THE OUT-OF-INDIA THEORY
THE LINGUISTIC CASE

Shrikant Talageri
Feb 2012, IITB
The AIT is based wholly and solely on the theory that the original homeland of the IEs was somewhere outside and far to the west of India, most popularly in South Russia. And this theory also, like the Sanskrit-origin hypothesis, “is not based on ‘hard-core’ linguistic evidence such as sound changes, which can be subjected to critical and definitive analysis”, but wholly and solely on “arguments based on plausibility and simplicity” (Hock).

And, as we saw, every single one of these arguments is in fact actually based on naïve and simplistic notions rather than on simple logic, and examination shows that they actually go against all principles of plausibility.

Further, in examining the arguments, all kinds of linguistic evidence is uncovered which in fact makes a strong case for an Indian homeland: the evidence of place and river names in north India (especially in the greater Punjab region, which is the Harappan as well as Vedic area), the evidence of the one-way Uralic borrowings, the evidence of Indian and Central Asian animal names in the European IE languages, etc.
But Hock insists that there is one category of evidence which proves that India was not the original homeland: the evidence of the isoglosses. An isogloss is an area within which all the languages develop certain common features. These features are also called isoglosses.

- Thus the Dravidian languages of South India and certain contiguous Indo-Aryan languages (Konkani, Marathi, Gujarati, Oriya) share a common feature: a distinction between a dental /l/ and a cerebral /l/, missing outside this area.
- Within this area, Tamil and Malayalam in the extreme south alone share a third variety of /l/ (written as zh in English).
- Marathi, Konkani, Telugu and some northern Kannada dialects alone share a distinction between a hard /ch/ and a soft /ch/ (ts) sound.

A shared isogloss is evidence of contiguity or of sharing a contiguous area, and when languages migrate from one area to another, earlier isoglosses retained by them can help in arriving at conclusions about their earlier areas.

The isoglosses shared by different IE branches can help in deciding which branches were in contiguous areas before they dispersed in different directions.
Hock takes up a list of IE isoglosses:

1. The preterital augment: Greek, Armenian, Iranian, Indo-Aryan.
2. *m* cases, merger of *a* and *o*: Germanic, Baltic, Slavic.
7. tt>tst>st: Baltic, Slavic, Greek, Armenian, Iranian.
8. tt>tst>ts>ss: Italic, Celtic, Germanic.
10. tt>tst: Hittite.
Hock arranges the different dialects of IE languages (equivalent to the later branches) in a “dialectological arrangement” which shows the different dialects in a relative geographical position (to each other) in the homeland, such as to be able to explain every single one of these isoglosses as being the result of contiguous proximity of the dialects which share that isogloss before their separation and dispersal from the homeland (see next slide).

And he finds that this dialectological arrangement coincides exactly with “the actual geographical arrangement of the Indo-European languages in their earliest attested stages” after their separation and dispersal from the homeland (Hock) (i.e. Indo-Aryan to the extreme south-east, etc.).

This, according to Hock, shows that “Proto-Indo-European was spoken somewhere within a vast area ‘from East Central Europe to Eastern Russia’... [and] that the Indo-European languages by and large maintained their relative positions to each other as they fanned out from the homeland”.

Figure 1. Hock’s Dialectological Arrangement

- Old Prussian
- Lithu-Latvian
- Slavic
- Germanic
- Celtic
- Italic (Latin)
- Greek
- Armenian
- Iranian
- Indo-Aryan
- Tocharian
- Hittite
- Luwian

Legend:
- preterital augment
- n cases; merger of a and o
- dividing line, Gen./Abl. merger
- Ruki, satem-assibilatation, core area
- Ruki, satem-assibilatation, transition area
- merger of velar and labiovelar
- merger of velar and palatal
- tt > tsth > st
- tt > tsth > ts > ss
- tt > tsth > tt (or tt reintroduced)
- tt > tsth (remains)
Hock argues against the OIT as follows:

- “To be able to account for these dialectological relationships, the ‘Out-of-India’ approach would have to assume, first, that these relationships reflect a stage of dialectal diversity in a Proto-Indo-European ancestor language within India..."
- [Further ] what would have to be assumed is that the various Indo-European languages moved out of India in such a manner that they maintained their relative position to each other during and after the migration.
- However, given the bottle-neck nature of the route(s) out of India, it would be extremely difficult to do so. Rather, one would expect either sequential movement of different groups, with loss of dialectological alignment, or merger and amalgamation of the groups, with loss of dialectal distinctiveness.
- Alternatively, one would have to assume that after moving out of India, the non-Indo-Aryan speakers of Indo-European languages realigned in a pattern that was substantially the same as their dialectological alignment prior to migration — a scenario which at best is unnecessarily complex and, at worst, unbelievable.”
However, there are two very basic flaws in Hock’s arguments:

1. Hock’s assumption, that the OIT (PIE-in-India) hypothesis would have to assume that all this “dialectal diversity” took place in the “Proto-Indo-European ancestor language within India” and that “the various Indo-European languages [consequently] moved out of India in such a manner that they maintained their relative position to each other during and after the migration” in spite of the “the bottle-neck nature of the route(s) out of India”, is totally misplaced.

