

## Tourism-boosting Rebuilding of Historic Buildings and Urban Form: The Case Study of Yanghe Tower and Its Urban Morphology in Zhengding, China

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### **Abstract**

*Tourism has recently been viewed as an economic growth engine for Chinese small historic cities, including Zhengding in Northern China. However, the intensive tourism-boosting projects have far more impacts on these cities than merely economic development. Yanghe Tower was first built in Zhengding in the Tang Dynasty, renovated many times, and demolished in the 1960s, although it had been included in Liang-Sicheng's surveys in 1933. The local government rebuilt the Tower in 2017 to make it a tourist attraction through an uncritical rebuilding that formed an urban unit with a texture and meaning that never existed in the city. The result is a standalone monument disjointed from its historic and morphological layering, which is crucial for the Tower's urban role and memory narrative. This paper instead reads the primary element of Yanghe Tower in its historical evolution and its relationship with the overall urban form. By reading the mutual relationship between the Tower and the urban development in both permanence and modification, the paper brings evidence of the deep structure and meanings of urban form that should guide any strategy of intervention and reconstruction beyond musealization and commodification.*

**Keyword:** Rebuilding, Yanghe Tower, Zhengding, Urban form, Tourism

### **1 Introduction**

Yanghe Tower (阳和楼) in the small historic city of Zhengding (正定), Hebei Province, was first built in the 7<sup>th</sup> century, renovated many times since then, and was demolished in the 1960s. In 2017, it was rebuilt within an urban regeneration project aiming at boosting tourism-led development.

The city of Zhengding, dated to the 4<sup>th</sup> century B.C., became the regional centre since the 3<sup>rd</sup> century B.C. for its military function and got prosperous in transportation and commercial trade. In 762 and 1449, the walled city expanded two times (Zhao, 2017). Prosperity continued until the city declined in 1907 when two railway lines intersected 14km south to Zhengding in a village named Shijiazhuang, which became the regional trading hub and centre in the 1920s, replacing Zhengding.

Yanghe Tower is a paradigm of a problematic relationship between current tourism plans and urban form. Despite that the Tower was already recognised as a valuable built heritage in 1933 by the highly respected Chinese architect and historian Liang Sicheng (Liang, 1933), it was demolished in 1966. There was not much research on the Tower until the 2000s when some historians collected documents and discussed its cultural values as a symbol for locals and inspiration for literary creation (Cheng, 2017; Fan, 2016b, 2018). Besides, some policy research regarded the Tower as a key to the tourism industry (Cong et al., 2012; Yin, 2014),

promoting its rebuilding. Except for one paper taking the Tower as a case study of Yuan Dynasty wooden structure (Zhao, 2013), research on its architectural or urban aspects is rarely seen.

This paper investigates Yanghe Tower's meaning and values from an urban perspective. The first part reads the diachronic evolution of Yanghe Tower; the second part analyses the primary element of the Tower and its relationship with the overall urban structure; the third analyses the morphological characteristics of the Tower's urban context. In the latter two parts, the Tower's rebuilding is analysed concerning tourism and the impact on the urban morphology.

