The *Hargarhis* of Jharkhand: A Brief Study of the Megaliths of Jharkhand

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**Abstract**

Jharkhand is one of the rarest places in the country where megalith making still continues today as a continued tradition since much ancient times. Jharkhand currently has about 32 tribes of which only barely four still continue with the much ancient practice of megalith building on their deceased since unknown times. How many tribes amongst these had megalithic burial custom in the past is not distinctly known. There must have been a few more megalithic tribes in the past that are extinct today or might have merged with some other megalithic group or may have deserted the megalithic burial tradition. That megalithism runs deep in Jharkhand can also be observed in the practice of *satbarwaan* ritual among the dalits of the state in which these people have been found to ritualistically bury the bones of the dead near a sacred stone or a megalith. However, contrary to popular beliefs, not all megaliths are connected with death. Few of these monuments served as commemoratives for special occasions or performed as boundary markers and some were even found to function as astronomical observatories.

**Keywords:** Kolvrata, *sasandiri*, dolmen, menhir, *biridiri*, Munda, Santal, Oraon, Pathalgadda, Chokahatu.

**Introduction**

India is an amazing land of megaliths; from Kashmir to Kerala and Manipur to Gujarat the sacred land of this country is interspersed with megaliths. The presence of such a cache of tribal megaliths in the country endorses the verity that India was once a predominant land of the non-Aryans tribes. Rai Bahadur S. C. Roy the doyen of Indian anthropology and ethnography therefore articulated that India ought to have been named *Kolavrata* in place of *Aryavrata* judging by the preponderance of the non-Aryans tribes in India (Roy 1912).

**Classification**

For scholars, the South along with the North-East of the country has been held as the Mecca of megaliths. That Jharkhand is indeed a treasure house of diverse megalithic
structures is barely known to many (Das 2008). Below is a portrayal of the megaliths of the state; many of which has been discovered by the author and subsequently by a few amateur megalith hunters of the state.

Among the 24 districts of Jharkhand a majority of them accommodate large number of megaliths ranging from the much ancient to the present times. Each district here surprisingly displays separate architecture of these monuments (Das 2015).

Figure 1: A Mundari sasandiri dolmen

In the ausric vernacular of the proto-austroloid Kolarian and even among the Dravidian speaking tribes dolmens are called sasandiri (Koopers 1942). A Mundari sasandiri dolmen comprises of a capstone placed on four or more stones (Fig 1). A sasandiri is meant to perform as a family grave vault in which the cremated bones of the deceased of the same family are inserted. Capstones of a few sasandiris dolmens comprise port holes through which the bones of the dead are meant to be popped in and the inner chambers are at times cleaned through it. (Koopers 1942).

The menhirs or the birdiris are memorials of the dead and these even serve as commemoratives for several purposes besides death. Birdiri menhirs in Jharkhand can be seen to be erected to commemorate a variety of noteworthy events as the birth of a much longed girl child in a family, to celebrate the release of jailed Jharkhandi activists during
the Jharkhand agitation and to observe the birth of the new Jharkhand state *et al.* Menhirs are also erected displaying the totem (*killi*) of the dominant tribe of a village and the rules thereby laid on it. In the hinterlands of Gumla and in the deep woods of Simdega I have seen a menhir in the memory of a dead wild elephant and one also to celebrate the birth of a mythical tiger born to a tribal girl (Das 2009). A state alive with such megalithism other than Jharkhand is difficult to find.

