THE PROCESSES OF ETHNOPOLITOGENESIS IN ANCIENT AND EARLY MIDDLE AGES IRAN

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ABSTRACT

The article investigates the main provisions of the biosocial approach to the constitution dynamics research in its conflict aspect. The point of this research is the confirmation of the dependence of the constitution dynamics on the dynamics of population sort. The L. N. Gumilev's concept, researching this dependence, is investigated. The universal, invariant, in respect of ethnic groups, types of constitution and historic eras regularity, – numerical algorithm of ethnopolitogenesis is formulated on the basis of this concept. For the purposes of verification the numerical algorithm, the ethnopolitogenesis of ethnic groups, created the first states on the territory of Iran – the Elamites, Medes, Persians and Parthians, is analyzed. The conclusion that it developed as a whole in accordance with a numerical algorithm is formulated.

Keywords: *Ancient and Early Middle Iran, ethnopolitogenesis, numerical algorithm*

INTRODUCTION

The conflictual political dynamics is characteristic for development of many countries. There are different approaches to the explanation of this dynamics. Among them has received recognition approach that links the political dynamics of agrarian states with demographic cycles. The structured-demographic theory developed by J. Goldstone is based on this approach (Goldstone 1991).

The main idea of this theory is that the growing amount of elite and peasantry is the cause of any crisis. The growing amount of elite leads to the exacerbation of the struggle for the resources, to the fractionation of elite and civil war between its factions. The increase amount of the peasantry causes the reduction peasant allotments, increase the prices, reduction of the consumption of the products, hunger and riots.

However, the beginning of crisis and the disintegration of the state may be caused by degradation both the elite and peasantry without its significant numerical increase. The crisis may start if the share of destructive elements among the elite increases and reaches a certain critical level of the share of corrupt officials, amateurs, etc. who misconduct. And among the peasantry the share of peddlers or just lazybones and loafers is increased to the critical level. Thus, the political dynamics in its conflictual aspect may be synchronized by the population qualitaty dynamics. It does necessitate the studying of these dynamics in order to determine its impact on the conflictual political dynamics. The impact of the population quality dynamics on the conflict political dynamics remains outside the scope of structured-demographic theory.

The different-quality energy structure is inherited by the human populations from their animal ancestry. This is one of the signs that testifies the dual biosocial nature of ethnicity. In animal population "the heterogeneity of its constituent individuals is the most important condition of population regulation" (Gilyarov 1990, p. 49).

Submit Date: 12.02.2017, Acceptance Date: 05.03.2017, DOI NO: 10.7456/1070ASE/009

The quality dynamics is one of the most effective mechanisms for population homeostasis by the increasing of proportion of the certain individual types at high population density (Dol'nik 2009). What's mentioned above is true in respect of human populations as well.

L. N. Gumilev is one among few historians who tried to investigate the influence of population quality on historical dynamics. According to K. G. Frumkin, "L. N. Gumilev states the question of population quality participating in historical events, of the dependence of historical events outcome on this quality, and the most important thing – of the dependence of this quality from a share of the one or another human type in the total general population. The posing of such issues is referred to Gumilev's merits" (Frumkin 2008, p. 19). Frumkin refers here to Gumilev's types of passionaries (individuals of energy excess type), subpassionaries (power-hungry type individuals) and harmonic people (balanced energy individuals); the latter constitute the bulk of ethnic group members (Gumilev 1990).

In Gumilev's concept, the main subject of macro historical process, considered as an indivisible unity and interaction of ethnogenesis and policy genesis, is the ethnicity as a biosocial and social and natural phenomenon. One of the biological hypostasis of ethnicity appears in the essence of passionary, subpassionary and harmonious types. The ratio of shares of these types determines the amount of ethnicity passionary energy, of which its activity and success depends.

According to L. N. Gumilev, the dynamics of the relative proportions of different types (the dynamics of passionarity) determines the process of ethnogenesis, which can be understood as the process of passing all the stages of ethnicity development (phases of ethnogenesis) and phase transitions which divide them – crisis periods, for which large-scale internal conflicts are characterized, leading to weakening and sometimes to dissolution of the state created by the ethnicity (Gumilev 1990). Using the term 'ethnopolitogenesis', proposed by P. V. Turchin (Turchin 2003, p. 54), one can say that the dynamics of passionarity determines the process of ethnopolitogenesis.

METHOD

Given by L. N. Gumilev characteristics of each phase and the phase transition, the determination of the approximate age ranges of each phase and the approximate dating of the so-called 'passionary impulses' that had been led to the formation of new ethnic groups, allowed him to make the empirical verification of his concept by analyzing the ethnogenesis of these ethnic groups (Gumilev 1990). However, its results cannot be recognized as conclusive. The same phases differ significantly in their age ranges in different ethnic groups, no phase transitions are highlighted. It should be acknowledged that Gumilev was failed in proving of the existence of universal regularity, which describes the dynamics of the energy type shares as part of an ethnic group. It drived to the necessity of making amendments in the concept.

