

# THE HISTORY OF THE SEVEN-DAY WEEK

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## 1. Numerical Weeks.

The seven-day week appeared in the Bible book *Genesis* in the account on the creation of the world in six days and was at first used by ancient Jews. The Hebrew name of the rest day *Sabbath* came from Babylonian name of the rest day *sabbatum* (Babylonians, like ancient Romans, used 7-8 day week determined by Lunar phases). The Hebrew names of days of the week are numerical Sunday -*Yom rishon*- “first day”, Monday -*Yom shani*- “second day”, Tuesday -*Yom shlishi*- “third day”, Wednesday -*Yom reve'i*- “fourth day”, Thursday -*Yom khamshi*- “fifth day”, Friday -*Yom shishi*- “sixth day” and -*Erev shabbat*- “eve of Sabbath”, Saturday -*Yom ha-shabbat*- “day of Sabbath”. From Hebrew names came the Syriac names *Hadbshabā*, *Trein-bshabā*, *Tlāt-bshabā*, *Arba'-bshabā*, *Hamesh-bshabā*, *Rubtā*, *Shabtā* (first five names are connections of the numerals 1, 2, 3, 4, 5 with the shortened name of Saturday and mean “first day after Saturday” and so on, the name of Friday means “preparation” since this day was the day of preparation to Saturday when any work was prohibited. From Hebrew names came also pre-Islamic Arabic names *Yaum al-aḥad*, *Yaum al-ithnayn*, *Yaum al-thalāthā*, *Yaum al-arba'ā*, *Yaum al-khamīs*, *Yaum al-'arūba*, *Yaum al-sabt*. After the appearance of Islam Arabs replaced the name *Yaum al-'arūba* by *Yaum al-jum'a*- “day of meeting” (for prayers). Analogous to the Syriac names are the Persian names *Yakshanba*, *Dūshanba*, *Seshanba*, *Chārshanba*, *Panishanba*, *Jum'a*, *Shanba* (the Persian name of Friday is taken from Islamic Arabs).

Among the Greek names *Kyriakē*, *Deutera*, *Tritē*, *Tetartē*, *Pemptē*, *Paraskeuē*, *Sabbato* the name of Sunday means “day of the Lord”, the names of 2th-5th days mean “second”, “third”, “fourth”, and “fifth”, the name of Friday mean “preparation” and is the translation of the Syriac name, the name of Saturday comes from *Sabbath* in some Byzantine documents Sunday is called *Prōtē*- “first” and Saturday is called *Habdomē*- “seventh.”<sup>1</sup> Among the Georgian names *Kvira*, *Orshabat'i*, *Samshabat'i*, *Otkhshabat'i*, *Khutshabat'i*, *Paraskevi*, *Shabat'i* and among Armenian names *Kiraki*, *Erkushapt'i*, *Erek'shapt'i*, *Chorek'shapt'i*, *Hink'shapt'i*, *Urpat'*, 5th days are like in Syriac and Persian,

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<sup>1</sup> V. Grumel, *La Chronologie*, Paris, Presses des Universités, 1958, p. 166.

connections of the numerals 2, 3, 4, 5 with the name of Saturday, the names of Friday are versions of the Greek and Syriac names, the names of Saturday come from *Sabbath*.

