The Hoysala period (10–13 century AD), culturally an active period in the Malnad region of Karnataka, is known for exceptional engineering projects like construction of large temple complexes, canal irrigation systems and water tanks. We focus here on an ancient network of canals and a quarry located near Halebidu, Belur Taluk, Hassan District (Figure 1 a), dating to the Hoysala period.

The Hoysala capital was initially located at Belur and later moved to Halebidu. We report here the features of these ancient symbols of craftsmanship and ingenuity around Halebidu so as to advocate for their preservation, as they are part of our common heritage. It would be a pity if they become silent victims of the ever-growing demands on land from the so-called ‘developers’.

The canal, locally called the Yaghachi Nalla, is part of an interconnected waterway and it is meant to bring water from River Yagachi to the freshwater lake at Halebidu, the later capital of the Hoysala dynasty (Figure 1 a). The 18-m-wide Yagachi Nalla is about 15 km long and seems to extend through villages of Rannagatta, Belvadi and joining the Bhadravathi river. At Ranaghatta, a small, fortified, medieval village (an inscription refers to the reign of King Vinayaditya who built Rannagatta), the Yaghachi Nalla, 18 m in width flows in a northwest direction starting from here, and is located on the right bank of River Yagachi at Ranakatta vatu (the name itself indicates ‘check dam’) in Kannada). The remains of a brick-built dam with some stone masonry spillway are still visible. This spillway was probably meant to divert water to Halebidu. In many places remnants of the channel are now obscured by cultivation and natural vegetation. It is remarkable that at Kallusettihalli (13°07′51.2″N; 75°55′28.6″E), the channel has been made by cutting deep into the hard rock. The excavated soil is found heaped on both sides of the canal (maximum height of these mounds is 10 m from the canal floor) throughout its length, masquerading as part of the natural topography (Figure 1 c). This is an early example of anthropogenically modified landscape.

A water tank built during the Hoysala period was located at Kumaranahalli, situated 4 km southeast of Halebidu. This is a rainfed tank located in front of the Narasimha Temple. This tank was further connected with the big tank at Halebidu through Kayathara halla. Another tank is located in Viradavanahalli, situated 7 km west of Halebidu. An inscription in this village refers to the construction of four reservoirs, namely Rudrasamudra, Gangasamudra, Achyutasamudra and Virasamudra, a project piloted by Virayadanda Nayaka, minister of Viraballala, the Hoysala King.

We have also identified a few other surviving remains of stone quarries of the Hoysala period (Figures 1 a and 2 a). These quarries are dominated by chlorite schist stones which were used for the construction of temples and forts in Halebidu (Figure 2 b and c). Remarkable examples of exquisite Hoysala craftsmanship can be seen at Parshvanatha Temple (13°12′33.4″N; 75°59′41.8″E), known locally as Jain Basti (Figure 3), near an ancient quarry at Pushpagiri (13°11′31.4″N; 75°59′27.3″E). The stones for these temples came mainly from four spatially clustered quarries, where the metamorphic rocks of chlorite schists were quarried using iron tools, including...
sledge hammers, chisels and wedges. The chisel marks could be seen on the quarry wastes heaped at the sites, which are now partially covered by soil (Figure 2b). Extracting the blocks from the bedrock was probably done along a line of wedge-shaped holes made by chiselling the rock surface. These holes were probably widened using wedges until the rock split along the line of the holes. These techniques still used by the present quarry workers have not changed for
thousands of years. Fine chiselling may have been done at the building site itself. Quarrying was done in open pits dug into the weathered soil overlying the bedrock, the thickness varying from 5 to 10 m.

It is possible that the large pieces of quarried stones were transported to the temple building sites by teams of men or carts pulled by draft animals through the cleared tracts around the quarries whose surfaces were hardened by laying stones. These quarries have also changed the natural landscape. These sites could have been in use by the craftsmen continuously for many years, where inscriptions, pottery and other archaeological remains can be recovered. Thus, ancient quarries are more than just sources of stones, but are also rich archaeological sites with ruins and other cultural remains. Mackenzie, having seen the magnificent Hoysala temples near Halebidu, marvelled somewhat wistfully at their craftsmanship: ‘It is difficult, when looking at this fine temple to believe that the builders of the neighboring huts are the descendents of the great masons whose brains planned, and whose hands fashioned this monument of their skill and taste. What become of them, and where have they gone, are questions which though hard to answer, are none the less interesting, and may well form the subject of antiquarian research’ – a sentiment we all may share with him.

Given their importance as a window to the past, these vestiges of our heritage are important study materials because they may provide a unique perspective on social life of ordinary people during the Hoysala period, the most significant period in the history of Karnataka. It is also our submission that the entire stretch of canal system should be preserved as a historical walkway, with exhibitions of Hoysala craftsmanship and engineering skills arranged along its banks. The canal bed itself can be used to plant indigenous and endangered trees.


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