## 2 The Evolution of Yanghe Tower

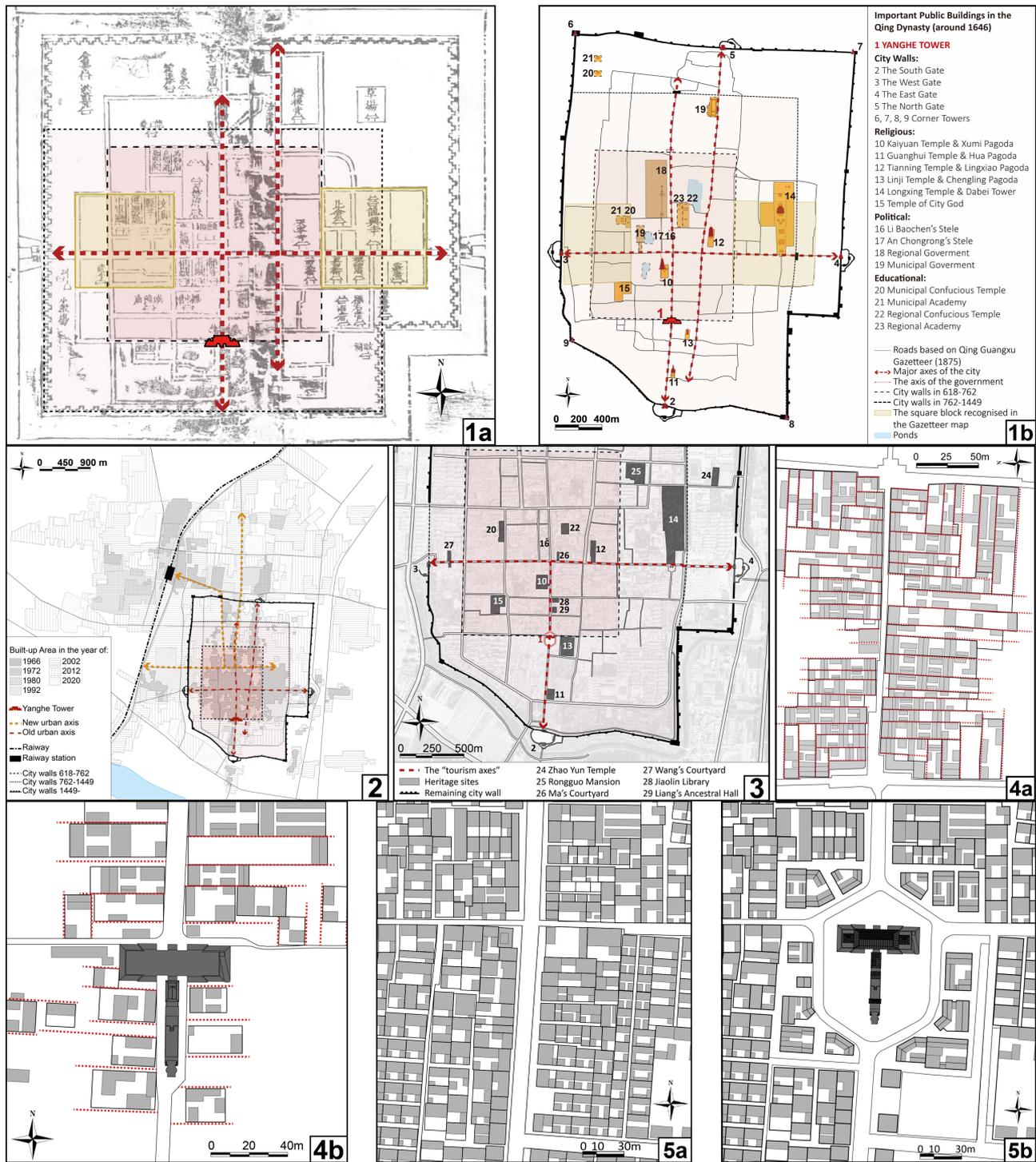
Liang Sicheng first studied Yanghe Tower in 1933 during his pioneering surveys of ancient Chinese architecture. The Tower and the affiliated Guanyu Temple on the south were a pleasant surprise for Liang. He praised the Tower "*as magnificent as the Arch of Constantine in Rome*" and emphasised its high architectural and historic value (Liang, 1933, p. 31). This survey also left us the only detailed drawings and the first detailed photos of the Tower, which later became the basis of its rebuilding (Figure 7). The Tower's layout was simple but unique: a rammed earth platform covered by bricks, two archways, and a wooden hall and two stele pavilions on top. An elongated Guanyu Temple was affiliated on the south in between the archways (Figure 5b, 9), forming a T-shape plan with the Tower.

