# MEDIEVAL CASTLES AND PRE-MODERN CASTLE TOWNS PLANNED WITH NATURE AS THE HERITAGES FOR LANDSCAPE DESIGN TODAY: A CASE STUDY OF NANBU REGION IN TOHOKU

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This research aims to manifest the Japanese traditional urban forms in Nature, selecting the castle towns built by Nanbu Clan from the medieval time to the pre-modern as case studies, seeking to discover the matching harmony between the ancient urban planning and Nature for the three points. 1) The medieval castle residences were built to adapt to various topographical conditions; their inner castle zoning and moats were designed to match the geographic condition. The pre-modern castle towns are verified, also, for their relation with the periphery sceneries, water systems and mountain worship by using their Yama-ate vista urban design, and also the temple dispositions were determined by the sea level in accordance with the temple's status. 2) The urban design of each castle town, determined by its builder, was distinct from each other. 3) The mountains that gathered the Nanbu Clan belief are worth studying for modern landscape designs in that the mountain views are preserved and visible from the town's main street. The town distributing of each Nanbu Castle Towns differed from each other depending on the time and builder; yet they all share one character – they all correspond to Nature and ecological environments.

#### Keywords

Japanese Castle Town, Natural Symbiotic Planning, Sacred Mountain, GIS System, Landscape Guideline

#### How to Cite

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### INTRODUCTION

The pre-modern castle town represents the traditional urban form of Japan, and the previous researches<sup>1</sup> so far concern themselves with observing the interrelation between the urban compositions and their peripheries. This research, in the light of their results, has tried to discover how the castle towns built by the Nanbu Clan with their own urban planning methods distinguished themselves from other Japanese castle towns. That the Nanbu planning uniquely corresponded to Nature topography had various reasons, such as choosing the plateau for military purposes, *Sinto*-linked social hierarchy, mountain worshipping and, surely, their landscape planning designed to match their environment. Thus does this paper concern itself with disclosing the methods of Nanbu urban planning for their castle towns, trying to analyse the Nanbu planning developed back to the medieval days and applied up to the pre-modern era. Japanese castle towns preserve the essence that recalls the disappearing historical beauty being visible today from those traditional urban forms. For the following reasons the medieval castles and the pre-modern castle towns built by the Nanbu Clan are selected for this research.

Nanbu is the district located in Tohoku (Northeast) Region of Japan, and the Nanbu Clan had ruled there from 1200 AD onwards till the End of Edo, a regime of six centuries. The Nanbu family tree consists of three main stalks; Sannohe-Nanbu the head House, Nejyo-Nanbu the major branch family, which had governed the district for generations<sup>2</sup>, and later on the revolt branch of Tsugaru-Nanbu, which became independent from the Nanbu Clan and ruled the Tsugaru territory. Along the vicissitude of rising, revolting and falling, several Nanbu medieval castle towns and residences were built among several locations, and following the process of town-distributing and varied styles of castle designs, each castle town distinguished itself characteristically from each other in its urban form. Still, how was it that the urban planning dispositions could correspond to the topographical condition? For instance, how was the vista designed to view the mountain top? All this must be studied and verified. Further, the aboriginal belief of Mountain worship, or Iwakura worship, was commonly seen in Nanbu District<sup>3</sup> in particular. The Iwakura refers to the sacred place, usually a huge rock found in mountain, where the Kami deity arrives at, seats and dwells. And the Iwakura Rock was taken to be the centre of a concentric circle on which the town installations were placed.<sup>4</sup> The vistas, or Yama-ate, serve as the "faith axes" that link the town streets with these sacred Iwakura spots, mountain tops or other installations like high temples or shrines, are verified.

After the fall of Nanbu Clan at the dawn of 19<sup>th</sup> century, the Japanese government enforced the legislation of urban modernisation upon the Nanbu pre-modern castle towns and took those located in the districts of Morioka and Hirosaki – the home bases of Sannohe-Nanbu House and Tsugaru House – as the bases to practice governmental urbanisation. The government expected them to become the capital city or metropolis of Iwate Prefecture and Aomori prefecture. And yet, fortunately, the culture-historical resources of these castle towns, highly esteemed, were not left unnoticed in recent year, the traditional heritages prevail upon modernisation. All these historical urban designs, owing to their harmonic relation with the natural environment, are expected to revitalise the urban life of castle towns today.

