RESEARCH ARTICLE	**Ways of formation of ctematonyms**

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Abstract

This study aims to utilize data visualization as a data mining technique for the purpose of credit analysis. It employs the Weka data mining software and the Scatter Plot Matrix technique to identify data trends and patterns, facilitating a logical analysis of the financial situation and by extension improve the decision-making process. The findings reveal that data visualization significantly enhances data comprehension by extracting pertinent information from the credit database managed by the studied agency of a public bank active in Algeria. This aids in understanding the bank's adopted strategies and various financial trends, which in turn influence customer satisfaction and requirements, as well as the country's overall economic growth.

Introduction. In this article analyzes ways of formation of ctematonyms. Lexically formed ktematonyms in our language are formed from appellatives or other onomastic units without any grammatical means. For example, "İTV" (İctimai + televiziya – public and television), "İnşaatçılar" (inşaat + çı + lar – Inshaatchilar metro station), "Yashıl market" (yashıl + market – green market), "Zirve" (peak – training course) – are formed by the common words. On the basis of the special word "Baku" some ctematonyms such as, "Baku State University", "Baku city executive power", "Gundelik Baku newspaper" were formed. Sadarak district, the name of the settlement took on a new meaning and the name of "Sadarak shopping center" is formed, as well as, beauty salons and wedding houses are formed based on personal names such as "Aygun, Gunel, Leyla" and so on, in addition, the name of "Kolani" wedding house, "Kolani" family recreation center are related to "Kolani" ethnonym, "Mungis" mosque, on the bases

of "Khazar" hydronym, "Khazar TV", "Khazar radio" are formed, flower salons on the basis of phytonyms "Lala, Nargiz, Liliya" are crated, the names of the summer house "Batabat" - the name of vodka "Batabat" are also formed with entonym, on the basis of special name of Sheki – "Sheki pitisi", "Sheki khan palace" are formed, as well as, "Almaz" palace was formed on the ktematonymy of Almaz.

Semantically formed ctematonyms are formed by conversion. That is, a number of general words belonging to different parts of speech are substantivized and form special names. Basically, adjectives and verbs are substantivized and answer noun questions, and as a result, special nouns are formed. However, it should be noted that not every substantivize appellant can create a special name. This phenomenon manifests in most anthroponyms and toponyms among onomotics. When we consider the semantic formation of ktematonyms, we have observed that these onomotics are formed by substantivizing nouns, adjectives, verbs and numbers. We can grouped our general thoughts as following:

1) The ones created by substantivization of the name: *"Garabatdaq"* (adornment), *"Qeyret"* printing house, etc.

2) The ones created by substantivization of the adjective: For example, *"Silsile"(adornment), "Khosrov and Shirin" (Nizami Ganjavi) etc.*

3) The ones created by substantivization of the verb: *"Ayran", "Qurut", "Basdıq"* - food names, etc.

4) The ones created by substantivization of the numeral: *"Chahargah", "Segah", and so on.*

Morphologically formed ctematonyms are studied in the second sub-chapter. For example:

The suffix: - *lı, - li, - lu, - lü*. This suffix is very productive and belongs to the group of suffixes that form onomastic units with different meaning. Mostly, are used to form the names of places, and surnames. For example: *Əbkli, Muğanlı, Qaraqaşlı, Həsənli, Mənımədli, Əlilli etc.*

The suffix: - *lıq, - lik, - luq, - lük*. For example, *"Arxalılq", "Canlıq"* (names of clothes), *"Sarılıq", "Quduzluq"*(names of diseases), *"Müstəqillik günü"* etc.

- *Ca, - cə*. It is a homonymous suffix. It is an unproductive suffix, as forming ctematonyms. For example, *Küləcə, Qızılca etc.*

- *xana*. *Berberxana, Yemekxana, Chayxana, Qumarxana etc.* This suffix was borrwed from Persian to our language. In the language of origin, "khana" means place, home. It has passed into our language as a suffix.

- *zadə*. It is a word of Arabic and Persian origin. It is used as an independent lexical unit in the language to which it belongs. In Persian, the suffix zadeh, means *"born", "son of man",* it forms a surname by joining special nouns, and by joining nouns, it expresses their origin, and their descendants. In our language, mainly it is productive in creation of anthroponyms. For example, *Həsənzadə, Əlizadə, Bağırzadə, Axundzadə, Mollazadə etc.* However, it is one of the most unproductive suffixes in creation of ctematonymy. For example, *İmamzadə (Ganja, Barda).*

- *iyyə*. This suffix has also passed into our language from Arabic and Persian. Generally, it is a suffix that creates an antoponym. For example, *Ülviyyə, Nuriyyə, Hüsniyyə* and others. It also takes an active part in the creation of ktematonyms. *Geysariyye (Monument in Ordubad city), Shukriyye (song), Ismaliyye (building) etc.*

The suffix: - *ı, - i, - u, - ü –*It is one of the most widely used suffixes in the formation of ctematonyms.