As a result of these amendments, the author's concept, based on the biosocial approach, was formed. Let us quote its main provisions.[1]

I. The main subject of macrohistorical process, presented as indivisible unity and interaction of ethnogenesis and policy genesis, is ethnicity, which is regarded as biosocial and socio-natural phenomenon.

II. Ethnicity in its development goes through a series of age-phases – persistent periods and phase transitions which are separated by them – unstable periods of crisis.

III. Age ranges of ethnogenesis phases and phase transitions, as well as crisis periods inside some phases, similar in character of phase transitions, are determined by universal, invariant numerical algorithm of ethnopolitogenesis, with respect to historical periods and types of polities regularity.

1. Expansion phase: 0 – 340-360 years.

[1] The complete list and details on these provisions see: Saifullin 2014, Saifullin 2015.

Submit Date: 12.02.2017, Acceptance Date: 05.03.2017, DOI NO: 10.7456/1070ASE/009

Consists of the following periods: incubation (0 – 100-155 years), explicit (100-155 – 340-360 years) and troublesome in the middle of the expansion phase (185-235 years) (denoted it as 1a). The explicit period begins with the creation of a state by an ethnic group at the age of 100-155 years.

2. Phase transition from expansion to acme (expansion-acme): 340-360 – 450-470 years.
3. Acme phase: 450-470 – 630-655 years.
Within this phase a troubled period of passionarity overheat is identified (540-560 – 570-585 years).

4. Phase transition from acme to crack (acme-crack): 630-655 – 680-725 years.

5. Phase of crack: 680-725 – 755-810 years.
6. Phase transition from crack to inertia (crack-inertia): 755-810 – 840-875 years.
7. Inertial phase: 840-875 – 1302-1334 years.
There are three crisis periods within this phase: the first – 7a (880-920 – 935-970 years), the second – 7b (1025-1070 – 1100-1145) and the third – 7c (1175-1215 – 1260-1285) separated by four stable periods.

8. Phase transition from inertia to obscuration (inertia-obscuration): 1302-1334 – about 1500 years.

IV. Troubles (it has the violent nature of large-scale domestic conflicts), as well as major military defeats which are characterized mainly by unstable periods.

V. The passionarity dynamics is synchronized by solar-climatic cycles, in particular, by 82-year-old harmonica Gleissberg's cycle. This synchronization is manifested in the existence of 'reproductive' ethnicity age, multiple of the number 82 (902, 1066, 1230, 1394, and 1558 years), in which many passionaries in the part of its isolated populations are born, and that the relatively high proportion of passionaries are born during the 82-year cycle. The year, which accounts for reproductive age, is, as a rule, in the middle of this cycle.

VI. In one of reproductive ages a great amount of passionaries are born, and they form the new subethnoses, which, in their turn, form the core of 'subsidiary' ethnic group. The year, which accounts for this age, is the starting point of ethnopolitogenesis of subsidiary ethnic group.

VII. Several consequently alternating each other in a particular area of an ethnic group, interconnected by the continuity of anthropological and racial type, language and culture, form hyperethnos.

The aim of this research is the verification of the numerical algorithm on the example of analysis of the ancient states political history of ancient states that existed on the Iranian territory – Elamite and Median kingdoms, Persian and Parthian empires. The analysis must show that the distempers, as well as major military defeats occurred mostly during periods of unstable states of ethnic groups who have created these states. To achieve the objective of the study, it is necessary to determine the starting point of ethnopolitogenesis of each of these ethnic groups, and to consider their political history with respect to correspondence to its numerical algorithm.

RESULTS AND DISCUSSION

3.1 The starting points determination of ethnopolitogenesis of the Persians, Elamites, Medes, Parthians and Parni

According to the numerical algorithm, ethnic group forms the polity (a chiefdom, an early state and others) at the age of 100-155 years. The ethnic group begins territorial expansion after the establishment of the state or its conversion to other forms of polities at the beginning of one of sustained periods. The Persians and apparently the Susian subethnos of third Elamite ethnic group (the Elamites-3) formed their own state at the age of 100-155 years.

As it known, the Achaemenid Empire occurred in the result of conquests of Cyrus II, continuing for nearly two decades. He became the king of the agricultural Persian tribes in 558 BC (Dandamaev

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1999, p. 275). Providing that the Persian state was formed this year, we obtain that the starting point of ethnopolitogenesis of Persians is in the range between 658 and do 713 years BC (558 + 100-155 years = 658-713).

Let's determine the exact date of the starting point of the Persians. It's basing on the thesis that the starting points of ethnopolitogenesis of all previously existing and currently existing ethnic groups should be separated by time duration, a multiple of numbers 82 or 41 (substantiation of this thesis see: Saifullin 2015). The starting point of Egyptians-3 was defined as 870 BC (Ibid). Based on this date, and on the thesis that the starting points of all ethnic groups are separated by time duration, a multiple of numbers 82 or 41, can define the starting point of ethnopolitogenesis of the Persians. It is 706 BC. 706 BC and 870 BC separates the 164 years. The number 164 is a multiple of number 41 (164 : 41 = 4).

