

Zarathushtra's Date & Place.

Nobody knows exactly when or where Zarathushtra lived. Most scholars and historians ~ ancient and modern ~ agree that he was a real person, who authored the Gathas.¹ But his date has generated conflicting opinions among historians as early as the 4th century BCE, and possibly earlier. Many scholars ~ passionately convinced that their own opinions are correct ~ give such opinions as though they were facts. But (in fact) they all are simply educated guesses. There is nothing wrong with an educated guess, as long as it is not passed off as fact. The only *direct* evidence we have of Zarathushtra's time period and location is the internal evidence of the Gathas themselves which describe the kind of society in which he lived, but do not say where or when it existed (in relationship to any historically known area, persons or events). Nevertheless, with increasing archeological and linguistic information, I think we can at least narrow down the period and place in which he lived.

Linguists use the following terms, so (to avoid confusion) I will use them here:

'Old Avestan' for GAv. ~ the language in which Zarathushtra composed the Gathas; the oldest surviving Iranian language, and the oldest form of the Avestan language, stemming from an ancestral language, Proto-Indo-Iranian, and an even older ancestral language Proto-Indo-European.

'Old Indic' for the language of the oldest Vedas (the language most closely related to Avestan), and the oldest surviving form of Indic languages, stemming from the same linguist ancestors as Old Avestan.

By 'Iran' I mean all of the lands in which ancient Iranian languages were spoken (regardless of ancient or modern political boundaries), although at all times there have been pockets of non-Iranian speech within these areas, and islands of Iranian speech outside it.²

Archeological dates given here that are based on radiocarbon dating, reflect the most recent methodology (according to Anthony 2007) ~ not the earlier methodology which has since been proven unreliable.³

And all archeological evidence discussed here pertains to, and is limited to, a wide area generally believed to have been the homeland of the Proto-Indo-European tribe, and its descendants in the areas south, east, and west of it.

I will lay out for your consideration, highlights from the following sources:

- (a) The internal evidence of the Gathas, and some archeological and linguistic evidence.
- (b) The YAv. texts' perception of when Zarathushtra lived.
- (c) The opinions of a few ancient Greek writers in the 4th to 5th centuries BCE.
- (d) The opinions of writers during Sasanian times and after the Arab invasion of Iran.
- (e) The opinions of a few modern scholars.

Considering all of the above (and giving priority to the evidence of the Gathas and archeological and linguistic evidence), I conclude that Zarathushtra cannot possibly have lived much earlier than around 2,200 BCE, nor later than around 1,700 BCE (200 years before the Mittani inscriptions discussed below). And yes, I realize that these conclusion run counter to the cherished opinions of many Zoroastrians today who are passionate about a much earlier date. And these conclusions (for different reasons) also run counter to the opinions of some modern linguists. But we have to go

where the evidence leads us, and let the chips fall where they may. So I ask that you keep an open mind, as we consider the following broad evidentiary framework.

(a) *The internal evidence of the Gathas, and some archeological and linguistic evidence.*

There is overwhelming linguistic evidence (often confirmed by archeological evidence) that the ancestors of many of the peoples of Europe, Iran and India spoke one ancestral language ~ Proto-Indo-European (PIE), and therefore belonged to one ancestral tribe.⁴ The PIE language, which has (in part) been reconstructed,⁵ generated most of the languages of Europe, Iran and India.⁶

The internal evidence of the Gathas (Insler 1975 translation throughout) establishes that Zarathushtra lived in a society that raised horses, had skilled charioteers, and engaged in chariot races. The verb 'yoked' is used in connection with horses, in the context of chariot racing (Y30.10, Y50.7).⁷ And 'yoked' is also used metaphorically ("yoked with truth" Y49.9; and "[the Karpans and Kavis] yoked (us) with evil actions" Y46.11).

The Gathas also describe a society in which cattle had been domesticated; cows were raised for milk and butter; and which had grasslands ('pastures') that were used for pasturage. And they speak (once) of the "draft oxen of truth" Y46.4, indicating through this metaphor those who labor for truth, which suggests that oxen were used in his society for some sort of work, (possibly pulling loaded wagons, but not ploughing ~ tilling the earth is not mentioned in the Gathas). There is even one mention of a 'camel' *uštra-*,⁸ (Y44.18) ~ but no mention in the Gathas at all of sheep, goats, or any other kind of domesticated animal,⁹ (although many YAv. texts frequently mention sheep. And a YAv. text mentions camels as animals that were used for load bearing and also fighting in battle).¹⁰

'Plants' are mentioned very briefly in the Gathas (Y44.4, Y48.6 and Y51.7).¹¹ But (unlike the YAv. texts) there is no mention of wheat, barley, lentils, farming, or raising crops, although *draonah-* is mentioned (Y33.8) ~ a ritual bread or cake, which would have been made from some sort of grain ~ whether wild, or cultivated (at the time of the Gathas), we do not know.¹² At any rate, cattle raising is a central feature of Zarathushtra's system of metaphors. Farming is not mentioned. So it would be reasonable to conclude that he lived during a time period in which cattle raising, and not farming, was the predominant occupation of his tribe and culture.

The Gathas mention metal refining, consisting of a process whereby metal ore was refined by being made 'molten, liquid, glowing'. This metal was most probably copper and its alloy bronze, because the melting point of iron is 1528 degrees C ~ too high for ancient furnaces (before 513 BCE, which is later than any date proposed for Zarathushtra) but which furnaces were adequate for melting copper (1083 degrees C) and its alloy bronze.¹³

The contract (Av. *miθra-*), and the importance of abiding by contracts, is implied in one Gatha verse.¹⁴ In an age of warfare and limited resources, contracts of alliance (and perhaps trade) could mean the difference between destruction and survival ~ hence their crucial importance.

Is there any independent archeological, linguistic, or textual evidence which would help place all of the foregoing internal Gatha evidence within a rough time period and place? There is.

Archeological evidence. We know from linguistic evidence that the Indo-Europeans were the ancestors of the people who spoke Avestan. The wheel ~ in its most rudimentary forms ~ was not invented until about 3500 BCE, and for roughly 500 years thereafter its vehicular use was only for

carts and wagons which pulled heavy loads (not for chariots). These load bearing carts and wagons were pulled by cattle (not by horses).¹⁵ The archeological evidence for such load bearing wheeled vehicles (as distinguished from sleds or sledges) consists of Mesopotamian clay tablets showing such wagons (3300 - 3100 BCE); pictorial evidence of such wagons and carts from the Rhine to the Volga (3500 - 3100 BCE ~ a cattle bone at one such site yielding an average date of about 3500 BCE); Hungarian clay models (3300 - 3100 BCE); and the remains of about 250 wagons and carts in burial mounds on the steppes of Russia and Ukraine (3000 - 2000 BCE).¹⁶ No archeological (or other) evidence has been discovered (in Indo-European lands) showing the existence of chariots during this time period or earlier.

According to the Encyclopedia Britannica, the two humped Bactrian camel was domesticated some time before 2500 BCE in northern Iran and northeastern Afghanistan. The encyclopedia offers no underlying archeological evidence in support of this statement (in its on line summary).

According to Anthony 2007, it is now generally accepted (by archeologists) that wild horses were not domesticated (in the regions inhabited by the Indo-European people and their descendents) until about 2500 BCE.¹⁷

Chariots used for racing or for battle were built for speed and balance, and would have required a more technically advanced use of the wheel than did load bearing carts or wagons. The radiocarbon dates of chariots discovered in Eurasian steppe graves show that the earliest chariots appeared on the steppes shortly before 2000 BCE. Anthony 2007 (through his own impressive pioneering work), demonstrates that the teeth from a wide number and location of ancient horses, including those from the Bronze Age city of Malyan in Iran (radiocarbon dated around 2000 BCE), show evidence of wear from bits (the part of the bridle that is in the horses mouth), which together with their related equipment (including cheek plates) establish that such horses were used for racing and warfare (not for pulling loaded carts or wagons).¹⁸ Therefore a chariot racing society (such as the Gathas portray), could not have existed before 2500 BCE (when horses (and camels) were domesticated), or until shortly before 2000 BCE, in light of the extensive, dated, archeological evidence that chariots had not been invented until shortly before 2000 BCE in the areas in which the Indo-Europeans and their descendants lived.

Linguistic evidence. According to Anthony 2007, following well established linguistic rules, scholars have determined that the reconstructed ancestral Indo-European language (which they call Proto-Indo-European or PIE) had two separate words for 'wheel', one for 'axle', one for 'thill' (the pole to which the animals were yoked), and a verb meaning 'to go, or convey in a vehicle', and that cognates for these terms occur in all the major descendent branches of Indo-European, from Celtic in the west, to Old Indic and Tocharian in the east, from Baltic in the north, to Greek in the south.¹⁹ (In Younger Avestan, 'wheel' is *cax ra-*, Skjaervo 2003 ~ the *c* being pronounced 'ch').

Anthony estimates that the main PIE period probably existed between 4000 and 3000 BCE (with some early and late stages a few centuries before and after that main period),²⁰ and he points out that most of the PIE wheel related terms have a vowel structure that identifies a late stage in the development of the PIE language.²¹ This is corroborated by archeological evidence of the proliferation of wheeled vehicles from 3500 to 3000 BCE, which were all load bearing carts and wagons (not chariots).

Linguists have not been able to reconstruct any PIE word for chariot,²² warranting an inference that the invention of chariots post-dated the main PIE period ~ a conclusion corroborated by the fact that languages which descended from PIE ~ including two closely related languages ~ Old Avestan and Old Indic ~ do indeed have chariot related words. For example, Skjaervo 2006 shows:

'charioteer'	Old Avestan <i>raiθr̥</i> ;	Old Indic <i>rathi</i> ;
'chariot horse'	Old Avestan <i>raiθya-</i> ;	Old Indic <i>rathya-</i> .

Anthony 2007 estimates that by 2500 BCE, the PIE language had evolved into various dialects such as Pre-Greek, and Pre-Indo-Iranian, which continued to diverge in different ways in different places, and that the descendant languages that evolved after 2500 BCE did not develop from PIE but from a set of intermediate Indo-European languages.²³ One such intermediate language was Indo-Iranian, an ancestral language of Old Avestan and Old Indic.

