promote new industries in the same region, in place of declined traditional craftwork industry. The regional industrial decline mainly on traditional craftwork industry, deprived the regions of job opportunity, and caused decrease in income of the regions along with it. This lost balance of local age population composition, and the regions got into a serious situation even to maintain the society. The decline of traditional craftwork industry is a crucial problem with a possibility to change the local community from its foundations. It is important to promote industrial renovation not only by the standpoint of protection of traditional culture, but also by a close relationship with structure of local community as an industrial base to support regional economy. It is important to have two viewpoints for a regional industry. One is providing job opportunity widely to local residents. Though it is important for manufacturing industry to make improvement in profit efficiency by restraint of labor cost, it is important to make profit along with increasing the number of employees as the characteristic of regional industries.

As for this standpoint, it had been attached greater importance to create added value appropriate to the labor cost, from producing distinct, delicate and beautiful hand works. But nowadays this added value has not been the driving force to promote customers interest. In order to increase the scale of manpower who are engaged in the industry, it needs other purpose and means. Another standpoint is forming the age of people engaged in regional industry with balance. If the age of laborers isn’t well-balanced, the labor cost will be extremely elevated by aging of laborers of largest age group. And it leads to increase crucial expense for the industry attacking importance to high number of laborers. The major reason to locate companies in the provinces is said to be low labor cost. Certainly it is a big attraction for the regions to have job opportunities, and also it is a big attraction for the companies to be able to secure young laborers. But for the companies expanding their business to the provinces for only that reason, there will be no advantage to continue to operate in the provinces after twenty years. Under this kind of circumstances, relocation will be an easy possible solution. It is important to minimize economic fluctuation, in order to maintain the industry within the region. And the age structure is an important element to think about labor cost especially.

Considering the above, in order to promote revitalization of regional economy, it is critically important to employ many people for contribution toward the regional economy and maintenance of social structure. And also the age structure shall be apportioned well-balanced. For these necessary conditions, the existing traditional craftwork industry could absorb labor cost by added-value of craftworks. As for the age structure, since the degree of proficiency could be a measure of added-value, skills of elderly craft men had been valued. So the general wage system had been reduced to prevent the high overall labor cost. Considering this local economy, a new means to absorb many of above mentioned manpower, and a means to raise the wage of people who work for the first time and young workers will be needed. Then the various characteristic of local industry as a new means would be examined.

4. Future Direction of Traditional Craftwork Industry

Today 210 items of regional products in Japan are authorized as traditional craftworks by the government [7]. Every of authorized product is living tool. The first article of authorization standards is regulated to be a tool for daily use. As for the other articles of authorization standards are to put emphasis on hand working, traditional skills, traditional materials and region by being a specific regional product shown at Table 2 [8].

<table>
<thead>
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<th>A condition item</th>
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<tr>
<td>1 The article must be used mainly in everyday life.</td>
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<td>2 The article must be primarily manufactured by hand.</td>
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<td>3 The article must be manufactured using traditional techniques.</td>
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<td>4 The materials should be mainly those which have been traditionally employed.</td>
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<tr>
<td>5 The industry must be of a regional nature.</td>
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In Iwate prefecture, four traditional craftworks were authorized. These are Hidehira Lacquer Ware, Joboji Lacquer Ware, Iwayado Chests, and Nanbu Cast Iron Ware. And Nanbu Cast Iron ware got the first authorization in the country (Fig 2-5).

These producing districts began the various promotions under the budget of the government according to this law.

The main projects were about acquisition of successors and education, or the development of new products. But in
Iwate Prefecture, theses attempt were, as same as scribed before, not success in the development of new products, but got a success about acquisition of successors to Nanbu Cast Iron Ware. Above law is aiming at industrial development. To promote traditional craftwork industry by authorizing from above standards as an industry that contributes to the region makes sense from the characteristics of regional industry. But in order to revitalize regional community that is starting to collapse, and to bring continuous development, it is insufficient just to deal with the viewpoint of development of traditional craftwork.

For example, the production amount of Yamanaka lacquer ware, which was introduced above as a case example, decreased less than half of 40 billion yen in twenty years. And it means that two million yen decreased per per townsman alone in a year. It is impossible to make recovery by improvement of existing products to the extensive decrease.

