

COMPLETION REPORT

Comparison study of handicraft technology in Yayoi Culture of Japan and Dongson Culture of Vietnam, especially on the bronze casting technology.

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In the Metal Age of Vietnam and Japan, Dong Son Culture (Vietnam) and Yayoi (Japan) are considered as the typical ones with symbols like Bronze Drum (Dong Son) and Dotaku (Yayoi).

The aim of this Project is to approach the producing technical of those bronze items in traditional methods in Vietnam and Japan. Actually, the mould casting of Dotaku are still in shape but the ones of Dong Son can not be found. The main reason is the Dong Son were cast in clay mould which were destroyed in order to take the drums out. It is proved by our meeting with artisans in casting both Vietnamese and Japanese.

Thanh Hoa (Vietnam) is the province in which Dong Son Culture was found. Dong Son archeological site, which was discovered and firstly excavated in 1924, is located in Ham Rong Ward, Thanh Hoa City, Thanh Hoa Province. Thanh Hoa is also the place where the Dong Som drums were found most. In Dong Son district, Thanh Hoa province, there is a trade village of bronze casting in traditional method. We can observe a whole process of casting here, from preparering materials to the end: a completed bronze drum.

For casting drums, the worker has to carefully choose land for making mould. The land is mixed with mud in pond and coal of rice husk. Next step is to figure the mould casting based on the sample. The drum mould casting consists of three parts: one face, two

bodies and core (same size with sample). The three parts are dried in outside temperature and burned before closely fixed for casting. The “door” for pouring bronze material is in the body or bottom of drum. Designs are made directly in the parts of mould.

Material for casting currently are bought from wastage collectors. Bronze and other metals are melt at the same time and poured into the mould.

Different from bronze drums, Dotaku are made from stone mould casting. The mould for Dotaku consists of two symmetrical parts made of sand stone. The simple designs are carved directly in the part of mould. Dotaku mould is hermetic, no door for pouring material. In our opinions, clay is used to make “a door” at the bottom of Dotaku mould for pouring material. After casting, the “door” will be destroyed before taking items out of the mould. Our meeting with Japanese bronze casting artisan, Mr. Koizumi Takahiro in Nagaokakyo City, Kyoto Prefecture has proved our ideas.

By researching artifacts found in archaeological sites and in traditional casting villages, by meeting with Vietnamese and Japanese casting artisans, it can be said that:

- 1, In Dong Son (Vietnam) and Yayoi (Japan), bronze symbols of the two cultures, Bronze drums (Dong Son culture) and Dotaku Bell (Yayoi), are casted at sites.
- 2, Although in different kinds of mould (clay in Dong Son and stone in Yayoi), they are all proved that the casting technical at that time were in high level. The owner of Dong Son and Yayoi knew exactly the casting process from making moulds to the end, having a completed items, as well as the know-how in mixing metals, creating designs for decoration in bronze items.
- 3, Traditional casting villages have been existent both in Vietnam and Japan nowadays. These are cultural heritages that have to take a good care and conservation.

Places in Japan were visited:

- Kyushu National Museum, Fukuoka Prefecture;
- Itazuke site, Fukuoka City, Fukuoka Prefecture;
- Kanenokuma site Museum, Fukuoka City, Fukuoka Prefecture;
- Itokoku Historical Museum , Itoshima city , Fukuoka Prefecture
- Naganobori Copper Mining Museum , Mine city , Yamaguchi Prefecture
- Ibaraki city Historical Museum , Osaka Prefecture
- Yasu Dotaku Museum , Shiga Prefecture

- Kanazawa University , Kanazawa city , Ishikawa Prefecture
- Chkamiri site Museum , Kanazawa city , Ishikawa Prefecture
- Center for Cultural Property Of Ishikawa , Ishikawa Prefecture
- Ministry of Culture , Tokyo
- Kasori shell midden site , Chiba Prefecture .

List of Japanese archaeologists and artisan we met in Japan :

- Mr Koizumi Takahiro , Nagaoka-city , Kyoto Prefecture
- Mr Kobayashi Koji , Kyushu National Museum
- Prof Nakamura Shinichi
- Dr Murano Masakage , Kyushu University
- Mr Okui Tetshuhide , Ibaraki Historical Museum
- Mr Shindo Takeshi , Yasu Dotaku Museum
- Dr Nishimura Masanari , Kansai University
- Prof Imamura Keiji , Tokyo University
- Dr Yamagata Mariko , Waseda University
- Mr Kengo Miyahara , Kyoto city archaeological Research Institute
- Mr Takayasu Koezuka , National research Institute for cultural properties , Nara national research institute . .

Publication of the Results of Research Project:

Verbal Presentation (Date, Venue, Name of Conference, Title of Presentation, Presenter, etc.)

International conference : Archaeology for community : sharing experiences among cultures .

Thanh Hoa city , Thanh Hoa Province 19-22 December 2011 .

Presentation : Public Archaeology : new way forward cultural heritages conservation in Viet Nam .

Thesis (Name of Journal and its Date, Title and Author of Thesis, etc.)

Book (Publisher and Date of the Book, Title and Author of the Book, etc.)