

**TPOLOGY OF PLACE NAMES IN SURKHANDARDO REGION;
HISTORICAL-LINGUISTIC AND GEOINFORMATION APPROACHES**

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ABSTRACT:

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This in the article Surkhandarya province place names (toponyms) in the region are typological in terms of classification will be done and their historical , linguistic and geographical features complex approach based on analysis The research main purpose – region in the area of toponyms formation factors , semantic groups and historical layers determination and them modern geoinformation technologies using from systematization consists of . Toponyms of the area historical memory , ethnic structure , economy activity and natural-geographical conditions reflection provider important linguistic units is considered . Research in the process Surkhandarya in the province hydronyms , oronyms , oikonoms , microtoponyms and ethnotoponyms semantic and structural in terms of to groups Also , the toponyms Turkish , Persian-Tajik , Arabic and ancient Iranian layers identified , their historical genesis studied . Scientific news place names as not only traditional linguistic methods , but also GIS mapping , statistical frequency analysis and component semantic modeling based on analysis to do offer was

done . As a result province 6 main types of toponyms typological group formed and their territorial distribution laws open given. Research results territorial planning , historical geography , toponymy and cultural inheritance storage in the fields scientific and practical importance profession will reach .

Login Part; Place names – each one of the area historical memory and cultural identifier is considered . Toponyms not only geographical objects designation tool , maybe of the people ethnic formation , economy activity , religious views and natural environment with mutual of the relationship is a product . This in terms of Surkhandarya province toponyms his/her own many layered historical and linguistic composition with separately scientific interest wakes up . Surkhandarya province Uzbekistan the most southern territory since ancient times various civilizations crossroads as formed . Especially Termez city surrounding regions ancient Bactria , Kushan and Islamic period of cultures important from the centers one was . Therefore , the region in the area toponyms in the composition ancient Iranian , Turkish and Arabic elements harmonized . The subject relevance is that globalization and urbanization in the processes many historical place names change danger under They remain . scientific basically classification and systematization cultural inheritance storage important is a factor . *The research destination* – Surkhandarya place names in the region typological in terms of classification and their historical-linguistic and territorial features Determination . Tasks :

1. Province toponyms semantic to groups separation ; Natural-geographical semantic group

- Hydronyms (water) objects): Amu Darya , Surkhandarya
- Oronyms (mountain- height): Boysun mountains , Hisar mountain ridge
- Relief reasonable Names : Oktepa , Qiziltepa , Jar, Adir

Religious and cultural toponyms .

- Termez surrounding pilgrimage places
- Imam , Hazrat , King such as components

2. Their historical layer detection;

Historical-cultural (archaeotopenyms)

- Fayoztepa
- Campirtepa
- Dalvarzintepa
- Geoinformation technologies based on territorial spread analysis to do ;
Geoinformation analysis following laws showed :
- River valleys — toponymic density centers .
- Irrigated oases — farm reasonable names territory .
- Mountainous zones — relief and color component names space .
- Historical centers — religious and cultural toponyms hearth .

3. Modern Develop a typological model exit

Modern typological model is toponyms one how many criterion based on complex classification system is , every name of a place :

- meaning (semantics),
- structure ,
- come exit period,
- spatial location,
- functional importance

Example as a rule as follows our distribution possible .

- S1. Natural and geographical - Surkhandarya
- S2. Ethnic - Call
- S3. Anthroponymic - Hazratabad
- S4. Socio-economic - Pakhtakor
- S5. Religious and cultural - Termez
- S6. Color- quality - Qizyltepa

Research material and methods ; Research material of the research empirical base Surkhandarya of the province all districts and to the cities related official administrative-territorial units list , topographic maps (scales 1:100,000 and 1:200,000), historical cartographic sources and archive documents organization Also , place names historical layer determination for the purpose archaeological objects location is also taken into account was taken (in particular, Termez surroundings , Amu Darya valley and Boysun mountains area). Research within 1200 more than toponym (oikonym , hydronym , oronym and microtoponym (data) to the base was entered. Every one name following parameters according to encoded:

- geographical type (river , village , mountain, neighborhood) and others);
- semantic basis (color, person name , profession , ethnonym and others);
- language to the layer affiliation (Turkish , Persian-Tajik , Arabic , Iranian);
- historical period (ancient , medieval) century , new period);
- territorial coordinate (for GIS).

