

fərā aməṣā spəṇtā gāθå gəuruuāin

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Índice de contenidos

Préface (Jean Kellens)	9
LISTA DE LAS PUBLICACIONES DE HELMUT HUMBACH 1	1
Alberto CANTERA Miling and the Sum the role of Miling in the Amangement	
Mi&ra and the Sun: the role of Mi&ra in the Arrangement of the Avestan Liturgical Calendar2:	5
Juanjo Ferrer-Losilla	
Couper et coller ? Une anecdote dans les manuscrits avestiques : l'exemple de K5 et K659	9
Jean Kellens	
Reflets du début du Yasna6	7
Götz König	_
Notes and Considerations on the History of the Gā9ās7.	3
Jaime MARTÍNEZ-PORRO	
The Avestan Manuscript 4162 of the Pouladi Collection. Is it the Eldest Iranian Vidēvdād Sāde Manuscript?99	9
Paolo Ognibene	
Scythian, Persian and Greek Misunderstandings 119)
Antonio PANAINO	
Studies on the Recursive Patterns in the Mazdean Ritualism: The "Installation" and the so-called "Disinstallation"	
of the high Priestly College129	9

Éric Pirart	
Pour une nouvelle interprétation de l'Ahiiāsā Hāiti	145
Nicholas SIMS-WILLIAMS	
The Sogdian Ancient Letter No. 4 and	
the Personal Name Manavaghichk	171



Helmut Humbach, casa de Bailey, sede del *Ancient India and Iran Trust* (Cambridge, 7 de junio de 2008)

Mi9ra and the Sun: the Role of Mi9ra in the Arrangement of the Avestan Liturgical Calendar

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ABSTRACT: As the deity associated with the sun's glow or sun light, opposed to that of the astral body, Mi9ra is the god of the liminal time, viz. the points of contact between day and night (that is, sunrise and sunset) and metonymically between summer and winter (that is, the equinoxes). Besides the well-known transformation of the Avestan liturgical calendar caused by the adoption of the Egyptian solar calendar, scholars have in recent years drawn attention to a further transformation in the liturgical calendar (for the first time H. Humbach in 2010): the expansion of the ritual divisions of the day from three to five. Later, J. Kellens pointed out the important role of Mi3ra in introducing the division of the day starting with sunrise. In this paper, I will argue that Miθra is not only associated with sunrise, but also with sunset, introducing Mi9ra as the protagonist in the process that eventually led to the transformation of the ritual parts of the day. Moreover, I will show that the adoption of the solar calendar caused the transformation. Both processes are linked through a series of analogies between the day and the year around the axis defined by Mi9ra: sunrise and sunset on the one hand and the two equinoxes on the other. I will also discuss Mi9ra's connection with both equinoxes. The autumn equinox is celebrated at the festival of Mihragān and corresponds to the Avestan festival paitiš.hahaiia-. With the vernal equinox begins the new ritual year with a series of celebrations that extend over the first week of the year. These celebrations are dedicated to the Amoša Sponta, and in them the liturgical season of each ashiia- ratu- is introduced at a different day, thus connecting parts of the day with the conception of the year and even hemeronyms of the first week. In this context, I will also show that the standard Yasna, the Yasna with the dedicatory of Nog Nawar, in which Mi9ra takes a prominent position, is originally the Yasna for the celebration of the opening of the new ritual year at the first sunrise after the vernal equinox. Other important actors of the reform are the Waters and the Frauuasis in whose honour the other great seasonal festivals are celebrated and to which the longest Yasts are dedicated. Most likely, the reform of the liturgical calendar took place in Western Iran in Achaemenid times, perhaps concurrently with other significant changes such as the introduction of a permanent fire and the creation of a supra-national authority.

KEYWORDS: Zoroastrianism, Mithra/Mitra, Liturgical Calendar, Solar Calendar, Mithraism.

Since MEILLET's (1907) discovery –first confirmed by THIEME (1957: 24 ff.)–, Miðra has commonly been viewed as the deity of the "contract" in the Vedic and Avestan texts. Despite the attempts of LOMMEL (1949: 210; 1962) to combine the idea of a god of contract with a solar deity, one of the main goals of GERSHEVITCH (1959) was to demonstrate that the identification of Miðra with the sun is post-Avestan. In the Avestan texts, Miðra is only

identified with the light of daybreak and not with the sun. This identification is secondary compared to Mi9ra's function as the watcher over contracts who rises proverbially early. This would have led to the post-Avestan pairing with the sun¹.

Kellens (1979) has shown that Miθra takes part in the solar symbolism in Yt10.104, extending the association beyond the light of daybreak. There the two arms of Miθra are identified with the four solar positions: sunrise, sunset, midnight and noon. According to Kellens, this is a consequence of Miθra's nature as a god of the light sky. A similar idea was expressed by Kellens some years later (1994: 165): "Entre le soleil et le dieu qui incarne l'empire de la lumière du jour sur les vivants, le lien ne peut être fortuit: Miθra se lève avant le soleil parce que la lumière se manifeste dans le ciel avant l'astre qui en est la source".

Furthermore, KELLENS (2016) has recently highlighted the role of Mi9ra in the transformation of the three ritual divisions of the day into five. Examining Y44.5, HUMBACH (2010: 195) had noticed that in the Old Avestan texts there were three ritual divisions of the day (ušah- "morning dawn", $ar\bar{a}m.pi\theta\beta\bar{a}$ - "noon", $x\bar{s}ap$ - "night") and not the well-known five of the Young Avestan texts and modern times. This observation is of extraordinary importance and the starting point of the following remarks. It is thus with the greatest pleasure that I dedicate this paper to Prof. Humbach. Without knowledge of HUMBACH's views, I presented a similar observation in a talk at Collège de France ("La cérémonie du Wisperad", 8th June 2011). While HUMBACH dated the restructuring of the ritual day to early Sasanian times, my position was radically different. In my view, the transformation is the result of a priestly re-evaluation of the ritual times that must have taken place sometime between the redaction of the Old Avestan texts and the fixation of the Young Avestan rituals, since it permeates all known Avestan texts. There are two indications for the priestly character of the new conceptualization of the time of the day. First, two of the new divisions bear programmatic names derived from the ritual practice: *hāuuani* "time for the pressing of the *haōma*" and aiβisrūθrima aiβigaiia- "time for only reciting and singing". Second, none of these divisions correspond in the names or the conception of time to the standard, worldly designations (see table 1, p. 27).

The two main features of the new distribution of the ritual times are, firstly, the introduction of a sharp distinction between the bright and dark parts of the day and, secondly, the division of the time where the sun is visible into three parts and of the time where the sun is not visible into two. The emphasis is on a separation of day and night, clearly distinguishing between $u\check{s}ahina$ - and $h\bar{a}uuani$ -, at one end, and uzaiieirina- and $ai\beta isr\bar{u}\theta rima$ -, at the other. Both

¹ A similar view has been defended, e.g., by SICK (2004). After analyzing parallel functions between Miθra and the solar deities of India and Greece, he concludes: "Mithra assumes the physical nature of the sun, because of his function as a god of contract." (SICK 2004: 461).

distinctions are fundamental to the ritual life as represented in the Young Avestan texts. They establish a clear time frame for the ceremony of the waters that is only possible between $h\bar{a}uuani$ and uzaiieirina. Moreover, the distinction between $u\bar{s}ahina$ and $h\bar{a}uuani$ is the basis for the distinction between the two basic forms of the Long Liturgy: the Yasna and Wisperad ceremonies that are celebrated at $h\bar{a}uuani$ and most $hampar\bar{s}ti$ - ceremonies that are only performed at $u\bar{s}ah$ with the exception of the Bayān Yašt.

Table 1: the *ashiia- ratu-* or parts of the day

		Old Avestan	V21.3	N28-33	YAv- summer	YAv- winter
dawn	midnight- sunrise	ušah	ušah	[maiδiiā xšap] ušah	ušahina	ušahina
sunrise	sunrise- noon			[hū vaxša-] fraiiara	hāuuani	
noon	noon	ar̄əm.piθβā		[rapiθβā]		hāuuani
aftamaan	**				гарідвіпа	
afternoon	noon -		uzīra	uzaiiara	uzaiieirina	uzaiieirina
evening	- sunset		arezah			
night	sunset- midnight	xšap	xšap	[frāšmō.dāiti] xšap	aiβisrūθrima	aißisrū9rima

The patron of *hāuuani*, the *ratu* responsible for the distinction between the Yasna and Wisperad ceremonies and the *hamparšti*-ceremonies, is Mi9ra. In Mihr Yašt (Yt10.56), Kellens (2016: 161 ff.) has found a direct reference to the introduction of the *ratu* hāuuani and a liturgy in which the name Mi9ra is recited in connection with the *ratu*:

aōxtō.nāmana θβā yasna raθβiia vaca yazaite barō.zaoθrō aṣauua aōxtō. nāmana θβā yasna raθβiia vaca sūra miθra yazāi zaōθrābiiō "L'harmonieux porteur de la libation t'offre un sacrifice où ton nom est mentionné comme mot lié au *ratu*; ô Mi9ra, je veux t'offrir, avec des offrandes [liquides]⁴, un sacrifice où ton nom d'opulent est mentionné comme mot lié au *ratu*." (KELLENS 2016)

² Anāhita demands, indeed, that sacrifices to her should be offered between sunrise and sunset (Yt5.91) and considers night offerings as benefiting only the *daēuuas* (Yt5.94-95). This strongly resembles the affirmation that the satisfaction of the *ratu* of the good waters (*apam vaŋ"hinam ratufritiš*) is circumscribed to the time between sunrise (*haca hū vaxšāṭ*) and sunset (*<ā hū> frāšmō.dātōiṭ*) (N30.1-2). That is why the Rivāyats indicate that in the auroral ceremonies the sunrise must take place between the recitation of the first Yasna Hataŋhāiti and Y62 (DHABHAR 1932: 408 ff.; CANTERA 2013: 119).

³ On these ceremonies, see CANTERA (2013).

⁴ Despite Kellens's translation, Av. $za\bar{o}\theta r\bar{a}$ does not necessarily mean "a liquid offering or libation". It also designates "solid offerings".

Most likely, this is a direct allusion to the new Yasna liturgy for $h\bar{a}uuani$ which is celebrated with the mention of Mi ϑ ra linked to the mention of the ratu and dedicated to Mi ϑ ra, as the patron of $h\bar{a}uuani$, in first instance (see §2.3).

The pre-eminent role played by Mi9ra in restructuring the ritual times of the day associated with sunrise, and the evidence of a solar imagery beyond the identification with the light of daybreak call for a re-examination of the connection between Mi9ra and the sun in the Avestan texts. I shall investigate the extent of his role in the redistribution of the parts of the day, and more generally, in the re-arrangement of the ritual times that took place in the context of the adoption of the Egyptian solar calendar and its significance for the liturgical Avestan calendar.