Let's verify the correctness of the starting point of Persian ethnopolitogenesis. According to the numerical algorithm, at the age of about 1320 years ethnos is entering a period of its agony (the phase transition inertia-obscuration, during which his polity dies because of attacks of neighbors) and it is replaced by subsidiaries ethnic group (several subsidiaries ethnic groups). The Sasanid Empire was defeated in the war with Byzantium in 628. King Khosrow II was killed. The internecine struggle for power began. Iran was conquered by the Arabs by the middle of seventh century. A subsidiaries Persian ethnic groups formed its states of Tahirid, Saffarid and Samanid in the ninth century.

This facts allow for the conclusion that in 628 the Persians entered the phase transition inertia-obscuration. The age of the Persians was 1334 years in 628 (706 + 628 = 1334), and this age corresponds to the beginning of age range of the phase transition.

Let's mention the features of ethnopolitigenesis and define a number and the starting points of ethnic groups of Elamite hyperethnos. An early states arose in Elam in the beginning of the third millennium BC. The great importance had the states which have capitals of Susa and Anshan (Dandamaev 1999, p. 264). The Susian and Anshanian subethnoses were leading in Elamite ethnic group. The last Elam Dynasty 'treasurers' (in Elamite 'kabniskir') came to power shortly after the death of the Achaemenid kingdom in 330 BC and governed up to the end of the second century AD (Hinz 1972). Consequently, the Elam statehood existed three thousand years, and the Elamite hyperethnos included three ethnic groups.

As it is known the Babylonian king Nebuchadnezzar I defeated Elam about 1110 BC, after that Elam was not mentioned in historical sources during almost three centuries. The omission about external policy of Elam in eleventh-ninth centuries BC testifies its weakening due to staying the Elamites in the unstable troubled period at this time. Sometimes the third crisis of the inertial phase goes directly into the phase transition inertia-obscuration. The long duration of the period of troubles eleventh-ninth centuries BC makes it possible to assert that the very occurrence took place in ethnopolitogenesis of the Elamites. Assuming that Elam was defeated by Nebuchadnezzar I in the beginning of the third crisis of the inertial phase of the Elamites-2, then we obtain that their starting point occurs approximately at 2305 BC (1110 + 1195 = 2305**,** where 1195 years – the average age of the beginning of the third crisis of the inertial phase).

Let's determine the exact date of the starting point of the Elamites-2. 2305 BC and 706 BC (706 BC – the starting point of Persian ethnopolitogenesis) separates the 1599 years. The number 1599 is a multiple of number 41 (1599 : 41 = 39). Therefore the starting point of the Elamites-2 accounts for 2305 BC. It is reasonable to suppose that the Elamites-2 been spun off during the next 82-year cycle: 2305-2264-2223 BC. In the Susian subethnos dominated the populations, the starting point of which was accounted for the beginning of the cycle (2305 BC), in the Anshanian subethnos – the populations, the starting point of which accounted for the middle of the cycle (2264 BC).

The Neo-Elamite dynasty which resumed an active foreign policy came to power in Susa about 760 BC. This dynasty refers to the third Susian subethnos (the Susians-3). The Susians-3 gemmated out in the reproductive age of the parent subethnos of 1394 and the starting point accounts for 911 BC (2305

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– 1394 = 911). They recreated their state at the age of 151 years (911 – 760 = 151), that corresponds to the numerical algorithm. Presumably in the first half of the seventh century BC the starting point of the Susians-3 had been shifted from 911 BC to 870 BC. The starting point of the Persians repeatedly shifted from 706 BC to 747 BC and vice versa (the reasons of these displacements see: Saifullin 2015).

The Anshanians-3 gemmated out in the reproductive age of the parent subethnos of 1558 and the starting point**,** in common with the Persians, accounts for 706 BC (2264 – 1558 = 706). The territory of Anshan/Parsa/Fars has become the core of Achaemenid state. The identity of the territory and the coincidence of the starting points the Anshanians-3 and Persians allows to assert, that in the formation of the Achaemenid state participated both of these ethnic groups. It was formed in the age of the Anshanians-3 and Persians of 148 years (706 – 558 = 148).

The third crisis of the inertial phase of the Elamites-1 apparently moved to a phase transition inertia-obscuration as well. Awan dynasty belonged to this ethnic group. The troubled period began after the death of last king of this dynasty, Puzur-Inšušinak and was characterized by the collapse of Elam (Hinz 1972). Puzur-Inšušinak is thought was a contemporary of Ur-Nammu (2112-2095 BC), founder of the Third Dynasty of Ur. Probably Puzur-Inšušinak died about 2105 BC. We obtain the starting point of the Elamites-1 is close to 3300 BC by linking this troubled period with the third crisis of the inertial phase, that have converted to a phase transition inertia-obscuration (2105 + 1195 = 3300). We determine that the starting point of the Elamites-1 accounts for 3330 BC assuming that the Elamites-2 spun off from the Elamites-1 in their reproductive age 1066 years (2264 + 1066 = 3330).

So, the starting point of the Elamites-1 is 3330 BC, of the Elamites-2 – 2305 BC and 2264 BC, of the Susians-3 – 911 BC, of the Anshanians-3 – 706 BC. Now we can write the scheme of ethnopolitogenesis of the Elamite hyperethnos:

Elamites-1–**3371-3330** ⇨1066 Elamites-2–**2305-2264** ⇨1394 Susians-3–**911→870** → death?