The tribal designation Arya occurs only in Indic and Iranian texts.²⁴

An archeological date for Old Indic. The Mitannis (1500 - 1350 BCE),²⁵ were an Arya people, who came to live in what today is northern Syria, and were famous charioteers. Anthony 2007 surmizes that they may have come to the area as mercenaries, and later took over the rulership of the country (as mercenaries are apt to do). Their inscriptions show that by 1500 BCE, their everyday language had become the indigenous Syrian language (Hurrian ~ not an Indo-European language), with the following exceptions summarized here (details footnoted).²⁶ The royal (but not everyday) names of Mitanni kings, were Old Indic names. Some of their deities were Old Indic and Indo-Iranian deities. Their main city was called by an Old Indic name. And in the oldest surviving horse-training manual in the world, a Mitanni horse trainer used many Old Indic words relating to horses, chariots and racing. In light of the fact that by the time of their inscriptions (around 1500 BCE) the Arya Mitannis no longer spoke Old Indic as their everyday language, their prior use of Old Indic as an everyday language obviously would have pre-dated 1500 BCE.

Anthony 2007 therefore estimates that Old Indic would already have been a separate language (separate from its Indo-Iranian ancestor) by about 1700 BCE (200 years before it fell into disuse amongst the Mitannis). How does the Mitanni evidence affect the dating of Old Indic and Old Avestan (the language of Zarathushtra)?

Well, there is no dispute that Old Indic and Old Avestan are closely related languages, and that both evolved from one language ~ Indo-Iranian. Indeed, according to some linguists many Old Indic words can be changed to their Avestan counterparts simply by applying the laws of phonetics.²⁷ Given the parallels between Old Indic and Younger Avestan,²⁸ and the fact that Old Avestan retains certain linguistic features that are older than Old Indic,²⁹ it is not likely that Old Avestan was a younger language than Old Indic. It is more probable that Old Indic and Old Avestan developed somewhat in parallel (chronologically), at an *early* period after Indo-Iranian split into two separate languages which evolved into Old Indic and Old Avestan.

Climate evidence and Indo-Iranian ancestors. Anthony 2007 mentions a glacial period (just after the start of the main PIE period) that affected Old Europe during "a 140 years long, bitterly cold period lasting from 3960 - 3821 BCE, with temperatures colder than at any time in the previous two thousand years" resulting in the widespread destruction of forests, settlements, and agriculture, and

the death of people and domestic animals (at that time, sheep, goats, pigs) ~ with somewhat less destruction in southeastern Europe. As a result, people scattered and became more mobile, depending for their food on herds of sheep and cattle rather than fixed fields of grain. Relatively mild climatic conditions returned after 3760 BCE, but pollen cores show that the countryside became even more open and deforested.³⁰

A cooler, more arid climate affected the Eurasian steppes after 2500, and reached a peak of aridity around 2000 BCE. Open grasslands expanded. Marshes dwindled. Ancient pollen from bogs and lake floors show the effect this change had on wetland plant communities, and on the people who (around 2100 BCE) were used to wintering their animals in marshy regions which offered winter forage and protection.³¹ With critical resources declining, competition and warfare increased, alliances (contracts) became more critical for survival, and so did tactical innovations for warfare, like the light war chariot.

In addition, during the period 2100 ~ 1800 BCE, the mining and refining of copper (which had existed before) and its alloy bronze, increased substantially, especially in and around the area north of the Caspian and Aral Seas.³²

Here is a summary of Anthony's estimated chronology based on his archeological evidence and his linguistic estimates (except where Skjaervo is mentioned), so that you can see at a glance, where the internal evidence of the Gathas may fit in (bearing in mind that all linguistic estimates are just that ~ estimates, opinions, not factual evidence).

4000 ~ 3000 BCE	The estimated main Proto-Indo-European period (1,000 years);
3960 - 3821 BCE	A glacial period of 140 years, resulting in widespread destruction of forests, agriculture, domesticated sheep and goats;
After 3821 BCE	Forests dwindled, replaced by grasslands; re-forestation did not occur;
3500 ~ 3000 BCE	Invention of the wheel used for load bearing wagons and carts (very useful in carrying tents, food, etc. during seasonal migrations).
2500 BCE	Wild horses (and camels) were domesticated (where PIE descendants lived); climate became cooler and more arid; grasslands expanded;
Before 2000 BCE	Earliest evidence (in steppe graves) of chariots used in warfare;
Before 2200 BCE	Skjaervo estimates that Indo-Iranian evolved into 2 separate languages, which were the precursors of Old Indic and Old Avestan ~ 800 years after the main PIE period estimated by Anthony 2007. ³³ But this could not be so, because there are words for 'chariot' and 'chariot horse' in both Old Indic and Old Avestan, so these two languages could not have evolved from Indo-Iranian in 2200 BCE ~ more than 100 years before the invention of chariots.
1900 BCE	Skjaervo estimates that the Indic Aryas arrived in India around 1900 BCE. ³⁴
1800 ~ 1600 BCE	Anthony estimates that Indo-Iranian evolved into 2 separate languages Old Indic and Old Avestan. With respect, I do not find these dates persuasive for the reasons footnoted. ³⁵

1500 BCE Mitannis, famous charioteers, no longer spoke Old Indic as their everyday language, but continued to use Old Indic names for kings, certain deities, their capital city, and certain horse, racing, and chariot related terms.

1700 ~ 1200 BCE Skjaervo estimates that all Old Avestan texts and the Rig Veda were composed during this period, (500 years after the Indo-Iranian language split into the precursors of Old Indic and Old Avestan; 1300 years after the end of the PIE period). With respect, in light of the high degree of similarities between Old Indic and Old Avestan, I do not find it persuasive that 500 years would have passed after the split from Indo-Iranian, before these two languages evolved.³⁶

900 ~ 450 BCE. Skjaervo's estimate for the Younger Avestan period.³⁷

The 140 years glacial period which decimated the forests, in fact enabled the extensive grasslands ~ the topography of Zarathushtra's time and place ~ supporting the cattle and horses that were so important in his society.

Interestingly, a YAv. text (which tells the story of an ancient, legendary Indo-Iranian ruler, Yima (Old Indic Yama) also speaks of a glacial period during Yima's rule ~ describing with graphic details, a period of extreme cold during which wild and domesticated animals perished.³⁸ The destructive nature of these two glacial periods (the archeological one, and the YAv. one) are so strikingly similar that one has to wonder if they could have been one and the same, discussed in the following footnote.³⁹

In conclusion: It is true that many different factors (isolation, trade, migrations, invasions etc.), influence the time it takes for a given language to evolve into descendant languages or fall into disuse (as happened with the Mitannis). It is also true that new archeological evidence is constantly being discovered, and that knowledge of linguistics is a work in progress. But the conclusion is inescapable that Old Avestan (the language of the Gathas, and therefore Zarathushtra's) could not have existed before the domestication of horses or camels (around 2500 BCE) and the use of chariots in battle (which occurred shortly before 2000 BCE). Nor could Old Avestan likely have existed as late as 900 BCE, by which time the language had evolved into YAv. (Skjaervo's estimated date). In addition, the Mittani inscriptions dated at 1,500 BCE showed a loss of knowledge of Old Indic except in the names of rulers, deities, and certain terms used in a chariot racing manual. In light of the closeness between Old Avestan and Old Indic, it is not reasonable to conclude that the Gathas were composed 600 + years after the Mittanis no longer used Old Indic.

Therefore it is not likely that Zarathushtra's date could have been much earlier than around 2000 BCE (based on the earliest evidence of chariots being a little before 2000 BCE), nor later than around 1,700 BCE (based on the estimated advent of YAv. and on the Mittani inscriptions).

(b) *The Younger Avestan texts' perception of when Zarathushtra lived.*

We do not know for certain when the YAv. texts were composed. Skjaervo estimates between 900 - 450 BCE.⁴⁰ In my view, YAv. may well have evolved from Old Avestan by 900 BCE. But the later end of this estimate (450 BCE) would require the conclusion that YAv. existed in parallel with Old Persian during Achaemenian times. With respect, I do not find this persuasive, because in all YAv.

texts, Zarathushtra's name for the Divine had been standardized into one name consisting of two separate words, Ahura Mazda (with a word divider (dot) between each word, and with each word inflected for case), whereas in all Old Persian (Achaemenian) inscriptions, the two-word name had evolved into one word ~ 'Auramazdah', as early as 522 BCE (the Behistan inscription) ~ generally inflected at the end of the 2d part of the one~word name.⁴¹

In YAv. texts, Zarathushtra was already an ancient, legendary figure who is said to have lived in Airyena Vaejah,⁴² ~ the YAv. name for the ancient homeland of the Aryas ~ the location and time period of which even in YAv. times, were already lost in the mists of antiquity. No YAv. text expresses a contrary opinion. Indeed, this idea that Zarathushtra lived in Airyena Vaejah must have been a well established tradition because it also appears more than 1000 years later in the Pahlavi *Bundahishn* which says that Zarathushtra brought the religion "and expounded in Airan-veg,..." Ch. 32 § 3, E. W. West translation.⁴³ As Humbach 1991 states,

"In the Younger Avesta and in the Pahlavi literature, the legendary homeland of the Iranians, and especially that of Yima and Zarathushtra, is Airyana Vaejah."⁴⁴

Many of these YAv. texts mention Zarathushtra together with the following 2 legendary Indo-Iranian heroes, whose names appear in both Avestan and Indic texts (although not described in the same ways)

Yima (Old Indic Yama); the Shahnamah 's Jam/Jamshid; and Thraetaona (Old Indic Traitana); the Shahnamah's Fareidun;

indicating that the legend of the *identities* (as persons) of these 2, existed before the Indo-Iranians split into two separate peoples ~ Indic and Iranian.

But according to the Gathas, Zarathushtra lived some time after both Yima and Thraetaona. In the Gathas he mentions '[...Yima \[yimascī\], the son of Vivahvant...](#)' Y32.8, Insler 1975, as a person who lived in times past. As for Thraetaona: in the Shahnameh Fareidun (Thraetaona) is said to have divided his kingdom between his three sons, one of whom was Tur, whose kingdom was later called Turan. And in the Gathas Zarathushtra mentions Friyana the Turanian, (Y46.12). So Zarathushtra could not have lived before, (nor could he have been a contemporary of) either Yima or Thraetaona (Fareidun) ~ both figures from a time period before the Indo-Iranians split into two separate peoples ~ Indic and Iranian.