1. Mi9ra's light

Miθra's luminous appearance in the morning dawn is described in great detail. It is not only different from the sun, as already noticed by GERSHEVITCH (1959: 31), but also different from morning dawn (ušah). The light of Miθra appears on the top of the mountains exactly after dawn and before sunrise, as described in the often-quoted passage V19.28:

āaţ mraōţ ahurō mazdå pasca para.iristahe maśiiehe pasca frasaxtahe maśiiehe pasca pairi9nəm dərəninti daēuua druuantō duždåŋhō 9ritiiå xšapō vīusaiti uši raōcaiti bāmiia gairinam aṣaxvā9ranam āsənaōiti mi9rəm huzaēnəm huuarəxšaētəm uziiōraiti

The same idea recurs in Yt10.13:

yō paōiriiō mainiiauuō yazatō tarō haram āsnaōiti pauruua.naēmāţ aməṣahe hū yat auruuat.aspahe "Ahura Mazdā said: 'After he has died, after he passed away, after the demons, supporters of the Druj and with bad gifts, cut the course of life, the bright resplendent dawn⁵ of the third night shines, the well-armed Mi9ra climbs the mountains that provide the prosperity of Order and the sun rises'."

"(Miðra), who as the first immaterial god climbs over the lofty Harā before⁶ the immortal sun who has swift horses."

⁵ On *uši*, see GERSHEVITCH (1959: 291).

⁶ Av. *pauruua.naēmāţ* has been understood in different ways: DARMESTETER and GERSHEVITCH translate it locally ("devant le soleil immortel" [DARMESTETER 1892: 2.448]; "in front of the immortal swift-horsed sun" [GERSHEVITCH 1959: 79]) and even more specifically PIRART (2010) who translates: "depuis le coté oriental du Soleil immortel".

WOLFF (1910: 200), however, following BARTHOLOMAE, prefers a temporal interpretation: "voraus (vor) der unsterblichen, schnelle Rosse besitzenden Sonne". In light of V19.28, pauruua.naēmāţ can only mean "before", in local and in temporal sense, but it does not mean, in any case, "in front of the sun" or "from the East side of the sun", since the sun is still not visible. We might compare Yt 16.2 yezi api pauruua.naēmāţ āaţ mam auui nmānaiia yezi paskāţ āaţ mam auui apaiia "If you are before me, wait for me. If you are behind me, catch up with me, catch me up". Av. pauruua.naēmāţ is opposed to paskāţ "behind", both in local and temporal senses.

Mi9ra is the light that is visible before the sun. Based on an interpretation of Yt10.13, Kellens (1994) believes that Mi9ra, like the Vedic bull that represents the daylight, seizes the morning down and lets it shine. Here is the text in Kellens' translation:

yō paōiriiō zaraniiō.pīsō srīrā barəšnauua gərəβnāiti adāṭ vīspəm ādiδāiti airiiō.šaiianəm səuuištō "(Mi9ra) qui, le premier, saisit sur le sommet les belles (aurores) aux ornements dorés."

According to the traditional interpretation, the text is ungrammatical. Kellens (1994: 166), however, offers an interpretation that fits the transmitted text and the Avestan grammar. Although the traditional interpretation correlates $sr\bar{r}r\dot{a}$ with $bara\check{s}nauua$, Kellens argues justly that the latter can only be, if we maintain the manuscripts' reading, the loc.sg. and the first the acc.pl.f. as an adjective of an elliptical substantive $u\check{s}ah$ - (cf. G5.5). His acceptance of the transmitted text, however, faces some difficulties. The reasons for the elliptical expression of the central concept, $u\check{s}ah$ -, are unclear. Furthermore, $u\check{s}ah$ - is never used in plural in the Avestan texts, although it is in Vedic. Additionally, despite Kellens's interpretation of RV3.61.3, the idea of "seizing the morning dawn" is unknown in the Indo-Iranian world. Finally, Kellens's suggestion is incompatible with V19.28, since there Mi ϑ ra climbs on the lofty Har \bar{a} only after the appearance of the $u\check{s}ah$ and not vice versa. Mi ϑ ra's luminous aspect is different from dawn and the sun and its epiphany takes place between these phenomena.

Mi9ra represents the solar rays or the sun's glow that are visible before the sun sphere appears. The moment depicted here corresponds to the civil twilight in the morning: it is the brightest form of twilight, when the sun is less than six degrees below the horizon. Only the brightest celestial objects like the morning star can be seen at this time. In mountainous areas, the sun's glow is sometimes reflected on the top of the mountains even before the sun is visible from the valley which is the scene depicted in Yt10.13.8

Nevertheless, Mi9ra is not only the first light of the day seen on the top of the mountains. He is also visible in all his splendour at dusk (Yt10.95), surveys the whole earth (Yt10.15, 44) and travels like the sun westwards during the

⁷ My translation follows the traditional interpretation: "(Miθra) who as the first catches the (now) gold-painted tops of the mountains. From there, he, the most powerful, watches the whole settlement of the Aryans."

⁸ Yt10.14 describes the settlement of the Aryan people that Miθra watches from the top of the mountains. Five places are explicitly mentioned. They are identifiable and point to a location in the area of the Kōh-i Bābā and adjacent valleys, a mountainous area in which the described image could really happen (GRENET 1993: 91). GRENET has identified the main figure of the picture that appears in Bāmyān over the head of the colossus of Sākyamuni as Miθra. The cliff is oriented to the south-east so that, as GRENET supposes, the name of the place, Bāmyān, a cognate of Av. bāmiia-, "refers to the light which at dawn illuminates the cliff, the very cliff at which Mithra's chariot still soars above the colossus of Sākyamuni".

day (Yt10.13, 67) and eastwards at night (Yt10.95, 126)(GERSHEVITCH 1959: 39). During the day, he fights against the demons all over the earth and at night against Aŋhra Maińiiu (Yt10.132-3). Ritually, Miŷra is not exclusively linked with the morning (although this part of the day is under his patronage), but with all the parts of the day between sunrise and sunset. Thus, the Mihr Niyāyišn is recited together with the Xwaršēd Niyāyišn during the three parts of the day in which the light of the sun is visible (CHOKSY/KOTWAL 2005: 219 ff.)⁹. Miŷra's radiance shines throughout the day (being visible on the earth) and overnight. Therefore, he cannot be identified exclusively with the early light of the day, but also not with the sun, from which he is clearly distinguished.

The natural phenomenon represented by Mi ϑ ra is the glow or radiance of the sun as different from the sun sphere. This concept is designated in the Pahlavi literature with a loanword from Avestan, $fr\bar{a}\bar{s}m$ (Dk 7.2.56 [B485.5]):¹⁰

pad ēwēnag ī xwaršēd pad ulwaxšišnīh nazdīh ka-š fradom frāšm wistarīhēd pas tan paydāgīhēd "... like the sun shortly before sunrise, when its first light is spread and then its body appears."

The *frāšm* of the sun is distinguished from its body (*tan*) and compared with the light seen in the house of Zaraθuštra three days before his birth. Miθra's visible manifestation is thus the *frāšm*, the sun's glow and the solar rays. The astral body is *huuar- xšaēta-* and therefore, this is the designation used when the sun appears in a list with other celestial bodies like the moon or the stars (e.g., Y16.4, Yt12.34). This explains the double relation, Miθra being the sun and not being the sun at the same time, which one also encounters in Roman Mithraism (DE JONG 1997: 128). Miθra is not the sun as an astral body, but its glow. Hence, the importance of the rayed nimbus for identifying Miθra in the iconography, e.g., in the only representation of Miθra in the Sassanian monumental reliefs of Tāq-e Bustān.¹¹

Many of the features and epithets of Mi9ra in the Avestan texts refer metaphorically to the solar rays as the spears with long shafts and the swift arrows shot from afar (Yt10.102). As already noticed by GERSHEVITCH (1959: 39), the Mihr Yašt describes the course that Mi9ra takes during the night (Yt10.99-101) and the day (Yt10.123-132). The description of the diurnal Mi9ra is far longer than the one of the nocturnal Mi9ra. The main difference is the long catalogue of Mi9ra's weapons (Yt10.128-132), a section without parallels in the other Yašts. In the description of the nocturnal path, he is depicted as supplying the Frauuašis with eagle-winged arrows and striking his

⁹ The counterpart is the recitation of the Māh Niyāyišn during *aiβisrūθrima* and *ušah* three times each month for the new moon, full moon and moonless days, respectively (CHOKSY/KOTWAL 2005: 225).

¹⁰ On this word, see BAILEY (1930; II.596), BENVENISTE (1936; 230).

¹¹ For the iconographic representation of Miθra, see SHENKAR (2014: 102 f.).

club at horse and man when he arrives to the anti-mithraic countries (Yt10.101). When he flies from east to west during the day and is visible in the sky, he is presented in his chariot loaded with weapons. All the strophes describing the weapons are identical with the exception of the corresponding weapon with its epithets: on Mi9ra's chariot stand thousand X (the corresponding weapon), and they fly through the immaterial space and fall onto the head of the demons. The weapons are thousand bows (Yt10.128), thousand arrows (Yt10.129), thousand spears (Yt10.130), thousand knives (Yt10.131) and just one mace, but having hundred bosses and hundred blades (Yt10.132). The insistence on the number "thousand" (representing a very high number) is most likely to be interpreted as reflecting the multiplicity of the solar rays¹².

The distinction between the materiality of the sun globe, and its light, which lacks any tangible reality (cf. Phl. frāšm as different from the tan of the sun), is responsible for the insistence on the "immaterial" aspect of Mi9ra. The Avestan texts classify the gods (yazata-) as "material" (gaēi9iia-) or "immaterial" (maińiiauua-). The "immaterial gods" (maińiiauua- yazata-) are frequently mentioned. However, Mi9ra is the only god named by his name that frequently gets the epithet maińiiauua. He is the immaterial god climbing over the lofty Harā (Yt10.13). His flight over the regions of the earth is immaterial (Yt10.16) and so are his horses (Yt10.68). In Yt10.106-107 a constant contraposition is made between the material man and the immaterial Mi9ra. His weapons, visible during the day (a metaphor for the solar rays), get constantly the epithet "occupying the immaterial space" (maińiauuasah-/maińiuuasah-). They fly and fall down on the heads of the demons flying

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¹² The multiplicity of the solar rays are perhaps also reflected in the various epithets employed for Miθra beginning with the numerals hazaŋra- "thousand" or baēuuara "then thousand". In fact, all epithets that begin with these numbers are exclusive to Miθra, with the problematic exception of hazaŋrō.yaōxšti. Most of them (baēuuara.cašman-, baēuuara.spasana-, hazaŋrō.gaōša-) express the great capacities of Miθra for watching over the fulfilment of the contracts, so that the high number might not be in connection with the multiplicity of the solar rays. Still, the contrast between the one eye of Ahura Mazdā (the sun) (Y4.16 etc.) and the thousand eyes of Miθra could establish a link between the high number and the multiplicity of the solar rays: the sun is one eye, whereas the infinite solar rays are the ten thousand eyes of Miθra (cf. Yt10.82).

KELLENS (2006: 18) translates the often repeated passage (Y1.11, 3.13, etc.) huuarəca xšaētahe auruuat.aspahe dōi ϑ rahe ahurahe mazdā mi ϑ rahe daxiiunam dai η hupatōi \check{s} as "pour le soleil éclatant qui est l'oeil d'Ahura Mazdā et de Mi ϑ ra, le chef des nations". In fact, the comparison with the accusative variant of the same formula (Y6.10, 17.10) clearly shows that Mi ϑ ra does not function as a genitive depending from dōi ϑ ram, but is just another member of the list on the same level as the moon or the sun. The sun is the eye of Ahura Mazdā, but not of Ahura Mazdā and Mi ϑ ra.

though the immaterial space (Yt10.128-132). Mi\u00a9ra's horses receive the same epithet¹³ (Yt10.68)¹⁴.

