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UKRAINIAN AND JAPANESE WOODEN ARCHITECTURE: CONVERGENT EVOLUTION (SACRAL ARCHITECTURE)

Abstract. The article deals with some special points of Ukrainian and Japanese ancient wooden architecture similarity pointing to the possibility of their convergent evolution. Such akin genesis could be possible because of initial developing circumstances (climate, the type of old agriculture culture, the type of prehistoric animistic beliefs) alikeness. The first part of the article was devoted to the early periods of Ukrainian and Japanese wooden architecture existence and also to the both countries rural houses architecture. The second part of the article is devoted to the Ukrainian and Japanese wooden temples similarity.

Key words: wooden architecture, Ukraine, Japan, church, temple, shrine, genesis.

The termination (see the beginning in #3)

Ukrainian wooden churches. Ukrainian wooden church of block-house construction principally differs from other churches immanent to other nations because of the shape of its tower – so called "zalom". This simple, though smart system based on the stepped diminution of tower top provides good opportunity to build without inside joists. So inner space of this church is entirely open from its floor to the vault providing a feeling of dynamic take-off. Despite of proportion diversity, most of Ukrainian wooden churches are styled in settled canonical type. They are erected either on Greek Cross or on three-part plan that have capacious central nave. Official name for three-part base adopted by experts is "traditional Ukrainian plan". Three-part churches usually have one to three towers, cross-plan churches have one up to five (rarely nine) symmetrized towers above the base. The oldest wooden churches now existing in Ukraine are early 16 century, while most of others belong to 17 - 18 centuries. To build them new church, village community normally employed a crew of craftsmen carpenters. Logs of old buildings have incut words: "Craftsman Mikhailo from the town of Zhovkva erected this church" or just "Craftsmancarpenter Wasil". Woodworking was honest family trade so fathers passed their knowhows to their sons or male kinfolk. Hereditary families of wooden church builders still live and work in Western Ukraine.

While Japanese used preparatory drawings, Ukrainian church builders didn't. Villagers tended to commission new church "similar to that stands in the neighboring village", now and then they could wish their own tower taller or lower either of different shape [1]. Planning of the church to come was simple – they extended cords across the

building site and didn't use other devices. So squares and octagons in church plans usually are not regular, however right this irregularity enchants us nowadays.

Churches of Eastern Ukraine are more developed design. Their walls noticeably rake inside to the peak so their more capacious foot part and shooting up vertical together form gorgeous inner space. Their architectonic feature remind a candle or slim poplar tree – traditional symbol of East Ukrainian landscape. Churches in Western Ukraine are lower so they look more stumpy and heavy. Their roofs are covered with wooden "gont" – scalelike shingle. Gont roofs deliver dreamy air to that humble churches. Experts believe that wooden architecture development on this territory progressed slower so many older continued. Besides, far and away more various churches maintained in the Ukrainian West.

Local schools of wooden architecture developed early in isolated areas of Carpathian mountains and regions around, where various ethnic groups of Ukrainians lived. Say, Boyky having their roots in modern Lvivska oblast. Exceptionally interesting is the fact that three-part in plan and usually having three tops wooden churches of Boykivska school outwardly remind Japanese and even Chinese pagodas. This visual impression of far eastern multistepped building produces many (up to five) zaloms stacked up on Boykivska church tops. Belfry is erected above the entrance part of church (Narthex), so called Babinets: the room where women have to pray. Ethnic lands of Ukrainian Lemky now belong to northern Zakarpattia, western part of Lvivska oblast and to southern Poland (Malopolska). Lemkyvska church is three-part in plan also but its belfry of framework construction without zalom is taller than its multistepped towers above central nave and altar. Some of Lemky Ukrainians and the best churches of that style stayed at Poland. They serve there in Ukrainian, Ukrainian builders` names still are readable on sooty old logs. Some churches of Zakarpattia oblast (historic Transcarpathian Ruthenia) belong to the separate group originated from Transylvania. Their construction features were forcely brought here in late 17 century after entire region became a part of Habsburg Kingdom Of Hungary and Orthodox churches came under jurisdiction of Rome, establishing so called "Unia" (they even remodelled some of older churches). Zakarpattia churches of that group are three-part also but their central sections aren't that ample having the same size as entrance part Babynets, while altar section is just tiny. Instead traditional Ukrainian zalom tops churches of that type have raftered roofs but belfry above Babynets. That belfry usually is crowned either with slim Gothic steeple or with rather bulky baroque head. It also has so called "pidsyabittya" – gallery for shooters (tribute to old time tradition when a church could be easily converted into fortness).