The names of days of the week of many Muslim nations come from the Persian names: the *Uzbeki* and *Tajiki* names coincide with Persian names, the versions of these names are the *Qazaq* (Kazakh) names *Jeksembi*, *Düysembi*, *Seysembi*, *Särsämbi*, *Beysembi*, *Juna*, *Sembi*, the *Qyrghyz* (Kirgiz) names *Jekshembi*, *Düysömbü*, *Sheyshembi*, *Shershembi*, *Beyshembi*, *Juma*, *Ishenbi*, the *Turkmen* names *Yekshenbe*, *Düşhenbe*, *Sishenbe*, *Chärshenbe*, *Pershenbe*, *Ana*, *Shenbe*, the *Tatar* names *Yäkshämbe*, *Düşhämbe*, *Sishämbe*, *Chärshämbe*, *Pänjeshämbe*, *Jomgha*, *Shimbä*, and the *Bashqort* (Bashkir) names *Yäkshämbe*, *Düşhämbe*, *Shishämbe*, *Sharshamby*, *Kesadhna*, *Yoma*, *Shmäbe* (the Turkmen name of Friday and the Bashqort name of Thursday are old Turkic names). The versions of the Persian names are also some *Azerbaijani* and *Turkish* names: the Azerbaijani names are *Bazar* (“bazaar”), *Bazar ertäsi* (“day after Sunday”), *Chärshänbä akshamy* (“eve of Wednesday”), *Chärshänbä*, *Jümä akhshamy* (“eve of Friday”) *Jümä*, *Shänbä*, near to these names are Turkish names *Pazar*, *Pazartesi*, *Sali* (perhaps, the shortening of *Seşembe*), *Çarşamba*, *Perşembe*, *Cuma*, *Cumartesi*.

Among the *Portuguese* names the first and seventh *Domingo* (“day of the Lord”) and *Sabado* (from *Sabbath*) are borrowed from Spanish and the other names *Segunda feira*, *Terça feira*, *Quarta feira*, *Quinta feira*, *Sixta feira* which are connections of the word *feira*–“bazaar” with the numerals “2nd”, “3rd”, ... “6th” are borrowed from Arabic.

The names of days of the week of many nations of Africa and Asia which obtained the 7-day week from Arab merchants come from the Arabic names: the versions of these names are the *Hausa* (Western Africa) names *Lahädi*, *Litìnìn*, *Tälätä*, *Läräbä*, *Alhämîs*, *Jumma'ä*, *Asabär* (the letter *l* in the beginning of some these names comes from Arabic article *al*-) the *Malagasy* (Madagascar) names *Alahady*, *Alatsinainy*, *Talata*, *Alarobia*, *Alakamisy*, *Zoma*, *Asabothy* (the letters *al* in the beginning of some these names also come from Arabic *al*-), and the *Indonesian* names *hari Ahad*, *hari Senin*, *hari Selase*, *hari Rabu*, *hari Kamis*, *hari Jum'at*, *hari Sabtu*. Among the *Swahili* (Eastern Africa) names *Jumapili*, *Jumatatu*, *Jumanne*, *Jumatano*, *Alhamisi*, *Ijumaa*, *Jumamosi* only the names of Thursday and Friday come from Arabic names, other names are formed analogously from the name of *Friday* and numerals *mosi* = 1, *mbili* = 2, *tatu* = 3, *nne* = 4, *tano* = 5. Among *Vietnamese* names *Chù nhät*, *Thù' hai*, *Thù' ba*, *Thù' tu*, *Thù' nãm*, *Thù' sau*, *Thù bay* the first name means “day of *Thù' hai*, *Thù' ba*, *Thù' tu*, *Thù' nãm*, *Thù' sau*, *Thù' bay* the

first name means “day of the Sun” or “day of the God”, other names mean “2nd day”, “3rd day”, ... “7th day”.

