

# To be Human: The Introduction

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The law of universal gravitation came about, as the legend goes, from experiencing (or 'observing', as a variation on the theme) an apple fall. This was 1666 and the famous question that arose in the mind of one of the premier scientific minds of all times was: Why did the apple fall down (and not rise up)? From this initial puzzle, started much of the scientific ideas about the earth and the moon. In fact, we can take this to be the necessary condition for any scientific enquiry, namely, curiosity. Compare this questioning spirit with another question that was posed about 300 years later: Why does the word "can" appear at the beginning of the following sentence when it is clearly associated with the verb "swim"?

(1) *Can the eagles that fly swim?*

Of course, in order to first understand the puzzling question itself, we must pay attention to the non-question version of the above question, which can be the following statement:

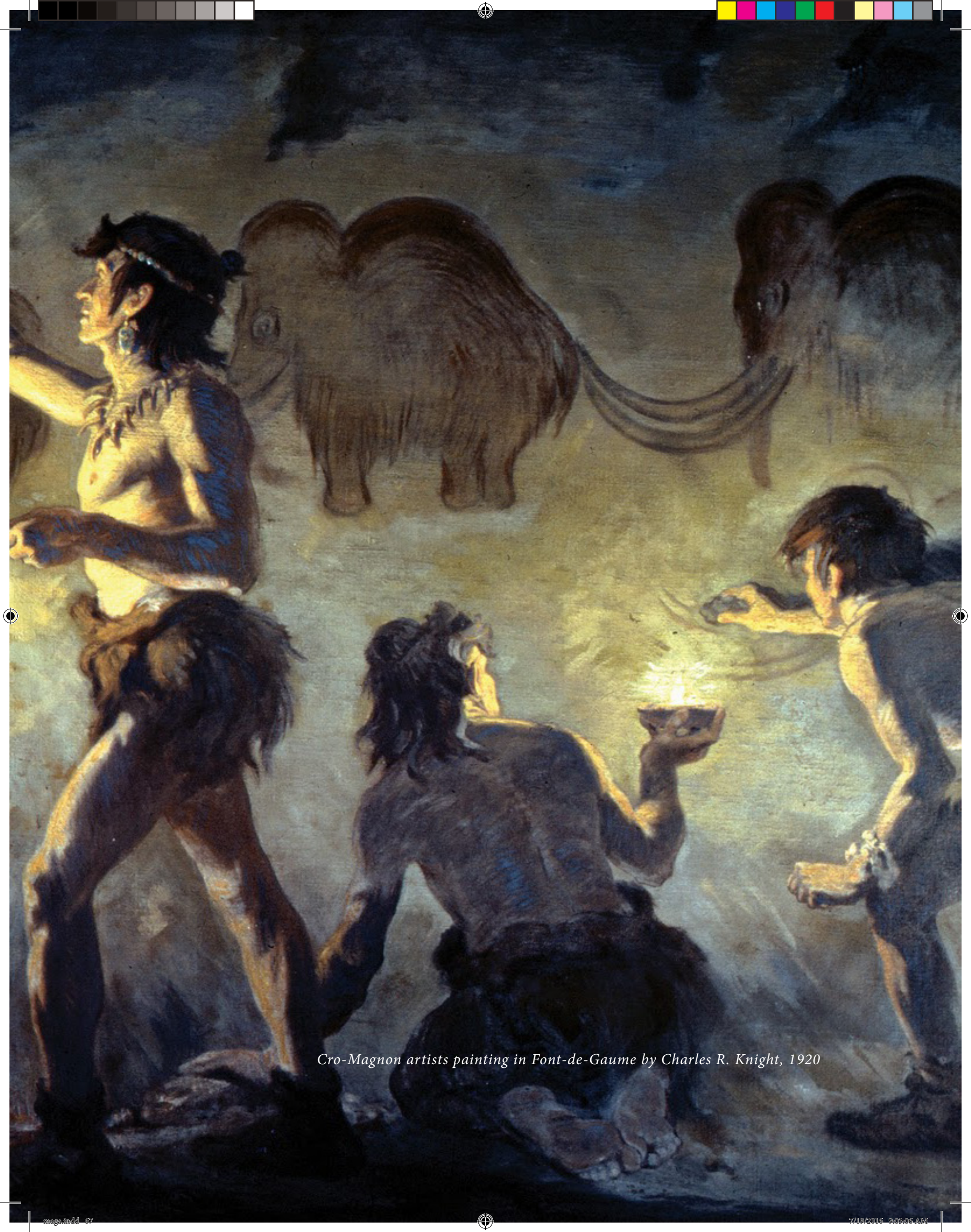
(2) *The eagles that fly can swim.*

The statement in (2) is a simple sentence with a subject, namely, The eagles [that fly], and a predicate or a comment on that subject, namely, can swim. Thus, if we consider a sentence to contain a subject and a predicate, then the only 'cut' in the sentence can be between fly and can, or as follows, showing the bipartite divisioning of a sentence:

(3)

*The eagles*      *can swim*  
[that fly]

This cut makes it obvious that can is associated with swim. Also, that is how we understand the sentence too – it is about the swimming ability of eagles that fly. Now, the puzzling question posed above will make sense: Why does the can associated as it is with swim, "move" all the way to the front in a question form such as (1)?