Nor could Zarathushtra have lived before the split ~ when the Indo-Iranians were one tribe. He is not mentioned in the Vedas (which mention other Indo-Iranian legendary heroes). And when the Indo-Iranians were one tribe, their language was not Zarathushtra's language (Old Avestan), but a language ancestral to both Old Avestan and Old Indic ~ Indo-Iranian (which linguists have reconstructed in part). Nor was Old Avestan an ancestral language of Old Indic. It was only after the Indo-Iranian tribe split into two separate tribes that the Indo-Iranian language (spoken by the one Indo-Iranian tribe) evolved into 2 separate languages ~ Old Avestan and Old Indic. Therefore Old Avestan ~ the language of the Gathas ~ could not have been the language of the Aryas before the Indo-Iranians split, and Zarathushtra could not have lived before the split (nor could he have caused the split, as some have theorized).

The YAv. perception that Zarathushtra was already an ancient figure, is expressed in many YAv. texts which also speak of Zarathushtra's teachings as being of '[long descent](#)', or equivalent words.⁴⁵

These YAv. texts they have value. They establish that Zarathushtra was already considered a figure of great antiquity by the time these YAv. texts were composed. Did Zarathushtra live in Airyena Vaejah? Well he could have done if Airyena Vaejah was the place to which the Arya Iranians migrated when they split off from the ancestral Indo-Iranian tribe, because although Zarathushtra could not have lived before the split, he would have lived in an early period after the split, based on the linguistic closeness between Old Indic and Old Avestan, and the following cultural facts.

1. *daēva-*. Zarathushtra calls the deities worshipped in his culture (whom he rejected) *daēva-* (Old Indic, 'deva'); and he calls the deity he worshipped 'ahura' (Old Indic, 'asura'). It was only much later, in the YAv. texts, that *daēva-* came to mean 'demon'. Anthony 2007 states that in the earliest parts of the Rig Veda "a comparatively large number" of deities were called both 'devas' and 'asuras'. It was only later that the 'deva' assumed greater prominence, and 'asura' came to be used in a derogatory way in Indic texts.⁴⁶ This suggests that the Gathas were composed soon after the Indic/Avestan split, when the Old Avestan and Old Indic peoples still called their deities by the same generic names ~ *daēva-*/deva and *ahura-*/asura.

2. *airya-*. Zarathushtra repeatedly uses Arya [GAv. *airya-*; Old Indic *ārya-*] as a *generic* word for clan or tribe.⁴⁷ Now we know that the Iranian Aryas migrated to areas throughout ancient Iran (probably due to population increases, and perhaps a glacial period),⁴⁸ splitting up into numerous descendant tribes which were called by different names ~ the Soghdians, the Scythians, the Medes, the Parsua, etc. Yet (except for Friyana the Turanian) none of these later Iranian Arya tribal names appear in the Gathas. This suggests that Zarathushtra lived at a period soon after the Arya (Indo-Iranian) tribe split into two tribes which became Old Indic and Old Avestan speakers, and that he lived when the generic word for 'tribe' was Old Av. *airya-* ~ and long before the Iranian Aryas split up into their numerous, named, descendant tribes throughout ancient Iran.

3. *Evolution of the Gatha names Mazda and Ahura*. The evolution of this name ~ from the Gathas, to other Avestan texts, to Old Persian inscriptions for which we have historical dates, to Middle Persian inscriptions and texts (having historical dates), also sheds some light on when Zarathushtra may have lived. This evolution is detailed in another chapter.⁴⁹ Where appropriate, I will refer here to certain conclusions based on the evidence in that chapter.

(c) *Opinions of ancient Greek writers who lived around the 4th to the 5th centuries BCE.*

Greek writers who lived around the 4th to 5th centuries BCE, (and whose opinions are sometimes based on the opinions of other Greek writers whose writings have not survived ~ double hearsay!) expressed opinions on a date for Zarathushtra that was ancient, indeed legendary, even at the time they wrote.⁵⁰ Parenthetically, the sheer breadth, volume and somewhat fantastic descriptions of Zarathushtra as a person (sometimes inconsistent, sometimes inaccurate) amongst ancient Greek writers (only a few of which are given here),⁵¹ is evidence that some such person existed in a more ancient time who achieved widespread, indeed legendary, renown for unusual knowledge and ideas.

6,480 or 1,080 BCE.: Xanthus the Lydian lived around the mid to late 5th century BCE.⁵² Diogenes Laertius wrote that Xanthus placed Zarathushtra's date at 6,000 years before the Achaemenian Emperor Xerxes' "crossing" (presumably of the Hellespont around 480 BCE). Translators today differ about whether the number should be translated as 6000 or 600 years.⁵³ If

the correct reading is 6000 years, then according to Xanthus, Zarathushtra's date would be 6480 BCE. If the correct reading is 600, then Xanthus placed Zarathushtra's date at around 1084 BCE.

6,349 BCE: Eudoxus (who lived from approximately 408 to 338 BCE ~ during the late Achaemenian empire), was a follower of Plato. He was of the opinion that "magianship" was founded by Zarathushtra, was "the noblest and most useful of the schools of philosophy," and that Zarathushtra lived 6000 years before Plato's death (around 349 BCE).⁵⁴ Thus according to Eudoxus, Zarathushtra lived around 6,349 BC. Eudoxus wrote that Aristotle also was of the same opinion.⁵⁵ Eudoxus' own writings have not survived. His opinions are given by other writers.

6,100 or 6,200 BCE. Diogenes Laertius also wrote that the Platonist Hermodorus, in his book on mathematics, counted 5,000 years from the Magians of whom he believed Zarathushtra was the first, to the fall of Troy,⁵⁶ (the date of which was itself lost in the mists of antiquity ~ even to these ancient Greek writers, who then believed that the Trojan War occurred somewhere around the 13th or the 12th century BCE).

Hermippus (around the 3d century BCE) wrote extensively on "magianship", claiming to have been instructed by "Agonaces". He also placed Zarathushtra's date at 5,000 years before the Trojan War.⁵⁷ So according to both Hermodorus and Hermippus, Zarathushtra lived around 6,200 or 6,100 BCE.

We can see from the above highlights that even by the 4th to the 5th centuries BCE, Zarathushtra's date was considered by the Greeks to have been very ancient indeed ~ sometimes long before dates which were also legendary in their time. But some of their estimated dates cannot be accurate.

If the wheel was not invented until 3500 BCE or later, if horses were not domesticated (in PIE areas) until 2500 BCE, and if the earliest evidence of chariots was shortly before 2000 BCE, it would not have been possible for a chariot racing society (such as the Gathas portray) to have existed around 6,000 B.C.E. (in PIE areas).

Nevertheless, the opinions of the Greek writers have value. They establish that by the 4th to the 5th centuries BCE (when these Greeks lived and wrote ~ before the fall of the Achaemenian empire), Zarathushtra was already a well known, very ancient, almost legendary, figure (just as he was in even earlier YAv. texts).

(d) *The opinions of writers during Sasanian times, and after the Arab invasion of Iran.*

Except for the first writer (discussed below) who lived during Sasanian times, all the other writers mentioned here lived some centuries after the Arab invasion of Iran (which occurred around 647 ~ 650 CE) ~ a thousand or more years after the above Greek writers ~ and expressed opinions that Zarathushtra's date was as early as 631 BCE, and as late as 589 BCE. In evaluating these (post-Arab invasion) Zoroastrian texts (and opinions based on them) we should keep in mind the devastating loss of knowledge that occurred when texts were burned and the learned killed ~ first after the invasion of Alexander (331 BCE), and even more so after the Arab invasion.

2010 BCE: Eusebius was a Roman and a devoted Christian who lived from 260 to 339 CE ~ during the time of the Sasanian Empire. In his work *Chronicle*, he expressed the idea that Zarathushtra was a Bactrian king who lived around 2010 BCE and was defeated in battle by Ninus the Assyrian.⁵⁸

631 BCE: Zadsparam, a Zoroastrian scholar priest who wrote in Pahlavi (Middle Persian) some time in the 9th century CE, (roughly 2 centuries after the Arab invasion of Iran), placed the date of

Zarathushtra's "revelation" (which according to tradition occurred when he was 30 years old) as being 300 years before a time when the religion was disturbed and sovereignty shaken,⁵⁹ which probably refers to Alexander's invasion, (in 331 BCE). If so, then according to this text, Zarathushtra's "revelation" would have occurred around 631 B.C.E.

631 BCE: The *Arda Viraf Namag*, (discussed in another chapter),⁶⁰ a Pahlavi (Middle Persian) text of unknown date, but written some time after the Arab invasion of Iran, states that a period of 300 years transpired from the time Zarathushtra made his religion "current in the world" i.e. generally accepted (which according to tradition occurred when he was 42 years old) until the invasion of Alexander (circa 331 BC).⁶¹ Therefore, according to this text, Zarathushtra would have made his religion current in the world at about 631 BCE.

589 BCE: The *Bundahishn* is a Middle Persian text which E. W. West believes may have been composed around 881 CE. (roughly 230 years after the Arab invasion of Iran). It has come down to us in several fragment manuscripts ~ some in Pahlavi and some in Pazand. According to the text itself, its name is *Zand-Akas*, which means "knowing the tradition."⁶² One of the small but more detailed fragments of the *Bundahishn* states:

"... Then the millennium reign came to Capricornus, and Zaratuhast the Spitaman with tidings (petkhambarih) from the creator Auharmazd, came to King Vistasp; and Vistasp was king, after receiving the religion, ninety years. Vohuman, son of Spend-dad, a hundred and twelve years; Humai, daughter of Vohuman, thirty years; Darai, son of Kihar-azad [Humai/Homay], that is, of the daughter of Vohuman, twelve years; Darai, son of Darai, fourteen years; and Alexander the Ruman fourteen years." E. W. West translation;⁶³ words in round parentheses are E.W. West's; the words 'Humai/Homay' in square brackets explains 'Kihar-azad', (in Levy's *Shahnameh*).⁶⁴ In the name 'Kihar-azad' the 'K' is pronounced 'ch'.