2. Mi9ra's time

Mi9ra's time par excellence is when the solar rays are best perceived without the sun being visible. This happens most frequently during the civil twilight, that is, the brightest form of twilight, when the sun is less than six degrees below the horizon at sunrise and sunset. Accordingly, Mi9ra is visible not only at dawn, but also at dusk (Yt 10.95). In these two moments, only the brightest astral bodies can be seen, especially the morning and evening stars. Hence the strong connection between them and Mi9ra. SIMSON (1997) even identifies Mi9ra with Venus. This association is indeed widely confirmed in the Mithraic (and also Central Asian)15 iconography by the presence of Cautes and Cautopates and by the intermediate position of the god in the tauroctonies between Luna and Sol. Mi9ra's intermediate position between the moon and the sun is, indeed, highlighted in the Xwaršēd Yašt. After the yazamaidesection dedicated to the sun, the objects of yazāi are Mi9ra, the mace of Mi9ra and the "alternation between moon and sun that is the best of the alternations" (Yt6.5 vazāi haxəδrəmca vat asti haxəδranam vahištəm antarə månhəmca huuarəca). Moreover, the image of the two arms of Mi9ra (sunrise and sunset) confirms the importance of sunrise and sunset in the imagery of Mi9ra (KELLENS 1979).

Nevertheless, if we do not take into consideration external information such as the iconography of Mi9ra in Roman Mithraism and in Central Asia, only Mi9ra's association with sunrise is obvious. Besides Yt10.95, a clear link with sunset is to be established only indirectly: by connecting Mi9ra with the patrons of *uzaiierina* (Apam Napāt and the Waters) and by the reflection of the conception of the day and the year in the religious geography of the earth. The year appears as an extension of the day because of the analogy between day and night with summer and winter. The correspondence of sunrise and sunset are, accordingly, the vernal and autumn equinoxes, respectively. While the other festivals seem to be pastoral and agricultural in nature and not directly connected to the positions of the sun, the two equinoxes are celebrated in two festivals (*hamaspa9maēdaiia*- and *paitiš.hahaiia*-). The festival of the autumn equinox is since Achaemenid times associated with Mi9ra and, as we shall see, the same could also apply to the Avestan texts. By contrast, the

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¹³ Miθra's horses are also said to "be nourished with immaterial food" (*maińiiuš.x* arəθa-Yt10.125). However, *maińiiuš.x* arəθa- must be interpreted under the light of *maińiiuš.x* arəθa- as epithet of the Gāθā. There it means "(the Gāθās) that provide the immaterial nourishment". Accordingly, it seems that the horses of Miθra are nourished through the recitation of the Gāθās.

¹⁴ An almost identical description is also found for the horses of Sraōša (Y57.27). Elsewhere, this word appears as an epithet for the arrows of Tištriia (Yt8.6, 37).

¹⁵ See Grenet (1993), Shenkar (2014: 102 ff.).

celebrations of the vernal equinox are in honour of the Frauuaṣis. The roles of Miðra in the sunrise-sunset axis, and by extension in the vernal equinox-autumn equinox axis, are in chiasmic distribution, confirming Miðra's links with both members of each axis:



However, Mi9ra also seems to play a prominent role in the celebration of the New Year beginning at the sunrise of the vernal equinox (see §2.3).

2.1. Mi9ra and Apam Napāt: the connection between sunrise and sunset The liminal time at sunset is not under the patronage of Mi9ra, but of Apam Napāt and the Waters. A distribution of the patrons is unavoidable, since two asńiia- ratu- cannot be under the patronage of the same god. Nevertheless, a link between Mi9ra and Apam Napāt has been noticed (GERSHEVITCH 1959: 59; KELLENS 2012). GERSHEVITCH (1959: 59) has called attention to the "intriguing relation between Mi9ra and Apam Napāt". Both are the only gods, apart from Ahura Mazdā, to bear the title of ahura. Furthermore, Yt13.95 put both together in connection with the birth of Zara9uštra, the spreading of the Vision obtained in the sacrifice to Mazdā and attributes to both of them the capacity of generating political stability. The connection between both lives forth in Roman Mithraism, where Oceanos and Neptunus frequently appear in the Mithraic reliefs.

KELLENS (2012) goes still further and supposes that the reason for the survival of Apam Napāt after the transformation of the sacrificial fire in a permanent fire lies in their unexpected political collaboration. According to him, the reason for such a connection is a metaphor of the political language: the same verb is used for social agitation and for the boiling of water (Av. yuz-, OP yud-).

In my view, the association of both gods in a common political agenda is the result of a connection that is established through their respective roles as the patrons of the liminal times of the day. Both are the patrons of the points of contact between the night and the day and main actors of the new ritual division of the day with significant ritual consequences: Miθra links the appearance of the sun's glow with the pressing of *haōma* and Apam Napāt is connected with the latest time boundary for the libation to the waters. Moreover, both are linked with the ritual actions preformed at the *ratu*- under their patronage: Miθra with the pressing of *haōma*¹⁶ and Apam Napāt with the

33

¹⁶ Miθra's time in the morning is the time prescribed for the pressing, as indicated by the programmatic name of *hāuuani* for the time of the day associated with this god. Furthermore, besides Ahura Mazdā (Yt10.123), Haōma is the only one who performs a sacrifice for Miθra (Yt10.89-93). The relationship between both is confirmed by the fact that the standard epithet of Miθra (*vouru.gaōyaōiti-*) is once applied to *soma-* in RV

libation to the Waters. They are, in fact, two steps of a ritual process with a common ritual programme: the continuity of the sun and life during night and winter (SKJÆRVØ 2007: 87; CANTERA 2016: 167 ff.). The link between both ritual actions (pressing of *haōma* and the libation to the waters) and the deities is established through *haōma*.

In the proper Long Liturgy, $ha\bar{o}ma$ is pressed at least two times:¹⁷ during the recitation of Y27.3 and Y31-33 (CANTERA 2014: 264). The most significant difference between the $ha\bar{o}ma$ pressed during the liturgy and the $para.ha\bar{o}ma$ pressed earlier is that the former is mixed with milk, whereas the latter is not (CANTERA 2016: 158 and fn. 125). The exclusive purpose of the $ha\bar{o}ma$ pressed during the Long Liturgy and mixed with milk is to be used for the libation ($za\bar{o}\theta r\bar{a}$) to the good waters. This follows from the fact that the mention of the ingredients is always followed by the text $ai\beta ii\bar{o} vay^v hibii\bar{o} im\bar{a} za\bar{o}\vartheta r\bar{a} haomauuait\bar{i}\bar{s} gaomauuait\bar{i}\bar{s} hao\bar{a}na\bar{e}patauuait\bar{i}\bar{s}$ "these libations for the good waters containing haoma, milk and pomegranate". In the Long Liturgy, they are mentioned for the first time in the Homast (Y22.2,21, 24.2,7, 25.2 & Vr11.4), the section of the liturgy during which the $ha\bar{o}ma$ mixed with milk is prepared. Then, the libation (without explicit mention of each of their ingredients, since they are already mixed) reappears in the $\bar{A}b$ -zohr (Y66.1, 66.17, 68.1; similarly in Y65.10, 66.17, 68.3,10).

The function of these libations is visible in the expression *hū frāšmō.dāiti*, which designates the "sunset". The latest proposed interpretation is "the setting of the glow of the sun" (BAILEY 1953: 32; GERSHEVITCH 1959: 233). 18 Whereas the interpretation of the first member of the compound as "glow, light, rays" is indisputable in view of Phl. *frāšm* "glow, light of the sun", the interpretation of "dāiti" as "the setting" is controversial. In fact, dāiti- as a second member of a compound always has the meaning "the action of giving", cf. *rāmō.dāiti-* (adj.) "giving peace"; *yaōždāiti-* (subst.) "action of purifying (< of giving life)", or in PN *zrazdāiti-* "giving confidence". Consequently, the most likely interpretation of *frāšmō.dāiti-* is "the action of giving light or brightness" and for *hū frāšmō.dāiti-* "the action of giving light or brightness to the sun". This is in all probability the designation of a ceremony for the invigoration of the sun for its night journey. The most likely candidate is the Āb-zōhr celebrated at the end of the Long Liturgy, confirming thus the participation of both Miθra and Apam Napāt in a ritual structure for the

(RV10.90.4). In fact, the meaning is more appropriated for Mi ϑ ra whose light illuminates broad expanses and makes them flourish as grass-land.

¹⁷ The priest does not drink *haōma* during the Long Liturgy. He only drinks *para.haōma* during the recitation of Y10.14 and Y11.10. This is a mixture of water, *haōma* and pomegranate leafs prepared before the beginning of the proper liturgy.

According to BAILEY, the Phl. word is a loanword from the Avestan *frāšma-, which is attested only as the first member of the compound frāšmō.dāiti-. Its etymologically literal meaning is the "the first light, the light that appears before (the sun)", cf. Pahlavi Psalter 'dyšm "moon; the light below" (BENVENISTE 1936: 231) and perhaps Sogd. nšmy "west, the light down" (<*ni-šma-) (BENVENISTE 1936: 230).

invigoration of the sun, starting with the pressing of $ha\bar{o}ma$ at sunrise and ending with its libation to the waters, probably at sunset. It is in this context that we understand the exact meaning of $fr\bar{a}smi$ as "glowing" (Y10.88, 57.19 and 8.33), an epithet exclusive of $ha\bar{o}ma$ that is etymologically related with $fr\bar{a}sm\bar{o}$ in $fr\bar{a}sm\bar{o}.d\bar{a}iti$ (GERSHEVITCH 1959: 233). $Ha\bar{o}ma$ is "the glowing one, the one giving glow to the sun through the libation to the waters at the end of the day".

The established link within both liminal parts of the day is also mirrored in the religious conception of the world geography. The earth is divided in seven regions: one central region ($x^{\nu}ani.ra\theta a$ -), surrounded by six regions organized in three pairs. 19 Two pairs designate contiguous regions on the south (Fradaðafšu²⁰, Vīdaðafšu) and the north (Vouru.barəšti, Vouru.jarəšti). The third pair (Arəzahi, Sauuahi) are the regions in the west and the east. The order is always: Arəzahi, Sauuahi, Fradabafšu, Vīdabafšu, Vouru.barəšti, Vouru, iarəşti. For KELLENS (1996: 66), the order west-east-south-north is unexpected and surprising, as the binary association is once based on the symmetry, but in other cases on contiguity. Therefore, he proposes to locate both Arəzahi and Sauuahi in the east. Despite Yt10.67, this solution is quite unlikely due to arəzah- "evening" (V21.3). It is more likely that the principle underlying the pairs' arrangement is the sun in its three manifestations: 1. the visible sun corresponds to the region between the points where it rises and goes down in the shortest day of the year (Fradaδafšu, Vīdaδafšu); 2. the invisible sun corresponds to the region between the points where it goes down and rises in the longest day of the year (Vouru, barəšti, Vouru, jarəšti); 3. the liminal time (Mi9ra's time) corresponds to the region where the sun rises in the different days of the year²¹ (Sauuahi) and where the sun goes down (Arəzahi). In other words, there is a clear correspondence between the earth regions and the solar calendar of the year: south is the direction where the sun is visible in the winter solstice; north, where the sun is not visible in the summer solstice; and Sauuahi and Arəzahi are the liminal sections, corresponding to Mi9ra, which explains Mi9ra's association with Sauuahi. East-West is the main axis of the arrangement of the regions and thus always takes the first position in the list. In a way, it is a kind of axis mundi, uniting the times of Mi9ra's manifestations. At the intersection of this axis and the south-north axis lies the central region of the earth, X ani.ra9a.