Churches of Gutsul school occupy predominately Ivano-Frankivsk oblast. They display Greek Cross plans and shorter single top in the centre. Churches of Bukovyna are essential in Chernivetska oblast. Such church of "hata type" under simple tall roof really looks like a home of some villager. Contrary to its exterior the church inside has introverted low-pitched top section having zalom. Churches of Bukovyna had traditional Ukrainian

multitop appearance before this region fell under Ottoman Empire in 16 century. Turkish authorities insisted on building almost undistinguished Christian churches. So their tops not only became stumpy, builders managed to conceal inside towers under common thatch roof [1].

Individual article in wooden architecture of Ukraine are belfries. They occur broad and mighty, slim and tall, grandly multistepped, some examples have shooters galleries so resemble compact self-supporting castles. Shape of a belfry depends on local building traditions. They may be clearly of block-house or framework systems but frequently we spot cross-breed belfry when its lower steps are of zrub system but upper ones are of framework.

Wooden Temples of Japan. In 6-7 centuries Japan met Buddhism, which came there via Korea from China [2]. Chinese standards of temple construction were borrowed simultaneously but soon Japanese builders began to abandon continental schemes instead inventing their own examples. It's easy to be sure enough that Japanese are strong in keeping their own traditions. At the same time they without any problem adopt novelties altering everything so quickly that soon any oversea borrowing looks natural attribute of Japanese culture. The same happened to Buddhist architecture and Buddhism itself in Japan. Shinto that reigned there before developed architectural forms of its own in 6-7 centuries. Newbrought religion failed to oppress the old one. Not as in 10 century Kyivan Rus, when Prince Volodymyr baptized his people and totally banned all attributes of paganism. Contrary to that, syncretism is the backbone of Japanese culture. An old joke has it: simultaneously Buddist and Shintoist so rituals are apportioned. They usually hold marriage and children birth in Shinto traditions but obituary rituals fulfill according to Buddhism.

Architectural forms of Shinto shrines and Buddhist temples primarily differed but time passed and soon they combined supplementing each other. In old Shinto times single delicate pavilion was enough for praying as the Nature was enough for spirits [3]. Fairy often Shintoists used to pray directly to the places where their deities lived: mountains, rivers, waterfalls etc. Presentday Shinto shrines as well as Buddhist temples are permanent structures. Furthermore, every Buddhist temple now is fitted up with small Shinto sanctuary – in order to please local Shinto gods. It goes without saying that every Shinto temple likewise possesses little sanctuary dedicated to Buddha.

Now Shinto and Buddhist shrines and temples look so alike that average tourists hardly can distinguish between the too. Though it's easy. Only Shinto shrine has Torii – the entrance gate dedicated to supreme goddess Amaterasu. Once in a bad mood she refused to leave her cave so the sun stopped to appear in the sky for some days. All gods came together to build a fancy gate before her shelter, then they put rooster upon it. Bird sang, gods played and danced around so Amaterasu couldn't help laughing and has shown

up from her cave. And the sun began to shine again. In memory of that wonderful event since every Shinto shrine has Torii gates before.

Well, let's get back to the time when Buddhism arrived on Japanese islands. The first Buddhist temple Asukadera exists today, albeit none of the ancient buildings been preserved there. Horyuji temple (7ct.) in the Ikaruga area near Nara, one of the first capitals, possesses the oldest extant constructions [4]. UNESKO declared it the oldest wooden building on the Earth. Surrounded with galleries the temple's yard has strictly rectangle shape. Central pavilion (Golden Hall) contains statue of Buddha. Pilgrims look in through the open door but don't enter [4]. Behind the Golden Hall stands Lecture Hall (from early times Buddhist monasteries were also schools). By the Golden Hall stands big five-storey pagoda demonstrating its origins from Indian stupa (worshipful spire symbolizes Buddha). Japanese pagodas essentially differ from bricked Chinese ones. Besides containing sacred relics pagodas in ancient China were instrumental as watchtowers and light-houses. In contrast Japanese invented how to build pagoda of wood. In the middle of constructing site they establish central pillar (so called "medullary post") and just tier up storeys one by one to it. This system proved out to be the best for Japan earthquake can't hurt such pagoda, its tiers flatter around the central pillar but building at the whole escape disintegration.