That layout, nonetheless, already witnessed the historical process of urban transformation since the Tower was first built in the 7<sup>th</sup> century as the South Gate (Fan, 2016a). When the city expanded in the 8<sup>th</sup> century, the old city walls were demolished other than the South Gate remained. A significant renovation in 1357 first transformed the Gate into the multi-functioning Yanghe Tower (Yang, 1994). Going through four more recorded renovations (Fan, 2016b), the Tower kept intact and functioning until the 20th century.

The decline of Zhengding in the early 20<sup>th</sup> century affected Yanghe Tower. In Liang's photos in 1933, it had already been abandoned with many components like the wooden windows lost (Figure 9a). During World War II (1937–1945) and the Civil War (1945–1949), the Tower was reused as a fort, destroying the wooden hall (Fan, 2016a). The brick platform survived (Yanbei Cultural Relics Exploration Group, 1951) until it was demolished in the Cultural Revolution in 1966. The streets were then straightened as a normal crossroad.

The rebuilding project (2014–2017), planned and designed by THUPDI as a part of the tourism-boosting urban regeneration campaign, included the relocation of 98 residences, an archaeological dig, reorganisation of roads, new surrounding buildings, a parking lot for tourists, and the new Yanghe Tower. The dig found only three corners of the old Tower's base (Fan, 2016a). The reorganised roads went around instead of passing through the new Tower, enclosing a 7,000 m<sup>2</sup> hexagonal square (Figure 9b). The new Yanghe Tower was rebuilt philologically as the "original style" shown in Liang Sicheng's photos, while its urban morphology was ignored. The new surrounding buildings were built as a simulacrum of antique-style courtyards devoted to

commercial functions. The new platform was a reinforced concrete shell with brick panels on facades (Fan, 2018) instead of rammed earth and brick, while the wooden hall adopted traditional techniques.



**Figure 1.** (a) Map from Zhengding Gazetteer dated 1646, showing the urban axes and two symmetric square blocks. (b) The actual situation speculated from orthophotos, showing the most important public buildings in 1646.  
**Figure 2.** The urban sprawl (1966–2020) and urban axes. Source: partly based on aerial images from USGS  
**Figure 3.** The "city for tourists" and the "axes for tourists", showing the remaining heritages sites in Zhengding  
**Figure 4.** Urban texture in 1966, (a) east section of West Avenue; (b) Yanghe Tower area. Source: author elaborated based on aerial image from USGS  
**Figure 5.** Urban texture of Yanghe Tower area: (a) in 2008; (b) in 2019.

### **3 The Persisting Role of Yanghe Tower in the Urban Form**

The Tower was resilient to changes and was capable of playing new roles in the dynamics of urban evolution, confirming its persistence as a primary element. Originally built as the South Gate in the early Tang Dynasty, it was a defence facility in the military Zhengding (618–762) when the South Avenue was one of the two main axes. The first renovation in 1357 transformed the Gate into a Shilou Tower (市楼) (Cheng, 2017), namely a "market management office" for the surrounding commercial activities (Na, 1994), as confirmed by the Guanyu Temple on the south of the Tower where merchants worshipped their God of Fortune. Besides, the Tower acted also as the Drum Tower, one of the few types of emerging landmarks in old Chinese cities, marking the hours and facilitating urban management and celestial observation (Yang, 1994).

#### **2.1 Yanghe Tower as a Persist Primary Element in History**

The Tower occupied the highest point on the South Avenue, which, according to Fengshui principles, symbolically represented the "dragon head" of the south-north axis (the "dragon vein"). This site gave the Tower a unique and irreplaceable morphological meaning. Although the earliest military city was expanded and altered, the central role of the two main axes persisted over hundreds of years, even after the city expanded and the north-south axis was doubled by moving the North Gate eastward (Figure 1). This persistence was evidenced in the map dated 1646, which showed two square blocks related to the most important public buildings and overpassed the first two city enclosures were intended to re-balance and reaffirm the symbolic symmetry and centrality concerning the "dragon vein". Once the entrance to this persisting urban axis, the South Gate also found a new role, shifting from a gate that faced empty military fields outside the city wall to a civilian urban element included in the texture of a major avenue.