Besides numerical names of days of the week whose first day is Sunday (Biblical, Muslim and some Christian names) or Friday (Swahili names) there are also the numerical names whose first day is Monday—these names are used by Slavic and Baltic nations. The *Russian* names are *Voskresen'ye* (literally “resurrection” (of Christ) instead old *Nedelya* - “not working” that is the day when people do not work; now this word means in Russian “week”), *Ponedel'nik* (“day after *Nedelya*”), *Vtornik* (from, *vtoroy*- “second”), *Sreda* (from, *sredniĭ*- “middle”), *Chetverg* (from *chetvertyĭ*- “fourth”), *Pyatnitsa* (from *pyatyĭ*- “fifth”), *Subbota* (from *Sabbath*). Analogous are the *Ukrainian* names *Nedilya*, *Ponedilok*, *Vivtorok*, *Sereda*, *Chetver*, *P'yatnytsya*, *Subota*, the *Belorussian* names *Nyadzyela*, *Ponadzyelak*, *Autorak*, *Sereda*, *Chats'ver*, *Pyatnitsa*, *Subota*, the *Polish* names *Niedziela*, *Poniedzialek*, *Wtorek*, *Sroda*, *Czwartek*, *Piatek*, *Sobota*, the *Czech* names *Nedelĕ*, *Pondĕli*, *Uterý*, *Streda*, *Ctvrtek*, *Pátek*, *Sobota*, the *Bulgarian* names *Nedelya*, *Ponedelnik*, *Vtornik*, *Sryada*, *Chetv'rt'k*, *Pet'k*, *S'bota*, the *Serbian and Croatian* names *Nedelja*, *Ponedeljak*, *Utorak*, *Sreda*, *Cetvrtak*, *Petak*, *Subota*. The *Lettonian* names are *Svētdiena*, *Pirm-diena*, *Otrdiena*, *Tresdiena*, *Ceturtdiena*, *Piektiena*, *Sestdiena*, the first of which means “day of Holiday”, the other ones mean “1st day”, “2nd day”,... “6th day”. The *Lithuanian* names are *Sekmadienis*, *Pirmadienis*, *Antradienis*, *Trečiadienis*, *Keturiadienis*, *Penkiadienis*, *Šeštadienis*, which mean “7th day”, “1st day”, “2nd day”,... “6th day” respectively. The *Estonian* names are *Pühapäev* (“the holy day”), *Esmaspäev* (“1st day”), *Teisipäev* (“the other day”), *Kolmapäev* (“3rd day”) or *Kesknädal* (“the middle of the week”), *Neljapäev* (“4rd day”), *Reede* (from Danish *Fredag*), *Laupäev* (from Danish *Lördag*). The *Hungarian* names are *Vasárnap*, *Hétfő*, *Kedd*, *Szerda*, *Csütörtök*, *Pentek*, *Szombat*, the first from these names comes from Turkish *Pazar* (*nap* means “day”), the second and third names mean “head of the week” and “second”, the last four names are versions of Slavic names.

These names are used also by some nations of the Northern Caucasus. The names of *Ossetes*, the descendants of Scythians, are *Hu'ytsaubon* (“day of the God”), *Qu'yri-sār* (“head of the week”), *Dyztzäg* (“second”), *Ärtytz-tzäg* (“third”), *Tzyppäräm* (“fourth”), *Mayrāmbon* (“day of holiday”), *Sabat* (from *Shabbath*). The *Chechen* names are *K'ira*, *Orshot* (from Georgian *Kvira* and *Orshabat'i*), *Shinara* (from *shi*” = 2), *Khaara* (from *kho* = 3), *Yieara* (from *di*” = 4), *P'eraska*, *Shot* (from Georgian *Paraskevi* and *Shabat'i*). The names of *Abaza* are *Mtshasha* (“day of the Lord”), *Khvasha* (“5th day”), *Sabsha* (from *Shabbath*).

In Asia these names are used by Chinese, by Mongols, and by kindred to Mongols Buryats. The Chinese name *Hsing ch'i jih* of Sunday contains the word *jih*—"Sun", but the Chinese names *Hsing ch'i i*, *Hsing ch'i erh*, *Hsing ch'i san*, *Hsing ch'i szu*, *Hsing ch'i wu*, *Hsing ch'i liu* of other days contain the numerals 1, 2, ...6. One of three kinds names of days of Mongols are *Sayn ödör* ("Holiday"), *Negdekh ödör*, *Khoyordokh ödör*, *Guravdakh ödör*, *Dörövdökh ödör*, *Tavdakh ödör* ("1st day", "2nd day", ..., "5th day"), *Khagas sayn ödör* ("eve of Sunday"). The Buryat names of days are *Voskreseni* (the version of the Russian *Voskresen'ye*), *Garagan negen*, *Garagan khoyor*, *Gara-gan gurban*, *Garagan dürben*, *Garagan taban*, *Garagan zurgaan*, *Garagan doloön* ("1st day", "2nd day"... "6th day").