⇩1558⇩

Anshanians-3 – **747-706** → death?

All the dating is BC. The starting points of ethnopolitogenesis of the Elamite ethnic groups are emboldened. The reproductive age, in which there was a hive off of child ethnic group from the mother's ethnic group, is indicated on the right side and below. The arrow (→) indicates that the starting point of the Susians-3 shifted at some period of their ethnopolitogenesis from the beginning to the middle of the cycle.

There are reasons to suppose that Western Iranian ethnic group had gemmated (from Indo-Iranian superethnos?) over the next 82-year cycle: 1198-1157-1116 years BC. Among the Medes dominated populations, the starting point of which accounted for the cycle (to 1198 BC), among the Persians – the populations, the starting point of which coincided with the middle of the cycle (1157 BC), among the Parthians – populations, the starting point of which was at the end of the cycle (1116 BC). Let's denote the ethnic group, the starting point of whish comes to 1157 BC, the Persians-1a.

The Persian tribes moved to the territory of the region Anshan (modern Fars Province), mixed with the local Elamite populations and have formed the new Persian ethnic group, which we denote as the Persians-1b. The starting point of ethnopolitogenesis of this ethnic group is 706 BC. During the several centuries it had been assimilated by the Persians, apparently, a significant part of the Elamite populations of Anshan, the starting point which falls on 747 BC. These populations have moved into the Persian language and actually became the part of the Persian ethnic group. From time to time the number of these populations exceeded the number of the Persian populations, the starting point which falls on 706 BC. This led to a periodic displacement of the starting point of the Persians-1b from 706 BC to 747 BC and back.

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The part of the Persian tribes has avoided this intermixture, and their starting point of reference stayed the same – 1157 BC. The subsidiary ethnic group (denoted by the Persians-2a) gemmated from these tribes in the reproductive age 1230 years, i.e. in 73 (1230 – 1157 = 73). In 224 this ethnic group defeated Parthia and formed their own state – the Sasanian empire. It is happened at its age of 151 years (224 – 73 = 151), that corresponds to the numerical algorithm. The victory over the Parthians was promoted by the facts that the Persians-1b at this time came out of the inertia phase recession and was in a stable state of the second period of inertia phase. In the preceding period their starting point has shifted to 747 BC, and their age comprised 971 years in 224 (747 + 224 = 971).

The analysis of ethnopolitogenesis of the Parthians and the Medes allows us to say that they formed their own states, respectively, at the beginning of acme phase and at the beginning of inertia phase.

The Medes formed their own state in 672 BC in the result of a successful uprising against the Assyrian yoke (Dandamaev 1999, p. 272). At that time their ethnic age was 526 years (1198 – 672 = 526), that corresponds to the beginning of acme phase. The Median kingdom was conquered by the Persians in 550 BC when the Medes entered the phase transition acme-crack (their age comprised 1198 – 550 = 648 years).

The Parthians formed their own state around 250 BC in the result of a successful rebellion against the Seleucid's power. Their ethnic age was at that time 866 years (1116 – 250 = 866), that corresponds to the beginning of the inertia phase. Arsaces (the leader of the Parni, an eastern Iranian tribe) became the founder of Parthia. The starting point of ethnopolitogenesis of this community accounted for 419 BC. Presumedly, the Parni formed their polity in the first half of the third century BC. They began expansion and conquered Parthia. The Parthian empire was conquered by the Sasanids in 224. The Parthians were in the transition phase inertia-obscuration at that time (their age was 1116 + 224 = 1340 years), and the Parni – in the phase transition acme-crack (their age was 419 + 224 = 643 years).

Now we can write the scheme of ethnopolitogenesis of ancient Iranian ethnic groups:

Parni – **419**

⇧902

Eastern Iranians-1 – **1321** **747↔706** – Persians-1b

⇧1066 ⇧1558⇧

Indo-Iranians? – **2428-2387-2346** **2305-2264**

⇩1230⇩ ⇩

Medes-1, Persians-1a, Parthians-1 – **1198-1157-1116** ⇨1558 **442** – Parthians-2

1394?⇩ ⇩1230

Medes-2 (Kurds?) – **196?** **73** – Persians-2a

The dating 73, 196, 442 is AD, the others dating – BC. The starting points of Iranian ethnic groups are emboldened. The reproductive age, in which there was a hive off of child ethnic group from the mother's ethnic group, is indicated on the right side and below. The inclined arrow indicates that the Persians-1b formed in the result of mixing with the Elamites. Double arrow (↔) indicates that the starting point of the Persians-1b repeatedly shifted from 747 BC to 706 BC and back.