*Cro-Magnon artists painting in Font-de-Gaume by Charles R. Knight, 1920*

This puzzling question, a question that arises also out of curiosity, is not as well-known as the apple question; obviously, it didn't receive the kind of publicity that the Lincolnshire apple got in the 17<sup>th</sup> century. If curiosity and puzzlement is the stuff of scientific ideas, then this second puzzling question too should lead to scientific enquiry. And it did, along with many such puzzling questions, to the scientific field of study known as Linguistics, the so-called science of language. Answers to such puzzles led to equally revolutionary ideas – at least about the human mind – that may be considered to be of the same stature as the Universal Law of Gravitation, except that they never got the same publicity.

There are several reasons why certain ideas are highlighted in contrast to many other ideas in the history of ideas; however, that is not the topic of this column. Instead, through this column, I will try to bring to the fore the important yet neglected ideas generated in the field of scientific study of language and how they are connected to issues like the human mind or evolution.

### Peopling of the Northeast of India

The German word *Sprachbund* (pronounced as sprakhboond), indicates a linguistic area where a group of languages with common features co-exist; in fact, the common features arise out of coexistence. Within the Indian context, Murray Emeneau, a Canadian linguist, coined the phrase 'India as a linguistic area' in a paper published in 1956 with the same title, where he demonstrated the common features mostly across two, out of three 'major' language families, namely Dravidian (Kannada, Malayalam, Tamil, Telugu) and Indo-Aryan (Assamese, Bangla, Gujarati, Hindi, Marathi, etc.). The third major language family that Emeneau briefly considered in comparing with the other two is Munda or Austro-Asiatic (Khasi, Munda, Mundari, Santali, Sora, etc.). Of course he does mention that his description does not cover all the languages spoken in the geographical area including "...many languages of the Tibeto-Burmese group in the Himalayas and in Assam". Thus the Tibeto-Burman language family does not fall within Emeneau's demonstration of India as a Linguistic Area (IALA). In retrospect, this omission (for whatever valid reasons) ought to be considered to have been costly, as the only new feature that Emeneau himself pointed out in that paper is the construction of 'classifiers' (shown below in (4a) for Bangla – an IA language, where the classifier jon is used to classify humans) is also found in many Tibeto-Burman languages (as shown in (4b,c) for example, Boro – a TB language, where the classifier phang is used for trees and gang for flat things like leaves of trees, books, etc.):

- (4) a. tin-jon lok (Bangla)  
three-CLASS people  
'three people'
- b. thalir phang-se (Boro)  
banana CLASS-one  
'a banana tree'
- c. bilai gang-se (Boro)  
leaf CLASS-one  
'one leaf'

Emeneau's conclusion with regards to classifiers, that they have developed exclusively in IA and have impacted their growth in Dravidian and AA, is therefore incomplete, and I think, incorrect.

The problem with *Sprachbund* or IALA is that it has given rise to a dominant theme of looking for certain common features found across IA and Dravidian in other languages as well,

preventing us from seeking alternatives; our vision of relatedness between languages is coloured by the idea of a *Sprachbund*.

### Where is Tibeto-Burman in ‘India as a linguistic area’?

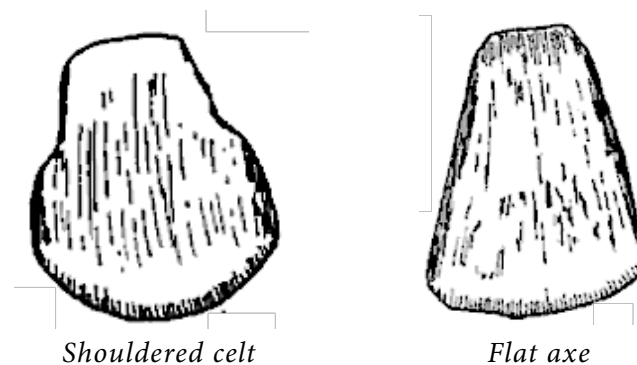
In 1923, Sylvain Lévi, in a article entitled *Pré-Aryen et Pré-Dravidien dans l’Inde* tried to show that some geographical names of ancient India can be explained by the morphological system of the Austro-Asiatic languages: “We must know whether the legends, the religion and the philosophical thought of India do not owe anything to this past. India has been too exclusively examined from the Indo-European standpoint.” Although, he has hit the nail on its head in the very last sentence above, however, just like Emeneau, his approach too ignored the TB language family, thus Tibeto-Burman does not find a place in the pre-Indo-Aryan India. If only scholars like like Lévi and Emeneau had taken an interest in TB languages as well, they would have been richly rewarded by considering an alternative history of migration and a different contact situation.