Among the 32 tribes presently it is the Mundas, Hos, Asurs and the Oraons that can be called megalithic tribes (Das 2015). Scholars are of the view that Santals are not megalithic in their disposal of their dead. I however beg to differ with this view point. There is much archaeological evidence to prove that the Santals did erect megaliths in the past and though the practice has plummeted yet similar monuments of stones on their dead created in the present day can be perceived.
Every tribal village in the state has a burial ground having diverse names as hargarhi, hargarha, harsalli and jangarha etc which comprise an assortment of varied megalithic architectures. Each among the four different tribes has their separate megalithic architectures and/or placements. The Mundari birdiri menhirs can be seen to be placed in a row. The Mundari sasandiri has already been described in the above, but the Mundas are also known to place stone slabs or centrestones on their buried funerary pots which too are sasandiri for them. The Oraon sasandiri is different having a combination of both a dolmen of a flat capstone on four stones and a birdiri menhir placed beside it (Fig 2). The modern day Oraon sasandiris are similar to their earlier forms but are of a petite size. The Ho megaliths are the rarest of them all as these people after cremation of their dead bury the remains in their courtyards inside an earthen pitcher and sasandiri burial slabs thereafter placed upon them (Das 2006) (Fig 3.). Their birdiri menhirs are very tall and slender in comparison to those of the Mundas (Fig 4). The Asurs too place sasandiri burial slabs on their dead. It has also been learnt that akin to their Munda brethrens the Asurs too once erected biridiri menhirs (Gupta 1976).

The different megalithic architectures also depended on different age groups of the dead, the nature of the person’s death or the diverse causes for the occurrence of death during different seasons (Van Exem 1982). However at most places stern distinctiveness of the megalithic architectures are not maintained today. I have observed that in a couple of megalithic sites a few Oraon type sasandiri dolmens were erected by Mundari families. Dolmen sasandiris which were originally meant to be burials are also being built today as memorials of the dead.

Megaliths in Jharkhand are not merely confined to sacred burial
hargarhis only. In places where the tribal population is either negligible or amounts to none megaliths could be found to be anywhere; in the field, in the jungle and within sacred groves aka Sarnas (Sarnas are also called Mandar in the non-tribal Hinduised lingo where as the Santals call their sacred grove Jaher Than where the Goddess of the sacred grove Jaher Era resides) (Fig 5). Sepulchral stones can even be located even at the foot and gradients of several sacred hills.

The burial typology in the megaliths of Jharkhand until now that is learnt is that of pot burials. Cinerary pots have been yielded from megalithic tombs as fall out of road making across many prehistoric megalithic sites, ploughing about megaliths and also by deliberate digging on to a megalithic site in hope of buried treasure. One can also see in the land around many megalithic sites as that of Obra, Basantpur, Angara and Barwadih etc where the rims of quite a few burial pots of various sizes peep out (Fig 6). However given the fact of assorted styles of megalithic tombs in the state, scientific excavation is indeed required to find out the different kinds of megalithic burials other than that of the earthen pots that may have prevalent in ancient Jharkhand that may lie buried under the megaliths.

Another unusual aspect of Jharkhand megaliths is the presence of melted bitumen that can be seen to have been poured at the top of many menhirs in connection to some unknown cinerary rite. This feature can be seen in many megalithic sites as that of Napo and Punkri Burwadih etc.

Distribution

From Koderma in the North to Simdega and both the Singbhum districts to its South of the state most of the districts if not all is indeed interspersed with a wide and remarkable array of megaliths (Das 2006).
Interestingly the megalithic architecture of the state differs from one district to the other despite a particular type remain common. Pathalgadda in the Chatra district as the name suggests is an amazing place for prehistoric megaliths. So dense is the megalithic population of this region that if a stone is flung up in the air and where it drops one is sure to stumble upon a megalithic site. There is a varied range of megaliths in the deserted ancient burial grounds many of which are still called hargarhi by the non-tribal Hindu residents of nearby villages.

One monument typical to Chatra and its adjoining districts is a leaning menhir that rests on a smaller upright stone facing either Due North or East. As the megalithic structure does not bear a name I have taken the liberty to christen it as “Lean-Support menhirs.”

The Rohmar megalithic site holds interesting placements of the Lean Supports (Fig 7). Here the monuments have been positioned in such a manner that they are inclined towards their opposite sides facing either the East or the West in a schematic manner at a difference of about a few feet. Resulting which a long passage in-between the opposite facing Lean Supports can be seen to have been formed in a North South alignment. This interesting and unique typology is indeed something very novel and archetypal to a few sites of the region. The Lean Supports seem to have carpetted many megalithic sites of the region but their positioning at either sides to fashion a passage is not observed in many sites. Rohmar comprises a few Buddhist votive stupas as well.