3.2 Results of the review of ethnopolitogenesis of the Elamites, Medes, Persians, Parthians and Parni and discussion of these results

Let's estimate in which ethnic ages of Elamites, Medes, Persians, Parthians and Parni took place troubles and they suffered from major military defeats. Then we can identify, for what period there

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were turmoil and defeats. The results are presented in Tables 1-6. In the second column (or the second and the third columns), in parentheses beside the ages of ethnic groups, the period numeration is specified in accordance with the above numerical algorithm: expansion phase – 1, troublesome period in the middle of the expansion phase – 1a, the phase transition expansion-acme – 2, etc. The ethnic age attributable to the steady period, and the numbering of this period are shown in italics. The presumable dating signaled by a question mark, presumably numbering of the period as well as the presumable age of ethnic groups in which indicated in the tables events occurred.

3.2.1 Results of the review of ethnopolitogenesis of the Elamites-1 and Elamites-2 and discussion of these results

The starting points of ethnopolitogenesis of the Elamites-1 and Elamites-2 are, respectively, 3330 BC and 2305 BC. All the dates listed in the Table 1 are BC.

Table 1. Troubles and major military defeats in ethnopolitogenesis of the Elamites-1 and Elamites-2

The chronological framework of distemper and / or major military defeats	Age of the Elamite ethnic groups (years)
1 The destruction of Elam Sargon about 2300 and his son Rimuš about 2258. 2 The dissolution of Elam after death Puzur-Inšušinak (about 2100?). The conquest of Elam Shulgi about 2066.	1030, 1072* (7b) 1230-1264 (7c-8)
3 The deposition of Hammurabi domination of Elam in 1764. Conquest by him Susa about 1755.	541-550** (3a)
4 Perhaps the conquest of Elam the Kassites in the second half of the sixteenth century BC.	780? (6)
5 The conquest of Elam by Kassite kings Burna-Buriash II (about 1366-1340) (about 1355?) and Kurigalzu II (1345-1324) (about 1340?).	950?, 965? (7a)
6 The destruction of Elam Nebuchadnezzar I about 1110.	1195 (7c)

* Here and below is the ethnic age of Elamites-1.

** Here and below is the ethnic age of Elamites-2.

Let's discuss the obtained results. Of the 6 cases, pointed in the Table of major military defeats, all of them occurred during the periods of unstable states of the Elamites-1 and Elamites-2. There are not anomalies.

3.2.2 Results of the review of the ethnopolitogenesis of the Susians-3 and Anshanians-3 and discussion of these results

The starting points of ethnopolitogenesis of the Susians-3 is 911 BC and 870 BC, of the Anshanians-3 is 706 BC. The last date marked in the Table 2, it is the end of the second century AD. All the other dates are BC.

Table 2. Troubles and major military defeats in ethnopolitogenesis of the Susians-3 and Anshanians-3

The chronological framework of distemper and / or major military defeats	Age (years)	
	Susians-3	Anshanians-3

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1 The destruction of Elamite-Babylonian troops by Assyrian king Sennacherib in 693. Troubles in Elam in 693-692, the death of the Elamite kings during the Troubles.	218-219 (1a)	
2 The destruction of Elamite troop by Assyrian king Ashurbanipal in 653, the defeat of Elam and the destruction of Susa in 646. The Elam annexation by Assyria in 644.	217-226* (1a)	
3 The unsuccessful rebellions against the Achaemenid government in Elam in 522 and 519.	348, 351 (2)	184-187 (1a)
4 The suppression of Dynasty treasurers, governed in Elimaide, at the end of the second century.	1070 (7б)	906 (7a)

* Probably in the first half of the seventh century BC the starting point of the Susians-3 has shifted from 911 BC to 870 BC. Here and below the ethnic age of the Susians-3 is specified for this point.

Let's discuss the obtained results. Of the 4 cases of major military defeats and unrest, pointed in the Table, all of them occurred during the periods of unstable states of the Susians-3 and Anshanians-3. There are not anomalies.

3.2.3 Results of the review of ethnopolitogenesis of the Medes and discussion of these results

The starting point of ethnopolitogenesis of the Medes is 1198 BC. All the dates listed in the Table 3 are BC.

Table 3. Troubles and major military defeats in ethnopolitogenesis of the Medes

The chronological framework of distemper and / or major military defeats	Age of the Medes (years)
1 The defeats of the Medes from the Assyrians in 834-788.	364-410 (2)
2 Successful campaigns of the Assyrians in 744 and 737. The inclusion of the Medes Union into the Assyrian power.	454-461 (2)
3 Successful campaigns of Sargon II in 716-713.	*482-485 (3)*
4 The defeat of the Medes by Scythians in 653. The Scythian supremacy over the Medes in 653-625.[2]	545-573 (3a)
5 The war of the Medes with the Persians in 553-550. The destruction of the Median State.	645-648 (4)
6 The unsuccessful revolt of magician (Median priest) the impostor Gaumata in 522.	676 (4)

Let's discuss the results. Of the 6 cases of major military defeats and unrest 5 occurred during the periods of unstable states of the Medes. There is one anomaly: successful campaigns of Sargon II at a time when the Medes were at the beginning of acme phase. Let's explain this anomaly.

[2] Some researchers (for example I. N. Medvedskaya) believe that the information about Herodotus, the 28-year reign of the Medes Scythians, is inaccurate.

