# The Process of Handling Materials before Digitizing the Heritage of Woodblocks of Vinh Nghiem Pagoda

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## ABSTRACT

This article is based on the survey results of woodblocks of Vinh Nghiem Pagoda, in Tri Dung commune, Yen Dung district, Bac Giang province, Vietnam. From the survey results, the author group wishes to release the value of woodblocks of Vinh Nghiem Pagoda in history and at present on with regards to two aspects, archives and transmission of Vietnamese Buddhism tradition in general and Truc Lam Buddhism in particular. Especially, on the basis of assessing the process of handing the heritage of materials, the author group has learnt strengths and weaknesses of Vietnam in the process of handling woodblocks, an important phase in the digitization process.

Key words: woodblock, woodblocks of Vinh Nghiem Pagoda, digitization

Il processo di gestione dei materiali prima della digitalizzazione del patrimonio ligneo della pagoda di Vinh Nghiem

## SINTESI

Questo articolo si basa sui risultati dell'indagine sui blocchi di legno della Pagoda di Vinh Nghiem, nel comune di Tri Dung, distretto di Yen Dung, provincia di Bac Giang, in Vietnam. Dai risultati dell'indagine, gli autori desiderano far conoscere il valore di questi blocchi di legno nella storia e presentare i due aspetti degli archivi e della trasmissione della tradizione di Buddhismo vietnamita in generale e del buddismo Truc Lam in particolare. Nello specifico, sulla base della valutazione del processo di gestione del patrimonio di materiali, gli autori hanno potuto conoscere i punti di forza e di debolezza del Vietnam nel processo di gestione dei blocchi di legno, una fase importante nel processo di digitalizzazione.

Parole chiave: blocchi di legno, blocchi di legno della Pagoda di Vinh Nghiem, digitalizzazione

Postopek ravnanja z materiali pred digitalizacijo dediščine lesenih blokov Pagode Vinh Nghiem

# IZVLEČEK

Ta članek temelji na rezultatih ankete o lesenih blokih Pagode Vinh Nghiem Pagoda, v komuni Tri Dung, okrožju Yen Dung, provinci Bac Giang v Vietnamu. Iz rezultatov ankete želi skupina avtorjev opozoriti na vrednost blokov Pagode Vinh Nghiem skozi zgodovini in v sedanjosti z dveh vidikov, arhivskega in z vidika prenosom vietnamskega budizma na splošno in zlasti Truc Lam budizma. Na podlagi ocene postopka rokovanja z materialom, se je skupina avtorjev tudi naučila moči in slabosti Vietnama pri obdelavi blokov, kar je pomembna faza v procesu digitalizacije.

Ključne besede: lesni blok, leseni bloki Pagode Vinh Nghiem, digitalizacija

Material heritage is a term used by UNESCO in the World Memory Program to refer to materials, documents of special value and with extensive influence in the world. After Nguyen Dynasty woodblock, Van Mieu – QuocTuGiam epitaph in Hanoi, Vinh Nghiem Pagoda woodblock is the third heritage entered in the "World Memory" material heritage. These archives are not only historical evidence that reflects creative achievements of Vietnamese people over different periods, but also a tool for public administration, establishment, sovereignty protection and territory unviolation of Vietnam. However, there are lots of problems in protecting and upholding the values of this "historical treasure" in Vietnam to be solved: no complete and accurate research, survey or statistics on the number of valuable materials of Vietnam (in addition to valuable material heritages kept by State archive agencies, a huge number of materials are dispersedly kept in vestiges, temples, pagodas and families); the preservation, storage of materials is more and more improved thanks to the Government attention and interest in equipment investment and simultaneously advice of foreign experts and higher and higher qualifications of officers in charge of material preservation. However, since woodblocks are wood planks carved and molded several times, the process of handling these archives has lots of inadequacies; consequently, Vietnam has not upheld its human values of woodblocks in the context of globalization and multi-culture of the human race.