Chatra also houses quite a few cairn burials of dark, beige and quartzite stone pieces. I have seen both the Lean Supports and the two toned cairns even in and around Santal Parganas. The Lean Support type structures can be seen in and around many villages of the Dumka region. These are not for sepulchral purposes here but for paddy thrashing. But that they still use the cairn as a mode of disposing their dead is still evident. In this context it seems the Lean Supports and the cairns in Chatra could be of Santal origin raised by them during their presence here sometime in the ancient era which they tugged along with them to Santal Parganas.
Another unique feature of megaliths of Chatra and its adjoining districts is the presence of trees as Banyan, Mahua or Peepul in the sites (Fig 8). Whether the plantation of these trees were a later day exercise in these age-old megaliths or do these belong to the lineage of much older ones could not be ascertained. Banyans (*ficus benghalensis*) and Peepuls (*ficus religiosa*) are sacred to both the Hindu and the Buddhists but for the tribals it is the Saal (*shorea robusta*) and the Karam (*adina cardifolia*) which I could not find in the megaliths. Therefore do the plantations of these trees in these tribal megaliths in some manner indicate to the acculturation of the tribal sites into the Hindu or the Buddhist fold?

Singhani, Katia Murwey, Obra, Angara, Barwadih, Bayen, Dundwa, Rohmar, Purni Mandar, Itkhori, Banjha and Silhatti etc are a few of the many megalithic sites in Chatra. Some twenty years ago I had discovered a major megalithic site of Purni Mandar of Chatra district which is spread at an area of a km housing six different megalithic sites of different architectures from the very ancient to the modern. The oldest site of Purni Mandar is inside a tribal *sarna* known to the Hindu neighbours as *mandar*; hence the name which in simple English means Old Temple. The site consists of menhirs standing to about 12 feet in height (Fig 9), burial slabs, small menhirs and many Lean Supports. The tall menhir is the sacred stone here worshipped by the Bhuiyan community and the *pahan* (priest) is from a Hinduised Ganju...
tribe. This is one interesting facet of India where the menhir may have been raised by some unknown tribe in the hoary antiquity but is presently worshipped by some other.

The modern megalithic *hargarhi* is about a quarter a kilometer away from the ancient site. Among the new ones a few resemble Mundari *sasandiris* and a few *sasandiris* are similar to that of the Oraons. A couple of these menhirs of the Oraon type *sasandiri* have been covered with white clothes as per some funerary rite and on their eastern surface one can see the details of the deceased inscribed in Hindi. The Heroes on the Hero Stones in South and Central India are found to be made on standing stones but here in Purni Mandar one Oraon type *sasandiri*’s horizontal capstone bears the horse ridden Hero.

Megaliths of different shapes substantiate that they may have been constructed by different tribes and at different time scales. The variants of the architecture as discussed earlier also depend on different type of deaths at different ages.

Banjha in the Chatra district is also another very ancient *hargarhi* nestled within a large *sarna*. There are hundreds of sepulchral stones here from burial *sasandiri* slabs, Lean-Supports, *birdiri* menhirs to large Oraon *sasandiris*. One Lean-Support menhir is the sacred stone worshipped as the “Kudra Sthan” or “Badka Baba” by an Agaria Asur tribal who is the *pahan*. Both the Hindus and the tribals are known to worship here.

Chatra megaliths present a wide variety of menhir placements; some of these stones lean on each other, some face to their either sides, some embrace one another; the assortment is indeed fascinating. They may now seem pretty alluring to us but to the prehistoric humanity these must have had meanings which we have now lost. Apart from conventional Oraon *sasandiris* Chatra also houses the customary Mundari type *sasandiris*.

Ramgarh too is home to single menhirs, *hargarhis*, dolmens and cairns. The dolmen of Bengwa Pahari near Chitarpur with a chamber and a capstone is indeed unique. The villagers are known to have dug out a pitcher from the chamber comprising of coins of Shah Alam period.

