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The Cradle of the Munda: Birth of a New Branch of Austroasiatic

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Abstract

The location of the origin of the Munda speaking peoples of India has been a contested subject since the time of Sarat Chandra Roy (1912), the doyen of Indian ethnology. The recent genetic studies have thrown a glaring light on the subject that is sufficient to empower the author to contradict the giants of the anthropological and linguistic studies of the past and even some DNA researchers of the present. The view which is presented in this paper is founded on the theory of Austroasiatic dispersal from river valleys of South China or North Vietnam towards south and west. The Khasi and Munda speakers are the descendants of the westward moving branch, whereas the Nicobarese have their origin in one of the southward moving branches. The paper deals with the questions of the place of origin of the Munda speaking peoples, their physical and linguistic transformation and the emergence of patrilineality among them. Piecing together the archeological findings, results of linguistic researches, folklore studies and above all the recent revelation of the genome studies related to the Austroasiatic in general, and the Munda in particular, the paper concludes that the cradle of the Munda speaking peoples was the lower Gangetic plains. Largely a male majority band of the Austroasiatic initiated an admixture with the pre-existing Dravidian and others that resulted in the emergence of a new generation of progenies with changed physical features and a patrilineal society. At length a section of them bifurcated into two groups and dispersed westward, one following the coastline of Bay of Bengal and the other, trekking the south bank of the river Ganges. Both of them reached central India but by that time their languages went through remarkable changes to the extent that they became mutually unintelligible.

The ‘central tribal belt of India’ roughly covering the modern states of Jharkhand, Odisha, Chattisgarh, Madhya Pradesh, western part of West Bengal, eastern Maharashtra and north-eastern part of Andhra Pradesh, has been the ancient habitat of the Munda speaking people. Munda belongs to the Austroasiatic language family, having two branches, known as South Munda and North Munda. South Munda languages are again divided into two groups according to their linguistic affinities, namely, Kharia and Juang are in one group, and Gdaba, Gotub, Remo, Gta in another group. North Munda includes, Korku, Mundari, Ho, Santali, Asuri, Birhori, Turi and Birjia. These two groups are mutually unintelligible and together they are even more removed from the Khasi,

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spoken in Meghalaya. Physically also the Khasi people are visibly different from the Munda speakers. In terms of social organisation also while the former is matrilineal the latter peoples are patrilineal. However, they have some cultural similarities, for instance, the practice of megalithic burial and ancestral worship and traces of fertility cult. The paper strives to resolve the issues of the origin of these peoples and their linguistic and cultural differences.

Recently published genetic studies have provided important clues to this inquiry. Tony Joseph in his book *Early Indians* has summarised two of them (Joseph 2018: 156-7). The first study is titled 'Ancient Genomics' reveals four Prehistoric Migrations into South-East Asia' by McCall Hugh et.al. It was published in 2018. The study had access to ancient DNA samples from Malaysia, Thailand, the Philippines, Vietnam, Indonesia and Laos, dating between 8000 to 200 years ago. The study found that within the last 4000 years or so, south-east Asia saw dramatic changes in its demography as a result of at least two major waves of migration with their origin in China after it had gone through an agricultural revolution. Rice and millets had been fully domesticated in the Yangtze and yellow river valleys of China between 7500 BCE and 3500 BCE and there is evidence of paddy fields by around 2500 BCE. India received the wave of migration that followed the land route, dated around 2000 BCE.

The second paper, published in 2011, entitled 'Population Genetic Structure in Indian Austroasiatic Speakers' by Chaubey Gyaneshwar et. al. concluded, 'We propose that Austroasiatic speakers in India today are derived from dispersal from southeast Asia, followed by extensive sex-specific admixture with local Indian populations'. The study found a significant southeast Asian component, about 25% among the Indian Munda speakers. But the southeast Asian ancestry signal has been lost in the mtDNA (Mitochondrial DNA) lineages of them, which means that their matrilineal lineages are of Indian origin. The study further concludes that the Austroasiatic speaking people of Chota Nagpur plateau seem to have an older admixture from East Asians, mediated in particular through migration of male line (Joseph 2018: 156-7). This was a startling finding!