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According to I. N. Medvedskaya, "contrary to the plans of Sargon the final conquest of the Medes did not happen" (Medvedskaya 2010, p. 128). Apparently one reason for this was that the Medes were able to organize enough effective resistance Assyrian troops. Overall, however, have been successful campaigns of Sargon. That fact that the starting point of a substantial part of the population accounted Median apparently to 1157 BC was facilitated this. The age of these populations during the campaigns of Sargon was 441-444 years (1157 – 716-713 = 441-444), and these populations have continued to be in an unstable state phase transition expansion-acme.

3.2.4 Results of the review of ethnopolitogenesis of the Persian ethnic groups in the Achaemenian period and discussion of these results

As it known, the Achaemenid, Parthian and Sasanid states were the world empires, which submitted a lot of countries and peoples. This means that their population was a superethnos, and turmoil and defeats in wars could be a result from staying in an unstable state not only the titular ethnic groups, the representatives of which constituted the major portion of the ruling elite, but also other ethnicities that were a part of this superethnos. For example, the rebellions in the satrapies of the Achaemenid state contributed to not only split the Persian ruling elite, but also the unstable state of ethnic groups, which made up the bulk of the population satrapy. Therefore it is necessary to consider ethnopolitogenesis of all the ethnic groups which were constituent the population of these empires. However, it is extremely complicate our task, and in order to reduce its labor intensity, we confine ourselves by consideration of only ethnopolitogenesis of titular ethnic groups, although such a consideration would mean a potent simplification of the real picture of ethnopolitogenesis.

The starting point of ethnopolitogenesis of the Persians-1a is 1157 BC, starting point of the Persians-1b is 706 BC. All dates listed in the Table 4 are BC.

Table 4. Troubles and major military defeats in ethnopolitogenesis of the Persian ethnic groups in the Achaemenian period

The chronological framework of distemper and / or major military defeats	Age (years)	
	Persians-1a	Persians-1b
1 The conquest by the Median king Cyaxares (625-585) of Persia about 615?	542? (3a)	
2 The popular uprising in the Achaemenid Empire in 522-521.	635-636 (4)	184-185 (1a)
3 Unsuccessful for the Persians wars with the Greeks in 490-449.	667-708 (4)	216-227 (1a), *235-257 (1)*
4 The rebellion against Artaxerxes I organized by his brother Bactrian satrap Vishtaspa in 464 and rebellion satrap of Syria Megabyzus in 454.	693, 703 (4)	*242, 253 (1)*
5 The rebellion against Darius II organized by his brother Arsites in Syria in 423.	*734 (5)*	*283 (1)*
6 The rebellions in Asia Minor and Media in 410-408.	*744-749 (5)*	*293-298 (1)*
7 The mutiny of Cyrus the Younger in 401.	756 (6)	*305 (1)*
8 The Great Revolt of the satraps in 367-359.	790-798	339-347 (2)

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	(6)	
9 The conquest of the Persian empire by Alexander the Great in 334-330.	823-827 (6)	372-376 (2)

Let's discuss the obtained results. 7 of the 9th cases of major military defeats and unrest, pointed in the Table, occurred during the periods when at least one of the Persian ethnic groups was an unstable state. There are two anomalies: the rebellion against Darius II by his own brother Arsites in 423 BC and the rebellions in Asia Minor and Media in 410-408 BC occurred during periods when the Persian-1a are in phase of crack and Persian-1b – the second half of the expansion phase. Let's explain these anomalies. Also we explain the reasons of the relatively easy conquest of the Achaemenid Empire by Alexander the Great.

For the rebellions in Syria in 454 and 423 BC contributed apparently unstable state of the Syrian ethnic group in this period. The Medes were a significant part of the population of the Achaemenid Empire. Their age was 788 years in 410 BC (1198 – 410 = 788) that corresponds to the beginning of the phase transition crack-inertia.

According to A. A. Nemirovsky, "in the fourth century BC the Achaemenid Empire made some political success. According the Peace of Antalcidas 387 BC, the Persians returned the control over the Greek city of Asia Minor, in 343-342 BC energetic Artaxerxes III (359-338) recaptured Egypt" (Nemirovsky 2008, p. 431). The hypothesis is presumable about that in the fourth century BC in the Achaemenid Empire increased the role of the Parthians. They were, unlike the Persians and the Medes, in the stable state at that time. The age of the Parthians was in 400-338 BC 716-778 years (1116 – 400-338 = 716-778), that corresponds to the age range of phase of crack. During the period of conquest Achaemenid Empire by Alexander the Great in 334-330 BC, all the Western Iranian ethnic groups (the Medes, Persians and Parthians) were in an unstable state. The Macedonians in this period were in the stable state of the first period of inertia phase (their starting point is 1239 BC), that contributed to their military successes.

3.2.5 Results of the review of ethnopolitogenesis of the Parthians[3] and Parni and discussion of these results

The starting point of ethnopolitogenesis of the Parthians is 1116 BC, the starting point of the Parni is 419 BC.