Since the first renovation of Yanghe Tower in 1357, both sides of the South Avenue running through the Tower were markets (Na, 1994; Wang, 2016) and gathered several courtyard mansions of wealthy families (Liang, 2016). The elongated Guanyu Temple south of the Tower, added in this renovation, marked the space between the two roads through the two arches inherited from the old Gate. This new spatial prototype strengthened the relationship between the new role, the new architectural unit and morphology.

Although the ancient texture of elongated courtyards was heavily damaged in the wars, traces were still recognisable in the 1966 orthophoto (Figure 4b). Liang's photos in 1933 also showed the courtyards framing the Tower on both sides of the South Avenue. By analogy, the east section of the West Avenue, still preserved in 1966, showed the morphological characteristics of the ancient courtyards texture (Figure 4a).

With these structural and formal relationships with the whole urban form, the architecture of the Tower was able to contain various functions in history while maintaining its formal structure for 800 years. It was undoubtedly a primary element, and a symbolic form in the city, until the 19<sup>th</sup> and 20<sup>th</sup> century.

#### **2.2 The Alteration of Urban Structure and the Demolition**

Apart from causing the emigration of commercial activities and the decline of Zhengding, the new railways built in 1907 also altered the urban structure. The evolution of Zhengding broke the limitation of city walls towards the new northwest pole marked by the railway station. Thus, the city centre started to shift (Figure 2), and the axis of South Avenue was significantly weakened.

This transformation in urban structure deprived Yanghe Tower of its urban vitality. In 1933, Liang recorded that the commercial activities in Zhengding all gathered around the major crossroad north to Yanghe Tower (Liang, 1933). Later since 1949, when the People's Republic of China founded, the intense urban sprawl pushed the city centre further to the north and west (Figure 2). At present, the urban axes correspond to Changshan Road and Fuxi Street, with their intersection as the urban centre.

This dramatic change should be counted as one of the leading reasons for the Tower's demolition. The devastating wars starting from the 1930s, the utterly bad economic situation in the 1950s and 60s, and the trend of aggressively breaking away from tradition and embracing industrialisation in the Cultural Revolution only accelerated the irreversible process. If the Tower had persisted its structural relationship with the overall urban form, it was highly likely to survive the difficult years while not its urban texture, which was not included in preservation. In comparison, the Drum Tower (Figure 8a) in Taigu, in a similar geographical and cultural environment to Zhengding, remained on the centre or at least one of the centres (Li, 2014) of the city and was well preserved (Figure 8b).

After the demolition of Yanghe Tower, the area became a common crossroad. Standardised courtyard houses then filled surrounding areas in the 1980s and 90s, which adopted traditional courtyard type although much simplified. This bi-univocal relationship between type and morphology (Rossi, 1966) resulted in the persistence of the morphological continuity with the old traditional texture, which remained readable and traceable as a latent structure in ground patterns and walls fragments (Pezzetti, 2019) even after the simplified courtyard houses were densified by adding extra floors in the 2000s (Figure 5a).

#### **4 The Tourism-boosting Rebuilding of Yanghe Tower**

The idea of rebuilding Yanghe Tower was first proposed in 1999 by local scholars (Bao, 2007) but was not finalised until 2013 when the local government decided to make full use of the historic resources in the city to develop tourism as a pillar industry. An intense tourism-boosting urban regeneration campaign was launched (Fan, 2016a) since then.