We may add one more of such research findings to this list. This is by Kai Tätte et. al. who published a paper in 2018 entitled 'The Genetic Legacy of Continental Scale Admixture in Indian Austroasiatic Speakers'. It reveals,

Surrounded by speakers of Indo-European, Dravidian and Tibeto-Burman languages, around 11 million Munda (a branch of Austroasiatic language family) speakers live in the densely populated and genetically diverse South Asia. Their genetic makeup holds components characteristic of South Asians as well as Southeast Asians. The admixture time between these components has been previously estimated on the basis of archaeology, linguistics and uniparental markers. Using genome-wide genotype data of 102 Munda speakers and contextual data from South and Southeast Asia, we retrieved admixture dates between 2000 – 3800 years ago for different populations of Munda (Tätte Kai et. al. 2018:2).

We should now examine two more papers that are related to rice cultivation pointed out by Toney Joseph. The paper published in 2018 was entitled 'Genomic Variation in 3010 Diverse Accessions of Asian Cultivated Rice' by Wensheng Wang et. al. revealed that the two major subspecies of Asian rice, Indica and Japonica (domesticated in Yangtse valley of China) were domesticated independently. Another paper 'Approaching Rice Domestication in South Asia: New Evidence from Indus

Settlements in Northern India' by J. Bates et. al. published in 2017, concluded, 'The data also suggest that when fully domesticated Japonica was introduced around 2000 BCE, it arrived in an area already familiar with rice cultivation and a range of cultivation technique'. Based on these findings it was safely concluded that rice production had a boost in India where these two subspecies met each other and hybridization happened around 2000 BCE. And this was the time that the ancient DNA evidence indicated the arrival of the Austroasiatic language speakers into India from southeast Asia.

The above information lead us to delve deep into this matter of 'migration and admixture' of Austroasiatic, the ancestors of the Munda speakers in India. Our key question is, who are the people provided females to the migrating male-majority Austroasiatic speakers and where did that admixture happen. In the following pages we will use the term Munda to denote the speakers of the North and South Munda languages, not the Mundari language speaking people alone.

Even before the revelations made by the genetic studies the evidences gathered from archeological findings, linguistic research and folklore analysis in the past led the historians guess the south China origin of the Austroasiatic languages speaking peoples of South-east Asia and South Asia (Zide & Zide 1976). The recent DNA Tests have now convincingly proved this presumption. A large number of writers on this subject support this view (Peiros 2011; van Driem 2011; Sagart 2011 and Bellwood 2013). However, according to another recent view, Middle Mekong in the modern-day North Vietnam might be the epicenter of the spread of the Austroasiatic languages speaking peoples propelled by the Neolithic revolution in the region (Sidwell 2011). Along with agriculture, these peoples also produced pottery, boats and fishing tools (Blench 2015) We should notice that the Yangtse valley in south China or the Middle Mekong are neighbouring geographic area. However, whatever may be the case, if we follow the riverine dispersal theory then we may conclude that a section of the Austroasiatic language speakers migrated following Mekong and other rivers and reached Laos. After occupying Laos, they crossed several major watersheds, such as Irrawaddy, into northern Burma and Assam via the 'Khasi Corridor' or the Cachar Hills Zone or the 'Burma Road' of Second World War fame.

From Assam, the pre-Munda followed the Brahmaputra River into the eastern Indian plain, leaving behind the Khasis and other speakers of the same language family in Assam. In the new locale they acquired many of the characteristic South Asian phonological and grammatical features from the previous Dravidian residents (Starosta 2005: 191-2).

The geography of this new locale has been a matter of controversy among the scholars.

Years ago, linguistic studies proved that the early settlers in Bengal plain were the speakers of Austroasiatic languages alongside the Dravidian ones (Chatterjee 1926: 29, 56) and most probably these languages were alive there until 6th century BCE (Roy 1993: 45). There is a strong similarity between the older place names of Bengal and the same of the present habitats of the Munda speaking peoples. Even the very name *Bango* is considered to be an Austroasiatic word like *Ganga*, the Ganges (Roy 1993: 44). Their linguistic presence in the whole region is so strong that some authors believed that the Munda-Mon-Khmer speakers originated in central India and then migrated to the east all the way to Cambodia (Chatterji 1926. 82-84; Roy 1912: 10;

Hutton. 1935:106). In recent time, Prof. Aseem Bhattacharya in his book *Bangaleer Bhasha* (The Language of the Bengalis) cited several characteristics of Munda languages that are common to the Bengali,

The presence of considerable number of ‘diphthongs’ in Bengali finds a parallel in Munda, but remarkably not in Sanskrit. The anaptyxis (insertion of a vowel between two consonants) and the ‘vowel harmony’ in Bengali are said to have their roots in the Munda, for they are definitely not Dravidian elements. One more feature of Bengali poetics is that any vowel can become ‘nasal’; this is also a Munda contribution to the Bengali language. Besides, there is Austric influence in Bengali grammar as well. The hugely available onomatopoeias and the absence of feminine and masculine distinction in verbs in Bengali are most probably the instances of Munda influence. Moreover, the Bengali vocabulary is immensely enriched by the Austric words (Bhattacharya 2000: 28-29).