1) Dances are formed by adding this suffix to the names of people, places and plants: *For example, "Kenanı", "Mehmanı", "Suleymanı", "Chinarı", "Keveri", "Qazagı","Innabı".* At the same time, innabi means the color. Innabı color means brown, the sahed of red.

2) Saz music, generally are also formed by this suffix like dances. For example, *Dilqemi, Huseyni, Bahmani, Alikhxanı, Urphanı, Summanı, Asadi, Jelili, Qeribi, Qahramanı, Durakhanı etc.*

3) Names of clothes: *"Kurdu", "Katibi", "Katubu", "Baharı" etc.*

4) Carpet names: *For example, "Fatmayı", "Kellayı", "Kelagayi" və s.*

- *iyyat*. This suffix, which is of Arabic and Persian origin, is actively used in the formation of subject names. For example, *"Küliyyat", "Ədəbiyyat", "Riyaziyyat", "Təbiyyət" etc.*

- *lit*. This suffix, which is not typical of the Azerbaijani language, is unproductive in the formation of ctematonyms. It participates in the creation of ctematonyms with the content of historical period. For example: Paleolithic Mesolithic, Neolithic, Eneolithic period.

- *izm.* It is a suffix derived from Russian and European languages. It is mainly involved in the creation of onomastic units such as movements and ideology in creation of ctematonym. For example *"Sosiologizm", "Kapitalizm", "Demokratizm"* and so on.

- *Namə.* Lexical meaning is *"letter"* in the language to which it belongs. However, we can see that it was often used in the creation of the names of works as a suffix. For example, *"Dahname" (Shah Ismail Khatai), "Shahname" (Firdovsi), "Isgendername" (Nizami)* and so on.

1) In the third sub-chapter titled **"Ctematonyms formed by siyntactic"** linguistics features of most ctematonyms formed by syntactical way are considered. For example, **Initial method:** *AMEA (Azərbaycan Milli Elmlər Akademiyası – ANAS, Azerbaijan National Academy of Science), YAP (Yeni Azərbaycan Partiyası – NAP, New Azerbaijan Party), BAB (Bütöv Azərbaycan birliyi – WAU, Whole Azerbaijan Union), TQDK (Tələbə Qəbulu Üzrə Dövlət Komissiyası – SCSA, State Commission for Student Acceptance) etc.* **The method of complete reduction of some components:** Qaçqınkom *(Qaçqın və Məcburi Köçkünlərlə İş üzrə Dövlət Komissiyası – Refugee Committe, State Committee for Affairs of Refugees and Internally Displaced Persons), Sosdem (Sosial Demokrat Partiyası – Social Democratic Party) etc.* **The method of partial reduction of all components:** *Aztelekom (Azərbaycan Telekommunikasiya Mərkəzi – Azerbaijan Telecommunication Center) and so on.* **Ktematonyms formed in the model "Noun + noun":** *"Qizil taj" (beauty saloon), "Demir qapi Darband" (Wedding place) etc.*

2) **Ctematonyms formed in the model "Adjective + noun":** ktematonyms formed in this way are more than others. *Ag Korpu (fountain, Astara region), "Saglam ailə" (Health family, Clinics), "Sade adamlar" (Simple peaople), "Açıq söhbət"(Open talking, (by Bakhtiyar Vahabzada)*

3) **"Numeral + noun" model:** *"Üç bacı"(meal name),"İki sevgi" (2 love), "20 bahar" (20 springs, by S. Vurgun)*

4) **"Adverb + noun" model:** *"Ireli"təşkilati (organization), "Bugünün səsi" (today's voice, newspaper) etc.*

5) **"Pronoun + noun" model:** *"Bizim mətbəx", "Bizim tarla", "Bizim yol", "Bizim dövr" newspaper, "Bizim ellər" (documentary film) etc.* Most of ktematonyms formed by the help of this model are created with the participation of the pronoun "biz".

6) **"Participle + noun" model:** *"Olen dunyam", "Olen mehebbetim" (S. Vurgun),"Parisde biten heyat", "Eriyen ada" etc.*

7)**"Exclamation + noun" model:** *For example, "Peh - peh" club , "Ay, Zaur" etc.*

8) **In the form of Type II attributive word combinations:** The first part does not accept any grammatical and morphological features, and the second part is used with the affiliation suffix. Usually, it is part of a sentence as a whole and cannot contain words. These combinations mean generality and abstraction. Therefore, complex office names are often expressed in these combinations. For example, Abşeron Rayon İcra Hakimiyyəti (Absheron District Executive Power), Azərbaycan Dövlət Aqrar Universiteti (Azerbaijan State Agrarian University) ect. In addition, we can also observe that other groups of ctematonyms are formed in the form of the second type of noun combination. For example, "Sharq qapisi", "Edebiyyat qezeti", "Xalq qezeti", "Azerbaycan muellimi", "Islam heqiqetleri" (names of newspaper), "Bilik gunu", "Daxili Qoshunlar gunu", "Silahlı Quvveler gunu", "Chiyelek murebbesi", "Xiyar turshusu" etc. Ctematonyms in the second type of attributive word combonations are mainly formed in the "noun + noun" model. The second type of attributive word combonations, the parties of which belong to other parts of speech, also substantivize and create this connection by entering into a relationship of approach and harmony. For example, "Sevinj bukhtasi"(film),"Kend seheri" (Morning in the Village, S. Vurgun) , "Dan yeri" (Dawn, Bakhtiyar Vahabzada) etc.