The "power" of tourism, 15 years after the first proposal, motivated the rebuilding of Yanghe Tower to be completed in merely three years from 2014. It is exactly because of the structural relationship of Yanghe Tower with the walled area of the city that tourism demanded to rebuild it. Almost all remaining heritage sites, namely the destinations of heritage tourism, are in the southern part of the walled area, forming "a city in a city", or a "city for tourists", in which the South Avenue and the East and West Avenues retrieved their

roles as axes and became the focus of urban regeneration (Figure 3). Thus, the primary element of Yanghe Tower was rediscovered by tourism and granted itself a new "life" as a monument on the "axes for tourists" and a new tourist attraction, surrounded by profitable new antique-style commercial buildings.

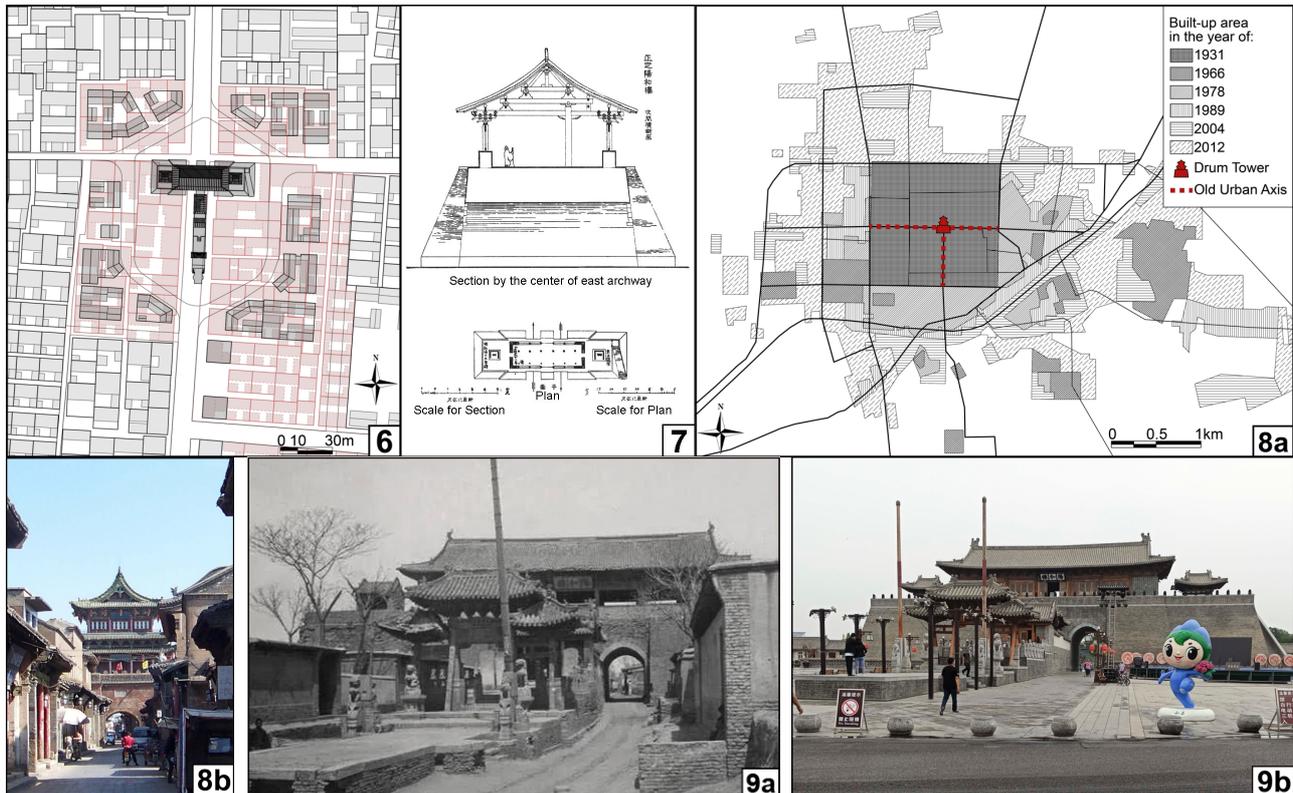
#### 4.1 Creating an Estranged Unit

However, the rebuilding project finished in 2017 entirely abandoned the relationship between the Tower and its traditional texture that provided a narrow perspective emphasising its polarising role. First, the new Yanghe Tower was disjointed from surrounding courtyards instead of closely related, leaving it standing alone in a vast open square as if it were still a gate facing a wide empty military area, while contradictorily the formal composition of the civilian Shilou and Guanyu Temple was maintained. Second, the hexagonal square is an inconsistent type for both the city and the architecture of the Tower, recalling some European squares like the Leipziger Platz in Berlin instead of any part of Zhengding or other historic cities in northern China. Third, the newly built surrounding commercial buildings adopted courtyard type but not their bi-univocal relationship with morphology, leaving wide gaps between each other, losing the compactness as in traditional textures and forming weird solutions to fit the hexagon angles (Figure 5b, 6).

This arrangement is not historical. It can neither create an imaginative narration on absences, memories, and previous signs nor reintegrate the Tower in the real living city. It was merely a rough reconstruction for tourism attraction. The estranged typo-morphological characteristics only derived from tourism demands: the gaps between new courtyards were only to produce more front stores; the hexagon resulted from reorganising the roads to allow vehicle transportation; the parking lot was no doubt a tourism facility.

This rebuilt layout created an estranged unit in the city. Although it brought considerable economic profit at the beginning (Chen and Geng, 2018), it damaged the already fragile local identity and cultural sustainability. The new Tower and surrounding buildings cannot recall any memory narrations or enhance its historic urban role. They produce no new meaning other than a static simulacrum of rough antique stylistic elements and façades. Even the magnificent urban landscape recorded by Liang Sicheng was lost, in which the Tower dominated and rose above the narrow perspective defined by closely related courtyards.