The ongoing genome research also indicate the Bengal connection of the Austroasiatic. Rajib Khan finds out that East Bengalis (now Bangladesh) show a high Gene flow from east Asia but the Munda are not a singular donor to Bengalis of their East Asian heritage (Khan 2015). The Tibeto-Burman speakers flooded the eastern plains of Bengal up to Padma river at a much later date. Therefore, dialects of Bengali of that region shows a strong influence of that language. By 500 BC it seems that Indo-Aryan culture at last arrived on the edge of Bengal. At this date it seems most of the tribes living in Bengal were probably already Munda (Khan 2018). Gerard Diffloth in his recent studies says,

The geographic distribution of the thirteen branches of Austro Asiatic (Munda plus Mon Khmer) would imply a centre of greatest historical diversity in the region which encompasses the fertile flood plains of the Irrawaddy in Burma and the plains along the lower Brahmaputra in Assam and Bangladesh (Diffloth 2005: 78).

In recent years, a purely linguistic argument for a western origin for Munda and hence Austroasiatic was forwarded by Donegan & Stamp (2004). This theory has, however, been questioned by some DNA researchers (Riccio, Maria Eugenia.2011: 429), whereas others supported it (Reddy, M & Kumar, V. 2008) Examining the megaliths of Jharkhand, Das (2018) reached the conclusion,

Migration of the various Proto-Australoid Kolerian Mundari tribes into India commenced in the early part of the second millennia, BC. They trekked to India from Sumer/Chaldea via the various mountain passes along the North-West frontier, bringing with them their culture, religion and technology of megalith-making applying astronomy and mathematics (Das 2018: ix).

Earlier Roy (1912) and Chatterji (1926) propounded the same theory. Gerard Diffloth’s (ibid) recent form of the Austroasiatic language family tree shows that Khasi-Khmuic (about 2000 BCE) is older than Munda (Between 1500-1000 BCE). This negates convincingly the Western origin theory. Now the fact remains that the plains of Bengal certainly populated by the Austroasiatic speakers after 2000 BCE. Therefore, there is a continuum of the presence of the speakers of Austroasiatic languages from the North-East to the Central India that Chatterji also noticed (Chatterji 1926: 29).

There is yet another assumption that the Munda speakers far from diffusing across the land, made a sea voyage across the Bay of Bengal. Years ago, J. H. Hutton hinted at such a possibility in the Indian Census Report of 1931 (Hutton 1935). It is now postulated,

‘Mundari-speaking Austro-Asiatic populations from mainland India have independently migrated/originated from the Mon-Khmeric-speaking Nicobarese’ (Kumarasamy Thangaraj et.al. 2005).

Felix Rau and Paul Sidwell published a paper in 2019 called, *The Munda Maritime Hypothesis*. It presented the ‘sea voyage’ theory. The abstract of the paper says,

On the basis of historical linguistic and language geographic evidence, the authors advance the novel hypothesis that the Munda languages originated on the east coast of India after their Austroasiatic precursor arrived via a maritime route from Southeast Asia, 3,500 to 4,000 years ago. Based on the linguistic evidence, we argue that pre-Proto-Munda arose in Mainland Southeast Asia after the spread of rice agriculture in the late Neolithic period, sometime after 4,500 years ago. A small Austroasiatic population then brought pre-Proto-Munda by means of a maritime route across the Bay of Bengal to the Mahanadi Delta region – an important hub location for maritime trade in historic and pre-historic times. The interaction with a local South Asian population gave rise to proto-Munda and the Munda branch of Austroasiatic. The Maritime Hypothesis accounts for the linguistic evidence better than other scenarios such as an Indian origin of Austroasiatic or a migration from Southeast Asia through the Brahmaputra basin. The available evidence from archaeology and genetics further supports the hypothesis of a small founder population of Austroasiatic speakers arriving in Odisha from Southeast Asia before the Aryan conquest in the Iron-Age (Rau, F and P. Sidwell. 2019:35).