## 1 Material heritage of woodblocks of Vinh Nghiem pagoda

Woodblock is considered as special books which are printed on wood and much used in feudal dynasties. Woodblocks are carved with Chinese or Ancient Vietnamese characters, negative proofs when printed on paper will become positive proofs and bound and used in accordance with the tradition of Eastern people (from left to right, from top to bottom). In addition to the woodblocks of Vinh Nghiem pagoda (Bac Giang), some woodblocks of Nguyen Dynasty are kept in State Department of Archives and Records 4 (Da Lat), Truong Luu woodblocks (Ha Tinh) and woodblocks in Nghe An. This heritage accounts for 3/6 the world material heritage of Vietnam registered by UNESCO in the World Memory Program for Asia – Pacific region.

The woodblocks of Vinh Nghiem pagoda are set of planks carved with prayers, alternately called "wood letters" aged 700 years, kept at Vinh Nghiem pagoda. The pagoda is famous for ancient writing, a center of Buddhist clergy training for nearly 8 centuries of Truc Lam Yen TuBuddhism, which is considered as quite a typical museum of Mahayana Buddhism culture in Northern Vietnam. The main temple of Vinh Nghiem pagoda preserves 80 book titles, nearly 3000 wood blocks, each has two sides, each side has two pages of negative proof, containing nearly 2000 Chinese and Ancient Vietnamese characters, including especially precious ones such as Khoa Hu Luc, KinhHoa Nghiem, etc.

Each block is made of wood of "decandrous persimmon" which is mostly grown in the pagoda garden. This type of wood is suitable for carving, as it is soft, smooth, tender, easy to carve, not bent, difficult to crack or break. The woodblocks have different sizes depending on prayer book. The biggest block is 1 meter long, 40 - 50-centimeter-wide and the smallest block is sized only 15 x 20 cm. Because of being printed for numerous times, planks have changed to shiny black color, their surfaces are covered with a thick layer of printing ink oil. The printing ink oil infiltrated into wood helps to prevent water penetration, mould and termite. Most planks are carved on two sides with sharp and plain handwriting of different types of Chinese and Ancient Vietnamese characters such as "chân thư," "thảo thư", "lệ thư", "hành thư".

The contents of woodblocks of Vinh Nghiem pagoda contain lots of diverse information in different fields: Buddhism history; cultural thought of religious work in the world beginning of Truc Lam dhyana; history of woodblock carving and printing and reputable career of some enlightened monks and well-known men who have made numerous contributions to the development of traditional culture of Vietnam. The special features of woodblocks of Vinh Nghiem pagoda lie at Buddhist, cultural and artistic values and especially, these archives mark the development of Vietnam characters, which is summed up in form of poetry or interpretation of Buddhist idea. These are valuable source of historical materials about the development of Vietnamese language and characters; the development of Vietnamese system of deeds changed from mostly using Chinese characters to actively using and attaching special importance to Ancient Vietnamese characters. In general, the contents of woodblocks of Buddhist prayers of Truc Lam dhyana in Vinh Nghiem pagoda are significantly meaningful with regard to: human life philosophy and education of citizen personality, belief religion, deed language, literature and arts, science and technology.

#### 1.1 The contents of woodblocks show cultural ideas of religious work of world beginning of Truc Lam Dhyana

The woodblocks of Vinh Nghiem pagoda imply deep human values with regard to ideas and catechism of Truc Lam Buddhism popularized and spread by such monks as ThichThanhTu and ThichNhatHanh superior Buddhist monks and ThichHuyenDieu Buddhist priest all over the world in order to attract millions of Vietnamese and foreigner Buddhists inclined to the good.

#### 1.2 The woodblocks are valuable literature works

In addition to representing the cultural ideas of religious work of the world beginning of Truc Lam dhyana, the woodblocks of Vinh Nghiem pagoda are valuable literature works such as: Cư trần lạc đạo phú (*Living in the earth and entertaining religion*) written in poetic form, Đắc thú lâm tuyên thành đạo ca (*A song about delighting with forests and streams and reaching the peak of the Way written by Tran Nhan Tong*), Vịnh HoaYên tự phú (*Hoa Yen pagoda poem*) written by HuyenQuang Buddhist priest, etc. They are precious literature works of dhyana which have positive influence on social life and interested by lots of Vietnamese and foreign literature researchers.