In Africa these names are used by some nations of Southern and Central Africa. Among the Zulu names *Sonto*, *Msombulukwe*, *Wesibili*, *Wesithathu*, *Wesine*, *Wesihlanu*, *Mgibelo* the first name is the version of the Dutch *Zondag* and the 3rd, 4th, 5th, and 6th names contain the numerals 2, 3, 4, 5 respectively. The Rwanda names *Kucyumweru*, *Kuwanbera*, *Kuwakabiri*, *Kuwagatatu*, *Kuwakana*, *Kuwagatanu*, *Kuwagatandatu* have the same meanings as mentioned above Mongol names.

The old Turkic names of days of the week are kept in the language of *Karaims* and *Chuvashs* whose languages are Turkic but who are not Muslims (*Karaims* are Judaists, *Chuvashs* are Christians). The names of days of *Karaims* living in the Crimea are: *Yukh kun* ("the day of the week") *Yukh bash kun* ("the first day of the week") *Orta kun* ("the middle day"), *Khan kun* ("the day of the king"), *Kicheyne kun* ("eve of Friday", of the Bashqort name), *Eyne kun* (of the Turkmen name), *Shabbat kun* ("the day of Sabbath"). The names of days of *Karaims* living in Lithuania are: *Yekh kün*, *Yekh bash kün*, *Orta kün*; *Khan kün*, *Kichibaraski* ("eve of Friday"), *Baraski* (from Greek *Paraskeue* and *Anna kün*, *Shabbat kün*. The Chuvash names are *Vyrsarnikun*, *Tuntikun*, *Ytlarikun*, *Yunkun*, *Kesnernikun*, *Ernekun*, *Shamatkun*, three last from these names are near to the Bashqort, Turkmen, and Karaim names of these days.

## 2. Planetary Weeks.

Besides numerical names of days of the week many nations of Europe and Asia have the names of days of the week which are connected with names of planets. These names appeared at first in ancient Rome and in India. The Roman names are *Solis dies*, *Lunae dies*, *Martis dies*, *Mercurii dies*, *Jovis dies*, *Veneris dies*, *Saturni dies*. In Christian Rome the names of Sunday and Saturday were replaced by *Domini dies* ("day of the Lord") and *Sabbati dies* respectively.

From the Christian Roman names come the *Italian* names *Domenica, Lunedì, Martedì, Mercoledì, Giovedì, Venerdì, Sabato*, the *French* names *Dimanche, Lundi, Mardi, Mercredi, Jeudi, Vendredi, Samedi* (earlier *Sabedi*) the *Spanish* names *Domingo, Lunes, Martes, Miércoles, Jueves, Viernes, Sabado*, the *Rumanian* and *Moldovan* names *Duminică, Luni, Marti, Mercuri, Joi, Vineri, Sâmpătă*.

From the heathen Roman names come the *English* names *Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday*, the *German* names *Sonntag, Montag, Dienstag, Mittwoch, Donnerstag, Freitag, Sonnabend* and *Samstag*, the *Dutch* names *Zondag, Maandag, Dinsdag, Woensdag, Donderdag, Vrijdag, Zaterdag*, the *Swedish* and *Danish* names *Söndag, Mandag, Tisdag* and *Tirsdag, Onsdag, Torsdag, Fredag, Lördag*, the *Icelandic* names *Sunnudagr, Manadagr, Tyradagr, Odhinadagr, Thorsdagr, Frjadayr, Laugardagr*. In the names of Germanic nations the names of Roman Gods *Mars, Mercury, Jupiter* (Jovis-Pater), and *Venus* are replaced by the names of corresponding Germanic gods *Tir* (or *Tiw, Zio*), the god of war, *Wodan* (or *Odin, Wotan*), later the chief god, but originally the god of the winds, *Thor* (or *Donar*), the god of thunder, and *Freiya*, the goddess of love. The German name of Wednesday means “the middle of the week”, the first German name of Saturday means “eve of Sunday”, the second one, as French *Samedi* came from *Sabbath*, the Scandinavian names of Saturday mean “the day of the bath”. Among the *Finnish* names *Sunnuntai, Maanantai, Tiistai, Keskiviikko, Torstai, Perjantai, Lauantai* the first and last three names are veraions of Swedish names, the fourth one is the translation of the German name.