If we add the years mentioned in the *Bundahishn* from the time Zarathushtra converted Vishtaspa up to the invasion of Alexander, we get 258 years. Add 258 to 331 (the date of Alexander's conquest), and according to this particular fragment of the *Bundahishn*, Zarathushtra taught his message around 631 BCE.

At first thought, the uniformity of this 631 BCE date seems to argue for credibility, but it soon falls to pieces in light of historical facts, as the following illustrates.

After his conquest of the Achaemenian Empire (331 BCE), Alexander died in 323 BCE. He therefore ruled in place of the Achaemenians for 8 years, not 14 years. The *Bundahishn* does not mention two of the greatest Achaemenid rulers ~ Cyrus (*kūruš*) the Great, and Darius (*dārayava^hu-*) the Great, and its list of Iranian rulers preceding Alexander's conquest does not accord with either the names or the dates of such historical records of Achaemenian kings as we have today, from the time of Vishtaspa (Hystaspes), the father of Darius I (the Great) ~ through Darius III (who was defeated by Alexander). The Cambridge History of Iran (CHI) does not mention King Vohuman (Bahman) or his daughter Queen Humai (Homai/Khumai) as Achaemenid rulers.⁶⁵ The *Bundahishn* mentions 'Darai', and 'Darai son of Darai'. History records 3 Achaemenian kings called Darius (in Old Persian *dārayava^hu-*, meaning 'He who holds firm the good'),⁶⁶ none of whom had a father called Darius.

The following Table compares the list of rulers mentioned in the *Bundahishn* (quoted above) and the list of Achaemenid rulers (giving the years they ruled) as shown in historical records, summarized

in the CHI, and Kent 1950.⁶⁷ The Bundahishn part of the Table shows the number of years for which (according to this mss. fragment) Vishtaspa ruled following his conversion by Zarathushtra. CHI gives no historical dates for Darius' father Vishtaspa but shows that he was of the same generation as Cyrus the Great (about 559 ~ 529 BCE) ~ both having the same great-grandfather Tiespes, the son of Achaemenes (the founder of the Achaemenians).

Historical dates in CHI	Reigned	Bundahishn	Reigned
Hystaspes (Vishtaspa) father of Darius I	?	Vishtaspa	90 yrs
Darius I (the Great): 522 ~ 486 BCE.	36 yrs	Vohuman (Bahman)	112 yrs.
Xerxes I: 486 ~ 465 BCE.	26 yrs	Humai (his daughter)	30 yrs.
Artaxerxes I: 465 ~ 425 BCE.	40 yrs.		
(Artaxerxes I's 3 sons):			
Xerxes II: 425 ~ 424 BCE;	1 yr.		
Sogdianus: 424 BCE;	~		
Darius II: 424 ~ 405 BCE.	19 yrs.	Darai (son of Humai)	12 yrs
Artaxerxes II: 405 ~ 359 BCE.	46 yrs		
Artaxerxes III: 359 ~ 336 BCE.	23 yrs		
(From another branch of the family)			
Darius III: 336 ~ 331 BCE.	5 yrs.	Darai (son of Darai)	14 yrs.
Alexander: 331 BCE.		Alexander	
Total until the start of Alexander's reign (the '+' is for Vishtaspa's years, not given in CHI)	196 + yrs	Total until the start of Alexander's reign (including Vishtaspa's given years)	258 yrs.

The *Bundahishn's* loss of knowledge (written after the Arab invasion) is also demonstrated by the following.

Even during Sasanian times ~ long before the Arab invasion of Iran ~ there was uncertainty regarding the identity of the King Vishtaspa who was Zarathushtra's patron. Agathias, a native of Myrina in Asia Minor, lived from about 532 to 580 CE, (by his own account he wrote during the reign of the Sasanian king "Chosroes"). He writes in his *Histories*, "... 'Just when this Zoroaster or Zarades ~ he is known by the two names ~ was at the height of his power and enacted his laws, one cannot state with certainty. The modern Persians [i.e. the Sasanians] say that he lived in the time of Hystaspes, limiting themselves to this general statement, and without making it clear whether they mean the father of Darius or another monarch of the same name. ...' ...".⁶⁸ 'Hystaspes' is the Greek form of Old Avestan and Old Persian 'Vishtaspa'.

According to YAv. texts, Zarathushtra's patron king Vishtaspa could not have been Vishtaspa the father of Darius the Great because these 2 Vishtaspas belonged to two different families and had two different fathers.

In a YAv. Yasht the King Vishtaspa who was Zarathushtra's patron was of the Naotara family.⁶⁹ Whereas the Vishtaspa who was the father of Darius the Great was of the Achaemenid family.

Darius the Great in his Behistan inscription identifies his father Vishtaspa as the son of Arshama [*aršāma*].⁷⁰ But a YAv. Yasht identifies the father of Zarathushtra's patron King Vishtaspa, as Aurvat-

aspa. The author of this Yasht has Zarathushtra (purportedly) asking the water deity for a boon "...that I may bring the son of Aurvat-aspa, the valiant Kavi Vishtaspa, to think according to the law ..." Yt. 5.105, Darmesteter translation.⁷¹

The meanings of the two names ~ Arshama and Aurvat-aspa ~ are also completely different (even though Old Persian and Avestan share a common ancestral language).

Arshama is Old Persian. Kent says it means 'having the might of a hero', and derives from *arša-* 'male hero, bull' + *ama-* 'offensive power',⁷² ('offensive' as in the opposite of 'defensive', not 'offensive' as in 'disgusting').

Aurvat-aspa is Avestan. Skjaervo 2006 says that *aurvant-* is an adj. meaning 'fleet (courser)'; and *aspā-* is a fem. noun meaning 'mare'. The *-vant-* ending indicates 'possession'; thus Aurvat-aspa means 'having fleet mares' ~ racing mares.

It is not uncommon for more than one king to have the same name amongst people with a common ancestral culture. In the history of England, there were 3 King Richards, 2 Queen Elizabeths, and 6 King Georges.

589 BCE: The writer Mas'udi (who died around 956 CE), wrote that according to the Mazdayasnians, there existed a period of 258 years between Zarathushtra and Alexander (around 331 BCE), which meant that Zarathushtra was alive around 589 BCE.

Al-Biruni, (born around 973 CE) placed Zarathushtra's date at 258 years before the start of the Seleucid empire, but later corrected that to 258 years before Alexander defeated the Achaemenian empire (around 331 BCE). So he also thought that Zarathushtra lived around 589 BCE.⁷³

It is clear that the opinions of both Mas'udi and Al-Biruni were based on Zoroastrian texts like the *Bundahishn* composed after the Arab invasion of Iran, which (as we have seen above) do not accord with known historical dates, and cannot have been accurate. But when we consider the huge loss of knowledge which Zoroastrians sustained (twice), it is not surprising that the information possessed by the surviving Zoroastrian community was fragmentary and inaccurate.

To summarize: These late dates for Zarathushtra expressed by writers a few centuries after the Arab invasion, could not have been accurate for many reasons:

- (1) They are too long after the split from Indo-Iranian into Old Indic and Old Avestan, and therefore conflict with the linguistic and cultural similarities between Old Avestan (in the Gathas) and Old Indic (in the Rig Veda).
- (2) They conflict with the YAv. texts ~ regarding the antiquity of Zarathushtra (already an ancient legendary figure when the YAv. texts were composed (around 900 ~ 450 BCE, Skjaervo's estimate).
- (3) They conflict with the YAv. texts regarding the name and family of the father of Vishtaspa, Zarathushtra's patron king.
- (4) They conflict with the opinions of the Greek writers (who lived more than 1,000 years before the post-Arab invasion writers), and who thought that Zarathushtra was a figure of great antiquity even then.
- (5) They materially conflict with known historical records of Achaemenian kings.

(6) They conflict with the time necessary for the evolution of the name of the Divine. If Zarathushtra's date was 631 or 589 BCE (as the post Arab invasion writers state), his two most used names for the Divine ~ 'mzdā-' and 'ahura-' ~ would have evolved into the one-word name *auramazdāh-* in Old Persian by the time of the Behistan inscription (522 BCE) ~ a period of 67 - 109 years ~ which is not possible. It would have taken multiple generations and several centuries for the use and styles of the most common names of the Divine, to have evolved:

From 'mzdā-' alone (most often used), and 'ahura-' alone (next most often used) in the Gathas,

To *mzdā- ahura-* (most often used in the GAv. *Yasna Haptanghaiti*),

To *ahura- mzdā-* the standardized name in the YAv. texts,

To *auramazdāh-* the standardized name in the Old Persian Behistan inscription 522 BCE (Avestan. and Old Persian evolved from an ancestral language).⁷⁴

(e) *The opinions of some modern scholars.*

It is a bit unfair to give opinions of modern scholars, because (unknown to me) some of them may have subsequently changed their opinions (as all thinking people do!). But I will give you a few highlights just to round out the picture, with apologies to those whom I have not mentioned, and those who may have changed their minds.

1,700 to 1,200 BCE: Skjaervo estimates that the split from one Indo-Iranian language into two separate languages ~ the precursors of Old Indic and Old Avestan ~ occurred around 2200 BCE; that the period from 2200 BCE to 1700 BCE saw the development of a Proto-Avestan dialect, and that Old Avestan was in use in eastern Iran, probably between 1,700 to 1,200 BCE,⁷⁵ (a period of roughly 500 to 1000 years after the split). In light of the linguistic closeness between Old Avestan and Vedic, I think Old Avestan would have existed much closer to the time of the split.

1,700 BCE: I have been informed that in certain circles, a belief in a 1700 BCE date for Zarathushtra is based on astrological evidence. But I am not knowledgeable in that area ~ neither regarding which ancient texts they rely on, nor how ancient Iranian astrological words would be translated into comparable English ones, nor how such ancient astrological time periods would be calculated, and so I cannot offer any useful information or comments on that conclusion ~ although ancient Greeks did indeed think that Zarathushtra was well versed in astrology.