#### 1.3 The contents of woodblocks are sum-up of folk experience in traditional medicine

The book Kính tín lục is included in the collection of woodblocks of Vinh Nghiem pagoda, which records emergency aid, treatment methods for An thai thôi sinh phương, Thiên Trúc cốt dược, Phụ cấp cứu phương... are sum-up of folk experience learnt from testing of medical and pharmaceutical essence at that time. At present, these remedies are widely popular in lots of pagodas, Zen monasteries and local areas of Vietnam.

#### 1.4 The woodblocks have marked the development of Ancient Vietnamese characters

The woodblocks in Ancient Vietnamese characters of Vinh Nghiem pagoda are material heritage that marks the development of documents in Ancient Vietnamese characters over Tran, Le and Nguyen dynasties. Especially, the book "Thiên tông bản hành" are used by the Vietnamese Nôm Preservation Foundation, USA as form for font of Ancient Vietnamese characters on Unicode (symbolized as Nom NaTong Light.ttf) and installed in computer all over the world.

#### 1.5 The woodblocks of Vinh Nghiem pagoda are great calligraphic work

The woodblocks of Vinh Nghiem pagoda are carved by Vietnamese wood-engravers with cares and pains. From the woodblocks, we can see the skillful hands, clear distinct eyes, patience and carefulness of wood-engravers who must especially be good at Chinese and Ancient Vietnamese characters.

The woodblocks of Vinh Nghiem pagoda are carved with Chinese and Ancient Vietnamese characters of different types such as chân thư, cursive writing, lệ thư, hành thư, etc. which are worth great artistic calligraphic works. Many pages of the woodblocks are interleaved by paintings with talented and fine lines, close and harmonious layout and of high aesthetic value.

# 2 Real situations of the preservation, exploitation of the value of woodblocks of Vinh Nghiem pagoda

#### 2.1 Preservation in traditional way

Before 1997, the woodblocks of Vinh Nghiem pagoda were directly taken care of and preserved by ThichThanhDuyet and Thich Thien Van superior Buddhist monks and ThichThanhVinh venerable in traditional way: The pagoda masters let build 7 shelves which look like a small wooden house. Each shelf has a pillar, roof and layer, surrounded by wide square bars of thick and solid ironwood.

The self has a removable locked door. After arranging planks on the self by each set of books, lock the door. Each shelf has from 4 to 6 legs or 8 pillars depending on its size. These legs are placed on a milestone with an elevated post in the middle. Then, they pour vegetable oil into the milestone to prevent

termite, ant, etc. This shelf is called collection of discourses. These collections of prayers are put in the triratna with 30-40cm thick tile, which ensure good temperature for preservation.

By now, the planks of prayer books are printed into books which are distributed for mediation pagodas. As printed by Chinese inks, the planks are covered with a layer of ink glue that protects the planks made of good wood (since the ink is mixed with buffalo skin glue of unpleasant smell which prevents rodents). Furthermore, the planks are made of decandrous persimmon (which is not bent, worm-eaten and well water-proof), so they are well preserved.

At present, the woodblocks are numbered by name of collection of discourses and preserved on the right lobby of the pagoda and behind the upper temple. However, even though the woodblocks are numbered by book name, they currently are arranged in confusion and not in set, so it is very difficult to find sufficient woodblocks for a collection of discourses. Especially, most collections of Buddhist discourses in general and literature works in particular are not adequate as in the past. According to ThichThien Van senior Buddhist monk, it is because for a long time, these woodblocks have not been paid attention to, many are lost, some are completely lost; therefore, no collection of discourses or literature work are sufficient to be printed for circulation. It is noticeable that during loading and unloading, some woodblocks are broken down or negative characters are come off; so, upon trial printing, lines are lost or missing, losing the beauty of woodblocks and causing difficulty for readers.