As per the OIT, the diversity in the Proto-IE ancestor language did not take place “within India”. It took place over a large area covering north-western India, northern Pakistan, Afghanistan and Central Asia after the major dialect groups had moved out of the “bottle-neck” in two stages:

a) first the Druhyu had already moved out of the bottle-neck into Afghanistan in a pre-Rigvedic era
b) later the Anu had expanded into Afghanistan in the earliest Rigvedic period, pushing the Druhyu into Central Asia in phases.

All this dialectal diversity, and all the different isoglosses, developed during these two stages.
2. In fact, Hock’s dialectological arrangement is itself flawed. Firstly it ignores many important isoglosses, and only takes into consideration those isoglosses which can be mapped out in contiguous areas when the dialects are arranged as per “the actual geographical arrangement of the Indo-European languages in their earliest attested stages” after their separation and dispersal from the homeland.

Secondly Hock excludes the Tocharian branch from his arrangement on the ground that “it is difficult to find dialectal affiliation” for it.

If all the isoglosses are taken into consideration, and Tocharian counted, Hock’s claim falls flat. It becomes clear that it is in fact impossible for the relative positions of the dialects in the homeland to coincide with “the actual geographical arrangement of the Indo-European languages in their earliest attested stages”.

However, all the isoglosses can be explained as having developed in different phases as the different dialects moved out of the original homeland, and, in fact, it is only the Indian homeland theory which can explain all the isoglosses.
As per the linguistic evidence, early IE dialects dispersed from the PIE homeland in the following order: Anatolian (Hittite), Tocharian, Italic, Celtic, Germanic, Baltic and Slavic.

Those which remained in the homeland after their dispersal were the Albanian, Greek, Armenian, Iranian and Indo-Aryan dialects.

Gamkrelidze presents in detail the general schedule of isogloss formation, but he tries to avoid (for obvious reasons, as we will see) the schedule of dialect dispersals implied in this schedule of isogloss formation. Here we will present his words, but with their correct implications:

Anatolian was the first dialect to exit the homeland: “The first historically established split of dialect connections ... [took place] between... the Anatolian languages... and the remainder of the proto-Indo-European area... [There were some fundamental] structural innovations carried out through the entire area except for Anatolian... These structural innovations affecting all languages but Anatolian imply a long period of joint development of an Indo-European linguistic territory... [and] a long period of independent development for Anatolian, with no interaction with the other dialects” (Gamkrelidze).
Tocharian was the second dialect to exit from the homeland. All the other dialects continued to remain in the homeland. Most of the common PIE cultural, religious and technological features developed during this stage.

Italic and Celtic were the next two dialects to exit the homeland.

These dialects clearly exited into a neighbouring area which functioned as a secondary homeland outside the exit point of the original homeland, as there were now "two major dialect areas: Area A, comprising Anatolian-Tocharian-Italic-Celtic, and Area B, comprising Indo-Iranian-Greek-Balto-Slavic-Germanic" (Gamkrelidze).

These two dialect areas functioned independently: "structural innovations appeared in Area A which united all of its dialects in opposition to those of Area B" (Gamkrelidze).

Likewise, "in Area B, we can distinguish several isoglosses which affect almost the entire dialect area" (Gamkrelidze).
But Area B was also divided into two distinct sub-areas of “dialect groups in which Indo-Iranian-Greek-Armenian were united as against Balto-Slavic-Germanic. The dialect boundary is clearly reflected in the distribution of isoglosses” (Gamkrelidze).

But sometimes some isoglosses which developed in, and spread over, one particular area or sub-area, could also spill over into a dialect in the neighbouring area or sub-area: “A structural trait that arose somewhere near the major dialect boundary spread across that boundary to affect a region at some distance on the other side... It was still a single linguistic system, subdivided into interacting dialect regions” (Gamkrelidze).

This is basically the general linguistic schedule of formation of the IE isoglosses as the dialects dispersed from the homeland, wherever that homeland be situated. But does it fit into any and every homeland theory?

It will be seen that right from the first step, of identifying the exact geographical locales of Areas A and B, and the two main sub-areas of Area B, all other homeland theories are left clueless.
Gamkrelidze is an advocate of an Anatolian homeland theory. Therefore he can not have the Anatolian branch itself exiting Anatolia, which is its later historical habitat. Hence he simply denies any migration of Anatolian, and locates both Area A and Area B within the original homeland itself.