Table 5. Troubles and major military defeats in ethnopolitogenesis of the Parthians and Parni

The chronological framework of distemper and / or major military defeats	Age (years)	
	Parthians	Parni
1 Invasion of Antiochus III in Parthia in 209*, defeat of the Parthians.	907 (7a)	210 (1a)
2 Defeats of the Parthians in wars with the Sakas in 128 and 124.	*988, 992 (7)*	*291-295 (1)*
3 Conquest by the Armenians of Media in 88 and Northern Mesopotamia in 85. Struggle for the throne between Gotarzes I and Orodes I in 80.	1028-1036 (7б)	*331, 334 (1),* 339 (2?)
4 The civil war between Mithridates III and Orodes II in 56-55.	1060-1061	363-364 (2)

[3] Evidence of the political history of Parthia taken from the book N. C. Debevoise (1938).

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	(7б)	
5 The frustration of the Parthians by the Romans in 38. Wars of Phraates III with claimants to throne: in 31-25 – with Tiridates II, in 12-9 – with Mithridates IV. The war between Vonones I and the ruler Media Artabanus III in 9-12**. Confirmation Artabanus III for the throne in 12.	1078-1128 (7б)	381-431 (2)
6 The rebellion of Tiridates III in 35-36. The rebellion in Seleucia in 37.	*1151-1153 (7)*	454-457 (2)
7 Wars of Gotarzes II with claimants to throne: in 39-47 – with Vardanes I, in 49 – with Meherdat.	*1155-1165 (7)*	458-468 (2?)
8 The struggle for the throne between Pacorus II and Vologases I in 78-80. Victory of Pacorus II. Fighting with him Artabana IV in 80-81.	1194-1197 (7в)	*497-500 (3)*
9 The struggle for the throne between Pacorus II and Vologases II in 105. The coming to power of the king Osroes I in 109. Capture by the Romans in 114 of Armenia, Mesopotamia – in 115.	1221-1231 (7в)	*524-534 (3)*
10 The struggle for the throne between Osroes I and Vologases II. Victory of Vologases II in 128.	1244 (7в)	547 (3а)
11 The unsuccessful war with the Romans in 162-166. Loss of Parthia Northwest Mesopotamia.	1278-1282 (7в?)	581-585 (3а?)
12 The unsuccessful war with the Romans in 197-199.	1313-1315 (8)	*616-618 (3)*
13 The war between the king Vologases V and his brother Artabanus V in 213-216. The rebellion of Ardashir about 220. Defeat by him of Vologases V about 223 and of Artabanus V about 227. The end of the Parthian Empire.	1329-1343 (8)	632-646 (4)

* Here and below all the dates are indicated BC.

** Here and below all the dates are indicated AD.

Let's discuss the obtained results. 12 of the 13th cases of major military defeats and unrest, pointed in the Table, occurred during the periods when either the Parthians (4 cases), or the Parni (2 cases), or both ethnic groups (6 cases) were in an unstable state. There is one anomaly: the Parthian army was defeated by Sakas at the time when the Parthians were in the second period of inertia phase, the Parni – in the second half of the expansion phase. Let's explain this anomaly.

We are far from the thought that defeats in the wars due to the effect only of biosocial factor. As well as in any complex social and political processes, the complex of factors influences on the war and its results, and the biosocial factor is only one among many. All other things being equal, that army win the victory, which is better armed and trained, adopts advanced tactics of warfare. The course of the campaign may be influenced by force majeure. Apparently, they have played a decisive role in the fact that the Parthian army was defeated by Sakas. According N. S. Debevoise (1938), defeat the Parthians in the fighting with the Sakas contributed to the side of the Sakas the Greeks, who were the part of the Parthian army.

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Note that the Parthian Empire was lost when the Parthians were in the phase transition inertia-obscuration – period of agony of the ethnic group, and the Parni entered in the phase transition acme-crack.

3.2.6 Results of the review of ethnopolitogenesis of the Persian ethnic groups of Sasanian period and discussion of these results

The starting point of the Persians-1b shifted from 706 BC to 747 BC after the death of the Achaemenid Empire. She's back from 747 to 706 BC probably during the first half of sixth century AD. The starting point of the Persian-2a is 73 AD.

Table 6. Troubles and major military defeats in ethnopolitogenesis of the Persian ethnic groups in Sasanian period

The chronological framework of distemper and / or major military defeats	Age (years)	
	Persians-1b	Persians-2a
1 The rebellion against Bahrām II of his brother Hormizd in 283. Defeat in the war with the Romans in 283.	1030 (7б)	210 (1a)
2 The successful rebellion of Narses against Bahrām III in 293. Defeat in the war with the Romans in 298.	1040-1045 (7б)	220-225 (1a)
3 The successful rebellion against Hormizd III of his brother Peroz in 459. The unsuccessful wars with Ephtalites in 482-484, the death of Peroz in 484.	1206-1231 (7в)	386-411 (2)
4 The Mazdak movement in 488-528. The overthrow of Kavadh I in 496, his return to the throne in 498.	1235-1275 (7в)	415-455 (2)
5 The successful rebellion of Bahrām VI Čōbīn against Hormizd IV in 590. Defeat of Bahrām by Khosrow II Parviz, death of Bahrām in 592.	*1296* (7)*	*517 (3)*
6 Defeat in the war with Byzantium in 628. The start of the troubled period. The conquest of Iran by the Arabs in 637-651.	1334-1357 (8)	555-578 (3a)

* Probably in the first half of the sixth century AD, the starting point of Persians-1b has shifted from 747 BC to 706 BC. Here and below the ethnic age of the Persians-1b is specified for this point.