#### 2.2 The process of molding woodblocks of Vinh Nghiem pagoda

The woodblocks of Vinh Nghiem pagoda were manipulated hundreds of years ago, mostly by handicraftsman and characterized as carved by Chinese or Ancient Vietnamese characters and negative proof, which become positive one when printed on paper. The size of woodblocks is not uniform; therefore, the process of molding woodblocks and especially the process of handling woodblocks before molding requires high level of passion, technique and knowledge of Ancient Vietnamese characters of people who directly perform it. Through practical investigation of molding in Vinh Nghiem pagoda, the author group has gathered the molding process as follows:

#### - Step 1: Choosing location of molding

The location of molding must be dry and airy but not windy, with sufficient light. Previously, Vinh Nghiem pagoda molded next to the shelf of woodblocks in the pagoda triratna, then moved to the left side of the pagoda.

#### - Step 2: Transporting and cleaning woodblocks

Through practical investigation, the author group has realized that this is a very important step and it must be very careful. As woodblocks have been molded numerous times and gone through a long time, it has a rotten and dusty layer. When taking the woodblocks out of the shelf, you must wear gloves made of soft cloth and face mask; you must take them out of the shelf step by step in order to prevent overlapping, which may cause scratches, tear-and-wear or loss of lines for rotten planks. When cleaning, you should use wet towel, soft brush to sweep dust on the plank surface, not soak the planks into water for cleaning. You should pay attention to the points stuck with ink caused by previous moldings; it is possible to use a little gas/petrol to take ink out of the plank surface.

#### - Step 3: Preparing coat, molding materials and tools

Coating requires flat surface, do not use too soft materials for coating. You should prepare following materials: Rhamnoneuron paper, ink, gas/petrol for mixing ink. Good Rhamnoneuron paper is medium thin which has regular powder, is not curdled or holed. Cut paper according to the woodblock size. The cut paper should be fit so that after molding, the molding page neatly lies in the middle of the paper, about 3-5cm away from top, bottom, left and right margin.

#### - Step 4: Molding

Since woodblocks are characterized as characters are carved negatively but relieved on the surface, so molding requires cares and pains. After molding, pages are arranged by volume, page number. When all pages have been gathered, they are arranged separately, clearly noted and then bound with a cover page and sewed by hemp.

- Step 5: Sorting book title

The investigation shows that the pagoda has sorted 34 book titles.

- Step 6: Translating contents in ancient Vietnamese characters into Vietnamese language The investigation shows that there is currently a lack of skilled researchers in Chinese and ancient Vietnamese characters who are able to take charge of translating original contents of woodblocks, accordingly it is possible to know insufficiency of each collection of discourses or each literature work. The documents, transcription, translation, transliteration, especially appendices to Chinese script, ancient Vietnamese script documents have errors, which are caused by composition, edition and correction of printed copy which results in little confidence in these materials.

#### 2.3 Exploitation and proving of woodblock values

From 1994 to 1997,these woodblocks were printed twice. The first one was performed by Thich Thanh senior Buddhist monk of Truc Lam Yen Tu monastery who is a nun of a pagoda in the Southern Vietnam and then translated, explained and developed Truc Lam dhyana. The second one was performed by Mr. Nguyen Van Phong appointed by Ha Bac Museum, along with a group of philological students at Hanoi Synthetic University.

From 1997 to 2000, Bac GiangMuseum appointed its officers to inventory book titles and permitted printing. After that, Bac GiangMuseum compiled the book "Vinh Nghiem Pagoda" which introduced part of contents of the book Yen Tu daily in order to broadcast Truc Lan Yen Tudhyana.