He simply ignores the fact that this just does not fit in with his own description of the exclusion of Anatolian from participation in the “long period of joint development of an Indo-European linguistic territory”, nor account for the “long period of independent development for Anatolian, with no interaction with the other dialects”.

Likewise, Hock, who advocates a homeland “within a vast area ‘from East Central Europe to Eastern Russia’” where “the Indo-European languages by and large maintained their relative positions to each other as they fanned out from the homeland”, can not explain how Tocharian on the one hand, and Italic and Celtic on the other, could have been in the same area within the homeland and have maintained their relative positions as they fanned out: Tocharian is in the extreme east and Italic and Celtic are in the extreme west. Hence he simply ignores the Tocharian branch in his scenario.
In fact, all the other homeland theories face problems right from the very first step of identifying the exact geographical location (on a map) of the original homeland, or its Area A and Area B, or the sub-areas of Area B, in the absence of any linguistic, textual or archaeological basis on the spot for any such identifications. The second step, of identifying the paths taken by the migrating dialects from such identified locations to their earliest known historical habitats, is even more fraught with uncertainty, logistical difficulties, and lack of evidence. The Indian homeland theory, on the other hand, has textual evidence on its side for identifying the concerned areas and sub-areas of the homeland where the isoglosses were formed, and very strong logistical logic and linguistic evidence for the paths taken by the migrating branches from the homeland to their earliest known historical habitats. The OIT in fact explains every single linguistic factor involved in the problem, most of which are simply ignored by other homeland theories since they are insoluble in their scenarios.
In the pre-Rigvedic period itself, the IE dialectal groups had spread all over the area which could be called Area B of the OIT homeland:

- a) the Druhyu (ancestors of the Anatolian, Tocharian, Italic, Celtic, Germanic, Baltic and Slavic dialects) were settled in Afghanistan,
- b) the Anu (ancestors of the Albanian, Greek, Armenian and Iranian dialects) were settled in the Sapta Sindhu area or present day northern Pakistan, and
- c) the Puru (the Vedic Indo-Aryans) were settled in and around Haryana.

All this area was Area B of the OIT, with two sub-areas, Afghanistan and northernmost India.

Area A of the OIT was Central Asia to the north of Afghanistan.

Different linguistic innovations took place among the different IE dialects in Areas A and B in the course of the gradual evolution and expansions/migrations of the different dialectal groups.
THE IE DISPERSALS - STAGES ONE AND TWO

- **In stage one**, in a very early period, the first migrating dialect, Anatolian, had exited into Area A (northern Central Asia).
  + All the dialects in Area B, i.e. all the other dialects remaining in Area B after the departure of Anatolian, developed the following isoglosses in common:
    - 2. Instrumental plural masculine *-ois.

- **In stage two**, Tocharian was the second IE dialect to exit from Afghanistan into Area A or Central Asia.
  + All the other historical dialects of IE, which continued to remain in Area B to the south, developed in the course of time all the common features of PIE mythology, religion, technology and culture reconstructed by linguistic and cultural studies.
Stages 1 and 2 of IE dispersals
In stage three, Italic and Celtic, in that order, also exited into Central Asia. Anatolian, meanwhile, had settled down in the western part of Central Asia (western Turkmenistan) while Tocharian had settled down in the eastern part (Kyrgyzstan).

The dialects in Area A developed the following isoglosses:
1. The relative pronoun *khois: Anatolian, Tocharian, Italic.
2. Thematic genitive in -*ī: Tocharian, Italic, Celtic.

The dialects in Area B developed the following isoglosses:
1. Middles in *-oi/*-moi: All the dialects.
2. Comparison of adjectives in *-thero, *-is-tho: Germanic, Greek-Iranian-Indo-Aryan.
All the dialects in Area B-1 (Germanic-Baltic-Slavic) developed the following isoglosses:

1. Thematic genitive in *-ō: All the dialects.
2. Genitive-ablative merger: All the dialects.
3. Oblique cases in *-m-: All the dialects.
4. Merger of *a and *o: All the dialects.

All the dialects in Area B-2 (Albanian-Armenian-Greek-Iranian-Indo-Aryan) developed the following isoglosses:

1. Thematic genitive in *-(o)syo: All the dialects.
2. Oblique cases in *-bhi-: All the dialects.
3. Athematic and thematic aorists: All the dialects.
4. Augmented forms: All the dialects.
5. Reduplicated presents: All the dialects.
6. The prohibitive negation *mē: All the dialects.
7. Conversion of *s>h of *s before vowels, of intervocalic *s, of *s before and after certain sonants, but not of *s before or after a stop: All the dialects except Albanian and Indo-Aryan.
Stage 3 of IE dispersal
In stage four, the Germanic dialect also exited into Central Asia.