The means of expression of the parts of ctematonyms in the form of the second type of attributive word combinations are limited in comparison with ctematonyms in the form of the first type of attributive word combinations. However, according to the structural type of the parts and the special names in which they are expressed, they can be grouped as follows:

1) **Ctematonyms, the first side of which is expressed in simple words:** "Anam gelini", "Deniz gezintisi" (Sea Walking, Samad Vurgun), "Aile shejeresi" (documentary film), "Veten sevgisi" (Motherland Love, future film), "Cuma masjidi", "Qiz qalası" (Maiden Tower), "Gardash piri", "Dere piri", "Dunya Bankı" (World bank), "Tava kababı" and so on.

2) **Ctematonyms, the first side of which is expressed in derivative words:** "Gündəlik Bakı" (Daily Baku) newspaper,

"Sevgililər günü" (Valentine's Day), "Neftçi portreti" (Oilman's portrait), "Yurdsuz ailə" (Homeless family), "Qaçqın qız" (Refugee girl, works of art) etc.

3) Ctematonyms, the first side of which is expressed in compound words: "Şirvanşahlar sarayı" (Shirvanshahlar palace), "Ag - Gara geceler" (black and white nights), "Nefes - nefes tegib" (Persecution), "Qızıltorpaq əfsanəsi" (legend of Giziltorpaq, documentary films), "Garahovuz masjid", "Duy - Duy reqsi" (Duy Duy dance) , "Ağxac - Qaraxaç toponini" (Aghaj - Garakhach Toponym, topics) etc.

During the study, ctematonyms in the form of II type attributive word combitions attracted attention with their activity. Ergonyms are quantitatively superior to ctematonyms formed in this way. When considering the names of government departments and organizations, there are more ergonyms in the form of type II attributive word combinations than in type III word combinations. For example, the Republican "Children's Clinical Hospital", "Ganja State University", "Baku State Traffic Police" and others.

Mostly, ctematonyms formed in the form of type II attributive word combitions differ from others in the number of components. There is a minimum of more than two and a maximum of more than five. For example, "the Congress of World Azerbaijanis", "the State Social Protection Fund", "the Ministry of Ecology and Natural Resources", "the Supreme Attestation Commission under the President of Azerbaijan" and others.

Ctematonyms in the form of 3th type of attributive word combonations: The first side of compounds of this type are used with the possessive suffix, and the second side with the suffix of affiliation, and in contrast to the second type of attributive word combinations, they mean specificity, certainty. These types of compounds are more productive. They have an active scope in our onomastics lexicon. There are many ktematonyms that formed in the type III attributive word combination model. We have found it in all groups of ctematonyms.

Ctematonyms in the form of noun compounds not included in the atributive word combonations: There are few ctematonyms formed in this way. For example: "From child to adult" (children's program, ANS), "Worker - youth!" (school), "Machine-tractor" (station)

2) Ctematonyms formed in the form "noun+adverb": "Hayat burda" restaurant ("Life is here"), "Bura Vetendir" military-patriotic program ("This is the homeland") etc.

3) Ctematonyms formed in the form "noun+verb": "Nush olsun!" (Bon Appetite), "Saglam olun" (Be healthy) etc. The ktematonyms formed in this form are mainly used in the command-type sentences.

Noun combinations with disobedience: Generally, word combinations, as well as noun combinations are formed on the basis of disordination connections. However, noun compounds with disobedience are also found, e.g., "Fathers and Sons", "War and Peace", "Leyli and Majnun", "Farhad and Shirin", "Romeo and Juliet", "Hormuz and Ahriman" and so on. Almost the most idioms are formed in this way. For example, the epos "Abbas and Gulgaz", "Mehr and the Client", "Ali and Nino", "Khosrov and Shirin", "Health and Disease" and others.

9) Ctematonyms in the form of sentences: *the castle "Gelersen, gorersen", "Pasha kochdu" (song), "Gelin atlandi" (national dance) etc.*

Conclusions. While analysis the ways of formation of Ctematonyms we have observed that the process of formation of these onomastic units takes place not on the basis of spontaneously, accidental, incidentially, but on the basis of gradual, objective regularities of socio-political, economic, historical and spiritual events. We have also observed that ctematonyms are formed by suffixes in our language, as well as by suffixes borrowed from Arabic, Persian, Russian and European languages.

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