1,080 BCE: Professor Shahbazi thinks that the reading of Xanthus which translates to a 1,080 BCE date for Zarathushtra, is corroborated by a text of Biruni, which gives the chronological history of Khwarezm, tracing the advent of Siyavush (son of Kaikaus) to the area, and the rule of Kaikhusru (son of Siyavush) and his descendents over Khwarezm which "happened 92 years after the colonization of that country [... =1200 B.C.]." Shahbazi argues that

"since the epic history separated Siyavus from Zoroaster by four generations and he allows 30 years per generation [= 4 x 30 = 120 years], the Khwarezmian tradition implies that the prophet flourished about [1200 - 120 =] 1080 B.C."⁷⁶

1,080 BCE: Humbach 1991 comments that Shahbazi's date (1080 BCE) is close to the "relative chronology resulting from a comparison with the Vedic development."⁷⁷ But with respect, based on the Mitanni inscriptions, Vedic (Old Indic) as a separate language would have had to exist before

1,500 BCE. and Old Avestan and Old Indic are closely related. Therefore Old Avestan would have to be older than the Mitanni inscriptions (1500 BCE).

686 BCE: In CHI (1985), Max Mallowan who authored the chapter on Cyrus II (the Great), expresses the opinion that Zarathushtra lived about one generation before Cyrus the Great (who ruled from 559 ~ 529 BCE.). Mallowan estimates that it was perhaps around 586 BCE. that Zarathushtra converted Vishtaspa at the age of 42, and that Cyrus, who about 50 years later incorporated Vishtaspa's territory within his (Cyrus'), may have been a Zoroastrian himself, in that Cyrus's style of government reflected the noble ideals of Zarathushtra's teachings.⁷⁸ I have great respect (and affection) for Mallowan. He was a fine archeologist (in his time period). But he was not familiar with the Avestan texts, according to which, the Vishtaspa who was Darius' father, could not have been the Vishtaspa who was Zarathushtra's patron (demonstrated above). But I do indeed agree with Mallowan that the ethical nature of Cyrus' life, and the nature of his rule, in many respects reflected aspects of Zarathushtra's teachings, including his notion of 'good rule' (*vohu- x šaθra-*).

589 BCE: Malandra 1983, referring to the later tradition which places Zarathushtra's date at 258 years before Alexander (i.e. 589 BCE discussed above), states that "the traditional date should not be accepted without question, especially when most other traditions of the prophet are so historically worthless" but he nevertheless concludes that the traditional date is "clearly not the product of a fanciful mythologization" (referring to the Greek writers), and "makes a good deal of sense in terms of the course of Iranian history in the sixth century".⁷⁹ He therefore accepts the traditional date (which historically would place Zarathushtra's date at roughly 30 years before Cyrus the Great (who ruled from 559 ~ 529 BCE.). Professor Malandra has done pioneering work in the Avestan script for which I am deeply grateful to him. However, (with respect) I am not persuaded by his view of Zarathushtra's date.

There are many, many other views, but the foregoing gives you a few highlights of the range of modern opinions.

Zarathushtra's place.

There is general agreement today that GAv. is a branch of PIE and therefore, Zarathushtra would have lived in or around the areas in which the PIEs and their descendants lived. But that is a huge and very general area.

The later texts ~ both YAv. and some Pahlavi texts express the tradition that Airyena Vaejah was a mountainous region, that Zarathushtra and his father Pourushaspa lived in a mountainous region, that Zarathushtra received his revelation in the mountains, and was successful in resisting the temptations of the Devil Ahriman (Av. Angra Mainyu) in the mountains. But the lands of PIE descendants in which ancient Iranian languages were spoken, were full of mountains. So that is not much help.

Western Iran. An earlier generation of modern scholars thought that Zarathushtra lived in a western region of ancient Iran. Some scholars of that generation thought he was a Mede (Media was somewhat in the western regions of ancient Iran).⁸⁰ And indeed Kent 1950 says of Old Avestan (Zarathushtra's language) that "...It is noticeable that it agrees rather with Median than with OP [Old Persian], but this is not conclusive." p. 6. Others placed him in the west, because of the importance of the western city of Ragha as a Zoroastrian center of later times.

Eastern Iran. Many linguistics today think that Zarathushtra lived in the eastern area of ancient Iran ~ which covers a fairly large area. Skjaervo states, "Linguistic analysis of Avestan long ago established the probability that it was an East-Iranian language."⁸¹ Certain ancient Greek writers described Zarathushtra as a prince of Bactria ~ an ancient nation in north eastern Iran (in what is now a part of Afghanistan, Uzbekistan and Tajikistan).⁸² The Gathas mention Friyana the Turanian. We do not know for certain where ancient Turan was located. But some scholars show it in eastern Iran. Friyana may have been a migrant in Zarathushtra's land, or Turan may have been next to it.

There are two very interesting essays ~ one by Franz Grenet who thinks that Zarathushtra's place originated in a place to the north east of present day Iran, and one by Almut Hintze who discuss Zarathushtra's date based on linguistics.⁸³ But in the final analysis what we have is largely intelligent guess work arrived at through reasoning based on somewhat scant linguistic and archeological evidence.

Conclusion:

Too many excellent scholars give their opinions of Zarathushtra's date and place, as though they were facts. I take my hat off to Skjaervo and Anthony for not doing so. All conclusions regarding Zarathushtra's date and place can only be opinions ~ and only best guesses at that. The time it takes for one language to evolve into another (and its in-between stages), is too fluid, and depends on too many external factors to come up with a fixed number of years for all such evolutions. The best we can do, is to narrow his probable time and place based on all available facts. The following conclusions are just my opinions, my best guesses.

Zarathushtra's Date. I think Zarathushtra lived some time around or after 2100 BCE and before or around 1700 BCE. For the following reasons.

Zarathushtra cannot have lived much before 2100 BCE because the earliest archeological evidence of chariots in Indo-European lands is a little bit earlier than 2000 BCE. And we know from several Gatha verses that he lived in a chariot racing society (as did the people who spoke Vedic).

In my view, he cannot have lived later than 1700 BCE, for the following reasons.

The Mittanis spoke a form of Vedic, and by 1500 BCE their inscriptions show that they no longer used their ancestral Vedic language for everyday use (except for the names of their divinities and kings, and their chariot racing manual). This linguistic change likely would not have occurred in less than 200 years ~ indicating that a form of Vedic (as a separate language from its ancestral Indo-Iranian language) would have been in existence by at least around 1700 BCE, possibly earlier.

This conclusion is somewhat corroborated if Skjaervo is correct that the Vedic Aryas came to India around 1900 BCE. If so, the separation of an ancestral Indo-Iranian language into Vedic and Avestan (or their near parents) would have occurred before 1900 BCE. If Vedic (or a near parent) existed before 1900 BCE, Old Avestan (or a near parent) would also have existed before that date. Because of the closeness of Old Avestan (the language of the Gathas) and the Vedic language, it is likely that the Gathas were composed close to the time after the ancestral Indo-Iranian language, split into two languages which became Old Avestan and Vedic, which would indicate that Old Avestan was in use by 1700 BCE or before that time.

Zarathushtra's Place. Zarathushtra probably lived in the north eastern parts of the lands in which languages that have descended from Indo-Iranian are spoken today (not limited by today's political boundaries).

* * * * *

¹ The *General Introduction* (under the *General Overview Tab*) discusses evidence from the Gathas which supports the conclusion that Zarathushtra was a real person (as he also was thought to be in Greek writings). And without dispute, in YAv. texts, Zarathushtra is not only a central person, but the only person associated with composing the Gathas.

² Kent 1950 *Old Persian*, § 2, p. 6, detailed in *Part Four: Ancient Origins and Homelands*.

³ Anthony 2007, *The Horse, the Wheel & Language* (Princeton Univ. Press) pp. 126 - 127.

⁴ Anthony 2007. His book provides an update of extensive archeological and linguistic evidence. It is well worth reading (in small segments at a time) as a framework for such evidence and its impact on Zarathushtra's date and place. Anthony says that he is an archeologist, not a linguist, but that to obtain as full and accurate an understanding as possible of PIE, and its descendent peoples and languages, we should integrate both linguistic and archeological evidence, and he has taken great pains to do so. I think this approach is both necessary and intelligent. His archeological and linguistic evidence is extensive and insightful - particularly when you consider the vast number of languages that have descended from PIE (as his diagram on p. 12 highlights). On the minus side, he is not familiar with Avestan texts, and sometimes makes statements of fact which are at odds with such texts. His renditions of a few Old Avestan words are close but not identical to what we see in Avestan texts, but this difference may have been a function of a different system of transliteration. And sometimes, he (seems to) give conflicting dates for the same historical events, but possibly in some instances at least, this may be a function of approximation, (or I may be missing something).

⁵ PIE words have been re-constructed from its descendent languages. Anthony 2007 says that although fine shades of meaning and word associations that enriched Proto-Indo-European poetry may be lost forever, "gross" meanings are recoverable for at least 1,500 Proto-Indo-European roots, from its descendent languages, using well established (and repeatedly verified) rules of linguistics.

⁶ The Anthony 2007 diagram on p. 12 shows the many families of languages that descended from PIE. I have listed them in a ft. in *Part Four: Ancient Origins and Homelands*. It has become popular for certain non-linguists to scoff at the idea of a shared ancestry for many ancient European, Iranian and Indian peoples. But if you are interested in archeological facts, in intelligent surmises based on such facts and in established rules of linguistics (some of which he details), I recommend that you read Anthony 2007. I do not agree with all of his opinions, but the evidence is overwhelming for the existence of an ancestral Indo-European language (and therefore an ancestral Indo-European tribe).

⁷ In Y50.6 Zarathushtra says "... instruct through good thinking (the course) of my direction, in order to be the charioteer [*raiθim*] of my will and my tongue." Y50.6, Insler 1975.

In Y50.7 he says "Yes, I shall yoke for you the swiftest steeds, those wide (going) with the victories of your glory and strong with both truth and good thinking, the steeds with which ye shall race (ahead), would ye be ready for my help." Y50.7, Insler 1975. The context establishes that he is speaking about a race with two or more horses on the same team, so yoke here has to mean that these horses were yoked to a racing chariot.

Y30.10 "... and there shall be yoked from the good dwelling place of good thinking the swiftest steeds, which shall race ahead unto the fame of the Wise One and of truth." Y30.10, Insler 1975. Here again, the steeds would be yoked together only for a chariot race.

In Y44.4 he also uses yoked, as a metaphor without mentioning horses specifically but translators have interpreted the context as referring to horses "... Who yoked the pairs of swift (steeds) to the wind and to the clouds?..." Y44.6, Insler 1975.