The names of the days of the week of *Celtic* nations also come from the Roman names: the *Welsh* names *diw Sul, diw Llun, diw Mawrth, diw Merdhyr, diw Iew, diw Gwener, diw Sadwrn* come from the heathen Roman names. Among the *Irish* and *Gaelio* names *Dé Domhnaigh, Dé Luain, Dé Mairt, Dé Ceadaoin, Déardaoin, Dé hAoine, Dé Sathairn* the first name comes from the Christian Roman name, the 7th one comes from the heathen Roman name, the 2nd and 3rd names also come from the Roman names. Very near to Celtic names are *Catalan* names *Diumente, Dilluns, Dimarts, Dimeores, Dijous, Divendres, Dissabte* which come from the Christian Roman names and the *Albanian* names *Diele, Henë, Martë, Merkurë, Entjë, Prëmtë, Shtunë* which come from the heathen Roman names (the first two Albanian names mean “the Sun” and “the Moon” respectively).

The *Indian* names, both classical *Sanskrit* and modern *Hindi*, are *Aditya vara, Soma vara, Mangala vara, Budha vara, Brihaspati vara, Shukra vara, Shanayshohara vara*, these names have the same meaning as the heathen Roman names. The names of days of the week of different nations of In-

dia are analogous to these names. The *Marathi* names are *Ravi-war*, *Soma-war*, *Mangal-war*, *Budh-war*, *Guru-war*, *Shukra-war*, *Shani-war* (*Rawi* and *Guru* are other Sanskrit names of the Sun and Jupiter). The *Urdu* names are *Itwar*, *Pīr* (the Persian word meaning “old man”), *Mangal*, *Budh*, *Juma’rat* (“eve of Friday”), *Juma’a* (from Arabic *Jum’a*), *Haftah* (the Persian word meaning “week”).

The Indian names of days of the week were borrowed by all Asian nations professing Buddhism. The *Thai* (Siamese) names *van Atit*, *van Chan* (from *Chandra*, another Sanskrit name of the Moon), *van Angkan*, *van Phut*, *van Prahat*, *van Suk*, *van Sau* are versions of Indian names. Analogous are the *Mongol* names of the second kind *Ad’yaa*, *Sum’yaa*, *Angarag*, *Bud*, *Burhaspad*, *Sugar*, *Sanchir*. The *Tibetan* names of days of the week *Nima*, *Dava*, *Migmar*, *Lagpa*, *P’urbu*, *Pasan*, *Panpa* coinciding with the names of corresponding planets can be considered as translations of the Indian names. The *Mongol* names of the third kind *Nyam*, *Davaa*, *Myagmar*, *Lhagva*, *Pürev*, *Baasan*, *Byamba* are versions of the Tibetan names.

The *Japanese* names of days of the week *Nichiyōbi*, *Getsuyōbi*, *Kayōbi*, *Suiyōbi*, *Mokuyōbi*, *Kin’yōbi*, *Doyōbi* and the *Korean* names *Ilyoil*, *Voryoil*, *Hwayoil*, *Suyoil*, *Moyoil*, *Kimyoil*, *Thoyoil* also can be considered as translations of the Indian names also: the literal meanings of these names are “day of the Sun”, “day of the Moon”, “day of fire”, “day of water”, “day of wood”, “days of metal (gold)”, “day of earth (soil)”, but the Chinese names of the planets Mars, Mercury, Jupiter, Venus, and Saturn are *Huo hsing* (the star of fire), *Shui hsing* (the star of water), *Mu hsing* (the star of wood), *Chin hsing* (the star of gold), *T’u hsing* (the star of soil) respectively (fire, water, wood, gold, and soil were five elements of classical Chinese science). Since the modern Chinese name of Sunday means “day of the Sun” and all other names of modern Chinese days of the week contain the character *Hsing* -“star”, it is probably that the *old Chinese* names of days of the week had the same meanings as modern Japanese and Korean names and also were translations of the Indian names.