In Asuka and Nara periods numerous temples, nunneries and monasteries were build. They had huge five-, seven- ad even nine-storey pagodas [4]. Alas, most of them sunk without trace in the time. Luckily, there is miniature pagoda in treasure house at Gangoji (Nara) monastery. This model was used as pagoda archetype throughout the centuries for building of many temples sponsored by Emperors [4]. In the Heyan period, after capital has moved to the to-be Kyoto, the temple architecture experienced important changes. As soon as various Buddhist denominations began to build their temples in the densely wooded mountains, they came to understanding that it's impossible to keep on symmetrical plan. The site dictated form of would be shrine. Quite in this time appeared so called "boards" pavilions on platform. If the site on the slope was not enough then they advanced the building forth on the wooden platform (boards) supported with posts. So many fancy buildings appeared, they seem if clutching the rocks with their claws. Mountain monasteries introduced the pagoda of Tahoto type [5]. Strong, round but not tall with skirt-like supplementary roof around their body they look like the overgrown mushrooms.

Beginning of the Kamakura period brought new wave of borrowings from China. (Japanese monks frequented there for education). New Chinese style was called Daibutsuyo (Great Buddha) while earlier Buddhist architecture had the name Wayo (Japanese style). It's quite easy to distinguish the time and the style of classical architecture in Europe such as gothic, baroque and classicism, because the buildings of that styles are neatly different. Unlike in Japan, where it takes time to learn to cognize delicate differences

proportions in and constructional features. Daibutsuyo style got no vast advancement in Japan [5]. A century later Zen Buddhism came from came from China bringing new Zenshuyo style. Surely all innovations never stopped blending with other styles so it's hard task to hunt out buildings of austere Zen or Great Buddha. Temple architecture generally combines features of many styles producing fresh impressions now and then [6].

Branches of the same tree. Coincidence between Ukrainian and Japanese wooden architecture is apparent especially in the early periods of styles formation and in the rural folk dwelling. Temple architecture developed in the different ways like two branches of the same tree that can't encounter. Austere and at same time exalted wooden temples of Japan seem nearer to Ukrainian rural churches than to richly decorated temples of China. Well, constructionally Japanese shrines are descendants of Chinese ones but emotionally they are closer to the old, blackened by time ad green of moss wooden churches of Ukraine. However, contrast between attitude to the national legacy seems disappointing. Not to mention the whole world knowing about excellent architecture of Japan, where it's impossible to find a derelict temple or shrine, all of them are "in use" so being under "selfacting" restoration. On the contrary, journey over rural Ukraine disappoints at the chance of this nation that now and again draw a blank. Few old churches are restored and kept properly. Most of wooden architecture items are in decay: belfries broke down, icons stolen, weed growing out from the floor. Another version of abolishment looks even more small-minded: a church repaired without proper restoration got plastic planking or kitschy iron studding. Such renovators think they conserve old construction in that way not minded about the fact that old wood without air access decay in a couple of years. 300 – 400 year old churches survived natural disasters, wars and revolutions but now they are closer to extinction than ever in their history. Few know about unique wooden architecture of Ukraine now, I'm afraid nothing to look at would be left soon.

It is reported Chinese architects use to come to Japan to study constructions of old temples because China has lost vast variety of its historical buildings. Beautiful examples of Ukrainian wooden architecture now are in Poland, Slovakia and Romania where small groups of Ukrainians still live. These isles of our ancient culture mostly are in proper conditions.

Would ever wake up Ukraine?

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Анотація. У статті досліджено специфічні аспекти аналогій давньої дерев'яної архітектури України і Японії, що дозволяє говорити про їх конвергентну (схожої через однакові умови розвитку) еволюцію, можливу через схожість похідних розвитку: клімату, сільськогосподарського типу культури та від початкових вірувань анімістичного типу. Перша частина статті була присвячена найбільш давнім періодам існування дерев'яної архітектури України і Японії та народному житлу. У другій частині розглянуто храмову архітектуру.

Ключові слова: дерев'яна архітектура, Україна, Японія, церква, буддійський храм, святилище синто, генеза.

Аннотация. В статье исследуются специфические аспекты аналогий старинной деревянной архитектуры Украины и Японии, что позволяет говорить об их конвергентной эволюции, возможной из-за идентичности исходных условий развития: климата, сельскохозяйственного типа культуры, верований анимистического типа. Первая часть статьи была посвящена наиболее давним периодам существования деревянной архитектуры Украины и Японии и народному жилищу. Во второй части рассмотрена храмовая архитектура.

Ключевые слова: деревянная архитектура, Украина, Япония, церковь, буддийский храм, святилище синто, генезис.