⁸ A young scholar, Shuan Karim, has offered some interesting information on the meaning of *uštra*- 'camel'. Karim is a PhD student in linguistics at Ohio State University focusing on historical and documentary linguistics, and is familiar with:

Indo-Iranian: Sanskrit, Avestan, Old Persian, Middle Persian, Parthian, Kurdish and some Balochi as well as (Semitic) Syriac and Akkadian. He is currently doing research on Kurdish historical morphology and aspects of Akkadian historical phonology.

He states that proposing new etymologies for a given word should be done with great caution; that the meaning of *uštra*- has never seriously been questioned because its meaning in all modern Indic and Iranian languages is "camel"; and that a good historical linguist should feel confident in reconstructing "camel". He notes a possible alternative. Swami Yogakanti in his *Sanskrit Glossary of Yogic Terms*, (Munger, Bihar, India: Yoga Publications Trust, 2007) provides the definition, "Ushtra: camel, buffalo, bull with a hump उष्ट्रः." Karim cautions that the source of swami Yogakanti's analysis is unclear, but adds:

"if accurate, it could be an example of a well-documented linguistic phenomenon where the meaning of a word— indigenous or borrowed— is extended to include new referents that are newly introduced. This is certainly the case with the word "cactus" which originally referred to a cardoon (a spikey thistle related to an artichoke) and its meaning was extended to the new world succulent. Additionally, 'ushtra' is not reconstructed for PIE; it is thought to be a borrowing into Proto Indo-Iranian from an unknown language. Following this line of inquiry, there are three possible alternatives, each of which preserves the possibility that swami Yogakanti's definition is re-constructible for Proto Indo-Iranian:

- (1) The original meaning was something like humped animal, and it was used for bulls, water buffalo as well as camels;
- (2) the original meaning was bull or water buffalo, and was extended to refer to camels which took over as the meaning in the approx. 1000 years between the Gathas and further attestation of ushtra in Iranian languages; or
- (3) the original meaning was camel, and in communities where cows were of great importance, the term was used to distinguish certain varieties of cattle with humps (water buffalo, bulls, etc.)."

Shuan Karim in an unpublished communication, Feb. 2018, included here with his kind permission.

⁹ The fact that the Gathas do not mention sheep, goats or pigs, does not prove that in his society, such animals were not raised. But I find this absence significant in light of the fact that (using the Insler 1975 translation) when Zarathushtra speaks of a "pastor", he (metaphorically) speaks of a "pastor" for the "cow" (Y29, Y31.9, Y47.3, Y51.5), and the "cattle-breeding pastor" (Y31.10, Y31.15). He also uses "pastor" once, metaphorically, for a priest's "pastoral duties" (Y33.6). The nurture for which he uses "pastor" as a metaphor is an important part of Zarathushtra's theological ideas. Yet not once does he speak of a 'shepherd' who nurtures or cares for sheep (neither metaphorically, nor literally). I therefore do not think sheep were generally raised in his society.

¹⁰ The YAv. *Ashi Yasht*, speaks of rulers who "... have large-humped, burden-bearing camels, flying from the ground or fighting with ... fieriness..." Yt. 17.13, Darmesteter translation, SBE 23, p. 273. But YAv. texts

were composed many centuries after the Gathas. We do not have any evidence of what camels were used or prized for during GAv. times.

¹¹ "This I ask Thee. Tell me truly, Lord. Which man has upheld the earth below and the heavens (above) from falling? Who the waters and the plants [*urvarāscā*]? ..." Y44.4 Insler 1975.

[referring to the cow, an allegory for the beneficial sacred in mortal existence]

"For she shall bring peace to us, she shall grant to us the enduring and esteemed strength of good thinking. And [*mazdā* 'Wisdom/wisdom'] shall increase the plants [*urvarā*] for her through truth ..." Y48.6 Insler 1975.

"Thou, Wise One, who hast fashioned the cow as well as the waters and the plants [*urvarāscā*] by reason of Thy [*spāništā mainyū* 'most beneficial way of being'], grant Thou to me [*amərətātā* 'non-deathness'] and completeness [*haurvātā*], those two enduring forces which are to be praised with good thinking." Y51.7, Insler 1975.

The word 'plants' is not specifically used in any of these verses in the context of farming, agriculture, nor any crop (wheat, barley, lentils, rice, etc.). In the Gathas impliedly, and (in certain later texts specifically), 'waters' is the material metaphor for completeness (*haurvatāt-*), and 'plants' is the material metaphor for non-deathness (*amərətāt-*).

¹² See *Part Two: The Puzzle of Worship*.

Franz Grenet thinks the word (which he mentions in stem form) *yava-* in Y49.1 may possibly mean 'barley', 'grain', or 'beer'; Franz Grenet, *Zarathushtra's Time & Homeland, Geographical Perspectives*, p. 22, appearing in *Wiley Blackwell Companion to Zoroastrianism 2015*, Edited by Michael Stausberg & Yuhan Sohrab-Dinshaw Vevaina, with Anna Tessman.

But linguists differ regarding the meaning *yava-*; and in the context of Y49.1, no one but Skjaervo 2006 thinks it may mean 'barley', with word play on the meaning 'lifespan'.

Skjaervo 2006 *yava-* 'grain, barley' showing *yavā* instr. sg. in Y49.1 "with wordplay on *yava-* < *āyu-*"; and he shows *āyu-/yao-* 'lifespan'.

Insler 1975 "Throughout my lifetime [*yavā*]..." Y49.1;

Humbach 1991 "...with my barley..." Y49.1; but by 2010 he had changed his mind;

Humbach/Faiss 2010 "ever"

Taraporewala 1951 "ever"

Bartholomae; and Moulton 1912 "ever".

In light of these differences on the meaning of *yavā*, in Y49.1, (and in the absence of other evidence) we cannot conclude that Zarathushtra lived in a farming society.

¹³ See *Part Two: Molten, Glowing Metal*.

¹⁴ "The ... master of a house, should respectfully receive any person coming (to him), be it in consequence of an order or (other) pact [*miθrōibyō*]..." Y46.5. In Avestan, *miθra-* means 'contract' (Skjaervo 2006); and in pre-Zarathushtrian, Indo-Iranian times, Mithra/Mitra was also an Indo-Iranian deity - the spiritual essence of the contract.

¹⁵ Anthony 2007 p. 461.

¹⁶ Anthony 2007 pp. 65 - 72. National Geographic Jan. 2015 issue, (fold-out page on First Times) says that the wheel was first made around 3,500 B.C. - and that for vehicles, early wheels were first used for wagons and carts to transport goods.

There is an excellent article on Wikipedia entitled "Sumer" which has pictures of Sumerian chariots, dated to around 2,600 BCE, found on (what archeologists call) "The Standard of Ur", which is a hollow wooden box 21.59 centimetres wide by 49.53 centimeters long, inlaid with a mosaic of shall, red limestone and lapis lazuli.

¹⁷ Anthony 2007, pp. 196 - 204, 206 - 220. However, he also states that by about 4200 - 4000 BCE people living in the Pontic Caspian steppes probably were beginning to ride horses on raids. p. 460. The time period 4200 - 4000 would have been early PIE, just before the main PIE period, p. 99. Not being an archeologist, I probably am missing something, but I am puzzled to account for his discrepancy in dates on the domestication of horses. Perhaps the early domestication of horses (4200 - 4000 BCE) was wiped out during the glacial period 3960 - 3821 BCE, which caused widespread destruction of domesticated animals, and perhaps horses were not again domesticated until 2500 BCE, but Anthony does not say so.

¹⁸ Anthony 2007 pp. 402 - 403, with a more detailed discussion on pp. 371 - 405. Anthony states that the earliest wheeled vehicles that were designed entirely for speed, first appeared in Sintashta graves in the southern Ural steppes around 2100 BCE p. 462. He thinks the Sintashta were ancestors of the Indo-Iranians.

In the Gathas, all references to horse racing is chariot related. There is no clear reference to racing on horseback. This need not mean that horseback racing did not exist in the time of the Gathas. But it is not mentioned.

¹⁹ Anthony 2007, pp. 33 - 36, 63 - 64.

²⁰ Anthony 2007 p. 99.

²¹ Anthony 2007 p. 64.

²² Anthony 2007 cautions that many PIE words that actually existed will never be reconstructed, and that negative evidence cannot establish a fact with certainty (which is true!), but he notes that although PIE has various wheel-related words, it has no (known) word for 'chariot' p. 86, which is consistent with the archeological evidence that shows no chariots, but only load bearing wagons and carts in the late PIE period 3500 - 3000 BCE.

²³ Anthony 2007, p. 58.

²⁴ Anthony 2007, p. 9.

²⁵ Anthony 2007 p. 403.

²⁶ Anthony, 2007, pp. 49 ~ 50. He gives a few examples of the Mitanni use of Old Indic names and words in Mitanni inscriptions as follows.

The name of their capital was Wassukanni (Old Indic *vasu-khani*, literally 'wealth-mine').

The names of their deities (mentioned along side Hurrian deities) included the Old Indic deities Indra, Varuna, the Nasatyas, and the Indo-Iranian deity Mitra, all of whom are mentioned in the Rig Veda.

The throne names of all Mitanni kings were Old Indic, for example:

Tus'ratta I (Old Indic *Tvesa-ratha* 'having an attacking chariot');

Artatama I, (Old Indic *Rta-dhaaman* 'having the abode of rta');

Artas's'umara (Old Indic *Rta-smara* 'remembering rta' etc.);

Sattuara I (Old Indic *Satvar* 'warrior').

The Mitanni military aristocracy was composed of chariot warriors called *maryanna*, Anthony says probably from Old Indic *márya*, 'young man', employed in the Rig Veda to refer to the heavenly war band assembled around Indra.

²⁷ Jackson 1892, Introduction, § 55, pp. xxxi - xxxii.

²⁸ Moulton 1912 p. 74, ftn. 1.

²⁹ Moulton 1912 says "the closeness of Vedic and Later Avestan is well seen in the identity ..." of certain Vedic and Younger Avestan words, indicating Darmesteter's concurrence p. 74, ft. 1.

Beekes 1988 says that "...Gatha Avestan ... is even more archaic than Sanskrit in that it preserves systematically the PIE laryngeals." pg. xv.