With respect to the expectation to live in harmony with nature, this paper aims to disclose the following four points. First, basing on the research of the historical texts of Nanbu Clan, the transformation of urban planning from the medieval to the premodern time becomes manifest. Second, the locations of these six medieval residences that were reformed to be the residential castles are surveyed and verified; the topographical forms of the inner castle zones and moats are studied; the locational relation between the castle moats and nature water system, rivers, marshes and the like, is surveyed. Third, all these five castle towns built in the pre-modern age in Nanbu district are studied with several attentions – the castle town's relation to the locations of *Iwakura* and mountain top for the worshiping purposes of the aborigine of the Nanbu Clan in particular, and the relation of street composition, micro-topography and temple disposition in correspondence to nature. And lastly, taking Morioka and Hirosaki as research objects, the vistas to view the sacred mountain tops must be preserved, maintained and respected, as a major policy of modern landscape planning.

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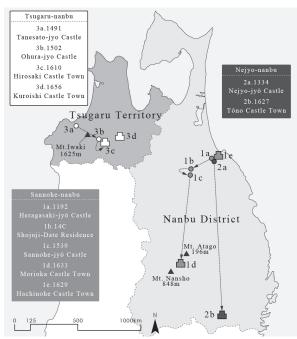


FIGURE 1 The Urban Planning Transformation of Nanbu Clan

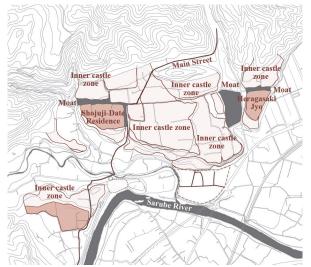
### THE URBAN PLANNING TRANSFORMATION OF NANBU CLAN

Basing upon the research of the historical texts, this chapter has the attempt to disclose the vicissitudinous Nanbu Clan from the Mediaeval to the Pre-modern. The Nanbu clan consisted of three Nanbu Houses – Sannohe-Nanbu the head House, Nejyo-Nanbu the major branch House, and Tsugaru-Nanbu House the revolted one that governed, independently, the Tsugaru territory. The events and dates as such are listed in the following.<sup>5</sup>

Take the transformation of castle construction of Sannohe-Nanbu to begin with, their rising and falling can be traced back to the year of 1192 when the Heragasaki-jyō Castle was built on the location of Heragasaki-machi (the city of Nanbu) today, and at the end of 14<sup>th</sup> century Shojuji-Date Residence was built in the vicinity as the headquarter of Sannohe-Nanbu, and yet it was ruined by fire in 1539, and then a new castle was built on the hill some three kilometres south to the site of Shojuji-Date Residence. The Morioka town-distributing began in 1597 and finished up till 1633, and people settled in the castle town. From 1628 to 1629, the town-distributing processes for the central area of Hachinohe castle town and its branch castles were done and ready for living; the periphery of Hachinohe castle town was prepared for settlement.

Second, the transformation of Nejyo-Nanbu castle town is noted. In 1334, it was built in Nejyo as the residential castle, and the residential castle was moved to Tōno in 1627; there, the Tōno castle town gradually got shaped up.

And thirdly, the Tsugaru House built the Tanesato-jyo castle in 1491 and the Ohura-jyo as their home base in 1502. Stepping into the Age of Civil War, the feudal lord Tamenobu Tsugaru revolted in 1588 and took the territory of Tsugaru as an independent state. In 1610 the town distributing of Hirosaki castle town started. In 1656, Kuroishi, the branch House of Tsugaru, started their town distributing and rebuilt the partial town area, and the urban structure was formed before 1656. And then, Tsugaru lord built the new areas prepared for the residences of Samurai class, and later on the business areas for townsman class (working class) were attached as their plans of town distribution.



Simple-Jgs

FIGURE 2 Sannohe-jyō castle and Heragasaki-jyō castle, located on the sides of slopping terrace

FIGURE 3 Sannohe-jyō castle, located on the low terrace of river bank

## THE URBAN FORM OF MEDIEVAL CASTLE AND ITS PERIPHERY ENVIRONMENT

Following the transformational history of urban planning above, this research selects six Nanbu castles for GIS analyses. Three were built by Sannohe-Nanbu head House, Heragasaki-jyō Castle, Shojuji-Date Residence and Sannohe-jyō Castle; one by Nejyo-Nanbu branch House, which is Nejyo-jyō Castle, and two by Tsugaru House, the revolt branch, which are Tanesato-jyō Castle and Ohura-jyō Castle. The aim of GIS application is to analyse their geographic locations, topographical shapes and river flowing courses. Two points become manifest.