Roger Blench, who earlier agreed with the land route migration theory, offered a hesitant support to this proposition. He claimed that in a personal communication to him Paul Sidwell raised a problem that if the Munda languages spread westward from a homeland in South East Asia, why do they show no specific resemblances to the nearest branches, for example Khasian and Palaungic. He found a solution to this riddle in the sea voyage proposition. He maintained that the Munda speakers migrated from somewhere on the southern coast of Myanmar or adjacent Thailand. They far from diffusing across land, migrated by sea across Bay of Bengal, ending somewhere in Bhubaneswar in Odisha, and expanding outward from here. Given that the Nicobarese also reached their current homeland by sea, there is nothing inherently implausible about this, although the journey of the Munda would be considerably further. In reply Blench raised a question, ‘Munda shows no trace of an affinity for the sea in its lexicon. ...If the Munda were not the navigators, why were they aboard the ships?’ He, on the contrary, noted earlier that various river species and capture techniques do show cognates between Munda and South East Asian Austroasiatic (Blench 2018). His attempt to resolve this issue appears to be really farfetched. He in support of Sidwell’s theory argues that other people, who were they we do not know, most probably traders forced the Munda speakers to row their ships and landed on the shore of Odisha near Bhubaneswar. The Munda speakers escaped or were dropped to become traders and farmers (Blench 2019). The major flaw in this theory is that between 2000-1500 BCE rice cultivation reached up to Bengal stretching from the southeast Asia. In Bengal rice crops were cultivated twice or more times in a year (Habib 2002: 77). Odisha does not appear in the map of double harvest agriculture in eastern India during this period. Besides, Kingwell-Banham, E, et. al. in their paper published in 2018, entitled ‘Archaeobotanical Investigations into Golbai Sasan and Gopalpur, Two Neolithic-Chalcolithic Settlements of Odisha’ made an observation that contradicts the theory of maritime dispersal of Austroasiatic, who are supposed to be the carrier of Japonica to Odisha. It says that the archaeobotanical

assemblages from Gopalpur and Golbai Sasan suggests that any movement by farmers/pastoralists to come into the east would have been a protracted process, taking around 1000 years. These agriculturalists may have come from the Gangetic Plains (who from c.4150 BP) practised both summer and winter crop cultivation and reared domestic cattle, buffalo, sheep/goat and pig or from the Vindhyan Region, as has been suggested based on the similarities in Black and Red Ware recovered from Chalcolithic sites. Archaeobotanical analysis has revealed a distinct agricultural economy based on rice (*Oryza sativa* cf. subspecies *Indica*), pulses (*Cajanus cajan*, *Macrotyloma uniflorum* and *Vigna* cf. *radiata*) and possible supplementary millets (*Panicum Sumatrense*, and *Setaria* spp.). This is in contrast to contemporary Neolithic-Chalcolithic sites in the Ganges Basin, which grew both summer (primarily of South Asian origin, like rice) and winter crops (primarily crops of Southwest Asian origin, like wheat and barley). Here, we should remember that the Gangetic Plains or Ganga Basin does include two major areas of agricultural civilisations, one, in the Ganga Doab region that was predominantly Aryan, and the other, in the Bengal plains developed by the Dravidian-Austroasiatic speakers.

The view of the maritime dispersal theorists exhibits the helplessness of the researches in finding out a link between the Khasi and Munda speeches. There is a gap no doubt between these two kinds of speakers also in appearance, culture, social organization, economic development and so on, more than the languages they speak. Our following discussion will find a different clue to explain this gap.

In recent times, Van Driem propagated a theory that not just Munda or even proto-Munda but the very Austroasiatic originated between the mouths of Ganga and Brahmaputra (Van Driem 2001; 2010, 2012). Sidwell and Blench have reasons to reject the idea. We also may not fully agree with the same. But our take from this view is that the missing link between the Khasi and Munda is the Bengal plain, the arena of the Munda drama, the cradle of the Munda speeches. This hypothesis really explains why the Munda of the central India so different from the Khasi of the Northeast.