³⁰ Anthony 2007, pp. 227 - 228. He states that variations in temperature in the northern hemisphere, were recorded in annual growth rings in oaks preserved in bogs in Germany, and obtained from studying glacial ice cores from the Swiss Alps and Greenland, all of which showed that around 4200 - 4100 BCE the climate began to get colder, and glaciers advanced. Extremely cold years happened first in 4200 and 4100 BCE, followed by a 140 year long period of bitter cold from 3,960 through 3821 BCE.

³¹ Anthony 2007, 389 - 390.

³² Anthony 2007, pp. 389 - 391.

³³ Skjaervo (undated), *An Introduction to Old Avestan*, (3d version), at www.gatha.org. > English > Articles.

³⁴ Skjaervo (undated article) *An Introduction to Old Avestan*, (3d version), at www.gatha.org. > English > Articles.

³⁵ Anthony 2007 estimates that the Indo-Iranian branch of PIE developed as follows:

2500 ~ 2300 BCE Pre-Indo-Iranian existed "at the latest" ~ "the minimal age for the separation of Pre-Indo-Iranian from Proto-Indo-European." pp. 51, 56 - 58;

1700 BCE "Common Indo-Iranian ... "probably dates back *at least* to 1700 BCE." p. 51 (emphasis is Anthony's) ~ implying that it may have existed later;

1800 ~ 1600 BCE Indo-Iranian evolved into 2 separate languages.
On p. 51, he say that Old Indic would already have been a separate language (separate from its Indo-Iranian ancestor) by at least 1700 BCE;
On p. 100, Figure 5.2, he shows that Indic and Iranian became two separate languages around 1800 BCE; and
On p. 455, he says that the earliest Old Indic dialects developed (from ancestral Indo-Iranian) about 1800 ~ 1600 BCE.

These figures seem to be internally inconsistent (I am probably missing something). If by 1500 the Mittanis had already forgotten the Old Indic language of their ancestors, and if (as Skjaervo says, ft. below) by 1900 BCE the Vedic peoples were already in India, Old Indic could not have become a separate language (from Indo-Iranian) as late as 1800 BCE.

³⁶ Skjaervo, in his undated article *An Introduction to Old Avestan*, (3d version), at www.gatha.org. > English > Articles, estimates the following (once again, I am probably missing something, but some of the dates seem inconsistent):

1900 BCE: He estimates that the Indic Aryas arrived in India around 1900 BCE.

2200 ~ 1700 BCE (500 years): This period in his view saw the development of 'Proto-Avestan' a dialect of 'Proto-Iranian', after the break up of Indo-Iranian unity (but he estimates that the Indic Aryas arrived in India around 1900 BCE which would have been after the break up). In any event, and with respect, I think this 500 years period is too long, because I do not think that the Old Avestan and Old Indic languages, would have

been as closely related as they are, if their precursor languages had developed (separately) for 500 years ~ after the split from Indo-Iranian.

1700 ~ 1200 BCE (500 years): This period in his view saw the composition of texts in Old Avestan ~ the Gathas, the Yasna Haptanghaiti, and other Old Avestan texts. He surmises that the Rig Veda was also composed during this time period, and that the Indo-Aryan Mitannis flourished during this time period in Northern Mesopotamia. However, the Mitanni inscriptions have been dated to around 1500 BCE by which time they had already forgotten the Old Indic of their ancestors (which survived only in the names of their Kings and deities). None of these inscriptions are *said* to have been as early as 1700 or as late as 1200 (so far as I am aware).

Skjaervo says it is "tempting" to think of the Avestan period as *following* the Bactria~Margiana Archeological Complex (BMAC) which (according to Wikipedia) is the modern archeological designation for a Bronze Age civilisation in Central Asia which flourished around 2300 ~ 1700 B.C.E., with sites located in present-day Afghanistan, eastern Turkmenistan, southern Uzbekistan, and western Tajikistan, centered on the upper Amu Darya (Oxus River). Its sites were discovered and named by the Soviet archaeologist Viktor Sarianidi (1976). Bactria was located between the Hindu-kush mountains and the Amu Darya (Oxus river) in what is now a part of Afghanistan, Uzbekistan and Tajikistan. With respect, I do not think that the Old Avestan culture of the Gathas evolved from the BMAC culture because (according to Wikipedia) the inhabitants of BMAC are described as "sedentary" people who practiced irrigation farming of wheat and barley, and kept herds of sheep and goats, but also developed "an impressive material culture" including "monumental architecture, bronze tools, ceramics, and jewellery of semiprecious stones." None of these descriptions fit Zarathushtra's society as described in the Gathas (detailed in the main part of this chapter), although they do indeed fit the descriptions of farming, domesticated animals, 'palaces' and jewellery in YAv. texts.

³⁷ Skjaervo, (undated), *An Introduction to Old Avestan*, (3d version), appearing at www.gatha.org. > English > Articles

³⁸ *Vendidad*, Ch. 1, § 4, translated by Darmesteter, SBE Vol. 4, p. 5, discussed in more detail, with quotations, in *Part Four: Ancient Origins & Homelands*.

³⁹ We know that Yima/Yama was an Indo-Iranian legendary figure because he is mentioned in both Avestan texts (as Yima) and Vedic texts (as Yama) ~ although his life in each of these texts is quite different ~ which requires the conclusion that his legend (as a named person, although not in the details of his life) existed before the Indo-Iranian branch of PIE split into two separate languages/tribes ~ Indic and Iranian. And his Avestan legend includes a period when the climate changed to intense and long lasting cold. But the archeologically authenticated glacial period started around 3960 BCE and ended around 3821 BCE ~ during the early part of the main PIE period (4000 - 3000 BCE) ~ too early a time period for any Indo-Iranian dialect or branch of PIE to have then existed. However, Yima/Yama may have been a figure in the legends of a Pre-Indo-Iranian (or late Indo-European) tribe whose legends have not survived, but were inherited by their Indo-Iranian descendent. So the glacial period of Yima may have been the same as the glacial period of 3960 through 3821 BCE, although of course we cannot say for certain.

While this does not directly affect Zarathushtra's date, the fact that a YAv. text describes a glacial period in strikingly similar terms to the glacial period established by archeological evidence gives a measure of credibility to YAv. legends ~ among which are statements that do affect Zarathushtra's date as being an ancient legendary figure even in YAv. times, as detailed in this chapter.

⁴⁰ Skjaervo, *An Introduction to Old Avestan*, (3d version), appearing at www.gatha.org. > English > Articles.

⁴¹ See *Part Five: Evolution of the Name(s) Mazda, Ahura*.

⁴² The YAv. Yasna 9 which is dedicated to the Indo-Iranian deity Haoma, says,

"... thou, O Zarathushtra wast born ... in Pourushaspa's house, ... famed in Airyena Vaejah..." Yy9.13 - 14, Mills translation, SBE 31, p. 235.

In the additional examples below, the YAv. texts say that Zarathushtra ~ in Airyena Vaejah ~ offered up a sacrifice to one or more deities (other than Ahura Mazda). This simply represents attempts (after the syncretization) to validate the worship of these additional deities by stating that Zarathushtra (and even Ahura Mazda!) offered them sacrifices. But in the Gathas, no such deities are mentioned or worshipped by Zarathushtra (let alone by Ahura Mazda). Here are some other YAv. texts which described Zarathushtra as living in Airyena Vaejah.

The YAv. *Drvasp (Gosh) Yasht*, Yt. 9.25 addressed to the deity Drvasp says,

"To her did the holy [*ašava* 'truth possessing'] Zarathushtra offer up a sacrifice in Airyena Vaejah, by the good river Daitya...". Yt.9.25, Darmesteter translation, SBE Vol. 23, p. 116.

The *Aban Yasht* Yt. 5.104 (SBE 23 p. 78), and the *Ashi Yasht* Yt. 17.45 (p. 279) also speak of Zarathushtra offering sacrifices ~ the deities receiving his (purported) sacrifices being different in each instance, but the location being the same ~ in Airyena Vaejah.

Parenthetically, I found one of the boons (allegedly) requested by Zarathushtra in the *Drvasp Yasht*, quite interesting. The lady 'Hutaosa' mentioned in § 26 was the wife and queen of Zarathushtra's patron king, Vishtaspa, and this section shows an interesting perception of the independence, power and influence of queens in Avestan times. Here, Zarathushtra does not (allegedly) ask that the queen influence the king to accept his teachings. The queen was thought to have enough power and influence to spread and make known Zarathushtra's teachings independently. The word which Darmesteter has translated as 'law' is not *dāta-* 'established rules' but actually *daēnā-* 'envisionment', which here refers to the 'wisdom-worshipping envisionment' (*daēnā- mazdayasni-*) of Zarathushtra.

26. 'O good, most beneficent Drvaspa! grant me this boon, that I may bring the good and noble Hutaosa to think according to the law [*daēnayāi*], to speak according to the law [*daēnayāi*], to do according to the law [*daēnayāi*], that she may spread my Mazdean law [*daēnaṃ māzdayasntm*] and make it known, and that she may bestow beautiful praises upon my deeds." *Drvasp (Gosh) Yasht*, Yt. 9.25 - 26, Darmesteter translation, SBE 23, p. 116; Avestan words transliterated from Geldner 2P, p. 123.

⁴³ SBE 5, pp. 141 - 142.

⁴⁴ Humbach 1991, Vol. 1, § 7.2.1, p. 33.

⁴⁵ Here are some examples of YAv. texts which speak of the 'long descent' of Zarathushtra's teachings (called *dāta-* in some of these examples, which Mills has translated as 'law' and sometimes as 'revelation'). However, the stem *dāta-* derives from *dā-* one of the meanings of which is 'to give, to establish' (Skjaervo 2006) and in the Gathas (Y46.15, Y49.7, Y51.14), the word is used in the sense of the envisionment (*daēnā-*) which Wisdom has given (*dāta-*) through Zarathushtra ~ thus Wisdom's teachings, His Word. Although neither 'teaching' nor 'Word' is a literal translation of *dāta-*, in the contexts in which *dāta-* words are used here, I think 'teaching' or 'Word' more closely approximates in English, their intended meaning in Avestan. And *maqθra- spənta-* literally means the 'beneficial precept, Word of the Divine'. In these quotations, words in square brackets have been inserted by me to show the Avestan word (from Geldner).