2.2. Mi3ra's festival in the autumn equinox

Through an analogy between the day and the year, Mi9ra is associated not only with sunrise and sunset, but also with their yearly correspondences, the vernal and autumn equinoxes. While there is no obvious link with the vernal

¹⁹ On the seven regions of the earth, see GOLDMAN (2015: 37 ff.).

²⁰ Identical with the adjective *frādat.fšu*- of the *rapiθβina- ratu*-.

²¹ In Nowruz, the spring equinox, hāuuani would begin when the sun rises exactly in the east.

equinox, connected mainly with the Frauuaṣis (the patrons of the first part of the night following sunset), the evidence for Miθra's association with the autumn equinox is overwhelming:

- 1. the month of Miθra begins exactly with the autumn equinox, exactly as the month of the Frauuašis begins with the vernal equinox;²²
- 2. the two greatest of the six Zoroastrian seasonal festivals (*yairiia-ratu-*), Frawardīgān, culminating in Nowruz, and Mihragān are celebrated at the vernal and autumn equinoxes, respectively.

The question arises as to whether this association is already present in the Avestan texts. Some evidence speaks clearly in favour of such an assumption. Firstly, the establishment of these two great festivals is not independent of the reorganization of the ritual times of the day. The two new ritual parts of the day are, indeed, under the patronage of the same deities in whose honour the greatest festivals are celebrated: aißisrū9rima- under the patronage of the Frauuašis (like Frawardīgān) and hāuuani, Mi9ra. Secondly, there seems to be enough evidence for the suggestion that paitis.hahaiia-, the festival of the autumn equinox, is the Avestan designation for Mihragan, comparable to Frawardīgān,²³ which bears the alternative Avestan hamaspa9maēdaiia-. There is no doubt that paitiš.hahaiia- was celebrated in the autumn equinox, exactly 180 days after hamaspa9maēdaiia (A3.9, see Table 2, p. 37), and marked the beginning of Miθra's month²⁴ (cf. BIELMEIER 1992: 17 f.).

Strabo (Geography 11.14.9) mentions that the satrap of Armenia sent 10000 foals every year for the celebrations of Mihragān in Persepolis. This reminds us strongly on the mention of the offering of 1000 mares in connection with *paitiš.hahaiia*-. The types of offerings mentioned in A3.7-12 are arranged according to a serial pattern, so that the association of *paitiš.hahaiia*- with "mares" might be accidental. However, there is an opposition that cannot be explained as a consequence of the serial arrangement. Interestingly, for the festival in honour of the Frauuašis no animal sacrifice is mentioned, but just liquid and vegetal offerings. This is the

²² Already BELARDI (1977: 11 ff., 140 ff.) highlights the central position attributed to Miθra in the structure of the months, but he attributes it to his role as the mediator. He reconstructs a lunar and sidereal calendar of thirteen months of 27 days with Miθra in the middle point (BELARDI 1977: 113-149), but see also BIELMEIER (1992: 60 ff.).

²³ For evidence of the Frawardīgān festival in the Avestan texts, see HINTZE (2009).

²⁴ For evidence for the original celebration of Mihragān at the autumn equinox, see BELARDI (1977: 84), CRISTOFORETTI (2013). However, according to Masudi it was celebrated in the Christian milieu on the first day of the winter. In modern times it is celebrated on day Mihr (16th) of the month Mihr (7th) (MODI 1922: 432). On Mihragān in general, see BOYCE (1975a: 172 ff.), DE JONG (1997: 371 ff.), STAUSBERG (2002: 3.540 ff.), CRISTOFORETTI (2013). About the special role of Mihragān in the Zoroastrian calendar, see BOYCE (1975b: 107 and fn. 104).

result of a correspondence in the new speculation about the ritual time between Frauuaṣis, aiβisrūθrima (under their patronage) and winter, at the end of which the Frawardīgān are celebrated (see Table 4, p. 43). As the programmatic name of aiβisrūθrima- indicates, the first part of the night is ritually appropriate for recitation and singing, that is, not for sacrifice. Accordingly, the rituals of Frawardīgān should be celebrated, probably, without animal sacrifice. paitiš.hahaiia- is diametrically opposed to aiβisrūθrima- in that the most important sacrifices of the year took place during this festival. This is probably the underlying idea in the serial arrangement of the offerings in A3.7-12, culminating with the sacrifice without animal victim during Frawardīgān. The importance of the sacrifices of Mihragān is confirmed by the fact that they are the only ones surviving into modern times (BOYCE 1975b).

Table 2: The *yāiriia- ratu-* or seasonal festivals according to A.3.7-12

	Festival	Day of the year	Month of the celebration	Day of celebration	Months of the year	Sacrifice	Modern festivals ²⁵
		1			Frawardīn		Nowruz
	maiðiiōi. zarəmaiia-	45	Aša Vahišta	da9ušō	Ardawahišt	1000 maēšinam	Ardwahišt Ğašn
					Hordād		
summer solstisce		90	Tištriia		Tīr		
	maiðiiōi. šəma-	105	Tištriia	da9ušō	111	1000 gauuąm.	Tīryān
					Amurdād		
					Šahrewar		
autumn equinox	paitiš. hahiia-	180	Xša9ra Vairiia	anaγranąm	Mihr	1000 aspanam	Mihragān
	aiiā9rima-	210	Міθга	anaγranąm	Ābān	1000 uštra	Ābān Ğašn
					Ādur		
winter solstice							
	maiõiiāiriia-	290	da9ušō	vərəθraγna	Day	1000 of each type	
					Wahman	7.	
					Spandarmad		
vernal equinox	hamaspa9maēðaiia-	365		Vahištōišti Gā9ā	Panj Gāhān days	corn and liquids	Frawardīgān

On the day Miθra of the month Miθra, a variant of the usual Drōn for Miθra is celebrated, namely $dr\bar{o}n$ -e mehrizad or $dr\bar{o}n$ -e $haft\bar{a}n$ andom (DHABHAR 1932: 343; BOYCE 1969: 32 and fn. 112; KOTWAL/BOYD 1976). The standard Drōn for Miθra is celebrated with the usual dedicatory to Ahura Mazdā, the Aməša Spəṇta and then Miθra (= S1.16)(KARANJIA 2010: 197). There is, however, an alternative $šn\bar{u}man$ for the $dr\bar{o}n$ -e mehrizad that includes Miθra

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²⁵ Mod (1922: 430) lists the Avestan Gāhānbār celebrations as different from the modern festivals. This is, however, most likely a duplication of the festivals caused by modern reinterpretations, perhaps because of the tendency to celebrate festivals when the patron of the day and month coincide.

and Rām, Rašnu and Arštāt, all the *yazata*- and the Frauuaṣis, without mentioning Ahura Mazdā and the Aməša Spəṇta:

miθrahe vouru.gaōiiaōitōiš.hazaŋrō.gaōšahe baēuuarə.cašmanō aōxtō.nāmanō yazatahe rāmanō x^vāstrahe (S1.16) rašnaōš razištahe arštātasca frādaṭ.gaēθaiiằ varədaṭ.gaēθaiiằ ərəžuxδahe vacaŋhō yaṭ frādaṭ.gaēθahe (S1.18) vīspaēšam yazatanam aṣaōnam mainiiauuanam gaēθiianam. aṣāunam. frauuaṣinam uγranam aiβiθūranam paōiriiō.ṭkaēṣanam frauuaṣinam. nabānazdištanam frauuaṣinam aōxtō.nāmanō yazatahe

Two features of this dedicatory reveal that it must have been originally conceived for an important ceremony, comparable in solemnity to a Wisperad ī Gāhānbār or a Srōš ceremony for the deceased:²⁶ 1. It is, together with the dedicatories to Sraōša and the Ratu Bərəzant, the only dedicatory that does not begin with the mention of Ahura Mazdā and the Aməṣ̃a Spəṇta. 2. The closing with *vīspaēṣ̃am yazatanam* is exclusive of the collective dedicatories used in special events and celebrations.

Originally, it must have been the dedicatory for the celebrations during the *paitiš.hahaiia*- festival, since other dedicatories for the day and month of a divinity do not share the features of this special dedicatory for Mi9ra. Its use in the day Mi9ra of the month Mi9ra is just the consequence of the secondary displacement of the Mihragān festival from the autumn equinox to the day of Mi9ra. The ceremony included likely a Drōn with a following Mihr Yašt according to the pattern we know from the Frawardīn Yašt (in the Farroxši) or the Way Yašt (KOTWAL/KREYENBROEK 2003: 118 f.; CANTERA 2014: 257 f.; ANDRÉS-TOLEDO 2015: 34), a pattern that I designate in accordance with the Nērangestān as *yašt ī keh* or "minor yašt".²⁷ Thus, the Mihr Yašt would have been composed for recitation at *hāuuani* of the autumn solstice and would be the pendant of a similar celebration to be performed during the first five days of the Frawardīgān, including a Farroxši (a Drōn + the Frawardīn Yašt).

The Gāhānbār festivals begin now a days with the Āfrīnagān, Dron and Wisperad ī Gāhānbār (Modi 1922: 449). The same textual combination might be assumed for the Antiquity. In the case of the *paitiš.hahaiia-*, it was likely complemented with the recitation of the Mihr Yašt. The ritual slaughter or sacrifice could have taken place during the Wisperad. In the modern practice, a piece of fat is put on a large silver-plated bowl and carried into the inner sanctuary of the fire temple (BOYCE 1975b: 113). This is surely a remnant of the old offering to the fire.

In the modern celebration of Mihragān, the link between Miθra and Haōma is specially highlighted. Six small portions, *andom*, of the sacrificial animal are offered to Miθra, the tongue to Haōma (BOYCE 1987: 111, 113). The

²⁶ On this ceremony, see MoDI (1922: 434 ff.). Most of the Widēwdād manuscripts describe the Widēwdād ceremony as it is performed in the Srōš celebrations.

²⁷ In opposition to yašt = Yasna and $yašt \bar{i}$ meh = Wisperad.

ceremony is sometimes concluded with an $\bar{A}b$ -z $\bar{o}hr$ that was most likely performed in antiquity with $ha\bar{o}ma$ mixed with milk. Thus, a link is established to the festival of the waters that is celebrated one month later (see $\S4$).

2.3. Mi9ra at the vernal equinox and the celebrations of the New Year While the modern Frawardīgān celebrations can be traced back to the Avestan texts (HINTZE 2009), no convincing evidence been found in the Avestan texts for the celebration of the New Year during the first day after the vernal equinox.²⁸ Nevertheless, a detailed analysis of the much-neglected system of dedicatories reveals not only the celebration of such a festival, but also a complex ensemble of ceremonies celebrated during the first week of the year.