The ordering of the planets in the names of the days of the week and planets is explained as follows: each day of the week and each diurnal and nocturnal hour have the “celestial lord”, the “lords” of days are “lords” of their first diurnal hours. The “lord” of the first diurnal hour of Sunday (and of Sunday itself) is the Sun, the “lord” of the second diurnal hour of Sunday is the following planet in the direction to the Earth in the Ptolemaic system, that is Venus, the “lord” of the third diurnal hour of Sunday is the following planet in the same direction, that is Mercury, the

“lord” of the fourth diurnal hour of Sunday is the Moon, the “lords” of the 5th-12th hours of Sunday are Saturn, Jupiter, Mars, the Sun, Venus, Mercury, the Moon, Saturn respectively. Therefore the “lord” of the 1st nocturnal hour of Monday is Jupiter, Jupiter is also the “lord” of 8th nocturnal hour of Monday, the “lords” of 9th, 10th, 11th, and 12th nocturnal hours of Monday are Mars, the Sun, Venus, and Mercury respectively, and the “lord”, of the first diurnal hour of Monday (and of Monday itself) is the Moon. Analogously the “lords” of Tuesday, Wednesday, Thursday, Friday, and Saturday are Mars, Mercury, Jupiter, Venus, and Saturn respectively.

This system could appear only in the *Hellenistic age* when became well-known the Biblical seven-day week, the division of day and night on 24 hours introduced by Egyptians and the Ptolemaic order of planets. Since this system in India was the same as in Rome, both systems had the common root. This common root probably was the Indo-Iranian cultus of *Mithra* very popular in the Roman empire.

The planetary names of days of the week appeared in Rome in I century A.D.: these names were used by the emperor Nero, whose letter to Cossus Lentulus begins as following: “Nerone Caesari Augusti Cosso Lentulo Cossi fil. VIII Idus febrariis dies solis, luna XIIIIX (*sic*) nun[dinis] Cumis V nun[dinis] Pomptis”;<sup>2</sup> this date is Sunday February 6 A.D. 60, 16th day of the Lunar month.

In Trajan baths on the Esquiline Hill in Rome was discovered the Roman calendar on which the months and the days of the months were marked by bone pegs inserted into the holes, the months were designated by zodiacal signs, the days of the month were defined by holes with numbers from I to XXX of the left and right sides of the calendar, the days of the week were defined by holes under the seven busts on the top of the calendar. Two busts were destroyed in the time of discovery of the calendar. These busts are personalizations of the days of the week: the first bust with rays symbolises the Sun and Sunday, the second with two horns symbolises the Moon and Monday, the third with the spear symbolises Mars and Tuesday, the fourth with hare’s ears symbolizes Mercury and Wednesday, the seventh with the star on his forehead symbolizes Saturn and Saturday, the busts symbolizing Jupiter and Thursday and Venus and Friday are destroyed (see Fig. 1 borrowed from the paper of A. Cutler).<sup>3</sup>

<sup>2</sup> P. Brind’amour, *Le calendrier romain*, Ottawa, University Press, 1983, p. 268.

<sup>3</sup> A. Cutler, “Stalking the Beast Art History as Asymptotic Exercise”, *Word and Image*, vol. 7, 1991, No. 3, pp. 223-238.

On Fig. 2-6 are represented the gods Saturn, Mars, Mercury and the gods of the Sun and the Moon from a codex-calendar of A.D. 354 kept in the Vatican Library<sup>4</sup> (Tables 8-12), under the image of each god is written the name of corresponding day “Saturni dies”, “Martis dies” etc., on the left and right of these images the “lords” of the nocturnal and diurnal hours of the corresponding day of the week are indicated.

Probably in the same times these names appeared in India.