Huhua in the region stands out as a unique monument with quite huge four-sided vertically edged pillared stones. Their flattened tops either possess *amlaka* like structures or comprise deep circular cavities dug on it (Fig 10). The only feasible interpretation of the *amalaka* on the these stones could be that these might stand for turbans representative of kings and the ones with tapered tops with large holes carved onto them may be symbolical of queens. The site could have been Hinduised in socio-religious aspects.

Huhua could be relatively new but a better conclusion will surface once an excavation is undertaken and the grave goods scientifically dated. The distinctive menhirs of Huhua have their parallels in quite a few other places such as Lohardagga, Ranchi and even around Hazaribagh. The presence of such unique stones with *amlakas* could signify a specific cult of megalithism that requires to be studied properly.
Honhey, Gandkey and Siru etc are quite a few among many ancient megalithic sites in which Honhey seem to be quite an old hargarhi. The site has revealed Red and appliqué pottery. Napo too is interesting in its architectural stylistics which also houses a small raised circle (Fig 11). Two menhirs stands side by side oriented towards the Winter Solstice sunrise and the Summer Solstice sunset. I was notified by the villagers that one of the two adjacently placed menhirs was hit by a speeding truck resulting in the splitting of one of the prehistoric stones. The fragmented part now lies at its feet. The two stones have tiny specks of mica ingrained in them and when the moon shines the mica flecks glow like fireflies in the night; indeed the ancient megalith makers did have an aesthetic sense.
Hazaribagh houses very stunning and very ancient megaliths. The district has huge menhirs and major megalithic complexes and dolmens which seem very old and whose capstones are very large.

The heterogeneity of Hazaribagh megaliths indeed has no corresponding site in the state. The district may not hold large megalithic burials as that of Banjha and Chokahatu and Purni Mandar but Hazaribagh indeed presents a wide array of megalithic structures unknown in other part of the state. Chano, Punkri Burwadi and Birbir are very unique in their typologies. Chano is a burial but is so remarkable in its surface architecture that the site has no known parallels in the country (Fig 12). Apart from the recumbent burial slabs the site comprises of a 29” tall phallus with glans and three triangles of relative sizes. The site is also oriented towards the Summer Solstice sunrise. The positioning of the stones in the site illustrates impeccable proportions and hex sectioning by way of alignments to the hills in the horizon. The vicinity of the site has a good amount of iron slags and traces of iron furnaces can be seen. I have also collected Black and Red Ware, Red Wares and even Black Wares revealed by the plough. I had also the fortune to find a fragment of a bone relic which could be the part of a bone flute.
The megalithic complex of Punkri Burwadih (Fig 13) seems to be an observatory of the transits of the sun to function as a calendar for the communities of the region. The stones here are positioned both with perfect alignment to the notches and peaks of the mountain range that encircle the megalithic complex and in the mode of 1: 2: 4 ratios. The site also consists of two Holed Stones similar to that of England’s. The complex houses a Stone Circle with a phallic stone in its centre. The circle may hold the burial.

Hazaribagh also maintains quite a few animal structures as turtles, elephant and lizard etc.

Lohardagga district is also home to a very absorbing dolmen, animal structures, cairn circles, large birdiri menhirs and hargarhis consisting of Mundari sasandiris. The dolmen sits pompously aligned to the Summer Solstice sunrise and the Winter Solstice sunset (Fig 14). The Asura megaliths around Netarhaat or Lohardagga too comprise large burial slabs also called sasandiri in their hargarhi.

Chokahatu near Bundu comprises contains over 8000 megalithic tombs including large sized sasandiris (Fig 1 & 15). The most crucial part of the site is not only its enormous size but its continuous use till today by the Mundas since over 2500 years. As
the site reveals a custom of continued megalithic tradition for over so many years, the site therefore indeed is a claimant of a World Heritage Site. Burunda near Chokahatu though is a smaller hargarhi comprise of larger megalithic slabs. The Dulmi hargarhi near Chokahatu too seem quite old.