The dialects in Area A developed the following isogloss:

1. The alteration of dental clusters at morpheme boundaries: *tt > ss: Italic-Celtic-Germanic.

The dialects in Area B developed the following isoglosses:

1. The alteration of dental clusters at morpheme boundaries: *tt > st: Baltic-Slavic, Albanian-Greek-Armenian-Iranian. [Indo-Aryan alone retained the original *tt].
3. The “Ruki” rule: Baltic-Slavic (transitional area), Armenian-Iranian-Indo-Aryan (core area).
Stage 4 of IE dispersal
The IE Dispersals: Stage Five

- In stage five, the Baltic dialect also exited into Central Asia pushing the Druhyu migration chain (Italic-Celtic-Germanic) further northwards.

- The Slavic dialects were the last of the Druhyu dialects to remain in Afghanistan for a short period. This must have been the period around the start of the composition of the old books of the Rigveda.
  + Cognate forms of certain words peculiar to the Rigveda (and the Avesta) are found outside Indo-Iranian only in Slavic (krshna, shyava, bhaga, etc.).
  + Also, the root -druh in Baltic and Slavic has exactly the opposite meaning (friend) that it has in Iranian and Indo-Aryan (enemy).
  + Gamkrelidze also refers to "lexical evidence" for "closely interacting areas of satem languages which coincide with the Armenian-Indo-Iranian and Balto-Slavic areas" (Gamkrelidze).

- The following minor isoglosses show linguistic proximities between these groups (Slavic, Iranian-Indo-Aryan):
Stage 5 of IE dispersal
In stage six, the Slavic dialect had also migrated northwards into Afghanistan, in the wake of the trail of the other Druhyu dialects moving northwards through Central Asia and then westwards on the path that would lead them to Europe.

In Area A, where the Anatolian and Tocharian dialects were still settled to the west and the east respectively, Slavic developed the following isoglosses:

1. Modal forms in *-l-: Anatolian, Tocharian, Baltic-Slavic, Armenian.
2. Middle present participle in *-mo-: Anatolian, Baltic-Slavic.

The oldest books of the Rigveda were being composed in this period, and the Battle of the ten kings had started the exodus of major Anu Iranian groups from the Greater Punjab into Afghanistan.

The major non-Iranian groups among the Anu, i.e. the Shimyu, Alina and Bhrgu, continued expanding or migrating westwards from a more southern (to the Druhyys) route.
Stage 6 of IE dispersal
It will be seen that Armenian-Phrygian, belonging to Area B, is the only dialect in Area B to be occasionally affected by isoglosses of Area A.

It was probably the northernmost border dialect of Area B, somewhere to the immediate south of Tajikistan, and therefore was affected by any “structural trait that arose somewhere near the major dialect boundary” in Area A and “spread across that boundary” (Gamkrelidze).

[This middle location also explains the universal presence of the Phryge in every IE tradition: IA Bhrgu, Greek phleguai, Celtic Brigit, Germanic Bragi].

Likewise, within Area B, some isoglosses are found at every stage cutting across parts of the two sub-areas.

This is because Area B “was still a single linguistic system, subdivided into interacting dialect regions” and “the presence of shared structural features in dialects belonging to different dialect subgroups [i.e. sub-areas] of Area B... can be interpreted as reflecting geographically adjacent positions for these dialects” (Gamkrelidze).
The OIT schedule of formation of the different IE isoglosses, and of the dispersals of the IE dialects from India in the course of formation of these isoglosses, explains all the isoglosses effectively, and in geographical perspective, which no other homeland theory is able to do.

Further, as we saw, it is not just a theory concocted out of thin air, it is actual recorded history, recorded in the historical traditions of India and backed by the textual evidence of the data in the Rigveda and the Avesta.

This scenario is fully supported by linguistic evidence, and itself explains linguistic anomalies or factors unanswered by other homeland theories, in all the three categories of dialects:

1. The Early dialects (Anatolian, Tocharian).
2. The European dialects (Italic, Celtic, Germanic, Baltic, Slavic).
3. The Last dialects (Albanian, Greek, Armenian, Iranian).
The two early dialects (Anatolian and Tocharian) can be explained only by the OIT:

1. The OIT scenario requires minimum movement from an Indian homeland for the two earliest dialects after moving out northwards from Afghanistan:
   - the historically attested area of Tocharian is in Sinkiang to the immediate northeast of Central Asia, and the historically attested area of Anatolian is Eastern Turkey into which it is known to have entered from the northeast around the Caspian Sea, which is to the immediate west of Central Asia.