Let us note that the Latin names of days were still used in Europe in 19th century Martin Bartels (1769-1836), professor at the university in Kazan, Russia (where famous Nikolay Lobachevsky (1792-1856) was his student) wrote March 2, 1808 in an announcement. “Prof. math. purae Bartels in horis 7-9 antemeridianis dierum lunae et Jovis trigonometriam analyticam planam et sphaericam, et diei Saturni horis pomeridiani 4-6 applicationem ejus ad astronomiam sphaericam et geographiam mathematicam docebit” (Professor of the Pure mathematics Bartels will teach at 7-9 h. a.m. on Mondays and Thursdays Analytic trigonometry, both plane and spherical, and on Saturdays at 4-6 h. p.m. its application to Spherical astronomy and Mathematical geography).<sup>5</sup>

The correspondence between days of the week and planets was known also in Muslim countries and was described by Thābit ibn Qurra (836-901) in his *Book on the subdivision of the days of the week according to sevenplanets* written in his native Syriac (Aramaic) language. In this book Thābit ibn Qurra wrote: “The first day [Sunday] is devoted to the Sun whose name is *Iliyūs* the second day [Monday] to the Moon whose name is *Sin* the third day- to Mars whose name is *Arīs*, the fourth day [Wednesday]- to Mercury whose name is *Nabuq*, the fifth day [Thursday] -to Jupiter whose name is *Bāl*, the sixth day (Friday)-to Venus whose name is *Balthī*, the seventh day [Saturday]- to Saturn whose name is *Qurunus*.<sup>6</sup> Here the god of the Sun, Mars, and Saturn are called by Greek names *Helios*, *Ares*, and *Kronos*, and the goddess of the Moon, Mercury, Jupiter and Venus are called by Babylonian names *Sin*, *Nabo*, *Baal* (Marduk), and *Balthi* (Ishtar). The book of Thābit ibn Qurra was translated into Arabic by his son Sinān ibn Thābit and this

<sup>4</sup> M.R. Salzman, *On Roman Time, the Codex-calendar of 354 and the Rhythms of Urban Life in Late Antiquity*, Berkeley, University Press, 1990.

<sup>5</sup> A.V. Vasil'yev, *Nikolay Ivanovich Lobachevsky*, Moscow, Nauka, 1992 (Russian), p. 31.

<sup>6</sup> D. Chwolsohn, *Die Ssabier und Ssabismus*, vol. 2, Amsterdam 1965, p. 22.



correspondence is mentioned by al-Bīrūnī (973-1048) in his *Astrology*<sup>7</sup>, (No. 404) and by al-Najdī (15th c.) in his *Book on nautical uses*.<sup>8</sup>

The names of days of the week of many former colonial nations are borrowed from languages of colonizers. We met the names of Sunday of *Buryats* and *Zulu* taken from Russian and Dutch. Besides the names of days in *Hausa* mentioned above there are the Hausa names *Dimāshī* and *Sāmdī* of Sunday and *Saturday* taken from French. The names of days of *Saha* (Yakuts) living in Siberia *Baskhy'annya*, *Benidiennyik*, *Optuorunnyuk*, *Serede*, *Cheppier*, *Beetinse*, *Subuota* are versions of Russian names. The names of days of *Tagalogs* living on Philippine Islands *Linggo*, *Lunes*, *Martes*, *Miyerkoles*, *Huwebes*, *Biyernes*, *Sábado* are versions of Spanish names.

The information about the names of the days of the week of the many nations discussed here has been derived from the book of F.K. Ginzl<sup>9</sup> and from our previous paper (some mistakes which are in [10] are corrected here).<sup>10</sup>

The derivative history of these names clearly shows the cultural connections between different and sometimes very distant peoples.

<sup>7</sup> Abū'l-Rayhān al-Bīrūnī, *The Book of Instruction in the Elements of the Art of Astrology*, ed. and transl. by R.R. Wright, London, Luzac, 1934.