Figure 15: The enormous megalithic hargarhi of Chokahatu

Chaibasa is the most amazing megalithic town of Jharkhand as each home holds sepulchral slabs; something unknown perhaps in any parts of the world (Fig 3) and tall birdiri menhirs can be seen dotting the village sacred ground raised in the memory of the departed (Fig 4). Quite a few Ho birdiris are pretty tall and slim and they may stand up to a height of 12 to 14 feet. Ho megaliths are believed to be relatively new not going back beyond the medieval ages as they are believed to have arrived here crossing Ranchi.

Villages in Central and South Jharkhand have many ancient hargarhis. They could be thousands of years old and many of these are still in use. Villagers have come and gone but for thousands of years the hargarhis have remained unchanged. The adivasis have continuously planted sasandiris and birdiris in these lands.

Ranchi and her neighbouring regions have numerous tribal villages every one of which comprise of hargarhi comprising of sasandiris and birdiris. Menhirs in several villages in and around the city are also termed as burudiri.

A very interesting birdiri cluster can be viewed in Mahuatoli in Khunti (Fig 16). There is a hargarhi here where sasandiris and birdiris from the very old to the new can be viewed. But a few tall menhirs outside the sacred burial land indeed pose much mystery as to why these were not placed inside the hargarhi? Was the hargarhi a later creation? If so why the hargarhi was not created here where these menhirs stand? The positioning of the stones too is strange as these stones are placed at distances...did these serve an
astronomical purpose? The typology of the menhirs clearly reveals that these stones are not Mundari in origin. Such slim *birdiris* are still built by the Hos in the Singhbhum region. Are these menhirs proof of the fact that the Hos were in this region sometime in the past?

Mahuatandr, Mcluskigunj and Gumla region comprise of numerous *sasandiri* and *birdiris*.

Although they are a Hinduised fraternity today, the Bhumij were raising burial *sasandiri* slabs along the Damodar River in Bokaro and Ramgarh till Bengal.

The Munda menhirs are usually tall and flat and tend to taper at the top and are found to be positioned in a single row. The *hargarhis* of the South and Central Jharkhand comprise merely the traditional *sasandiris* or the burial slabs losing the variety of megalithic architectures which the North of the state offers. However places like Lohardagga and Ranchi also reveal quite a few stone circles and oblongs (Fig 17). To which tribe these structures could be attributed is not easy to assert as no tribe presently constructs such circles.

In and around Santal Parganas many cairn burials resembling the ones in the woods of Chatra and Hazaribagh can be seen (Fig 18). The stones used in such burials are essentially of two colours; white quartzite and beige or black. They can be seen to be placed at the foot of hills or are aligned to them. Many of these graves are indeed new and fundamentally corroborate two things; that Santal on contrary to common beliefs do dispose their dead megalithically and these megaliths also confirm that in line with their folklores the Santals indeed dwelled in Hazaribagh region much prior to their migration to the Santal Parganas.
Astronomy

It was Allchin for the first time in India who wrote about some forty non-sepulchral megaliths in the region of South Hyderabad including those of Nilurallu, Hanamsagar and Vibhuthihalli (Allchin 1956). K. Paddayya however later discovered a few more non-sepulchral sites. Quite a few other megalith settings like the beautiful yet ruined stone circle of Asota in Pakistan and Burzhaom in Kashmir are also identified as being non-sepulchral (Ghosh 1990). Gordon also wrote about such non-sepulchral megaliths and like Allchin he too opined on their astronomical links (Gordon 1997). Research into the megaliths of Nilaskal, Vibhuthihalli and Nilurallu by the Indian Institute of Astrophysics and the Tata Institute of Fundamental Research revealed the fact that many of these ancient megaliths were constructed as per astronomy. Nilurallu is non-sepulchral in nature and has revealed its astronomical links after research by Indian Institute of Astrophysics (Rao, Thakur & Priya 2011). The megalithic complex of Nilurallu is also aligned to sunrises and sunsets at the equinoxes and solstices.

In the same lines my research of many years uncovered the concealed fact that megaliths of Punkri Burwadih, Chano, Birbir and Katia Murwey apart from being sepulchral tombs were also created for astronomical purposes. Profound research of these
megaliths showed that they displayed orientations towards the sunrises and sets of the Equinoxes and Summer and Winter Solstices. Punkri Burwadih is the only megalith in the country today where people gather to view the Equinox sunrises through the “V” formation of the two contiguously positioned menhirs (Fig 19). One can also witness the Summer Solstice sunrise through the same “V” on 20/21 June standing at a different marker.