When a prospective priest performs the priestly ordination ($n\bar{o}g$ $n\bar{a}war$ or $nawz\bar{o}d$),²⁹ he must celebrate four Yasna and four Drōn in four successive days, each day with a different dedicatory (KOTWAL 1988: 305 ff.):

- Day 1: Yasna and Dron with the dedicatory of Nog Nawar
- Day 2: Yasna and Dron with the dedicatory of Sroš
- Day 3: Yasna and Drōn with the dedicatory of Sīrōzag
- Day 4: Wisperad and Dron with the dedicatory of Ohrmazd

With these celebrations, the new priest proves his knowledge of the main rituals (Drōn, Yasna and Wisperad) and the most important dedicatories. With the Sīrōzag, he proves the knowledge of the dedicatories for each day of the month. With the dedicatories of the second and fourth day, he demonstrates knowledge of the typical dedicatories for the celebration of Widēwdād ceremony and of the important Yasna and Wisperad for Sraōša.

In the modern practice, the Yasna with the dedicatory of Nōg Nāwar is performed in order to enable the celebrating prist for the celebration of the Long Liturgy. It is known as $m\bar{o}ti$ ("large") $kh\bar{u}b$ in opposition to $n\bar{a}ni$ ("small") $kh\bar{u}b$ (STAUSBERG 2002: 3.304). The latter is a celebration of a Drōn with the dedicatory of $pan\check{g}$ $t\bar{a}y$ and enables for the celebration of outer ceremonies during one day. The $m\bar{o}ti$ $kh\bar{u}b$ allows a priest to celebrate inner ceremonies and is effective during four days. A similar function viz., regaining the capacity for perfeorming the Long Liturgy, is attributed to the Yasna with the dedicatory of Nōg Nāwar by the Nērangestān (N24.10). It is not clear where this practice derives from, but a comparison of the specific dedicatory of Nōg Nāwar with other dedicatories sharing similar features allows us to make a hypothesis about the function for which this especial variant of the Long Liturgy was composed.

The manuscripts of the Long Liturgy usually specify the month and day of the performance (CANTERA 2014: 220). At times, we only find an instruction

²⁸ BOYCE's (2009) assumption, for instance, that Nowruz is a seventh otherwise unattested Gāhānbār, is unconvincing.

²⁹ On this ceremony and its description in the manuscript K7, see KOTWAL (1988).

indicating the position where the month and the day should be recited. Nevertheless, some Yasna manuscripts (most frequently the exegetical ones) explicitly mention the month and day of the ceremony. In these cases, the date is always the first day of the year (the day Ahura Mazdā of the month Frauuaši). This could just be a convention, but the analysis of the dedicatory points in another direction.

Avestan ritual texts indicate in the Frauuarāne the *asńiia- ratu-* in which they are performed.³⁰ In very few rituals, this indication is complemented by the mention of the patrons of the corresponding *ratu-* in the dedicatory following the mention of Ahura Mazdā and the Aməṣ̃a Spəṇta which opens almost all dedicatories. Only six specific dedicatories share this feature:

- 1. the dedicatory of Nog Nawar,
- 2. the dedicatory to the seven Aməşa Spənta,³¹
- 3. the dedicatory to Aša Vahišta in the third day of the year,³²
- 4. the dedicatory to Hauruuatāt in the sixth day of the year,³³
- 5. the dedicatory of Ameretatat for the celebration the $dr\bar{o}n \bar{i} p\bar{a}dr\bar{o}zag$, ³⁴
- 6. the dedicatory of the three $da\theta u \bar{s} \bar{o}$ -days ($day \ pad \ \bar{a} dur$, $day \ pad \ mihr$, $day \ pad \ d\bar{e} n$). 35

The text of these dedicatories is as follows:

Table 3: The dedicatories that include the patrons of the *ashiia- ratu-*

Nōg Nāwar	Aša	Hauruuatāt	Amərətatāt	Aməşa Spənta	Da9ušō		
nog nawar	Vahišta	11auruuatat	Amərətatat	Aməşa Spənta	Daduso		
	ahurahe m	azdå raēuuatō x ^v	arənaŋuhatō aməša	nąm spəṇtanąm			
				(S1.2-7)			
				vaŋhauue			
				manaŋhe			
		hauruuatātō raθβō	amərətatātō	ašahe vahištahe			
				hauruuatātō	raθβō fšaōnibiia		
			va9βābiia	xša9rahe			
		yāiriiaiiāsca hušitōiš	aspinibiia	vairiiehe			
		sarəδaēibiiō	yaōnibiia	spəṇtaiiā			
		ašahe ratubiiō	gaōkərənahe	vaŋhuiiå			
			sūrahe	ārmatōiš			
			mazdaδātahe	hauruuatātō			
				raθβō			
				amərətatātō			
				raθβō			

³⁰ The only exception are the *hamparšti*-ceremonies that instead show the ceremony marker.

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³¹ On this dedicatory, see KARANJIA (2010: 241).

³² On the specific dedicatory for the third day of the year, see KARANJIA (2010: 47, 215), and on the standard dedicatory for Aša Vahišta, see KARANJIA (2010: 185).

³³ On this dedicatory, see KARANJIA (2010: 245 f.). It is already mentioned in the Nērangestān (N29.17).

³⁴ On this dedicatory, see KARANJIA (2010: 53, 225).

³⁵ On this dedicatory, see KARANJIA (2010: 188 ff.).

A. Cantera, Mi9ra and the Sun

(Y0.9-11) huuarəxšaētahe aməšahe vaiiaōš razištaiiā cistaiiā daēnaiiā vaŋhuiiā mą9rahe spəntahe dātahe vīdaēuuahe dātahe vīdaēuuahe dātahe zaraθuštrōiš ā9rō ahurahe Vīspaēšam yazatanam ašaōnam mainiiauuanam gaēθiianam Vīspaēšam yazatanam ašaōnam mainiiauuanam gaēθiianam lauruuatātō rašnaōš razištahe arštātasca arštāta	hāuuani : mi9rahe vouru. gaōiiaōtōiš rāmanasca x [√] āstrahe	rapiβθina: ašahe vahištahe āθrasca ahurahe mazdå puθra	hāuuani: mi9rahe vouru. gaōiiaōtōiš rāmanasca xvāstrahe rapiβ9ina: ašahe vahištahe ā9rasca ahurahe mazdå pu9ra uzaiieirina: bərəzatō ahurahe nafəδrō apam apasca mazdaðātaiiå	hāuuani: miθrahe vouru.gaōiiaōtōiš rāmanasca xvāstrahe rapiβθina: aṣahe vahištahe āθrasca ahurahe mazdā puθra uzaiieirina: bərəzatō ahurahe nafəδrō apam apasca mazdaōātaiiā aiβisrūθrima: aṣāunam frauuaṣinam³⁶ γənanamca vīrō.vaββanam yāiriiaiiāsca huṣitōis amahecahutāštahe huraōðahe vərəθraynaheca ahuraðātahe vanaintiiāsca uparatātō ušahina: sraōšahe aṣiiehe aṣiuuatō vərəθrājanō frādat.gaēθahe raṣnaōš razistahe arṣtātasca frādat.gaēθaiiā arədat.gaēθaiiā		
vīspaēšam yazatanam ašaōnam mainiiauuanam gaē9iianam	huuarəxsaētahe aməşahe vaiiaōs razistaiiå cistaiiå daēnaiiå vaŋhuiiå ma9rahe spəṇtahe dātahe vīdaēuuahe dātahe zara9uštrōiš ä9rō ahurahe		raθβō yāiriiaiiāsca hušitōiš sarəδaēibiiō ašahe ratubiiō (S1.6) aiiaranamca asniianamca māhiianamca yāiriianamca sarəδanamca.	razištahe arštātasca frādat.gaē9aiiā varədat.gaē9aiiā aršuxðahe vacaŋhō yat frādat.gaē9ahe zəmō huðåŋhō yazatahe (S1.28)	hutāštahe (S1.20) anayranam raōcaŋham xºaōātanam raōxšnahe garō.nmānahe misuuānahe gātuuahe xºaōātahe cinuuat.pərətūm mazdaōātam bərəzatō ahurahe nafəòrō apam apasca mazdaōātaiiå haōmahe ašauuazaŋhō dahmaiiå vaŋhuiiā āfritōiš uyrāi dāmōiš upamanāi (~S.1.30)	ahurahe mazdå raēuuatō x ^v arənaŋuhatō aməšanam

Dedicatories 3 and 4 are used only during the special celebrations of the first week of the year and, as I shall show, the same might apply to dedicatories 1 and 2. In the day of Aša Vahišta, the patron of Rapiθβina together with Fire,

³⁶ Interestingly, the Nērangestān (N29.16) takes this mention of the Frauuaṣis in the dedicatory to the Seven Aməṣa Spəṇta for the mention of the month. It is interesting to note that this is not the case in modern practice (ΚΟΤΨΑΙ/ΚRΕΥΕΝΒRΟΕΚ 2003: 119, fn. 451). Perhaps it never was part of the practice. It might just be a mistake in the interpretation of the text by the author of the Nērangestān, who take the mention of the Frauuaṣis as patrons of aiβisrūθrima- for the patrons of the first month. The same information, however, is repeated by KARANJIA (2010: 241).

instead of a Yasna or a Wisperad, a Rapihwin Yašt is celebrated with the above mentioned dedicatory. The day is thus known as Rapihwān (MODI 1922: 431). From this day on, celebrations for Rapihwin are possible until the autumn equinox, when they have to be abandoned. The time between the two equinoxes is thus equated with $rapi9\beta ina$ -.³⁷

For the sixth day of the year, the day of Hauruuatāt, there is an especial dedicatory that is only performed on this day of the year. The corresponding Yasna and Drōn of this day can be celebrated during the three *ratu*- of the day during which the sun is visible. The corresponding patrons of each *ratu* are mentioned in the dedicatory after Hauruuatāt.

The dedicatories of Amərətatāt and of the seven Aməṣ̃a Spəṇta resemble that of Hauruuatāt, but are celebrated (or can be celebrated) during the five *asńiia- ratu-* so that the dedicatory might include the patrons of each *ratu-*.