First, Sannohe-jyō castle, Nejyo-jyō castle and Ohura-jyō Castle are located on the low terrace along river bank; Heragasaki-jyō castle, Tanesato-jyō castle and Shojuji-Date Residence are located on the sides of slopping terrace. Viz. all their locations illustrate one thing; they were built to match the surrounding natural topography. Second, each inner castle zone has irregular shape and area, but it was exactly the topographic formation in Nature that made all the castle zonings irregular and simultaneously made the appearance of man-made building be in harmony with Nature. Also, the sea-level differences of the castle site served to divide the inner castle zones. And further, their planning of zonings and distribution applied rivers and swamps in nature ways; e.g., they planned thee inner castle zones and moats from using the flowing courses with respect to the geographical conditions.

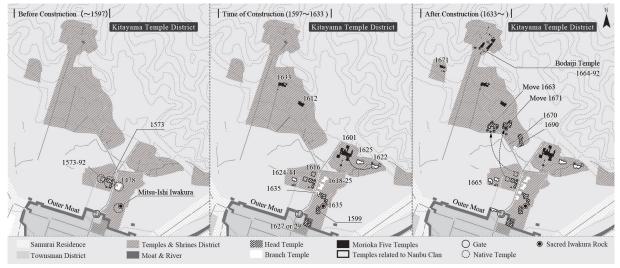


FIGURE 4 Disposition of Temples in Morioka

# DISPOSITION OF TEMPLES, STREET COMPOSITION OF THE PRE-MODERN CASTLE TOWNS IN NATURE

This chapter concerns itself with the actual conditions of five Nanbu castle towns, as surveying objects, trying to disclose their town distribution methods done by these three Houses in the pre-modern age. This chapter yields three analyses. In the light of the historical texts to begin with, <sup>6</sup> it aims to discover how the religious attitude of Nanbu Clan can affect the disposition of temples or shrines and, by means of GIS, how the topographic shapes can affect such disposition. Second, using GIS and field survey to verify the Yama-ate (vista) – the central lines of Main Street extended to meet the mountain top. Measure the gap-difference between the central line and the line that links the street's central point and mountain top, and verify it quantitatively. The gap within 1° provides full mountain view, and that between 1° and 5° slips away from the unobstructed landscape. GIS also serves well to analyse how the mountain views affect the street framework designed with reference to vista. And thirdly, from the historical texts, the relation between the sacred mountains and Nanbu belief is verified.

# THE CHARACTERISTICS OF TOWN DISTRIBUTION OF MORIOKA AND HACHINOHE IN SANNOHE-NANBU

Those high-dignified temples, having ties with Nanbu Clan, were built to locate on the edge of the high hills – Morioka Five Temples – of the castles' peripheries in Morioka territory; the higher the status of the temple is, the higher the sea-level of hill the temple shall be. Also, the peripheries where there were sacred *Iwakura* Rocks were built with the temples related to Nanbu Clan. However, those low-rank temples, most of which were not religious in bond with Nanbu Clan, were built on the level grounds. In Hachinohe territory, the high-rank temples tied with Nanbu Clan were all located either in their castles or on the halfway up the surrounding high sea-level hills or plateaus. For example, *Bodaiji* Temple, the family temple of Nanbu Clan, was located on the halfway of the highest hill on the periphery. Those temples irrelevant to Nanbu Clan were located on the level grounds of the central area of both castle towns, Morioka and Hachinohe.

Both towns below the castles were planned on the level grounds, and the street composition respectively set up the urban framework. Yama-ate, or vista design, is verified; the sacred mountain tops are visible from the main street of both towns. The periphery streets are either parallel or perpendicular to the main streets which offer the vista. From the Ohte Street (the highway that links the castle gate), the beautifully sloping side of the sacred mountain tied to Nanbu Clan is visible; in Morioka, from the street the view of the mountain where the *Iwakura* Rocks were located is visible.The vista of the Ohte Street of Morioka castle town offers us the view of the mountain where the *Iwakura* that drew the Nanbu Clan religiously was located. And it is the *Iwakura* location that determined the urban planning of Morioka, in particular; the framework of town streets, the bended moat, and even the castle gate position were all related to *Iwakura*. The Ohte Street and the extension line of the Main Street cross each other by 60° at the junction on which the inner-castle Eboshiiwa *Iwakura* was located. The distance between Eboshiiwa and the Mitsuishi *Iwakura* – the North of Castle – is about 895 meters, and that between the Eboshiiwa and Tokkobeishi *Iwakura* is about 415 meters, and that between the Eboshiiwa and the West gate has same distance. Also, around 855 meters away from Eboshiiwa, four bending moats are verified.