Our conjecture would be that the Austroasiatic speakers from Myanmar (Burma) migrated to the Brahmaputra valley in Assam and settled there. At a later time, one their branches crossed the Garo-Jayantia Hills and entered into the fertile soil of the Bengal plains where Ganga meets Brahmaputra. It was a male majority band. The 'sex specific admixture' with the pre-existing Dravidian happened here. Their physical, cultural and linguistic transformation were the outcome of this development. It might have taken a long time for them to populate the lower Gangetic plain. Most probably about 1500–1000 BCE some of their progenies continued migration towards further west. One group, traversed following the south bank of Ganga and reached central India. Their settlements *en route* were later submerged by the Tibeto Burman and Indo-Aryan language speakers. Many words of Austroasiatic origin have been noticed in Lepcha (the speakers presently live in Darjeeling and Jalpaiguri districts of West Bengal), suggesting a Sino-Tibetan superstrate laid over an Austroasiatic substrate. Blench (2013) calls this branch of the Austroasiatic 'Rongic' based on Lepcha autonym 'Rong'. Johan Peterson (2017) suggests that 'pre-Munda' languages may have once dominated the eastern Indo-Gangetic plain, and were then absorbed by Indo-Aryan languages at an early date as Indo-Aryan spread east. Peterson notes that eastern Indo-Aryan languages display many morphosyntactic features similar to those of Munda languages, while western Indo-Aryan languages do not. There are both archaeological and folklore materials to prove

their settlements in the Gangetic plains between the south bank of the river and the hills of Chotanagpur plateau (Roy 1912: 56-64). They were the ancestors of the present-day North Munda speakers. A section of the South Bengal group expanded further at a later age (most probably after the largescale migration of the Tibeto Burman speakers in around 1000 BCA) and moved westward following the Bay of Bengal coastline and reached the Mahanadi delta of Odisha. They were the ancestors of the present-day South Munda speakers. Scholars have already suggested the riverine expansion of Austroasiatic speakers on the basis of linguistic geography and historical linguistics (Sidwell & Blench 2011; Blench 2013). This explains why there is a difference between the north and south Munda languages and why the north Munda speakers are concentrated in the north-central part of India and the south Munda speakers are found more in the south-central part of it. The fact that South Munda speakers show more evident signs of a sex-specific admixture on maternal side than the North Munda speakers (Chaubey et. al. 2011 & Tätte, Kai, 2018) is explained by the fact of the South Munda speakers' incessant mingling with the Dravidian speakers *en route* as well as in their present habitat, and North Munda speakers left the Dravidian connection behind as they took a different route of moving towards the central India. North Munda speakers might have some insignificant admixture with the early migrants from the North West India to the upper Gangetic plain. These facts further corroborate our assumption.

S.C. Roy (1912: 6-12) propounded the theory of Austroasiatic origin in the north-west India and their gradual expansion towards east till they populated the land of south Asia. Munda migration to the Chotanagpur plateau was a part of this process of migration and settlement. He reached this conclusion by identifying places of Munda settlements on the route of their migration in the modern map essentially on the basis of Munda folklore and references of the Kol (*Kolla*) and its various branches in the Sanskrit literature. He was aware of the theory of the eastern origin of the Austroasiatic speaking people upheld by his contemporary authors Hewitt (cited by Roy) and the author the Annals of Rural Bengal who made the same indication. He wrote,

Thus, we have grounds for inferring that the Mundas and other Kolarian tribes originally lived in the hilly regions along the Araballi and Vindhyan ranges and gradually spread further to the north and occupied the valleys of the mighty rivers of Northern India. Subsequently admixture with some Dravidian tribes of the south hailing from across the Vindhyas may have contributed in assimilating their physical characteristics...When subsequently, the Aryans began to pour into India through the north-western passes, some of the congeners of the Mundas unable to resist the on-set of the invaders would naturally emigrate eastwards and passing through Pragjyotisha or ancient Assam would gradually follow a southerly direction. One band, the ancestors of the Khasis, settled in Central Assam. A second band, the progenitors of the Mons or Telangs of Pegu established themselves in the country fertilised by Irawady. Other branches of the Kol race moved on further to the south and settled in the several countries now known as the Malaya Peninsula, the Philippines and the Nicobar Islands. Some other tribes, again, proceeded probably in their rude canoes further to the south-east as far as to Australia (Roy 1912: 6-12).