A series is clearly recognizable. In the day of Aṣa Vahišta of the first week of the year, the ceremonies are performed only at *rapiθβina*-; in the day of Hauruuatāt of the same week, at *hāuuani*-, *rapiθβina*-, *uzaiieirina*-. The natural continuation of the series is a dedicatory including the patrons of the five *asńiia- ratu*-. This happens, indeed, in the dedicatory to Amərətatāt, the Seven Aməṣa Spəṇta and the three *daθušō*-days. Candidates for continuating the series of the 3rd and 6th day of the year are only the dedicatories of Amərətatāt that corresponds to the 7th day of the first week of each month and the dedicatory of the Seven Aməṣa Spəṇta who do not have a day in the calendar. Our choice remains speculative, however I consider more likely that the 7th day of the year a Drōn and Yasna for the Seven Aməṣa Spəṇta were celebrated in substitution to the expected celebrations for Amərtatāt. Accordingly, the dedicatory to the latter would be recited only in the day of Amərətatāt of the other months and also in the days of her *hamkārs* (Rašnu, Arštāt and Zam). My main reasons are for this hypothesis are:

- 1. S.1-7 does not reproduce the dedicatory of each day of the first week of each month as it happen with the rest of dedicatories of the month, but the common dedicatory of the Seven Aməṣ̃a Spəṇta that seems to enfold the dedicatories of the seven days of the first week of the year
- 2. The only preserved Yašts dedicated to the Aməṣ̃a Spəṇta are Yt2 (Haft Amašaspandān), Yt3 (Ardwahišt, but in fact with the dedicatory of Rapihwin) and Yt6 (Hauruuatāt, with changing dedicatories depending on the *ratu* of the celebration). The evidence of the changing *ratu* in Yt3 connects this Yašt inevitably with the dedicatory for the 6th day of the year. Therefore, we can postulate that the three preserved Yašts dedicated to the Aməṣ̃a Spəṇta are the three Yašts performed during the 3rd, 6th and 7th day of the year.

This analysis allows us to reconstruct a complex ritual structure in which, during the first week of the Year, the five ashiia- ratu- are progressively

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³⁷ In India, this Drōn was celebrated on the first day of the year.

introduced as time suitable for the ritual. Accordingly, from the third day of the year on, it is possible to celebrate rituals during $rapi\theta\beta ina$; form the seventh, also during $ai\beta isr\bar{u}\theta rima$ - and $u\check{s}ah$ -. Thus, the new ritual season is opened. The former was closed with the celebration of the Frawardīgān (including the five Gā θ ā days).

If this hypothesis is right, the position of the Nōg Nāwar dedicatory becomes completely clear. Its place is in this series and opens the ritual season for the *ratu- hāuuani-* the first day after the vernal equinox. Since these dedicatories are only used for the Yasna and the Drōn, we can imagine these being the rituals performed during the first days of the year. Accordingly, we can reconstruct the texts recited during the first week of the year as follows:

Table 4: The texts recited during the celebrations of the first day of the year

	ušah-	hāuuani-	гаріθβіпа-	uzaiieirina-	aiβisrūθrima-			
		Āfrinagān + Yasna ī Nōg						
1st day:		Nāwar						
Ahura		+ Mihr						
Mazdā		Yašt/						
		Ohrmazd						
		Yašt						
2 nd day: Vohu		38						
Manah								
3 rd day: Aša Vahišta			Āfrinagān + Yasna ī Rapihwin + Ardwahišt Yašt					
4 th day:								
Xša9ra Vairiia								
5 th day:								
Armaiti								
6 th day:		Āfrinagān +						
Hauruuatāt		Yašt						
7 th day:	Āſ	frinagān + Yasna ī Haft Amašaspandān + Yašt ī Haft						
Amərətatāt		Amašaspandān						

Not each day of the first week included the recitation of a Yašt, but only the three days that open the corresponding ritual season for each *asńiia- ratu-*. In fact, we do not expect Yašts for the Amaša Spanta, since they are not *yazata-*. These Yašts do not share, indeed, the usual features of other Yašts (PIRART 2010: 46 f.). They are rather of apotropaic character (CANTERA 2015: 79 ff.; KÖNIG 2016: 28 ff.), corresponding to the nature of the celebrations which

43

³⁸ I assume that in the intermediate days the celebrations of the previous day are repeated.

inaugurate a new ritual season after the end of the winter and the return of the Frauuaṣis. These Yašts thus provide an insight into compilers' compositional skills for Avestan texts at the time of the arrangement of this ritual complex that ran concurrently to the reform of the liturgical calendar.

The discovered ritual complex brings into light a set of analogies between the first day and week of the year (and effectively the Aməša Spənta) and the year itself:

Table 5: The day, the week and the year

asńiia- ratu-	patron	day of the 1st week	solar season
hāuuani-	Miθra	Ahura Mazdā	vernal equinox
		Vohu Manah	
rapiθβina-	Aša Vahišta	Aša Vahišta	summer time between
		Xša9ra Vairiia	both equinoxes
		Armaiti	
uzaiierina-	Apam Napāt	Haruuatāt	autumn equinox
aiβisrūθrima-	Frauuašis	Amərətatāt	winter time before the
ušah-	(Sraōša)		equinoxes

This set of analogies achieves the linking of night and winter with amaratatāt, so that it guarantees the continuity of the sun and life. For that purpose, the central Aməşa Spənta of each triad (Aşa Vahista and Haruuatāt) were connected to the divinities under whose patronage are rapi\(\theta\)ina and uzaiieirina. At the same time, Ahura Mazdā was linked to Mi9ra, and Amərətatāt to the Frauuašis. The latter represents, as the concluding member of the series, the continuity during the five parts of the day. Both (Mi9ra and the Frauuasis) appear as the intimate collaborators in an "immortality project", which also includes the continuity of life after night (in the form of the plants represented by Amərətatāt), but also of the sun during the night and winter, and of men after death as frauuašis, and perhaps also of the fire transformed from sacrificial fire into a permanent fire. Additionally, this analysis allows us to confirm the expected connection between Mi9ra and the vernal equinox through the celebration of a specific form of the liturgy for the *hāuuani* of this day, which is dedicated in first instance to Mi9ra. The choice for the New Year's opening of the variant of the Long Liturgy celebrated at hāuuani³⁹ and dedicated to its patrons, Mi9ra and Rāman, shows the parallelism traced between the vernal equinox and sunrise, on the one hand, and its link to the god Mi9ra, on the other.

Each day $da\vartheta u\check{so}$, the beginning of the 2nd, 3rd, and 4th weeks of the month, a Dron should be recited at each of the five *ashiia-ratu-*⁴⁰ (besides the Yasna

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³⁹ It corresponds to the order in which the five *ashiia- ratu-* are presented in the Yasna, but not to the original one (HINTZE 2007). We must assume, at least, one step between the creation of the five *ashiia- ratu-* and the preeminence of the *ratu- hāuuani-*, as it appears in the Yasna.

⁴⁰ The performance of Rapihwin is celebrated only between the two equinoxes.

of *hāuuani* with the same dedicatory). It supposes a reinauguration of the ritual season each week of the year that resumes the performances during the first week of the year.

3. Mi9ra's "ratu-ness" (ra9\beta-) and the Yasna for the New Year

The Vedic god Savitar is equated, like the Avestan Mi9ra, with the light of the sun. He shares with Mi9ra the image of the two arms (e.g., RV6.71.1), as shown by KELLENS (1979: 716), but also other features. Savitar, like Mi9ra, comes after the morning dawn (RV81.3) and brings the sun (1.35.9), but also the night (e.g., RV2.38.3, 8.27.12). He also precedes day and night (RV5.82.7). Like Mi9ra, he is the sun during the night (RV1.35.9) and watches over the living beings and the commandments (*vratáni*) (RV4.53.4). Actually, the RV explicitly identifies Savitar with Mitra (RV5.81.3):

utá yāsi savitas trīṇi rocanótá sūryasya raśmíbhiḥ sám ucyasi /

utá rấtrīm ubhayátaḥ párīyasa utá mitró bhavasi deva dhármabhih // "And you travel, Savitar, through the three luminous realms, and you are at home with the rays of the sun.

And you encircle the night on both sides, and you become Mitra, o god, through your supports⁴¹."

(JAMISON/BRERETON 2014: 764)

One of the functions of Savitar is to hold apart the *rtus*, the ritual times (RV2.38.4):

púnah sám avyad vítatam váyantī madhyā kártor ny àdhāc chákma dhīrah /

"Once again, the weaver has wrapped up what was stretched out; in the middle of his work the mindful (worker) has set down his craft.

út saṃhāyāsthād vy rtūmr adardhar arámatiḥ savitā devá āgāt //

Having pulled himself together, he [=Savitar] has stood up. He has always kept the *ritual times* separate. As Proper Thinking, god Savitar has come."

(slightly modified from JAMISON/BRERETON 2014: 457)

At the rising of Savitar, when he brings the day and wraps up the night's blanket, he is praised as having kept the ritual times separated. He, Savitar, is responsible for the transition between night and day and, accordingly, for the boundaries between the ritual times.

The Avestan hymn to Mi9ra (Yt10.92) explicitly mentions the capacity of Mi9ra for determining the *ratu*-. Yt10.92 is a difficult text that seems to paraphrase the Frauuarāne. It includes some of its key terminology: the choice

⁴¹ Cf. RV8.52.3, where Viṣṇu makes the three steps according to the *dhárman*- of Mitra (*upa mitrásya dhármabhiḥ*).

($fra\bar{o}ranta$), the ratu as $ra\theta\beta am$ and the Ahuna Vairiia that closes each Frauuarāne through the mention of $ah\bar{u}mca\ rat\bar{u}mca$. Then the central part of the text runs as follows:⁴²

frā.hē mazdå huuāpå ratuθβəm barāţ gaēθanam yōi.θβā vaēnən dāmōhu ahūm ratūmca gaēθanam yaoždātārəm ằŋham dāmanam vahištam

"(Ahura) Mazdā of good works brought to him (Miðra) the "ratu-ness" (that is, the capacity for determining the ritual times) of the living beings; (and the Aməṣ̃a Spəṇṭa) who held you (Miðra), among the creatures, for the lord and the articulation (of the ritual times) of the living beings."

Despite the difficulties offered by the text, the most likely interpretation seems to be that Ahura Mazdā has given Mi9ra the capacity for determining the ritual times, a feature whose protection falls to Tištriia (Yt8.1). The Aməṣ̃a Spəṇtas, whose role in establishing the ritual times I have already discussed (see §2.3), consider Mi9ra the *ahu* and *ratu* of the world, a title that Mi9ra only shares with Ahura Mazdā and Zara9uštra (Vr2.4, Yt13.92).

As we have seen, Mi\u0387ra is connected with sunrise, sunset and the two equinoxes. These are, indeed, the main axis around which the five ashiia-ratu- and the main seasonal festivals are organised. The months are also distributed, at least in part, around the two equinoxes (see below). Therefore, we have good reasons to believe that the transformation of the ashiia- ratu-from three into five, the organization of the main seasonal festivals (hamaspa\u0399ma\u03e9daiia- and paiti\u03e3.hahaiia-) and the months are all part of the

46

⁴² The text presents some difficulties. Firstly, the identity of the referent of several pronouns ${}^{\circ}h\bar{e}$, $9\beta\bar{a}$ and the relative $y\bar{o}i$. Secondly, the function of *vahištąm*. According to the different proposed solutions, following translations have been proposed:

^{- &}quot;Es übertrug ihm (Miθra?) der wohlwirkende Mazdāh die Ratav-schaft über die Menschheit, (auf daß) sie dich (Miθra?) für den Ahū und Ratav der Menschheit ansehen, für den Vervollkommner dieser besten Geschöpfe." (Wolff 1910: 12).

^{- &}quot;Es übertrug ihm der Weise, der Schöpfer guter Werke das Amt des Meisters aller Wesen, welche dich (oder: damit sie dich) unter den Geschöpfen als Herrn und Mesiter ansehen, der diese vortrefflichen Geschöpfe schuf." (LOMMEL 1927: 77).