As shown above, the town distribution of Sannohe-Nanbu castle town has three verified points; first, the microtopographic condition did affect the temple disposition. Second, the mountain worship did shape up the street planning as the urban framework. And third, the *Iwakura* worship was found only in Morioka; how did the *Iwakura* location affect the temple disposition? And, how did it affect the street formation that formed the urban framework? Also, how did the Eboshiiwa *Iwakura* in the castle serve as the concentric centre of the circle on which the facilities were dispositioned? All these are verified.

## THE CHARACTERISTICS OF TĐNO TOWN-DISTRIBUTING IN NEJYO-NANBU CLAN

A few shrines and temples rooted in the territory of Tōno in the medieval days were taken restoration and the process of *Sengu* renewal – the relocation of a Shrine; all these were located on the foot or halfway up the hill of the sacred mountain known for a series of veneration related to Nejyo-Nanbu Clan. Those temples and shrines built for ascetics and mountain worships, located either on the hill belly, the side of micro-terrace, or the strategic positions like the castle gate or Main Street.

The Main Street of Tono castle town referred to the highway that ran passing through the façade Samurai Residences and linked to the Ohte Street; the periphery streets were either parallel or perpendicular to the Main Street. Yet, the Ohte Street and the Main Street shaped up the urban framework and give people the Yama-ate (vista), but the town distribution shows no evidence of mountain worship.

As shown in the town distributing of Nejyo-Nanbu, it can be verified that their temple dispositions and microtopographic forms, as well as mountain top positions and the street framework were all related. Although the Nejyo-Nanbu town distributing shared similarities with that of Sannohe-Nanbu, the object mountains of vista had no relation to mountain worship.

# THE CHARACTERISTICS OF TOWN-DISTRIBUTING OF HIROSAKI AND KUROISHI IN TSUGARU CLAN

In Hirosaki Territory there were two temple zones located on the hills. They levelled down the hilly locations, whilst processing the town distribution, in order to make the sea-level of temple zone lower than the donjon. Disregarding each temple's status, the temple complex was distributed only to match the micro-topographic forms. Most streets of 200 meters and above in length were planned to face up the objective mountain with an elevation angle of 3° ~ 3.5°. These mountains, however, were not worship objects, bearing no religious tie with Tsugaru Clan. Quite a few streets of less than 150 meters in length and several tiled streets, however, provided us unobstructed views of sacred mountains from the elevation angle of more than 4°, which were bond to Tsugaru.

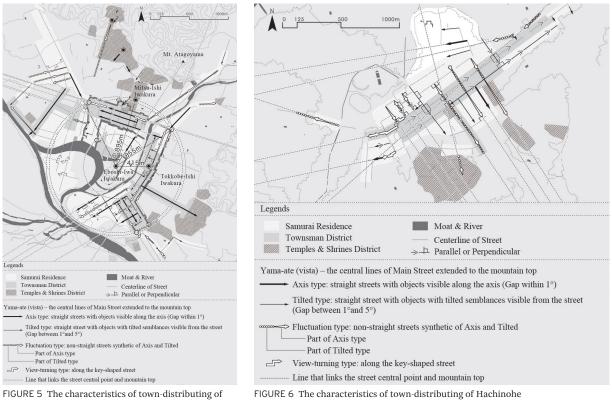
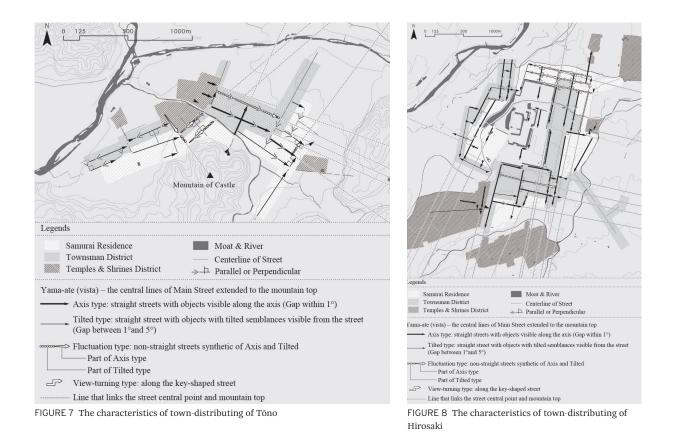


FIGURE 5 The characteristics of town-distributing of Morioka

In Kuroishi territory, Bodaiji family temple and the shrines bonded to the Kuroishi domain were, disregarding the status-based temple zone distribution like Hirosaki territory, located on the hill and corresponded to the micro-topographic shape only. Basing on the town distributing, the streets were curved to match the micro-topographic form and bended to see the changeable panorama/landscape of Mountain View.