Lacquer ware that value internal characteristics such as history and culture cannot be expected to have a large-scale market. About the traditional craftwork industry whole, for a market of the traditional craftwork, which lost an opportunity of use in the modern society, it becomes important to develop the new field of market not expansion of the part reduced. Then what is necessary so that current traditional craftwork industry finds a new market?

Next, a direction in some viewpoints would be proposed.

4.1. Tradition and Universality

The basic condition of traditional craftwork industry authorized by the government is to have history of production more than a hundred year at least. Tradition is a result formed by continuous historical activities. And the fact the industry has continued and developed for more than a hundred year means that the products have universality and high competitiveness as an industry. Also, since most of skills have been improved constantly and continuously, it has an effect to increase competitiveness of the industry as long as the products are accepted by the society.

The universality, which has been cultivated for more than a hundred year, is not only spiritual and cultural heritage or custom, defined in the word tradition. Not characteristic and superiority brought instantly in the course of continuation of tradition, but universality acquired as a consequence of continuation that is the key to open the future prospects. It is essential to analyze this universality carefully, and to look for superiority and effectiveness brought about throughout the ages. This superiority and
effectiveness should not be judged only by fineness, beauty, spirituality of individuality and culture, and these had been the measure of existing traditional craftworks.

The measure should be the examination of various fields of techniques, and the necessary condition heading from today to future. It will be the spread of functionality, an effect of ingredient, possibility of environmental circulation, harmony and coexistence with nature, and so on. Since this universality can be examined mainly in the field of used material, used skills, and skilled personnel in charge of manufacture, next each direction would be mentioned.

4.1.1. Recognition of Material in Traditional Craftwork Industry

Almost all traditional craftworks are depending on the material supplied in the district. Including craftworks, it is no exaggeration to say that traditional manufacturing industry started from regional raw material. At the begging when manufacturing industry was formed as an industry, the necessary condition of raw material was as follows; to be easy to process, to be secured abundantly and continuously. Physical characteristic of strength necessary to products should be secured. And also it cost should be appropriate to make products corresponding to markets demand. But processing technique, products market and customers need, which required these conditions against material, have been changing drastically. Specially in processing technique, it no longer has processing conditions or restrictions [9]. Then as for material, it is necessary to examine the products with the standpoint except processing, that is to say, with the direction best suited to the material evaluating the influence to human being, natural environment, society and so on. A small portion of concrete example is as follows. Lacquer sap used as material for making lacquer ware turned out to have strong sterilizing properties in a recent study [10]. If we make lacquer ware taking these properties into account, it will be possible to create products that have completely different use and value from the existing products, and to make new use environment and market. Since lacquer sap is collected from lacquer trees, big environmental contribution can be expected [11]. And then new products, for use which was unthinkable before, can be created.

4.1.2. Recognition of Techniques of Traditional Craftworks

The main manufacturing means of traditional craftworks is handwork. Though material has been used without big change, handwork skills have been advancing and sophisticated constantly. Although a ratio of machine work by electric use has increased, as for manufacturing of traditional craftwork, handwork plays an important part to express spirituality and culture. And this is impossible for machinery to express. Therefore, the technical level of handwork has been improving till today, and there are a lot of examples of products made by handwork, which must be impossible to make by machinery even with modern technologies. Like this, handwork is maintaining extremely high skills, and these skills can be widely used in the fields other than craftwork. For instance, when it is necessary to make only one piece or a tiny quantity of works by high processing accuracy, it is an exclusive territory of skilled handwork. Also handwork is very effect when making same kind of products but each of them is slightly different, just like a product of custom-made.

The characteristic of traditional Nanbu ironware is that it is possible to make casting products of refined design and shape with two millimeters thickness. To make products of two millimeters thickness, the straight forming is done directly by handwork. This technique is called Sougata Technique [12]. This traditional Sougata Technique is the only technique to make such a thin casting product. Since a mold of Sougata Technique is made by hand, one lot is very small, from five to ten. Now, this technique is used for iron kettles and kettles to be used for Chanoyu (Japanese tea ceremony). The material of his technique is not limited to iron, but can be applied to metal other than iron. In view of this technique only from the point of casting technique, the field of products that this technique can be used is considered to easily expand.