In 2009, Back Giang Provincial Department of Culture, Sports and Tourism printed them on Rhamnoneuron paper and bound all woodblocks kept at Vinh Nghiem pagoda. At the same time, the Department inventoried, classified book titles, coordinated with Research Institute of Han Nom to briefly relate the contents of prayer books, books, Buddhist laws in the woodblocks. After that, with assistance of Hue Tam monk, the book "Yen Tu daily" written in ancient Vietnamese script was read and printed for introduction.

At present, Bac Giang cultural sector has inventoried, cleaned, classified, documented and arranged in sets, simultaneously molded on Rhamnoneuron paper, bound, taken photos, filmed, related briefly, encoded (museum symbol) all woodblocks for purpose of convenient management, preservation and utilization.

Local authorities and sectors in Bac Giang province have paid attention to preserving and proving the values of these materials; however, in order that the woodblock contents were introduced into cultural life of the people, the people respect these valuable human values and especially the preservation is most effective, it is impossible not to digitize these material heritages. This is an effective solution that both contributes to value proving and effectively preserves these woodblocks.

# 3 Process of handling woodblocks before digitization

From the definition of material value and the real situation of preservation and exploitation of valuable material heritage in Vinh Nghiem pagoda, the author group realizes that one of currently urgent problems is how to lengthen the life-span of original materials (such phenomena as woodblocks are rotten, bent or broken while cleaning, etc.); to identify different types of materials, to improve the situation that molded copies have different types of Rhamnoneuro paper; to manage and exploit collectively, etc. One of the solutions to above-mentioned problems is to digitize this heritage. It can be seen from the investigation that all woodblocks are currently digitized; however, only titles, not contents are digitized and one of the important phases that is currently not paid attention to, when digitizing this valuable heritage, is that there is a lack of standard process of handling woodblocks before digitization. Since the woodblocks are handled in traditional way based on the experienced of nun monks, they are rotten (due to uncleanness), broken (due not carelessness), etc.

#### 3.1 Shortcomings in the process of material handling

- Carving planks are characterized as easy to rotten, eaten by rate, termite, etc.;
- Characters carved on planks are easy to broken, cracked or lost since they have been existed for hundreds of years;

- Chinese (or ancient Vietnamese) characters carved on planks are negative; so it is difficult even for people who are unable to read ancient language and even people who are quite proficient in ancient language to approach documents if they are not printed;
- Each type of woodblock is arranged unscientifically;
- Exhibits are not preserved and repaired carefully, resulting in inaccurate statistics on exhibit
  materials, binding agents and materials. The previous process of preservation and repair has not
  been clarified.

#### 3.2 Recommendations, suggestions on the process of handing woodblocks before digitization:

- It is necessary to clearly understand the role of the process of handling woodblocks before digitization;
- standard process of handling woodblocks is required;
- It is restricted to use bare hands to directly contact exhibit;
- t is necessary to periodically inspect and take measures to promptly handle insects and mould; to separate damaged materials for promptly handling;
- The use of chemicals during preservation should be based on research, careful consideration and not affect physic-mechanical structure and quality of exhibit and woodblock contents;
- The rehabilitation and restoration of woodblock should follow a strict process: recording the real situation of exhibit in detail; looking for the reasons for damage; cleaning the exhibit; handling the insects by mechanical methods of chemical steam (refer to experience in cleaning woodblocks of South Korea); arranging, classifying woodblock components (which plank is original, which plank is newly added, etc.); finishing the exhibit surface and color.

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# SUMMARY

In summary, the woodblocks of Vinh Nghiem pagoda are great woodblocks of Buddhist prayers in Bac Giang province, which reflect history, religion and culture of Truc Lam dhyana and local people. Through the digitization of woodblocks done by professional officers in Bac Giang province and the investigation, collection of materials in the pagoda, the author group has not approached to any document on the process of handling woodblocks. Therefore, from the value of woodblocks and the shortcomings of the preservation of woodblocks in Vinh Nghiem pagoda, the author group looks forward to the interest and discussion of local and foreigner researchers about the process of handling woodblocks before digitization in order to improve the currently limited process of handling woodblocks in Vietnam.

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