# Documentation of Archaeological Artefacts: The Case of Wooden Tablet

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Cultural Properties

Other historical literature

Deciphering Understanding of of text what is written

Text materials

Unearthed text materials

## Archaeological artifacts

Observation of processing and configuration

Information on the archaeological site

Archaeological artifact + "written text"

"Written text" provides a wealth of information

Archaeological information guarantees the reliability of the text information

XIn Japan:

Mokkan (wooden tablet), urushi-gami (lacquered paper), earthenware with writing in ink, etc.

· · · Many works written in "ink"

Major results with a combination of literature + archaeology (narrow definition)

(However, the focus of the work becomes reading the text)

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Nara National Research Institute for Cultural Properties has staff who, while experts in written materials, also participate in archaeological excavations and have a certain measure of experience and skill.

## Observe the condition of the material

The overall condition

Defects or traces of processing

Similar to other archaeological artifacts

## Observe the characters

Order of brush strokes
Configuration of the characters
Missing characters

Techniques unique to the unearthed text material

## Observe peripheral information

Context
Information on the archaeological site
Similar cases
Knowledge of history

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Accumulation of know-how centered on Nara National Research Institute for Cultural Properties. The National Museum of Japanese History also serves as a hub. The Taga Castle Ruins Research Center in the Tohoku region, and the Kyushu History Museum in Kyushu, also serve as hubs.

Archaeological organizations lead operations in each region and conduct investigations in cooperation with NRICP Nara, the History Museum, and researchers of Japanese history.

### Observe the characters

## Technologies for observing the characters themselves

Utilization of the adjustment of light

Utilization of the refraction of light in water

Observation of minute uneven parts on the surface by shining light at an angle

Observation through changes in moisture absorption

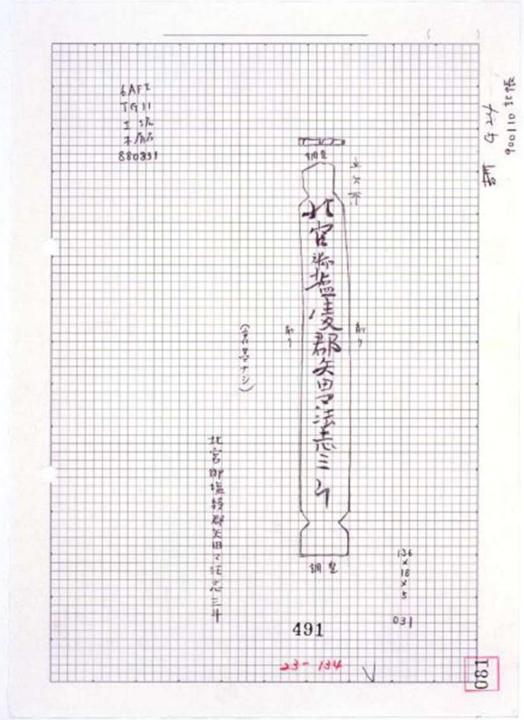
Observation through the use of infrared devices

## Recording mainly the order of brush strokes

Focus on the brush, not on the shape

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Create an observation report called "Kicho" (registry). Most artifacts are written in ink, so infrared is effective.





Infrared digital photography



Visible light

## Observe peripheral information

## Organizing and utilizing of databases

Database of unearthed text information

Database of character configuration (Jisho database)

Database of various types of knowledge

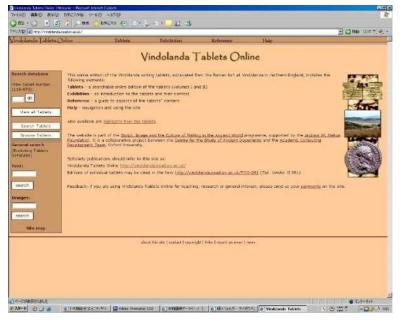
# Organizing of information on excavation