I want to consider these alternatives briefly here in this first instalment. In the context of migration into India of different groups of people speaking different tongues, Tibeto-Burman speaking people are shown to be the last one to arrive. The dominant narrative has either the Austro-Asiatic or the Dravidian to have either arrived the earliest or to have been the original settlers, followed soon by the Indo-Aryans from the North-West and finally the Tibeto-Burmans from the East. When did the Indo-Aryans really arrive in the land called India, is up for grabs, but the most conservative and scholarly estimate is that this intrusion happened roughly around 4000-3500 ya (years ago), i.e. 2000-1500 BCE (Before the Common Era).

Needless to add that this focus on northern India as the only worthwhile site to study in relation to ancient migrations has a political side too — resulting in the north-eastern regions being deprived of much needed state support for archaeological and historical research; excavations and scientific studies on objects excavated therefore remain far from complete.

### The North-Eastern Neolithic?

From the existing archaeological findings, restricted to surface collections and some limited excavations, it is in fact possible to consider the north-east to be the home of a typical north-east Neolithic population, distinct from the eastern Neolithic, an early estimate of which was wrongly set at 2000-1200 BCE since it was assumed that metal (for example, as a ‘wire-saw’) was required for the production of the most common tool types found, namely, shouldered or flat axes/ celts; all artefacts of the eastern Neolithic collected are however, stone tools (and rarely, some fossil wood) and corded pottery. The following are the most common types of stone axes found in the north-east region, as mentioned in *An Encyclopaedia of Indian Archaeology* by Amalendu Ghosh (2009:60) to have been found in the Garo hills:



However, a lack of potteries among the findings may be considered as not meeting the parameters of a Neolithic civilisation. Though the stone tools (including celts and axes as above) have been found in all districts of Assam, Garo, Khasi, and Jaintia Hills, Naga hills (especially where Sema and Lotha tribes reside), Manipur (Napachik, Canchipur, Khangkhui, Sekta), Arunachal Pradesh (Lohit, Siang, Kameng), and to a lesser extent in Mizoram and Tripura, pottery or potsherds have been found only in north Cachar Hills in Assam, Garo Hills, and also reported to have been found in Manipur.

The first excavation by an Indian team was done in *Daojali Hading* in north Cachar in Assam in 1961/63, which yielded, apart from shouldered and ground axes of various types, over 600 corded or incised potsherds (a prehistoric fragment of pottery). Corded pottery is pottery with cord impression, obtained by pressing cords on the material to create patterns, whereas incised pottery is obtained by cutting or scrapping into the material, the incised potsherds found in north Cachar had either crosshatch or herring patterns. Most of these potsherds are coarse, ill-baked, and handmade. Some typical finds are shown below along with a picture of the 1961 excavation (from S.K. Roy, 1977):



Corded Potsherds



Excavation at Daojali Hading (1961)

These finds firmly establish the northeast as Neolithic. Both the stone tools and the potsherds however bear remarkable resemblances to the ones found in the established Neolithic sites in Southwest China and Southeast Asia. *Daojali Hading* is therefore considered to be an extension of the 'Corded Ware Zone' of south and south-west China and the southeast Asia, as far as pottery is concerned. With regards to the grounded axes and shouldered celts too, (superior) versions of the same are found in the south and southwest Chinese Neolithic sites. Also, at least in the Naga Hills and in Arunachal, Neolithic axes made of jadeite were among the surface finds – a material which is locally unavailable – indicates import of tools/ material from Neolithic cultures in China, most probably in Sichuan in south China.

Recent excavations reveal that the earliest dates for many of these artefacts can be situated in fact in Indo-China (SE Asia), in particular to the Hoabinhian industry of Vietnam (12-11K BCE) and the Spirit caves in northeast Thailand, where corded pottery and grounded Neolithic stone tools like polished adzes were dated from 7000 BCE. The most conservative estimate of *Daojali Hading* cultural material is 5000-2000 BCE. However, considering various other opinions, the Northeastern Neolithic can be considered to be in existence somewhere between 7,000 and 2,000 BCE.

Now this puts the Northeastern Neolithic in much greater antiquity than any other Neolithic culture in India, including Mehrgarh, and certainly rest of north India, where the earliest sign was of the aceramic culture of Burzahom in Kashmir in 2800-2500 BCE (perhaps indicating a later date of migration into India of Tibeto-Himalayans as opposed to the Tibeto-Burmans in the northeast, but more on that story in the next instalment). In fact, even the Northern Neolithic (as in Kashmir) is, by most accounts, anterior to early Indo-Aryan invasion (1700-1400 BCE) and is considered to be

contemporaneous to the Dravidian Harappan civilization (as reported in G. van Driem, 1998). So, in all likelihood, the northeast was already peopled by Neolithic culture by 7-6,000 BCE.