<sup>8</sup> G. B. Tibbets, *Arab Navigation in the Indian Ocean Before the Coming of Portuguese: translation of Kitāb al-Fawā'id fi Usūl al-Bahr wa'l-Qawā'id* by Ahmad ibn Mājid al-Najdī, London, Royal Asiatic Society, 1981, p. 159.

<sup>9</sup> F. K. Ginzl, *Handbuch der mathematischen und technischen Chronologie*, Vol. 1-3 Leipzig-Berlin, Teubner, 1906-1914.

<sup>10</sup> B. A. Rosenfeld, "The Planets and the Days of the Week", *Istoriko-Astronomicheskie Issledovaniya*, vol. 22, Moscow: Nauka, pp. 367-380, 1990 (Russian).



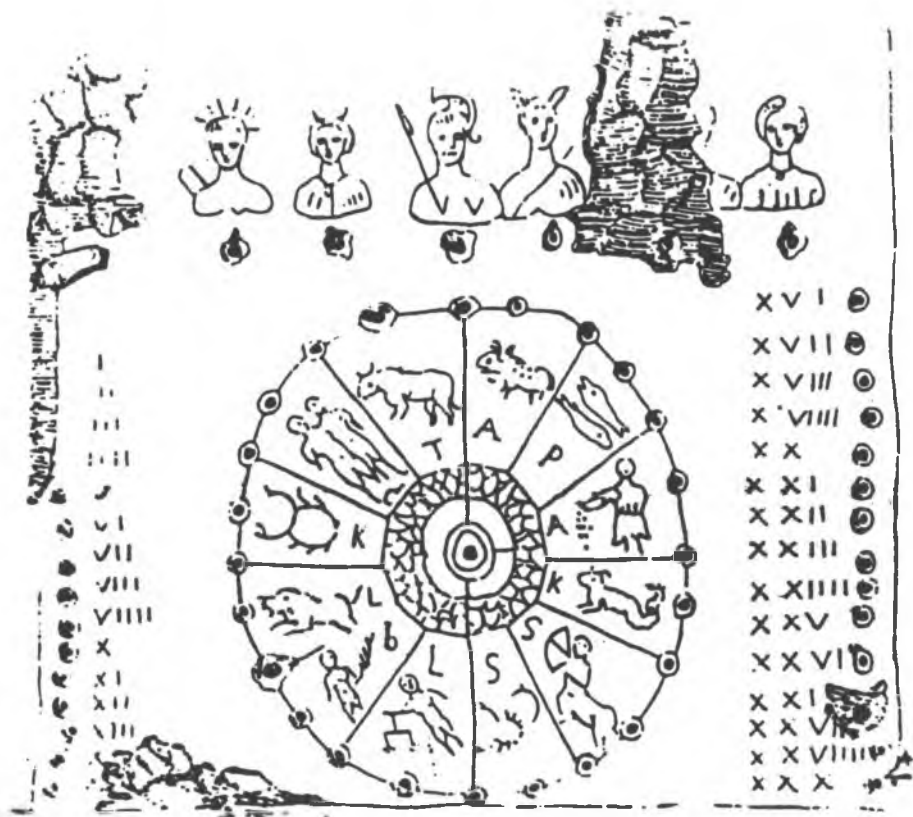


Fig. 1 — The Roman calendar from Trajan baths.



Fig. 2 — The planet Saturn, Romanus 1 ms., Barb. lat. 2154, fol. 8. Biblioteca Vaticana, Rome.



Fig. 3 — The planet Mars, Romanus 1 ms., Barb. lat. 2154, fol. 9. Biblioteca Vaticana, Rome.



Fig. 4 — The planet Mercury, Romanus 1 ms., Barb. lat. 2154, fol. 10. Biblioteca Vaticana, Rome.



Fig. 5 — The planet Sol. Romanus 1 ms., Barb. lat. 2154, fol. 11.  
Biblioteca Vaticana, Rome.



Fig. 6 — The planet Luna Romanus 1 ms., Barb. lat. 2154, fol. 12. Biblioteca Vaticana, Rome.