2. The presence of the two is recorded in Indian texts as the two great tribes of people living to the north of the Himalayas:
   - the Uttara-Kuru and the Uttara-Madra.
   - Uttara-Kuru is clearly a Sanskritization of the self-appellation of the Tocharians: Tokhru, preserving what Henning calls “the consonantal skeleton (dental + velar + r) and the old u-sonant [which] appears in every specimen of the name”.
   - Uttara-Madra is therefore clearly a name for the Anatolians to the west of the Tokharians on the analogy of the Madra to the west of the Kuru within India.
3. The Hittites record a clue to their earlier proximity to India.
   + The only recorded leftover religious myth in Hittite mythology is the myth of a God Inar killing the Great Serpent who attacked the weather-god.
   + This is clearly a reference to the Vedic Indra killing Vrtra, the great serpent who prevents or withholds the rainfall.
   + Indra is a purely Indo-Aryan name unknown to any other IE mythology (except the rival Iranian, where Indra is converted into a demon).
   + The Larousse Encyclopaedia of Mythology actually describes Inar as “a God who had come from India with the Indo-European Hittites”.

4. Finally, there is racial evidence that the Hittites migrated into Turkey from the east and not the west:
   + “While... they spoke an Indo-European language, their physical type is clearly Mongoloid, as is shown by their representations both on their own sculptures and on Egyptian monuments. They had high cheek-bones and retreating foreheads” (Carnoy, in Journal of the American Oriental Society, 1919), a fact which has been consistently ignored.
In the case of the European dialects (Italic, Celtic, Germanic, Baltic, Slavic), there is overwhelming linguistic evidence for their migration towards Europe from the direction of Bactria-Margiana in Central Asia (immediately to the north of Afghanistan):

1. The European dialects share isoglosses with both, the early dialects (Anatolian, Tocharian) as well as the late dialects (Albanian, Greek, Armenian, Iranian, Indo-Aryan).

   But Iranian and Indo-Aryan do not share a single linguistic isogloss with either Anatolian... [“It is significant that the Anatolian languages give no evidence of contact with Indo-Iranian or vice versa” (Gamkrelidze)]

   ... or Tocharian [“There are words demonstrating the affinity of Tocharian with some or all of the ancient European languages but not with Indo-Iranian” (Gamkrelidze)].
The historical Iranian and Indo-Aryan languages are to the extreme south-east of the IE world, while the historical European languages are to the extreme west.

Anatolian is to the south and Tocharian to the east. If, as per Hock’s arrangement, all these IE dialects were “maintaining their relative positions to each other as they fanned out from the homeland” in a central location “East Central Europe to Eastern Russia” (Hock), their positions as dialects in the homeland would also be the same.

So the early dialects in the south and east should have developed many isoglosses with Indo-Iranian in the south-east but none of the three should have developed any with the European languages in the north-west, whether within the homeland or “as they fanned out”.

But the facts are exactly the opposite. This proves that Hock’s homeland theory is not only not “simple and plausible”, it is simply wrong.
On the other hand, as per the OIT,
the early dialects had migrated northwards into Central Asia in very early times, and settled down in the east and west of Central Asia.
The European dialects also migrated northwards after them, and developed isoglosses with the early dialects during their sojourn in Central Asia before migrating westwards later.
The Iranian and Indo-Aryan dialects remained in the areas to the south-east of Afghanistan throughout the formative stages, and did not pass through Central Asia till much later in historical times. So they did not develop any linguistic isoglosses with the early dialects.
So the formation or non-formation of isoglosses by other dialects with the early dialects can be explained only by the OIT.

2. The migration of the European dialects from Bactria-Margiana to Europe is proved by voluminous and positive linguistic evidence to this effect, as shown in the sophisticated and detailed two-volume linguistic study of the subject by Nichols entitled “The Epicentre of the Indo-European Linguistic Spread”.
Nichols’ description of the linguistic process reads like a description of the Druhyu dialects moving one-by-one into Central Asia through Bactria-Margiana and then moving west:

“The vast interior of Eurasia is a linguistic spread zone... where... a single language or language family spreads out over a broad territorial range...

The central Eurasian spread zone, as described in Volume II, was part of a standing pattern whereby languages were drawn into the spread zone, spread westward, and were eventually succeeded by the next spreading family.

The dispersal for each family occurred after entry into the spread zone.

The point of dispersal for each family is the locus of its proto-homeland, and this locus is eventually engulfed by the next entering language... the locus of the IE spread was somewhere in the vicinity of ancient Bactria-Margiana” (Nichols).