However, Hunter indicated a different route of Santal migration in the Annals of Rural Bengal long before him on the basis of the folklore of the Santals. Let us quote him as follows:

I have enumerated the various countries which the Santals say they travelled towards their present territory not because I can derive much information from them myself but in the hope that other inquirers may, by identifying them, establish conclusively the Santal line of march. Where Hihiri Pipiri may be or where Chae Champoa and Silda may be, I know not for certain; it is worth mentioning that Pipiri-am means in Santhali a butterfly, and that Hihiri is merely a reduplicative form of it. If Hihiri Pipiri signify the Butterfly Land, it would be in the temperate climate which the Himalayas afford. The second country, Chae Champa, where the Santals are said to have first become numerous, is possibly the Land of Flowering Trees, the term being a reduplicative plural of Champa, a flowering tree. This would have been in the higher valleys of the Brahmaputra. With Sikar, the fourth on the list we touch solid ground. It lies upon Damooda (the original name of the river Damodar, which is its Sanskritised form), almost within the ancient district of Beerbhoom, and now forms one of the chief places of pilgrimage of the race (Hunter 1965: 87).

Hunter records another fact in support of his conjecture. He mentions the Santal belief of the presence of a Great River in a far-off eastern land from which their ancestors came. Presently, they consider the river Damooda as a symbolic representation of the Great River of antiquity. They perform a rite of ancestral worship on the bank of Damooda every year (Ibid. 86-87).

Even though large majority of the researchers do not agree with Roy, without rejecting him out right we may agree that some of the Munda speakers migrated back towards east from their central Indian homes after being outnumbered by the advancing Indo-Aryan speakers and being overwhelmed by their aggressive culture. The present Mundari speaking people is one of them who kept wandering from place to place before settling down in the Chotanagpur plateau. The Korkus of Satpura range in Eastern Maharashtra, the Kols of Madhya Pradesh and Mirjapur in south eastern Uttar Pradesh and the Kharwars of the same area are their cousins who speak the Munda languages. These peoples also kept shifting from one place to another within a specific region known as the central tribal belt of India. The migration of the Mundari speakers that Roy studied was a part of the same phenomenon and has nothing to do with the Austroasiatic migration discussed above. Dr. Ram Dayal Munda used the word *Agneya*, meaning south-east quarter in Sanskrit (1988: 1) for the Austric (Austroasiatic) people. The Aryans of North India called them by that name indicating the direction of their homeland. Had they been the resident of the north west, as Roy believed, during the time of the Aryan settlement in the Northern part of India, the Aryans would not have obviously coined the word *Agneya* to identify them.

Now coming back to our main point of discussion about the place where the ancestors of the Munda speakers got intermixed with other people, we may now safely say that the place is undoubtedly Bengal where the Great River of the Santal folklore met the another Great River, the Ganga or may be vice versa.

The Dravidian speakers at one time spread over from Baluchistan to Bengal (Chatterji 1926: 28). In the plains of Bengal, for the first time the Austroasiatic migrants from the Brahmaputra valley got mingled with the Dravidian speakers of East/Central India, a subgroup of Dravidian language called Central Dravidian languages. Even now, these people live in close proximity with Austro-Asiatic speakers of East India (many within the same village). Gene flow between these two groups (Central Dravidian and Austroasiatic) is now documented (Chaubey et al. 2011). Roy (1912:10-11) was convinced of this fact of admixture with some Dravidian tribes of south. But according

to him this occurred in the hilly regions of Aravalli and Vindhyan ranges. And from there the Munda speakers migrated towards east only after the invading Aryans began to occupy their ancient habitats. He observed that this assimilation between the ancestors of the Munda and Dravidian speakers contributed to the physical features of the Munda speakers of the present day—the shape of the skull, the dimensions of the nose, Cheek bones, orbits, forehead and zygomatic arches, the breadth of pelvis, the colour and texture of the hair and so forth. However, there is a diverse opinion as well. Maria Eugenia Ricco says,

Several analyses using genetic distances indicate that the Mundas are much more closely related to populations from the Indian subcontinent than to Southeast Asian populations speaking languages of the same Austroasiatic linguistic family. On the other hand, they do not share a closer relationship with Dravidians compared with Indo-Europeans, thus arguing against the idea that the Munda share a common and ancient origin with Dravidians... This conclusion is in agreement with archaeological and linguistic information. The history of the Austroasiatic family represents a fascinating example where complex interactions among culturally distinct human populations occurred in the past (Ricco, Maria Eugenia. et. al. 2011).