Let's discuss the obtained results. 5 of the 6th cases of major military defeats and unrest, pointed in the Table occurred during the periods when both ethnic groups (the Persian-1b and Persian-2a) were in an unstable state. There is one anomaly: rebellion Bahrām VI Čōbīn happened when the Persian-1b was in the final period of inertia phase, and the Persian-2a – in acme phase. Let's explain this anomaly.

It is known that Bahrām VI Čōbīn originated from a high-born of the Parthian genus Mihran. Seizing the throne in 590, he proclaimed the revival of the Arshakids Dynasty. In ethic terms the accession Bahrām can be regarded as an unsuccessful attempt of the Parthians-2 to revive the own state. The Parthians-2 gematted from the Parthians-1 in their reproductive age 1558 years, i.e. in 442 (1558 – 1116 = 442). Their age was 148 years in 590 (590 – 442 = 148). This age corresponds to the age of formation by the ethnic group of its state. However, the Parthians failed of retaining the power, because both of the Persian ethnic groups were in a stable state.

Note that the Sasanid Empire was lost when Persian-1b entered in phase transition inertia-obscuration, the Persians-2a – in the troubled period of passionarity overheat, the Parthians-2 – in the troublesome

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period in the middle of the expansion phase (628-651 – 442 = 186-209 years), the Parni – in the first crisis of the inertial phase (628-651 + 419 = 1047-1070 years).

CONCLUSION

The result of the research became the verification of the numerical algorithm on the example of the analysis of ethnopolitogenesis of ancient ethnic groups of Iran. The analysis showed that the unrest and major military defeats occurred mainly during the periods of unstable states of these ethnic groups. The presented anomalies are explained within the bounds of the theory.

In terms of follow-up studies it's interesting to analyze ethnopolitogenesis existed in the first-second millennium subsidiaries Persian ethnic groups – the Persians-2b and Persians-2a and, in particular, the currently existing the Persians-3b and Persians-3a, as well as the Azerbaijani. It will be possible to give a reasonable prediction of modern Iran development, if we find out in what periods of ethnopolitogenesis are these ethnic groups.

ACKNOWLEDGMENTS

The work is supported by a grant issued by 2016 International Grant Program of Russian Institute for Advanced Study at Moscow State Pedagogical University.

REFERENCES

Dandamaev, M. A. (1999). Iran i Srednyaya Aziya v drevnosti (Iran and Central Asia in Antiquity). In V. Kuzishchin (Eds.), Istoriya Drevnego Vostoka (History of the Ancient East) (pp. 260-95). Moscow: High School.

Debevoise, N. C. (1938). A Political History o f Parthia, Chicago: University of Chicago press.

Dol'nik, V. R. (2009). Neposlushnoe ditia biosfery. Besedy o povedenii cheloveka v kompanii ptits, zverei i detei (Naughty child of the biosphere. Conversations about the behavior of the person in the company of birds, animals and children). St. Petersburg: Petroglyph publishing house.

Frumkin, K. G. (2008). Passionarnost': priklyucheniya odnoj idei (Passionarity: The adventures of one idea). Moscow: LKI publishing house.

Gilyarov, A. M. (1990). Populyatsionnaya ehkologiya (Population Ecology). Moscow: Issued by MSU.

Goldstone, J. A. (1991). Revolution and Rebellion in the Early Modern World. Berceley: University of California Press.

Gumilev, L.N. (1990). Ehtnogenez i biosfera Zemli (Ethnogenesis and biosphere of Earth), Leningrad: Gidrometeoizdat.

Hinz, W. (1972). The Lost World of Elam. London: Sidgwick & Jackson.

Medvedskaya, I. N. (2010). Drevnij Iran nakanune imperij (IX-VI vv. do n. eh.). Istoriya Midijskogo tsarstva (Ancient Iran on the eve of Empires (IX-VI centuries BC.). The history of the Median Kingdom). St. Petersburg: Petersburg Orientalism.

Nemirovsky, A. A. (2008). Drevnij Iran (Ancient Iran). In V. Budanova (Eds.), Drevnij Vostok (Ancient East) (pp. 409-35). Moscow: Astrel: AST.

Saifullin, R. G. (2014). Polity and Population Quality Dynamics. Advances in Environmental Biology, 8 (5), 1351-1356.

Saifullin, R. G. (2015). Ethnopolitogenesis of Ancient Egyptian and Mesopotamian Ethnic Groups. Asian Social Science. Volume 11, No. 5; 2015, pp. 158-168.

Turchin, P. (2003). Historical Dynamics: Why States Rise and Fall. Princeton: Princeton University Press.

Submit Date: 12.02.2017, Acceptance Date: 05.03.2017, DOI NO: 10.7456/1070ASE/009