Many menhirs in and around Hazaribagh districts could be seen to be orientated towards $120^\circ$ SE of E, the azimuth of the Winter Solstice sunrises in this latitude. The plausible reason behind this is perhaps the celebration of the bone burying *jung tapa* or the *jung gara* ceremony that once transpired around the mid-winter sunrise. Today this rite is nearly dying out but can still be found to be practiced around the *Maghe Parob* in January.

Alignments to the notches and peaks of hills by the megaliths are still a stunning sight to behold. Studying the positioning of many megalithic sites as that of Chano, Birbir, Bayen, Katia Murwey has revealed astronomical alignments to the significant sunrises and sets. As it is not possible to discuss the alignments of all the astronomical megaliths of the state let me share with you the alignments of a particular megalithic complex of Huhua. The megaliths show how precisely the site has been positioned in

![Two menhirs in Punkri Burwadih are positioned in such a manner that a V notch is formed. On Equinox and on Summer Solstice mornings the sun rises exactly through this V.](image)
alignment to the cardinal points. The monument can be found to be situated exactly at the intersection of the alignment of the sacred Lugu and Sikidiri pahadi at the Due North and South respectively and to an unnamed hill and the Maya tongri to the Summer Solstice sunrise and the Winter Solstice sunset respectively.

The mathematics and observational astronomy that was used in these megaliths’ construction confirms the prevalence of these sciences amongst the megalith building tribes during an unknown time in prehistory.

**Triangles**

One unique aspect of Hazaribagh megaliths is the presence of triangles of various sizes. Megaliths as that of Birbir, Chano, Jabra, Purni Mandar, Lati and Amnari et al houses triangles in them. This phenomenon is not seen in any other megaliths in Jharkhand. It is difficult to affirm with conviction the rationale behind this. Megaliths as is now understood were temples of the Mother Goddess of the now defunct fertility cult revered by humanity even till a few years ago. Triangles with their apex pointing to the top is believed to be phallic male principles; confirmation of the prevalence of tantra like custom during these times of prehistory.

Birbir and Chano demonstrate that these triangles were also used as pointers as the one of Birbir aim at the Equinox sunrise to the Due East (Fig 20) where as the Chano triangles towards the Winter Solstice sunrise and the Summer Solstice sets.

![Figure 20: The triangle in the Birbir megalithic site points to the Equinox sunrise](image)

**Cupmarks**

Cupmarks are accepted as rock art today and the Darkai Chattan cupules have been dated to the Acheulian Age (Kumar 1995). However the cupules of megaliths are yet to receive a
proper scientific dating. Punkri Burwaidh, Chano, Napo, Gurua, Raja Gosainw Birbir are a few megalithic sites where cupmarks are present. No one knows for certain for what reason cupules were once made. It however is assumed that they could be symbolic representations of the Great Goddesses. They could also be commemoratives of the dead or they could have been created for astronomical intention to be used as lunar calendars.

Grave Yields

Road construction, digging of earth for brick making or to seek buried treasure in the megalithic burials and ploughing have disturbed many a megalithic sites. Such activities have revealed burial pots, pitchers which contained a range of metal implements (Fig 21). Pots and pitchers have been recovered from megaliths by villagers that contained many implements of iron and copper from the prehistoric to the historic period. Ruination of megaliths has also laid bare coins from early historical to that of the early modern era. Burial pitchers from the megaliths of the Singhani site of Pathalgadda that have been unearthed during road making has yielded only copper remains as hooks, tools, bell, slags, rings and other implements of copper (Fig 22).