Yy2.13 "...I desire to approach the Zarathushtrian law [*dātəm*] with my praise, and (with it) its **long descent** ..." Mills translation, SBE 31, p. 206; Geldner 1P p. 15.

Yy6.12 "And we worship the Mathra Spenta with our sacrifice, the glorious and of a truth, the law revealed against the Daevas, the Zarathushtrian law, and we worship with our sacrifice its **long descent**, ..." Mills translation, SBE 31, p. 221.

Yy60.3, "... the **long enduring prominence** of this religion of Ahura's, the Zarathushtrian Faith." Mills' translation, SBE 31, p. 310, Geldner 1P p. 210. In Mills' SBE translation, the first sentence of Yy60.3, is the last sentence of Yy60.2 in Geldner.

We see the same thought (its '**long descent**') expressed in (at least) six additional YAv. passages (Yy1.13; Yy7.14; Yy17.13; Yy25.6; Y22.25; and Yy25.6), indicating that the belief that Zarathushtra's teachings were ancient ~ of **long descent** ~ was well established in YAv. times. There is no Avestan text which expresses a contrary view.

Parenthetically, Mills thought that the 'law against the Daevas' (mentioned in many YAv. Yasnas) referred to the *Vendidad*, SBE 31, p. 199, fn. 5. But with respect, the Gathas (and even many YAv. texts) spoke out against the daevas long before the *Vendidad* did. Moreover, more modern scholars are unanimous in stating that the *Vendidad*, although purportedly written in YAv. text, is full of grammatical errors, and therefore was composed after YAv. times when its authors were no longer fluent in the YAv. language. So the grammatically faulty *Vendidad* could not have been in existence, when the grammatically sound YAv. Yasnas were composed which mention Zarathushtra's law against the Daevas.

⁴⁶ Humbach 1991, Vol. 1, § 5.3.3, pp. 21 - 22. Humbach goes on to say that "Already in the first nine of the ten books of the Rig Veda which forms the oldest part of the collection, *asura*, which originally had an auspicious meaning, slowly begins to acquire a derogatory sense and comes to denote a class of beings of demoniac character..." p. 22, § 5.3.4. In the Avestan texts *ahura* retained its auspicious meaning. But *daevas* (who were deities in Zarathushtra's culture) are spoken of in a pejorative way in the Gatha, and the word came to mean demons in the YAv. texts. Two fine examples which demonstrate that in understanding the ways in which the meanings of words evolve over time, and in related cultures, sometimes a page of history is worth a volume of logic (as Mr. Justice O. W. Holmes once said in a different context).

⁴⁷ Anthony 2007 seems to corroborate the Insler 1975 translation in which *airya-* is used generically for the largest social unit (which Insler calls 'clan' and Anthony calls 'tribe'). Anthony surmises that in (reconstructed) PIE, social units were the household (containing one or more families), the clan, and the tribe, and that the PIE word for 'tribe' later evolved into the Indo-Iranian word for tribe which he gives as *aryan*, pp. 91 - 92. Kent 1950 shows the following: PIE root **er-*; Avestan *airya-*; Skt. *ārya-*; Old Persian *ariya-*; Irish *Eire*; New Persian *ērān*; p. 170.

Here are the Gathas verses which show that Zarathushtra uses *airya-* words generically for the largest social unit (the 'tribe').

"At my insistence ... the family, the community [*vərəzəṇəm*] together with the clan [*airyamnā*] entreated for the grace of Him, the Wise Lord, (saying:) 'Let us be Thy messengers ...'." Y32.1, Insler 1975.

"(to the Wise Lord). The person who is very good to a truthful man, be he allied by family, or a member of his community [*vərəzəṇyō*], or allied by clan [*airyamnā*], Lord, or be he someone who ..." Y33.3, Insler 1975.

"Wise One, (it is) I who, through worship, shall turn away disobedience and bad thinking from Thee, and opposition from the family, and the nearest deceit of the community [*vərəzəṇahyācā*], and scorners from the clan [*airyamnascā*]..." Y33.4, Insler 1975.

"To what land to flee? Where shall I go to flee? They exclude (me) from my family and from my clan [*airyamascā*] ..." Y46.1, Insler 1975.

"... Which clan [*airyamā*], which family shall abide by Thy laws, thus being one which shall give good fame to the (whole) community [*vərəzəñāi*]?" Y49.7 Insler 1975.

⁴⁸ See *Part Four: Ancient Origins & Homelands*.

⁴⁹ See *Part Three: The Evolution of the Name(s) Mazda, Ahura*.

⁵⁰ Humbach 1991 summarizes available sources regarding Zarathushtra's date Vol. 1, p. 24 and onwards, and Vasunia 2007 also gives many Greek sources which expressed opinions on Zarathushtra's date.

⁵¹ Vasunia 2007.

⁵² Xanthus was a contemporary of Herodotus (Moulton 1912 p. 77); Herodotus was born at or about 484 BCE, (Introduction to Rawlinson's translation of Herodotus, *The Persian Wars*, (Random House; The Modern Library: New York, 1942). p xx.

⁵³ Humbach 1991, Vol. 1, p. 25.

⁵⁴ Humbach 1991, Vol. 1, p. 24.

⁵⁵ Vasunia 2007 p. 70 (3).

⁵⁶ Humbach 1991 Vol. 1, p. 25.

⁵⁷ Humbach 1991 Vol. 1, pp. 24 - 25.

⁵⁸ Vasunia 2007 pp. 60, 401.

⁵⁹ Humbach 1991 Vol. 1, pp. 28 - 29.

⁶⁰ The *Arda Viraf Namag* is a Pahlavi text, but I discuss it in *Part Three: Heaven & Hell In Pazand & Pahlavi Texts*.

⁶¹ Humbach 1991, Vol. 1, p. 29

⁶² SBE 5, p. xxii, et seq., E. W. West's Introduction to the Bundahishn.

⁶³ SBE 5, pp. xl.

⁶⁴ Rueben Levy, 2d ed. 1996, *The Epic of the Kings, Shah Nama by Ferdowsi*, (Mazda Publishers & Bibliotheca Persica), p. 219.

⁶⁵ King Vohuman and his successor Queen Humai are mentioned in both the Bundahishn and the Shahnameh which argues a well established traditional view. Although the Shahnameh does not devote a lot of space to Queen Humai, it does say that after her father's death, she "came and set the crown on her head, establishing a new practice and a new order. ... In judgment and equity she surpassed her father and because of her justice the whole world prospered." Levy, *ibid.* p. 221. But, not wanting her son to rule, the story goes that she boxed him up in comfort and luxury (when he was a few months old), and had him placed on the river, so that he floated away and was found and raised by a washerman and his wife (which sounds neither 'just' nor 'equitable' to me!). Nevertheless, it is difficult to reconcile a prosperous rule of 30 years for Humai, and an additional 112 years for her father Vohuman, with their absence from the historical records of the ten Iranian rulers who preceded Alexander's conquest (set forth in CHI and Kent 1950 from various historical sources). Perhaps, Vohuman and Humai were rulers during another period of Iranian history, which, due to

loss of knowledge were mistakenly placed by surviving Iranians in the list of rulers preceding Alexander's conquest.

⁶⁶ Kent 1950, p. 189. Kent shows the stem as *dārayava^hu-*, and its nom. sg. form (often used as the 'dictionary' form) as *dārayavauš*. He mentions that one scholar takes the name as "hypocoristic" of *dāraya-vahu-manah-* 'Holder of Good Thought', which is rejected by another scholar. However, if Darius (*dārayavauš*) means 'Holder of Good Thought' then because of the lapse of time, and destruction of knowledge this meaning may have resulted in confusing King "Vohuman" (and therefore his daughter Queen Humai, both shown in the *Bundahishn* and in the *Shahnameh*) from another period of Iranian history, with the Achaemenian King Darius I (the Great).

⁶⁷ CHI Vol. 2 p. 874, which shows Darius I starting his reign in 522 BCE. (Kent shows it started in 521 BCE).

⁶⁸ Vasunia, 2007, pp. 47, 50 ~ 51.

⁶⁹ The Aban Yasht, in § 98, speaks of the ruler whom Zarathushtra wanted to convert, as "Vishtaspa the Naotaride,..." SBE 23, p. 77; Humbach 1991 also says that in the Yashts of the Younger Avesta and in the Pahlavi literature, Vishtaspa is a member of the Naotara clan. Vol. 1, p. 12, § 3.2.1.

⁷⁰ Behistan Inscription, Column 1 lines 3 - 5, Kent 1950, *Old Persian*, p. 116; and Kent p. 158 for his Table showing the Achaemenian Kings.

⁷¹ SBE 23, p. 78.

⁷² Kent 1950, p. 171

⁷³ The opinions of Ma'sudi and Al-Biruni are given in Humbach 1991, Vol. 1 pp. 27 - 28.

⁷⁴ Detailed in *Part Three: Evolution of the Name(s) Ahura, Mazda*.

⁷⁵ Skjaervo (undated), *An Introduction to Old Avestan*, (3d version), appearing at www.gatha.org. > English > Articles.

⁷⁶ Humbach 1991, Vol. 1, pp. 26 - 27, and ft. 34; words in square brackets are Humbach's.

⁷⁷ Humbach 1991, Vol. 1, pp. 26 - 27, and ft. 34.

⁷⁸ CHI, Vol. 2, page 416.

⁷⁹ Malandra 1983 *An Introduction to Ancient Iranian Religion* (University of Minnesota Press), p. 17.

⁸⁰ Darmesteter's Introduction in SBE Vol. 4, pp. xlvi et seq.

⁸¹ Skjaervo (undated), *An Introduction to Old Avestan*, (3d version), appearing at www.gatha.org. > English > Articles.

⁸² Encyclopedia Britannica (on line under 'Bactria').

⁸³ Franz Grenet, *Zarathushtra's Time & Homeland, Geographical Perspectives*, p. 21, and Almut Hintze, *Zarathushtra's Time & Homeland, Linguistic Perspectives*, p. 31, both essays appearing in *Wiley Blackwell Companion to Zoroastrianism 2015*, Edited by Michael Stausberg & Yuhan Sohrab-Dinshaw Vevaina, with Anna Tessman.