This observation cannot be ignored completely. The problem is the timings of Munda intermixing with other people. Our conjectured migration route of the Munda speakers shows their occupation of the upper Gangetic valley as well, but at a much later date. We must remember that the time of the Austroasiatic languages speakers' entry and spread in India coincided with two very important events; one, the disintegration of the Harappan civilization and the other, the immigration of the Indo-Aryan languages speaking peoples from the northwest. Harappan civilization began to collapse in around 1900 BCE and around the same time, there was an influx of population coming through eastern India (Tony 2018: 156). The Indo-European language speakers started migrating to the Northwest India in around 1500 BCE. They met the Munda speakers at a much later date when they were already well settled in North-Central India. Therefore, the possibility of Munda admixture with the Indo-European language speakers in Bengal is out of question. Bengal remained out of the pale of the Indo-European speakers till at least the 6th century BCE (Chatterji 1926). However, there are evidences that the Munda came in contact with the eastward moving branches of Harappan people, the Asuras for instance in Chotanagpur, or even before that in central India. We will pick this matter up later.

The above said findings solve the riddle of the cultural and physical differences between the Khasi, on the one hand, and the Munda speaking (so called Kolerian) tribes of the Eastern-central India, on the other, even though they speak the languages belonging to the same Austroasiatic language family. However, there is still another and more important riddle that is to be solved. The former group of peoples are matrilineal and the latter ones are patrilineal. The clue that we received from the above discussion leads us to presume that when the Austroasiatic reached the Brahmaputra valley around 3000-4000 years and populated the region. Some of the present day Khasi speakers are their descendants. Some, like the Garos adopted their language. These societies are still matrilineal. Tätte et al. (2018) said, 'Using genome-wide genotype data of 102 Munda speakers and contextual data from South and Southeast Asia, we retrieved admixture dates between 2000–3800 years ago for different populations of Munda'. This and previously cited research findings indicate

that the ‘sex specific admixture’ of the Austroasiatic happened in the region beyond the Brahmaputra valley. We have discussed earlier that this region was the lower Gangetic plain. But how come the matrilineal cousins of the Khasi became patrilineal in Bengal?

Matriliny is transformed to patriliney under various conditions, such as economic development and change in relations of production, economic differentiation and state formation, colonization by patriarchal pastoralists or other communities, proselytization to patriarchal religions (Sanskritization and Missionization) and so on. In the case of Austroasiatic migrants in the lower Gangetic plains during the pre-historic time, the beginning of their transformation to patriliney was not caused by any of these factors. It essentially emerged out of ‘sex specific admixture’ with other communities. Austroasiatic males brought in females from other pre-existing communities into their bands for procreation. This was prompted by the fact of the presence of very small number of women in the migrating bands of the Austroasiatic. They were may be the breakaway groups of the matrilineal Austroasiatic settled in the Brahmaputra valley. Expansion of population or in migration of the Tibeto Burman bands in large number might have caused this movement towards lower Gangetic plains in search of better resources of livelihood. They were largely male dominated bands since women generally do not accompany their men in their adventurous journey to unknown lands. This fact of admixture with other people changed the very structure of Austroasiatic matriliney. The matrilocality was changed to patrilocality by the fact of women from other communities coming to live with their new male partners. Even if both the communities, ‘provider’ and ‘receiver’ of women were matrilineal this new phenomenon led to the breakdown of the matriliney of the recipient community, whereas the provider community continued to remain matrilineal. The children of the recipient community adopted the language of the father, but they could not fully ignore their mother tongue which was but natural. The claim is made by two University of Cambridge academics, Peter Forster and Colin Renfrew, in their paper, Mother Tongue and Y Chromosomes (*Science* 2011). They said,

It may be that during colonisation episodes by emigrating agriculturalists, men generally outnumber women in the pioneering groups and take wives from the local community. When the parents have different linguistic backgrounds, it may often be the language of the father which is dominant within the family group (Forster and Renfrew 2011).

A new branch of Austroasiatic was thus born, the linguists call it the Munda. In this new locale the Austroasiatic *Japonica* met the Dravidian *India* and hybridization happened leading to the increased production of rice. More food means more people. More people need to look for more land. Migration continued; the group that took the coastal route developed the South Munda branch and the one that followed the south Gangetic path developed the North Munda.

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