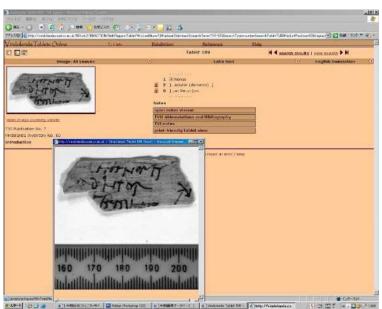
Information on articles unearthed together

Information from the ruins

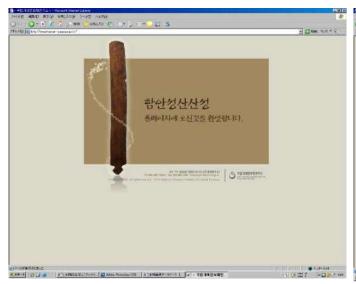
Organizing and checking of historical (research) knowledge

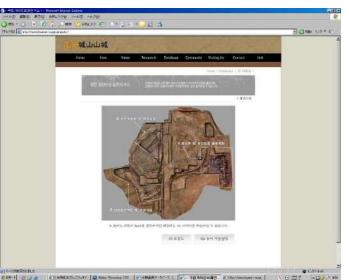
Development of new technologies





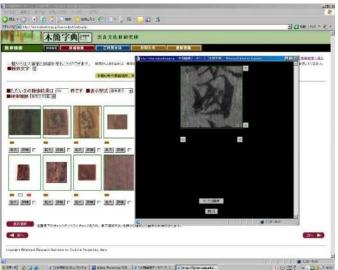
**England** 





#### South Korea





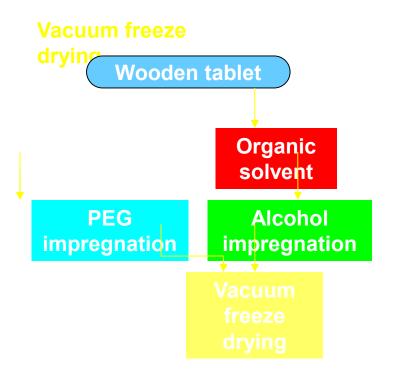
## Important challenges

#### **Ensured protection of the artifacts**

Attract attentions because of their amount of information

Fragile in many cases (information concentrated on the surface)

Conservation, management, and scientific technologies necessary



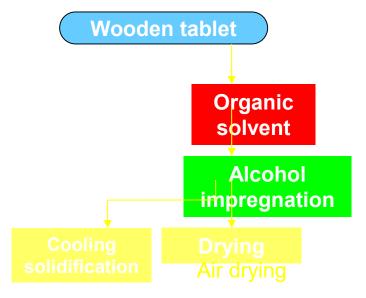
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Many artifacts are fragile. Wooden tablet is very delicate wooden crafts. They must be handled with care.

Management requires considerable labor and money. Everyday observation and study done through photographs and records instead of looking at the actual article.

Processing for conservation done in close liaison with Conservation Science staff. After processing, article is stored at 20°C, 60% rh. As a general rule, not open to the public.

#### Alcohol impregnation



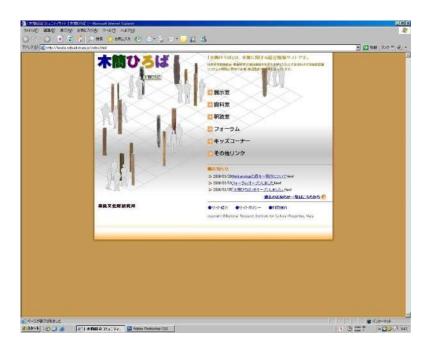
# Widespread sharing of information

Procurement and provision of high quality photographs and images

Opened to the public via Internet

Publication of photograph collections

Liaison with scientific societies



#### XIn Japan:

Requests for observation or public viewing of articles are usually dealt with by showing photographs. In special cases, the actual article is shown in the presence of staff.

Exhibitions are extremely limiting. Therefore, efforts are put into opening the articles to the public through the Internet and through high definition printing and publication of photographs. The scientific societies are aiming to become a bridge between research organizations and researchers through close liaison with the Japanese Society for the Study of Wooden Documents (*Mokkan gakkai*) (office located within NRICP Nara).