This tourism approach cannot be sustainable. Even though developers wished to revive the primary element of Yanghe Tower, they treated the urban area as a tabula rasa, failing to investigate and recognise the morphological structure and historic layers. Heritage tourism requires an authentic historic urban landscape that cannot be achieved by simple simulacra or façadism reconstruction. The latent structural and morphological continuity of urban form in small historic cities like Zhengding should be considered as an intangible value. These settlement rules need to be read and decoded as principles for the rationale in rewriting projects (Pezzetti, 2019). Intervention and, eventually, rebuilding in these cities should be guided by the deep structure and meanings of urban form. They are the keys to interpret and continue the historic and architectural significance of buildings and cities.



**Figure 6.** *Overlap of urban texture of Yanghe Tower area in 2008 and 2019.*

**Figure 7.** *Yanghe Tower, section and floor plan in 1933 by Liang Sicheng.*

**Figure 8.** *Drum Tower in Taigu, (a) urban sprawl and urban axes, Li, 2004; (b) photo from the west (Wikimedia Commons)*

**Figure 9.** *Yanghe Tower, photots from the south, in (a) 1933 by Liang Sicheng; (b) 2021 by Caizhen Qian.*

## 5 Conclusion

The meaning of Yanghe Tower needs to be understood in its structural relationship with the whole urban form. Since the renovation in 1357, it was always a primary element on the urban axis until the decline of the city and the alteration of the whole urban form in the 20<sup>th</sup> century, when the Tower lost its structural role and was abandoned and demolished. Tourism rediscovered its role of primary element on the urban axis and gave it a new life. The urban context also changed its features corresponding to the Tower's changing roles but kept a latent continuity with the traditional texture formed by courtyard buildings alongside the urban axis of South Avenue, even after its demolition.

Since tourism is an indispensable economic engine for preserving built heritage, rebuilding the Yanghe Tower area in 2014–2017 should have been an opportunity to reflect on the city's urban form between continuity and discontinuity and critically rewrite on the existing urban form reality. On the contrary, the project adopted a strategy only to boost tourism, treating the urban area as tabula rasa and creating an estranged "graft", falsifying both the history and memory of the historic urban landscape.

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