^{- &}quot;To it [Mi θ ra] generous Mazdāh gave jurisdiction over the living beings, so did (*lit.* to it) the incremental Immortals who considered you (=Mi θ ra) the temporal and religious judge of the living beings in the (world of) creatures, the one who purifies the best (Religion) for the creatures." (GERSHEVITCH 1959: 119).

^{- &}quot;Le Roi de la Sagesse et des bonnes ouvres la chargea d'être l'existence et le modèle des troupeaux en lui dissant ceci : « Ceux qui, parmi les êtres, te regarderont, Doctrine, comme l'existence et le modèle des troupeaux, ceux-là seront, parmi les êtres, les meilleurs purificateurs »." (PIRART 2010:143).

Except PIRART, the translators agree in understanding Mi θ ra as the receptor of the $ratu\theta\beta a$ - "ratu-ity". Furthermore, the antecedent of $y\bar{o}i$ are the Am θ θ a Sp θ n (cf. Yt13.92).

same process. The context for this complete rearrangement of the liturgical calendar is, most likely, the adoption of the solar calendar, which triggers a rearrangement of the ritual times at all levels. Some of the highlights of this reform are the extension of the parts of the day from three to five, the creation of great festivals for the equinoxes, the rearrangement of the days and the months. The main protagonist of this rearrangement seems to have been Mi\text{\text{9}}ra who, as the deity of solar radiance, is a good candidate to instigate or benefit from the adoption of the solar calendar.

Concerning the extension of the *asńiia- ratu-* to five, the key of the new division is the sharp distinction between day and night, creating divisions before and after sunrise and sunset. Both establish the time frame for the libation to the waters, a ritual process in which Miðra and Apam Napāt are intimate collaborators. The clearly delimited night time is now under the patronage of the Frauuaṣis and associated with Amərətatāt. The tool for the immortality of the sun, and life in general, is the libation to the waters, in which the old role of Apam Napāt as the keeper of the sacrificial fire in the waters after its extinction has been transformed into the role of the invigorator of the sun.

The introduction of a new ratu- between $u\check{s}ah$ - and $rapi\vartheta\beta ina$ - also had a major ritual consequence: the creation of a new variant of the Long Liturgy in which the time for the pressing of $ha\bar{o}ma$ was exactly at Mi ϑ ra's time, that is, the time immediately before sunrise. Before the creation of this variant, the Long Liturgy started with the morning dawn, like the actual variants of the Long Liturgy celebrated during $u\check{s}ahina$ (Widēwdād and Wisperad). The Yasna with the dedicatory of N \bar{o} g N \bar{a} war was likely created for being performed at $h\bar{a}uuani$ after the vernal equinox, i.e., in the celebrations of the New Year ($\S 2.3$). The first sunrise of the spring is celebrated with a special ceremony in which the pressing of the $ha\bar{o}ma$ coincides with sunrise, Mi ϑ ra's time, and that is dedicated in the first instance to Mi ϑ ra and R \bar{a} man, the deities of the newly created ratu. The expression $a\bar{o}xt\bar{o}.n\bar{a}mana~yaca~ra\vartheta\beta iia~vaca~(Yt10.56; see above) might be a reference to this ceremony.$

The role of the equinoxes in the arrangement of the month is decisive. While the solstice does not play a role in the organization of the months, two months begin immediately after the two equinoxes: the month of the Frauuaṣis after the vernal and the month of Mi ϑ ra after the autumn equinox. The association of these two months with the equinoxes resembles the process of expansion of the *ashiia- ratu-*, as shown by the fact that the patrons of the these two months are the same as the two *ashiia- ratu-* with ritual designations ($h\bar{a}uuani$ and $ai\beta isr\bar{u}\vartheta rima$). Therefore, it is likely that these are associated processes triggered by the great reform of the liturgical calendar. This is confirmed by the month of the Waters following immediately after Mi ϑ ra. It can be explained as a trivial reflex of the raining time or as the result of a more complex phenomenon that links the month of the rain with the ritual of the $\bar{A}b$ - $z\bar{o}hr$ in which Mi ϑ ra is involved through the libation with $ha\bar{o}ma$.

In fact, the two equinoxes are the most important festivals (hamaspa9maēdiia- and paitiš.hahaiia-) of the Zoroastrian calendar and (together with aiiā9rima-) the only that mark the beginning of a new month. They are dedicated to the two protagonists of the whole calendar reform: the Frauuašis (HINTZE 2009) and Mi9ra (see above §2.3). They divide the year in two periods (summer and winter) of 180 and 185 days, respectively. Summer is divided in 6 months of 30 days and winter in six months of 30 days + 5 epagomena, exactly like the Egyptian calendar. A third festival indicates the beginning of a month: aiiā9rima-. The key for understanding the role of this festival is the ritual for the invigoration of the sun (hū frāšmō.dāiti-) through the libation to the waters at the evening (uzaiierina-). Therefore, the festival to the waters follows immediately the autumn equinox and corresponds in a certain way to aißisrū9rima-. BIELMEIER (1992: 30) noticed, indeed, the parallel formation of both (ai\beta isr\bar{u}\theta rima- and aii\bar{a}\theta rima). This would again point to a parallel chronology for the introduction of aiβisrūθrima- and the designation of the festival of the autumn equinox as aiiā9rima-.

In fact, the same three protagonists (Mi ϑ ra, the Waters and the Frauua \mathring{s} is) permeate the distribution of the ritual times at all levels (see Table 6):

Table 6: The divinities protagonising the reform

rable of the divinities protagonising t							
		Mi∂ra	Waters	Frauuašis			
	asńiia-	hāuuani-	uzaiieirina-	aiβisrūθrima-			
	asniia-	(sunrise)	(before sunset)	(after sunset)			
		paitiš.hahaiia-		hamaspa9maēdaiia-			
	yāiriia-	(day before	aiiā9rima-	(day before vernal			
	yairiia-	autumn equinox =	(end of 7 th month)	equinox =			
		end of 6 th month)		last day of the year)			
	sarəδa-	7 th month	8 th month	1 st month			

Ten Yašts stand out in the collection as they are divided in sections (*karde*). If ordered according to their length, we get the following list: Frawardīn Yašt (158 paragraphs), Mihr Yašt (146), Ardwīsūr Yašt (133), Zamyād Yašt (90), Wahrām Yašt (54), Tištar Yašt (62), Ard Yašt (62), Rām Yašt (58), Drwāsp Yašt (33) and Dēn Yašt (20). The three longest are precisely dedicated to the three protagonists of the reform of the Avestan liturgical calendar: Miðra, the Frauuaṣis and the Waters. At the same time, they are the deities in whose honour the three seasonal festivals that mark the beginning of a new month are celebrated. Without a doubt, this points to one of the occasions for the performance of the longest Yašts. In the modern practice, the celebration of the Gāhānbār does not include the recitation of the Yašt, but they would have most likely done so in antiquity.

According to MoDI (1922: 449), the general textual structure for the celebration of a Gāhānbār consists of following texts: 1. the Āfrīnagān ī Gāhānbār; 2. the Drōn ī Gāhānbār; 3. the Wisperad ī Gāhānbār; 4. the *pāvi* of Gāhānbār. The latter is a *dibache* recited three times with changing dedicatories (Gāhānbār, the deity of the day and Sraōša). We can only

hypothesise about the position of the corresponding Yašt. At least two alternatives appear which do not exclude each other:

- 1. The intercalation of the Yašt among the Old Avestan texts like in the Bayān Yašt. The most likely position for the intercalation would be after the Vahištōišti Gā�ā. In some contexts, this ceremony could be substituted by a Yašt ī keh, the combination of a Drōn with a Yašt (KOTWAL/KREYENBROEK 2003: 118 f.; CANTERA 2014: 257 f.; ANDRÉS-TOLEDO 2015: 34).
- 2. The actual *pāvi* could be the reminiscence of the recitation of the Yašt after the Wisperad ī Gāhānbār with or without a previous Drōn. The corresponding Yašt would be celebrated perhaps in the most appropriate *ratu* for each divinity and festival.

In any case, although the exact position of the Yašts in the celebration of the Gāhābār cannot ascertained, the fact that the longest Yašt preserved are dedicated to the protagonists of the three most important festivals (the three ones that mark the beginning of a month) points to a recitation of the corresponding Yašts in these celebrations. Accordingly, we could make following speculative reconstruction of the texts recited in the main festivals and other important days of the liturgical calendar (see Table 7; for the first week, cf. Table 4).⁴³

Table 7: Reconstruction of the Avestan texts recited during the main festivals and festivities

	day-	ušah-	hāuuani-	гаріθβіпа-	uzaiierina-	aiβisrūθrima-
Nowruz	1		Āfrīnagān + Yasna Nōg Nāwar + Mihr Yašt			
maiδiiōi. zərəmaiia-	45		Āfrīnagān + Drōn + Wisperad ī Gāhānbār	[Yasna Rapihwin] ⁴⁴		
maiδiiōi. šəma-	105		Āfrīnagān + Drōn + Wisperad ī Gāhānbār + Tištar Yašt ⁴⁵			
paitiš. hahaiia-	180		Āfrīnagān + Drōn + Wisperad ī Gāhānbār + <i>Mihr Yašt</i>			
1 st day of month Mi9ra	181		Āfrīnagān + Yasna Nōg Nāwar + Mihr Yašt			

⁴³ I assume that the Āfrīnagān, Drōn and the Yasna or Wisperad always have the same dedicatory. This table is just a first attempt of linking texts with moments of celebration according to some internal data, also considering the modern practice. The most speculative assumptions are put between [].

⁴⁴ This reconstruction is highly speculative and many alternatives are thinkable.

⁴⁵ I have not sure arguments for deciding whether the original *ratu* for the celebration of this Drōn + Tištar Yašt was *hāuuani* or any other. I take *hāuuani* as default *ratu*.

hamaspa9- maēdaiia- (=Panj Gāhān 5)	365	Āfrīnagān + Wisperad ī Gāhānbār + Yašt ī Gāhān of the Vahištōišti Gā9ā	[Frawardīn Yašt]		Frawardīn Yašt
Panj Gāhān 1-5	361-4	Āfrīnagān & Yasna Srōš & Gāhān ⁴⁷ + Yašt ī gāhān ⁴⁸	[Frawardīn Yašt]		Frawardīn Yašt
Frawardī-gān (5 days)	356- 360	Āfrīnagān & Yasna Srōš & Frawardīn ⁴⁶ + [Frawardīn Yašt]	[Frawardīn \	Yašt]	Frawardīn Yašt
maiδiiāiriia-	290	Āfrīnagān + Drōn + Wisperad ī Gāhānbār		[Wahrām Yašt]	
1 st day of month of the Waters	211	Āfrīnagān + Yasna for Apam Napāt + Ardwisur Yašt	Āb-Zōhr with Ardwisur Yašt		
aiiā9rima-	210	Āfrīnagān + Drōn + Wisperad ī Gāhānbār + Ardwisur Yašt	Āb-Zōhr with Ardwisur Yašt		

It is noteworthy that, as far as we can see, there is no place for ceremonies of *ušahina*- in the calendar of the great festivals. The old ceremonies starting before sunrise did not participate in the celebrations of the new calendar.