### The Importance of Rice

A more holistic definition of Neolithic is entertained by M.B. Mitri (2008) in his doctoral dissertation, where a shift in the mode of subsistence to agro-based farming is considered as a confirmation of a Neolithic culture. In fact, a shift to a more “tamed” lifestyle, in terms of stable settlement, or a separation of the wild from the domestic, is the surest hallmark of a Neolithic culture. It is no wonder therefore that stone axes and potsherd were the prominent finds of the Northeast Neolithic, as farming, cultivation, or house building all make use of these axe-type tools and a domesticated life through cooking needs (clay) pots. But what will they cook?

The vast expanse of the green and brown waterlogged paddy fields that I spot as our plane lowers to land in Imphal during every autumn or spring, have a great place in the story that I am narrating about peopling of the northeast. In the rice scholarship, a long lasting debate has been going on with regards to the source of the cultivated rice variety *Oryza sativa*; roughly three sources have been proposed, Yangtze valley in China, southeast Asia, and northeast India. However, the Northeastern Neolith, discussed above, has not yielded any evidence of rice cultivation as yet, neither have Yunnan or southwest China in general.

There is linguistic evidence to claim that all branches of Austroasiatic languages, supposedly having their original homeland in SE Asia, have a large list of reconstructible roots representing rice which qualifies them as original cultivators of rice:

- Rice plant *\*(kə)ba:ʔ*
- Rice grain *\*rəŋko:ʔ*
- Rice outer husk *\*cəŋka:*
- Rice inner husk *\*kəndaŋ*
- Rice bran *\*phe:ʔ*

*A list of rice-related expression in Austroasiatic languages (G. Diffloth, 2005)*

However, as long as the actual homeland of Austroasiatic speakers is not agreed upon, SE Asia cannot be set as the geographic location of early rice cultivation. However, phytolith (silica deposits in plants) studies indicate rice cultivation as early as the 4500 BCE in north and central Thailand, but evidence of domesticated rice in Thailand using macroremains dates to 2000–1500 BCE in the coastal site of Khok Phanom Di (C. Castillo, 2011).



“*Oryza sativa* at Kadavoor”  
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On the other hand, wild rice husks and phytoliths have been found in Yunchyan and Xianrendong caves in middle and lower Yangtze valley in China, respectively, indicating wild rice collection in the region during terminal Pleistocene (9700 BCE). Incidentally, world's oldest pottery too was discovered at these caves, dating to as early as 18K-17K BCE. In fact, pottery tempered with rice husks have been reported from Pengtoushan site in Hunan province – another middle Yangtze province. The cord-marked potteries of this site have been dated 7500-6100 BCE, and have been found among burial goods. Cooked rice have been found from a pot in the famous site of Hemudu, dated around 5000 BCE. The fact that Hemudu falls within Zhejiang province in the far-east coast of China shows that rice cultivation and domestication most probably travelled eastward from middle Yangtze, having begun there around 6500 BCE. The important sites in the course of the river are shown on the right.

Interestingly, it has been conjectured that Hemudu was peopled by Austronesian population and not Han Chinese. There is also independent evidence to show that there was movement of Autoasiatic tribes up and down the Mekong valley from southeast Asia to China. Such



Figure showing sites where ancient rice remains were found.

*Terrace rice fields in Yunnan Province, China by Jialiang Gao*

dispersals quite possibly relate to the early entry of Tibeto-Burmans into northeast India along with their rice-cultivation and domestication skills.

But where did they come from?

### **Are my wife and our domestic help related?**

Here is my wife Dr Haobam Basantarani from Imphal, Manipur on the left below and our domestic help Poonam from Rampur, UP on the right:



Are they related? Of course this suggestion will be considered ridiculous, not only by the persons involved, but also by most other people. Yet, I do not think that this is an outrageous suggestion. They could very well be a part of the same gene pool that may have defined the Tibeto-Burman *Urheimat* (original homeland) in some hoary past in some place in the Sichuan province of China flanked by the yellow river on the North and the great Yangtze on the South. And there is good evidence that this is not just a figment of my imagination. However, I will leave this interesting trail here and come back to it in the next instalment.

#### NOTES

*This is a shorter and a non-technical version of a presentation made by the author entitled "Dravidian - Tibeto-Burman similarities: Is there a third group involved" as the lead paper for a Panel on Dravidian-Tibeto-Burman languages at the 36<sup>th</sup> ICOLSI held at the University of Kerala, Thiruvananthapuram, on 2<sup>nd</sup> Dec 2014.*