As above, the town distributing of Tsugaru castle town shows two points; first, the town distributing of Tsugaru, being different from that of Nanbu Clan, distinguished itself by adapting the micro-topographic form and located their temples and shrines disregarding to their status. Second, by matching the elevation angle to see the Object Mountains, from the central line of Main Street bended and curved, the pedestrians may see changeable mountain views and landscape.

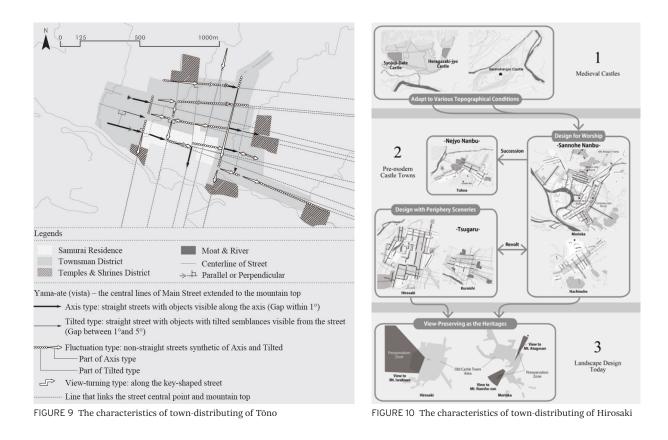
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### CONCLUSION

How was it that the traditional urban planning methods could make the man-made buildings correspond to Nature and adapt to their ecological environment well? This paper aims to answer this question, taking the castle towns built by the Nanbu Clan as case studies, analysing their castle residences built in the medieval age and their castle towns planned in pre-modern era. Three points are presented in the following:

First, the Nanbu planners built their medieval age castle residences with the principle of respecting their geographic conditions, using the topographic shapes, river courses and so on to plan the inner castle zones and moat. Obviously, it was the natural environment in the medieval age that shaped up their urban forms. The Nanbu pre-modern castle towns distinguished themselves from other castle towns; they were aware of the methods of Yama-ate vista that provided them the composition of mountain sceneries and helped dispose their temples and shrines on the sacred mountain. This was the urban design that absorbed Nature and be with Nature. Accordingly, all these Nanbu medieval castles and pre-modern castle towns shared the character; their urban planning and methods all sought to make the dwelling areas be with Nature. Among these, the urban forms of Nanbu medieval castles distinguished themselves by corresponding to surrounding topography, and the urban designs of pre-modern Nanbu castle towns did adopt, friendly, the periphery environment as the prime consideration in designing.

Second, this paper has tried to tell the differences of urban designs between the castle towns built in the Nanbu district and those in the independent Tsugaru territory; the former district was ruled by the Nanbu Clan from the early medieval age, and the latter territory was the revolt Tsugaru House in the late medieval age. The pre-modern castle towns built by Sannohe-Nanbu were urban-designed with relation to the *Iwakura* and mountain worship from the periphery mountains, and yet the urban planning of those built by Tsugaru House concerned themselves

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MEDIEVAL CASTLES AND PRE-MODERN CASTLE TOWNS PLANNED WITH NATURE AS THE HERITAGES FOR LANDSCAPE DESIGN TODAY: A CASE STUDY OF NANBU REGION IN TOHOKU DOI: http://dx.doi.org/10.7480/iphs.2016.4.1296 with how to create mountain views by means of vista (Yama-ate), showing no religious tie to mountains. Thus so, the difference is clear; different Nanbu Houses build their castle towns differently. The castle towns built by the main stalk of Nanbu House concerned themselves with nature scenery as well as mountain worship; whereas those by the revolt Tsugaru House took scenery as their priority over nature worship in urban designs.

And third, the sacred mountains as the objects of Yama-ate vista gathered all kinds of local belief; such phenomena of view-preserving must be respected as the heritages for landscape designing today. Thus, these two characters of pre-modern castle towns, the expression performed by Nature Worship and the scenery directed by Nature Landscape, may apply to the landscape design and urban planning today; it is clear that both the citizenry and the governmental authority must inherit such heritages from the Nanbu Clan.

#### Endnotes

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