[Nichols is not an OIT writer. Elsewhere she refers in passing to the Aryans “spreading into northern India”, but does not give, or claim to give, any evidence for this, since her own study does not provide any such evidence].
Nichols’ detailed study includes detailed linguistic evidence of different kinds:

- The structure and distribution of the IE languages:
  - “The structure of the family tree, the accumulation of genetic diversity at the western periphery of the range, the location of Tocharian and its implications for early dialect geography, the early attestation of Anatolian in Asia Minor, and the geography of the *centum-satem* split all point in the same direction: a locus in western central Asia” (Nichols).
  - Nichols also examines loan words from West Asia (Semitic and Sumerian) in IE languages, and in other language families like Caucasian which transmitted many of these words into IE, and the mode and form of transmission of these words into the IE family as well as its particular branches, and combines this with the evidence for the spread of Uralic and its connections with primitive IE. This examination shows that all “the long-standing westward trajectories of [the] languages point to an eastward locus... in the vicinity of ancient Bactria-Sogdiana” (Nichols).
3. A Chinese scholar, Tsung-tung Chang, on the basis of linguistic studies of the relationship between Old Chinese vocabulary and the etymological roots of proto-IE vocabulary, concludes that there was a very strong IE (particularly proto-German) influence on Old Chinese vocabulary, and concludes: “**Indo-Europeans had co-existed for thousands of years in Central Asia... (before) they migrated into Europe**” (Chang).

- This is confirmed by Gamkrelidze and Ivanov, who trace the movement of IE dialects from Central Asia to Europe on the basis of linguistic contacts with other language families and mutual borrowings with Old Chinese, Yeneseian and Altaic languages in Central Asia, in a section in their book entitled:
  - “The separation of Ancient European dialects from Proto-Indo-European and the migration of Indo-European tribes across Central Asia”.

- The evidence for the European dialects migrating through Central Asia is so compelling that they find it necessary to show the ancient European dialects first migrating eastwards to Central Asia from their proposed Anatolian homeland, before turning them around again to take them to Europe!
The last dialects to leave India in the period of the old books of the Rigveda were Albanian, Greek, Armenian and Iranian. The first three migrated far westwards out of the Indian horizon, but Iranian, in the period of the new books continued to be in neighbouring Afghanistan and continued to develop a common culture with India.

The voluminous textual evidence for Iranian has been seen. The linguistic evidence is the common linguistic culture of the new books, which proves that the Avesta was composed in the period of the new books.

So far as the other three dialects are concerned, the close linguistic relations between Iranian (and, to only slightly less an extent, Indo-Aryan) and these three dialects makes the Iranian evidence apply to them as well, especially since the evidence shows that the pre-Avestan Iranians were inhabitants of areas further to the east of the Avestan area.

But there is some other linguistic evidence to show that they migrated westwards, by a more southern route as compared to the European dialects:
1. The three last dialects have left a trail of their names from the Punjab to their historical habitats:
   a) the names of the Rigvedic Shimyu, Alina and Bhrgu of the Punjab (in the Battle of the ten kings), and Sairima in the Avesta,
   b) the historical names of the Iranianized Sarmatian and Alan people to the north and north-east of the Black Sea, and the semi-Iranianized Armenians (related to the Phrygians) to the south-east of the Black Sea, and
   c) again (in the same order), the earliest names of the Sirmio (Albanian) and Hellene (Greek) people to the west of the Black Sea, and the Phryge (Phrygians) to the south west of the Black Sea.
   Notably, the name Alina in the Rigveda is a non-Indo-Iranian name, since in the old Rigveda, as well as the Avesta as a whole, the IE *l (retained in Greek) had become r.
2. No linguistic studies have been carried out (comparable to Nichols’ study for the European dialects) to show the linguistic trail of these three dialects from India to the west. But the following example shows what such a study will indicate.

- An important word borrowed by IE languages from West Asian languages is the word for “wine”: viticulture and wine-making originated in West Asia (c.f. ancient Egyptian wnš, “grape, wine”): “The wide distribution of phonetically similar words meaning ‘wine’, ‘grape’ among various linguistic groups of the Near East... (Indo-European, Semitic, Kartvelian) indicates the extreme antiquity of the migratory term, which must have passed from one language to another at a protolanguage level.” (Gamkrelidze).

- The distribution of variants of the word in the different IE branches gives a break-up exactly in line with the three groups of IE dialects, and their positions vis-à-vis the wine lands of West Asia: this word is totally missing only in the IE branches located to the east of these lands.
Among the early dialects, it is derived from a reconstructed form *\textit{wi(o)no}. It is found in Anatolian, but totally missing in Tocharian.

Among the European dialects, it is found among all the branches (Italic, Celtic, Germanic, Baltic, Slavic) derived from a reconstructed form *\textit{weino}.

Among the last dialects, it is found in Albanian, Greek and Armenian, derived from a reconstructed form *\textit{woino}, but is totally missing in Iranian and Indo-Aryan.