4.1.3. Recognition of Skilled People in Charge of Traditional Craftwork

Most of workers in charge of traditional craftwork industry are laborers called craftsmen. Normally, it takes several years at least to obtain necessary technique as a traditional craftsman. About ten years of experience is said to be necessary to obtain technique to make lacquer ware, which requires wide-ranging technique. Like this, the quality of traditional craftwork has been kept by technical acquisition over the years. The quality of traditional craftwork is its precision of the processing technique and maintenance of beauty. And accuracy, elaborateness and beauty is also required for the work. These characteristics of the work are common items required for almost all traditional craftwork. Many of them are sharing common sense as to be common language of craftsman, although the field they are engaged in is different. It means that craftsman who are engaged in specific craftwork
manufacturing have great understanding toward manufacturing technique of other craftwork. It can be said that they are personnel with very high ability in the specific technical field. However, the social position of such personnel is regulated to be lower level at the present situation. The work of traditional craftwork industry is a labor that requires comprehensive and high ability demanding various know-how, knowledge and invention. But it has a strong impression to be labor-intensive. In production of existing traditional craftwork, the work has been divided and simplified. And the comprehensive ability of craftsman has not been truly shown. If there will be situation that traditional craftwork industry can produce highly specialized products of small quantity but various kinds, the original ability of craftsman is expected to be shown satisfactorily, and it can be easily imagined that they will be positioned as professional engineers who have high technique. The new use of skilled personnel with high handwork technique will be the key to revitalize traditional craftwork industry.

4. Conclusion
As it is stated in a series of this report, traditional craftwork industry is an important industry for the region. It is because it has a characteristic taken root in the only region, which inhabitants can possess the regional identity jointly, along with economic effect and securing job opportunity. To reexamine traditional craftwork industry in a new viewpoint as stated before, does not mean to make it global. The review should be made to provide what the time needs rationally and in best suitable form. To review material and technology and talented person will become a central theme, when research of new functionality and rebuilding of a reasonable price as new life article will be done, to regain the sociality that a traditional craftwork lost. It is nothing but design activity for traditional craftwork industry for the future to coordinate various new elements produced by these reviews.

It is important for the region to bear appropriate part with other regions by various aspects such as material, culture, tradition, skills and human resources. This sharing shall be the characteristics that only this region has in our times. And in order to reexamine valuable conditions as the future industry, it is a mission of design to recommend to coordinate, and to make improvement and innovation of various necessary conditions. To create what the time requires by highly developing skills refined in the region, excellent material and highly qualified personnel with a new viewpoint will bring about a complete change of traditional craftwork industry as a regional industry. And products created there shall be the regional culture and tradition for the future.

5. References and note
1. Toshikazu Machida, Use and Expansion of Design for regional traditional craftwork industry, A Doctoral Dissertation, Chiba University, 2004
2. A traditional craftwork industry is defined in a Homepage of The Association for the Promotion of Traditional Craft Industries.
   http://www.kougei.or.jp/crafts/about-index.html
A term of a traditional craftwork is used with this definition by the main subject.
3. The present conditions of traditional craftwork industry
   http://www.kougei.or.jp/crafts/condition-index.html
6. By the national census result (Kaga-shi, Wajima-shi) in 2005
7. This authorization is established by "laws concerning the promotion of traditional craft industries enacted in May 1974".
8. The above mentioned. The homepage of Association for The Promotion of Traditional Craft Industries
   http://www.kougei.or.jp/crafts/about-index.html
9. By the development of a tool and a processing device, any kind of materials can be machined now.
10. Nobuko Watanabe: About lacquered antibacterial antimold characteristics and powder, Fukui industrial technical center NEWS, No.6, 4p, 2006
11. Since lacquer sap can be gathered by planting of a lacquer tree, the use does not lead to increase of carbon dioxide.
12. Sougata Technique is the method to make a mold by turning in a wooden pattern of a turn cross-section of a product without making a model. And this technique is called Yakigata method so that it is burnt by the state that a mold is unglazed too. More over, it can make wall thickness thinly, because there is not cooling of iron by water of a mold.