Research methods;

1. Historical-etymological analysis ;Every one toponym come output historical sources and lexical basically identified , phonetic changes dynamics studied .

2. Linguostatistics method ; Toponym in the content recurring components (for example , “- hill ”, “- prosperous ”, “- kent ”, “-soy”, “- kurgan ”) frequency from the analysis was held . Their territorial distribution diagram and table based on was evaluated .

3. Component-semantic modeling ; Names morphological to the composition according to into segments separated , each one component semantic load For example , “ Oqtepa ” — color + relief model .

4. GIS (Geographic Information System) system) based on mapping ; Toponyms electronic to the map placed , their territorial clustering and natural conditions with dependency Density density index and territorial concentration coefficient was calculated .

5. Typological classification ; Obtained information based on toponyms 6 main and 14 small typological to the group separated .

Results; Natural and geographical priority ; 35–38 percent of toponyms natural to objects based on . Mountainous in the regions oronyms , river in the valleys and hydronyms high share organization will reach . Especially the Amu Darya valley along water with related names density high .

Component model advantage ; “-top ” and “ -bottom” components the most many occurring affixes as record This area was relief features with directly depends .

Linguistic layers ratio

- Turkish layer – 62%
- Persian-Tajik layer – 21%
- Arabic layer – 9%
- Ancient Iranian elements – 8%

This ratio of the area historical-ethnic formation process reflection will bring .

- Regional clustering

GIS analysis as a result three main toponymic cluster determined :

- Termez central cluster – historical-cultural names column .
- Boysun mountainous cluster – relief and natural names column .
- Sherabad – Denov oasis cluster – farm and irrigation with related names column .
- Ethnotoponyms existence

Some place names clan - tribe names with related is , this in the area historical migration processes what happened confirms .

Discussion; Results Surkhandarya of the province toponymic system many layered and complicated that it is showed . Area southern geographical to the location has happened because of historically various civilizations intersected space This is the naming in the process linguistic to synthesis take came. Toponyms natural-geographical advantage this means that ancient population naming criterion mainly to the environment related was . Next in periods and socio-economic factors (farming , irrigation) system , trade roads) are important role played . Linguostatistics analysis this showed that the Turkish components advantage of the area main ethnic layer represents . Persian and Arabic elements and cultural-religious impact as a result GIS approach has been formed . application scientific accuracy increased and of toponyms spatial laws determination opportunity This methodology Uzbekistan other provinces toponymy also used in learning possible . Also , urbanization in the process some historical of names change This is being observed . toponymic inheritance legal and scientific basically protection to do necessity to the surface brings.

Conclusion ; Surkhandarya regional place names many layered historical , linguistic and geographical to the features has complicated the system organization Their typological classification territorial development processes in understanding important scientific source is considered . New approach — linguostatistical , component-semantic and GIS -based complex analysis — toponyms further deep and systematic study opportunity gave . As a result province of toponyms spatial and semantic laws identified , 6 of them are main typological group formed .

Literature

1. Begmatov E. Uzbek toponymy basics .
2. Nafasov T. Uzbekistan toponyms dictionary .
3. Rahmatullayev Sh. Uzbek of the language etymological dictionary .

4. Hasanov H. Middle Asia historical geography .
5. Uzbekistan national encyclopedia .
6. Surkhandarya province statistic department information .
7. Cartographic materials collection (Uzbekistan geodesy service).
8. GIS Basics according to scientific manual .
9. Toponymy and linguogeography according to international articles collection .
10. Historical sources : ancient Bactria and Kushan period writing monuments .