When one of the menhirs of the Punkri Burwadih megalithic complex fell down, I had had the fallen menhir erected to its former glory with the assistance of the District Administration, of the village folks and of my team. In the process of the erection of the menhir, the earth was required to be dug where we hit upon an average sized pot buried near the menhir which housed an iron singi. The practice of burial with the singi is still prevalent in the satbwarwaan burial modes in Hazaribagh and her neighbouring district. Singis are two small iron cones connected with each other with a small iron chain. The cremated bones and the ashes of the deceased are inserted into the singi and jammed with iron lids connected with each other with an iron link and subsequently put inside the pot and thereafter buried near a menhir or even
immersed in a river. Singis can be bought in the market and an old rusted one can still be found near any megalithic site in Central Jharkhand (Fig 23). The ritual though is vaguely popular is gradually dying out today.

Pottery collected in situ from the megaliths or from the above mentioned processes are Appliqué, Black and Red, Black on Red, Polished Red Pottery, and Black Pottery (Fig 24). During the digging in Punkri Burwadih for the erection of the fallen menhir one Hand Axe was also recovered.

Fig 23. A singi. Collected in situ from a megalithic site and Fig 24. Potshards from various megalithic sites.

Possible Date

Due to the lack of a scientific dating for the grave goods yielded from the megaliths of Jharkhand it gets difficult to assign a date for them. Archaeologists hypothetically place megaliths of Jharkhand to the Iron Ages or to the historical period.

The find of burial pitchers from the megaliths of the Singhani site of Pathalgadda during road making that contain only copper remains is bound to change much of this entire hypothesis (Fig 22). No iron could be traced from the pitchers of the megaliths; meaning they may not have been aware of iron as the metal might not have been discovered in that era. This find is indeed liable to push back the date of several megaliths of Chatra and Jharkhand to the Chalcolithic era and even beyond.

Basing both on the surface architecture of several megaliths of the state and examining the migration lore and the ingress of the proto-australoid megalithic Mundari tribes into the state, my conjecture is that several megaliths as that of Punkri Burwadih and that of Chano might have been built between 1550 and 1450 BC.

I have had a few stone tools dated at Dresden Germany collected in-situ from the megalithic complex of Punkri Burwadih. The date acquired from the patina formation on the stone tools has been found to go beyond 5000 BP (Imam 2014). This however in no
way sets the date for the megalithic complex of Punkri Burwadih but only fixes it for the tools made and used by the primitive folks who lived here possibly much prior to the megalithic complex.

**Conclusion**

Many megaliths also served as boundary stones or as simana diri. It is sad that megaliths despite being the truest archaeological and historic relics of the tribals of Jharkhand they lie in utter disregard; neglected both by the government and tribal themselves. Excavation of many of the sites is required in order to trace the migration pattern of the various megaliths making tribes into Jharkhand and fixing the date of their arrival into the state in the process. To which tribe the prehistoric megaliths could be credited becomes imperative in the research.

Furthermore more open mindedness is required by the archaeologists to accept the new changes that have set in megaliths archaeology worldwide. Hence that megaliths were also set up for non sepulchral and astronomical functions should also be acknowledged by them.

Megaliths are being destroyed everyday and these ancient sacred stones are being towed away for mundane domestic uses. If such a process of destruction of megaliths continues, the adivasis of Jharkhand very soon will be left with no archaeological relics of their past, of which they can boast unless they wake up to protect their own heritage of megaliths. Our country in the process will also lose significant artifacts of prehistory of which not many people are aware of.

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Subhashis Das was the Principal of a High School but is better known as an individual researcher of megaliths of India, tribal civilizations and culture and tribal folklores. He has the distinction of discovering many unknown megaliths of the country. He has also discovered the astronomy of Punkri Burwadih megaliths and the much ancient Equinox sunrise viewing from the site. Today as a result of his effort Punkri Burwadih is the only megalith in the country where people congregate to witness the Equinox sunrises. He has authored three books on his discovery and research on megaliths which are of course the first books on megaliths in the state of Jharkhand: *In Quest of the Megalith, Sacred Stones in Indian Civilization, Unknown Civilization of Prehistoric India*. He also writes in many national and international journals and his work has been featured in many documentaries and in many significant venues across the world. He has also been invited to speak on his research in many countries across the world. He also runs the only website on megaliths of India: www.megalithindia.in.