If the “Near Eastern” word had been borrowed by PIE in the homeland, it would have been found in all the IE branches, or in a mixed or miscellaneous group of branches. But it is clearly found in every single branch in or to the west of the wine lands of the Near East, but totally missing in the only three branches which are to the east of these wine lands.

This proves that the proto-IE homeland was well to the east of the wine lands of the Near East, which is why the branches which remained in the east did not borrow this word at all, while branches which moved to the west and passed by these lands by three different routes in their westward migration separately borrowed three different variants of the word.
3. In the case of Greek, at least, Gamkrelidze records “the existence in Greek of a lexical stratum of Kartvelian (South Caucasian) origin” (Gamkrelidze).

- This includes the names of various words connected with vegetables, animals, topographic features, tools, social relations, etc.
- Gamkrelidze unambiguously concludes: “The numerous lexical resemblances between Greek and Kartvelian, found precisely among the ‘pre-Greek’ words of non-Indo-European origin, are to be interpreted as showing that a number of Kartvelian words were borrowed by Greek… somewhere in the Near East during the Greek migrations from the proto-homeland westward to historical Greek territory… some… prehistoric borrowings from Greek into Kartvelian… show that the Greek-Kartvelian borrowings went in both directions” (Gamkrelidze).
- Thus the linguistic evidence for the movement of the last dialects westwards from India by a more southern route (to that of the European dialects), through West Asia, is clear and unambiguous.
The dispersal of the non-Indo-Aryan dialects of IE from India is **textually recorded**, and this textual account is fully supported by all the linguistic evidence.

But *how deep back* in time and space do the linguistic roots of PIE go inside India?

- The common Indo-Iranian culture of the *new books* of the Rigveda, dated on the *evidence* of the Mitanni records, goes back deep into the third millennium BCE. The *beginning* of the *old books* therefore goes back at least into the very early third millennium BCE or the late fourth millennium BCE: the very period estimated by linguistic analysis to be the period of the break-up and dispersal of the IE dialects.

- The geographical data in the Rigveda shows that, at this date as early as the late fourth millennium BCE at least, which is also the linguistically estimated date for the break-up and dispersal of the IE dialects from the homeland, the Vedic Indo-Aryans were inhabitants of an area (a *very much* “Aryan” area, with IE river-names, and no trace of any non-IE languages or language-speakers in the area itself) in Haryana and east, with *no* knowledge of areas to the west.

- The evidence that India was the PIE homeland just *cannot* be challenged.

- Is there need for any more linguistic evidence to corroborate the textual evidence showing that the earlier roots go back even deeper into India?
Whether there is any need or not, such evidence is available showing that the roots go back deeper in time and deeper into India itself!

- The Rigveda refers to its easternmost river, Ganga or Jahnavi, in the two oldest books, 6 and 3, and in the reference in III.58.6, actually refers to the banks of the Jahnavi as the “ancient home” of the Gods.

- The linguistic evidence also supports this textual reference pointing to pre-Rigvedic roots deeper inside India:

1. An isogloss common to the IA (including Mitanni IA) and the Iranian dialects is the merger of PIE */l* into *r*: “all of Indo-Iranian tended to confuse *r* and */l*... Every IE */l* becomes *r* in Iranian... and ... in the Rigveda” (Meillet). “The Vedic dialect, like the Iranian, is an *r*-only dialect in which the Indo-European */l* merged into *r*... all three groups – the Proto-Iranians, the Western branch of the Proto-Indo-Aryans [Mitanni IAs] and the Eastern branch of the Proto-Indo-Aryans [Vedic IAs] – represent the *r*-only dialects of common Indo-Iranian heritage” (Deshpande).

- Thus, a distinction between the original PIE *r* and */l* is an emphatically “pre-Indo-Iranian” linguistic feature.
As per the AIT, the “Indo-Iranians” jointly migrated from South Russia to Central Asia, and it is from Central Asia that they split into three groups, and migrated in three different directions. Therefore, this merger of PIE *l into r had already taken place before they split and separated. So any hypothetical forms of speech preserving the earlier distinction between PIE *l and *r can only have existed somewhere on the route from South Russia to Central Asia in areas far to the west of Central Asia.

But we have seen that the AIT hypothesis is wrong. These three groups migrated or expanded westwards from Haryana. If the OIT is right, then forms of speech retaining this distinction between PIE *l and *r which predate the “common Indo-Iranian heritage” should be found inside India in areas far to the east of Haryana. And this is just what we find:

- “The Vedic dialect... is an r-only dialect... but the dialect of the redactors of the Vedas was an *r-and-*l dialect, where the original Indo-European *r and *l were retained; the redactors of the Vedic texts have put this *l back into some of the Vedic words, where the original Vedic dialect had an r” (Deshpande).
- These dialects were the dialects of eastern U.P and Bihar.
Deshpande (a staunch AIT supporter, and a close associate of Witzel in the west) admits his inability to explain these dialects within the AIT paradigm: “Where did they come from?... Were the speakers of the r-and-l dialect of pre-Vedic Indo-Aryan a totally different branch from the Indo-Iranian? These are difficult questions... Anyway, one would still have to assume the entry of r-and-l dialects of Indo-Aryan into India before the arrival of the Rgvedic Aryans to account for the fact that r-and-l dialects in India were more easterly in relation to the Rgvedic dialect”.