4. Some considerations about the introduction of the solar calendar

Today it is generally accepted that the Avestan calendar is a solar calendar with 365 days divided in twelve months of 30 days and 5 epagomenal days (BIELMEIER 1992; HINTZE 2009; PANAINO 2017). 49 However, there is a great divergence of opinion about the date, the manner and above all the character of the calendar preceding the solar one. HINTZE's recent proposal is very innovative. She has argued that the Avestan calendar was already a solar calendar before the introduction of the Egyptian calendar. According to her, the Avestan year had 365 days on the evidence of A3.7-12, consisting of 7 summer months of 30 days, five winter months of 29 days and the ten days of the *hamaspaθmaēdaiia*-festival (HINTZE 2009).

This possibility, however, has been challenged by PANAINO, who rightly considers the independent creation of the solar calendar in Eastern Iran as very unlikely (PANAINO 2017: 78 ff.). Besides, PANAINO rightly points out that "it would be very peculiar to assume that the Iranian priests would have found a

⁴⁶ On the modern recitations during the five first Frawardīgān days in India in modern times, see MODI (1922: 479). In the day of Mąθra Spəṇta, the Yasna with the dedicatory to the Frauuašis is substituted by the dedicatory of Maθra Spənta.

⁴⁷ This is a Yasna with the dedicatory to the Gāθā; see KARANJIA (2010: 217)

 $^{^{48}}$ It consist of the celebration of Drōn together with the recitation of one Gā $9\bar{a}$, the corresponding Gā $9\bar{a}$ of the day.

⁴⁹ For a general description of the pre-Islamic calendars with further bibliographical references, see PANAINO (1990).

direct impulse to establish the ritual names of their own months and of days, a choice based on theological and esoteric reasons, only after a calendrical innovation of Egyptian origin" (PANAINO 2017: 89). For PANAINO, the elements of the Avestan calendar (ashiia-ratu-, aiiara-ratu-, $m\bar{a}hiia-ratu-$, $y\bar{a}iriia-ratu-$ and $sara\delta a-ratu-$) existed before the introduction of the solar calendar and cannot be separated from the speculation concerning the "Infinite" and "Limited Time". Accordingly, the presence of a month or day name in a text does not suffice as a proof for the presence of the Egyptian solar calendar. As for adopting the calendar, he accepts that there are many different possible scenarios and processes, but considers a synthesis between the new and the old calendrical system in a prominent cultural centre in eastern Iran as the most likely (PANAINO 2017: 75).

The adoption of the solar calendar was, indeed, a major process. As PANAINO points out, it cannot just be explained as an external innovation, but also not as an independent innovation. The solar calendar is based on a foreign calendar, but the reasons for the change must be sought internally. The analysis I have provided on the preceding pages attempts to provide some clues to this transformation that affected the liturgical calendar broadly (from the parts of the day to the months and the seasonal festivals). This adoption also affected the cult, in a process in which theological, cultural and political issues would have been involved. While I agree with PANAINO that the elements of the calendar can be anterior to the adoption of the solar calendar, I believe that the adoption stimulated a deep reformation of the Avestan liturgical calendar, affecting not only the number of days of each month and the introduction of the five epagomenal days.

The key for understanding the new divisions of the day is a reorganization of the periods around sunrise and sunset, that is, of Mi9ra's times. The same Leitmotiv is responsible for the arrangement of the most important seasonal festivals around the vernal and the autumn equinoxes, the yearly correspondences of sunrise and sunset. The distribution of the names of the months around the year is also conditioned by the same idea, as shown by the fact that the months for the Frauuasis and Mi9ra, the patrons of the new divisions of the day, immediately follow the equinoxes. The hemeronymes are, at least partly, the consequence of the same intellectual movement. We have seen that the names of the days of the first week and the seven Aməša Spentas, no doubt already understood as representing the natural elements, participate in a series of analogies with the parts of the day and the seasons of the year (see Table 5), linking Aša Vahišta as the fire to noon and the summer, Hauruuatāt as the waters to the afternoon and the autumn equinox and, thus, Amərətatāt as the plants to the continuation of life during night and winter, symbolized by Apam Napāt. In this series of analogies, Ahura Mazdā is linked to Miθra.

Mi9ra's prominent role in the reorganization of the liturgical calendar is emphasized in the calendar itself. He is the patron of the new ashiia- ratu-

starting with sunrise. His festival, the Mihragān, was the most important after the celebration of the New Year and was celebrated at the autumn equinox (see §2.2) and the month under his patronage also begins with the autumn equinox. Last, but not least, the New Year after the vernal solstice was inaugurated with a very special ceremony that was created *ad hoc*, the standard Yasna liturgy (known as well as Yasna of Nōg Nāwar) in which Mi9ra takes the most prominent place in the dedicatory (see §2.3). In fact, it is only during the celebrations of the first week of the New Year that the patrons of the *ashiia- ratu-* are included in the dedicatories.

The transformation of the liturgical calendar involved important ritual changes as well. The most significant was the creation of a new celebration of the Long Liturgy because of the redefinition of the appropriate time for pressing the *haōma*. Before the introduction of a sharp distinction between *ušahina*- and *rapiθβina*-, *haōma* was likely pressed before sunrise, as it still happens in the *ušahina*- liturgies. From now on, the pressing time is exactly at sunrise, as the programmatic designation of the new ratu-, hāuuani-, indicates. A new special ceremony was also created for this new pressing time: the Yasna and, most specifically, the Yasna of Nog Nawar for the sunrise after the vernal equinox. Other existing ceremonies, like the Wisperad, were adapted to the new pressing times. Only the *hamparšti*-ceremonies, especially linked to the morning dawn as ceremonies in which the ritual technique of the daēnā played a central role (CANTERA 2013), were not influenced by this ritual transformation. It would be interesting to rethink in this context the rejection of the daēnā by Yima, ⁵⁰ a solar figure and son of an auroral god. It seems that the competing ritual practices (solar vs. auroral) were confronted several times in the history of the Avestan ritual practices. In this context, the adoption of the solar calendar could be seen as the reversal of the history of Yima, as told in the second book of the Widewdad: the final victory of Yima over the ritual practice of the daēnā.

A further fundamental ritual change that is probably associated with the introduction of the solar calendar and the significance acquired by Mi9ra is the change in the conception of the Sun and, especially, of the fire that led to the transformation of the ritual fire into a permanent fire. I have willingly omitted almost every reference to this important transformation for it deserves an independent analysis. Nevertheless, it is important to mention some facts that seem to point towards a link between both processes, in order to contextualize the significance of the changes that accompany the adoption of the solar calendar. Mi9ra/Mitra is associated in Iran and in Vedic India not only with the sun, but also with the fire. This is usually attributed to the fact that oaths are taken in presence of the fire (BOYCE 1975a: 28 f.). However, the association is caused by the luminous manifestation of Mi9ra: both are

⁵⁰ For my understanding of the history of Yima, see CANTERA (2012). For an alternative explanation, see PANAINO (2015).

conceived as the sun's glow. Accordingly, the reconsideration of the role of Mi θ ra could have been the promoter of a change in the conception of the permanent fire as earthly symbol for the heavenly and immortal sun. The central position of Aṣ̃a Vahišta and the fire among the *asńiia- ratu-* as the patron of *rapi\thetafina-* points to a link between the reform of the calendar and the introduction of the cult to a permanent fire, highlighting the identification of the fire with the sun.

The ceremony for tending the fire ($b\bar{o}y\ d\bar{a}dan$) is repeated five times a day, once at each of the five $as\acute{n}iia$ - ratu-. By contrast, the complementary ceremony, the libation to the waters, is possible only during the three $as\acute{n}iia$ - ratu- when the sun is visible. They are complementary ceremonies. If we return to our set of analogies operating in the first week of the year (see §2.3), we could say that the $\bar{A}b$ -z $\bar{o}h$ r corresponds to the sixth day, Hauruuat $\bar{a}t$, whereas $b\bar{o}y\ d\bar{a}dan$ relates to the seventh day, Amərətat $\bar{a}t$. The latter represents the immortality of the sun and the fire that grants the continuity of life. Its ceremonies can be celebrated in the five ratu- exactly like the $b\bar{o}y\ d\bar{a}dan$ ceremony. It is, together with the celebrations for the Frauua \bar{s} is linked to Amərətat $\bar{a}t$, one of the few ritual actions that can be performed during the first part of the night ($ai\beta isr\bar{u}\vartheta rima$), so that a link is established between permanent fire and the Frauua \bar{s} is.

Mi9ra also participates in a political agenda that is probably concomitant with the transformation of the liturgical calendar. It might, indeed, have given the impulse for the transformation of Mi9ra's role in the pantheon and, hence, for the adoption of the solar calendar. Many authors, such as DARMESTETER. HERZFELD, GERSHEVITCH have noticed in the Mihr Yašt (Yt10.18, 87, 145) references to a political institution of higher level than the country, a kind of federation of countries or empire. While only four social circles are usually mentioned (nmāna-, vīs-, zantu-, danhu-; e.g., Vr3.2, G4.7), the Mihr Yašt mentions on two occasions a fifth one (daxiiunam fratəmatātō in Yt10.18; daήhusasti in Yt10.87). The fifth social circle appears (now as zara9uštrōtəma-), out of the Mihr Yašt (Yt10.115) and Frawardīn Yašt (Yt13.21), exclusively in the list of the five ashiia ratu- and is associated with the Frauuašis (Y17.18, 26.1, 71.2), thus linking political agenda and liturgical calendar. Mi9ra is agent of a political agenda in which the Frauuașis play an important role. In fact, most of the great Yašts are dedicated to divinities involved in such a political plan: Mi9ra, the Waters, the Frauuašis and the x^varənah-.

HERZFELD (1947: 444 ff.) identified this "imperium" with the Median Empire in agreement with his chronology and localisation of the Avestan texts. By contrast, GERSHEVITCH (1959: 299) associates the fifth category with the Greater Chorasmia. Nevertheless, if I am right, and assuming that the political agenda of Mi9ra runs in parallel to the reform of the liturgical calendar, then the Achaemenid Empire appears as the most likely candidate. GERSHEVITCH and KELLENS pointed out the collaboration of Mi9ra and Apam

Napāt in the political agenda. I have stressed their ritual association through $ha\bar{o}ma$ in the Long Liturgy and similar ceremonies and its reflexes in the liturgical calendar with the month of the waters following the month of Mi θ ra and the festival of $aii\bar{a}\theta$ rima- after $paiti\bar{s}.hahaiia$ -. These festivals are the most likely ritual context for the Ardwisur and Mihr Yašt. The mention of Mi θ ra and Anāhitā in the Old Persian inscriptions from Artaxerxes II on could be an echo of this ritual prominence of Mi θ ra and the Waters.

The rituals in Avestan language that have come down to us were composed for the performance in the reformed liturgical calendar. They contain older materials, but they are presented to us in the shape they acquired after the reformation of the liturgical calendar. The ritual time has often important textual consequences in the performances. The system reflected in them is the liturgical calendar resulting from the adoption of the solar calendar. The complex system of dedicatories is also shaped according to the reformed liturgical solar calendar. Accordingly, we can confidently affirm that the fixation of the Avestan rituals in their extant form took place in the context of the reform of the liturgical calendar concomitant with the adoption of the solar calendar.

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