Throughout the history of Indo-Aryan linguistic studies, linguists have swept inexplicable linguistic features under the carpet by attributing them to different IA groups speaking different IA dialects of which “only one of these dialects or dialect-groups has mainly been represented in the language of the Vedas” (Chatterjee).

And when linguistic features are found which represent definitely pre-Indo-Iranian aspects of IE linguistics, they have been attributed to “two waves of migrations” of two totally different IE groups, whose exact linguistic and historical positions are left unexplained.
But they can be explained in the OIT paradigm:

+ the known branches of IE languages are descended from the IE speech forms of the Druhyu and Anu, and in the case of Vedic IA, the Puru.
+ But there were other IE tribes to the east and south of the Puru.
+ Tradition classifies them as Yadu, Turvasha, Ikshvaku, etc.
+ Their speech forms also retained different features of proto-IE which may or may not have been preserved in the speech forms of the Anu, Druhyu and Puru.

In sharp contrast to the historical IE dialects which

+ moved out of India and
+ evolved independently and under the influence of countless external factors
+ in widely different cultural areas and geographical environments,
+ these dialects of the interior (not recorded at the time) remained within India, and either died out in the course of time or became so completely Sanskritized (like the speech of the remnants of the Anu and Druhyu tribes in the northwest) that by the time they were recorded their original identity as separate IE dialects had become unrecognizable.

Clues to their original separate identity exist, but they are either not noticed, or if noticed they are given alternate explanations, or attributed to “non-Aryan” sources, or simply ignored.
The retention of the original PIE distinction between */l* and */r* in eastern dialects is one such clue.

Other clues abound:

- Studies of old Prakrits (called MIA or Middle IA) show many words and features "which are clearly of IA, or even IE, origin, but have no attested Skt equivalent, e.g. suffixes not, or only rarely, found in Skt, or those words which show a different grade of root from that found in Skt, but can be shown not to be MIA innovations, because the formation could only have evolved in a pre-MIA phonetic form, or because a direct equivalent is found in an IE language other than Skt" (Norman).

- Such words and features can be recognized as IE, e.g.
  - Sinhalese *watura* (cognate to English *water*, Greek *hudor*, Hittite *watar*), or
  - the Kentum features discovered in 1987 in the Bangani language in Uttarakhand.

- But where such words and features are not found either in Sanskrit or in any IE language other than Sanskrit, they are automatically assumed to be non-IE, when they can actually be PIE words or features of these eastern IE dialects: PIE words or features which failed to survive, or were missing, in the Druhyu, Anu and Puru dialects.
2. Evidence for the earlier roots of PIE deep east inside northern India goes even beyond PIE forms and features.

We find evidence for primitive connections between PIE and the proto-form of one other totally unrelated language family which go back to the earliest formative stages of the two families in eastern parts of North India:

- Linguistic studies by Dyen find such connections between the reconstructed PIE and proto-Austronesian languages even in such basic words as the first four numerals, many of the personal pronouns, and words for “water” and “land”.

- He however feels that this linguistic evidence “is not favoured by considerations of the distribution of the two families [...] The probable homelands of the respective families appear to be very distant; that of the Indo-European is probably in Europe, whereas that of the Austronesian is no further west than the longitude of the Malay Peninsula in any reasonable hypothesis, and has been placed considerably further east in at least one hypothesis. The hypothesis suggested by linguistic evidence is not thus facilitated by a single homeland hypothesis” (Dyen).
However, we see that the homeland of the IE family is actually in northern India with its earliest roots going into the eastern parts of northern India.

And there is in fact a “reasonable hypothesis” which places the homeland of Austronesian considerably “further west than the longitude of the Malay Peninsula”.

The eminent linguist SK Chatterjee (a staunch AIT supporter) puts it as follows: “the Austric speech... in its original form (as the ultimate source of both the Austro-Asiatic and Austronesian branches)... could very well have been characterized within India... India was the centre from which the Austric speech spread into the lands and islands of the east and Pacific” (Chatterjee).

[For a rare clue to this connection in the Austro-Asiatic languages, compare the words for “one” in Greek mia and Armenian mi with Santali mit and Vietnamese mot].

Therefore the linguistic roots of PIE in India go very deep in time and space into the eastern interior of northern India.
Questions?
Thank You