This methodological guide explains the structure and possibilities of a new type of author Alisher Navoi's corpus. the Alisher Navoi Author's Corpus created as a result of the practical project “Creation of Alisher Navoi Author's Corpus” under the number AL-662205561 has such important aspects as educational, linguistic, historical, spiritual, and is currently in working condition. This methodical guide has provided basic information about the corpus and instructions on how to use the corpus.



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“O‘zbek tili ontologiyasi: yaratish texnologiyasi va konsepsiyasi” (Monografiya. 2022)
“Korpus lingvistikasi” (2022)
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- Holder of the "Leader of Innovative Ideas" badge (2020)

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ALISHER NAVOIY MUALLIFLIK KORPUSI: IMKONIYATLARI VA FOYDALANISH YO‘RIQNOMASI



O‘ZBEKISTON RESPUBLIKASI
OLIY TA’LIM, FAN VA INNOVATSIYALAR VAZIRLIGI

ALISHER NAVOIY NOMIDAGI TOSHKENT DAVLAT O‘ZBEK TILI VA ADABIYOTI UNIVERSITETI

Abjalova Manzura Abdurashetovna

ALISHER NAVOIY MUALLIFLIK KORPUSI: IMKONIYATLARI VA FOYDALANISH YO‘RIQNOMASI

Uslubiy qo‘llanma

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Alisher Navoiy mualliflik korpusi: strukturasi va tarkibi [Matn]: uslubiy qo‘llanma / M.A. Abjalova. – Toshkent: Bookmany print, 2024. – 164 b.

O‘z. Mazkur qo‘llanmada yangi tipdagi Alisher Navoiy mualliflik korpusining strukturasi va tuzilishi tushuntirildi. Dunyo miqyosida insonning intellektual rivojlanish va mental olamini kengaytirishga urinishlarning davri kechayotgan ayni damda ma’naviyati kuchli, mantiqiy ilmi chuqur, tasavvuri keng insonlar namunasini ularning ijodiy ishlaridan olib ko‘rsatish kutilgan natijalarni beradi. Ana shunday ulug‘vor insonlardan Alisher Navoiy asarlarini o‘qish va o‘rganish, tahlil qilish, muhimi tushunish o‘quvchi tafakkuri qamrovi, vizualizatsiya imkoniyatlarini oshiradi. Shu nuqtayi nazardan, AL-662205561 raqamli “Alisher Navoiy mualliflik korpusini yaratish” nomli amaliy loyiha natijasida yaratilgan Alisher Navoiy mualliflik korpusi ta’limiy, lingvistik, tarixiy, ma’naviy kabi ahamiyatli jihatlarga ega bo‘lib, hozirgi kunda ish faoliyatida. Ushbu qo‘llanmada korpusga oid asosiy ma’lumotlar va undan foydalanish yo‘riqnomasi berildi.

Qo‘llanmadan “Korpus lingvistikasi”, “Kompyuter lingvistikasi”, “Amaliy tilshunoslik” kabi fanlarning ma’ruza, amaliy, seminar mashg‘ulotlarida, o‘rta, o‘rta maxsus va oliy ta’lim muassasalarida Alisher Navoiy hayoti va ijodiga oid darslarda, til korpuslari, jumladan, mualliflik korpuslari bo‘yicha ilmiy tadqiqotlar davomida foydalanish mumkin.

Mas’ul muharrir:
Sirojiddinov Sh. – Filologiya fanlari doktori, akademik

Taqrizchilar:
Eshref Adali – Texnika fanlari doktori, professor
Muhamedova S.X. – Filologiya fanlari doktori, professor

Uslubiy qo‘llanma Alisher Navoiy nomidagi Toshkent davlat o‘zbek tili va adabiyoti universiteti O‘quv-uslubiy kengashining 2024-yil 25-sentabrdagi 2-sonli yig‘ilishida nashrga tavsiya etilgan.

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Abjalova, Manzura.
Alisher Navoi authorship corpus: structure and content [Text]: methodical guide / M. Abjalova. – Tashkent: Bookmany print, 2024. – 164 p.

Abstract. This methodological guide explains the structure and possibilities of a new type of author Alisher Navoi's corpus. At this time, when all over the world there is a period of intellectual development and attempts to expand the mental world of human, showing the example of people with strong spirituality, deep logical science, wide imagination gives the expected results. Reading and studying Alisher Navoi's works from such remarkable people, analysis, understanding of important expands the possibilities of reading thinking, visualization. In this regard, the Alisher Navoi Author's Corpus created as a result of the practical project “Creation of Alisher Navoi Author's Corpus” under the number AL-662205561 has such important aspects as educational, linguistic, historical, spiritual, and is currently in working condition. This methodical guide has provided basic information about the corpus and instructions on how to use the corpus. The handbook can be used in lecture, practical and seminar classes on such disciplines as “corpus linguistics”, “computer linguistics”, “applied linguistics”, in lessons devoted to the life and work of Alisher Navoi in secondary, specialized secondary and higher educational institutions, in the course of scientific research on language corpora, including author's corpora.

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KIRISH

Ta’lim olayotgan **o‘quvchi hamda talaba-yoshlarning** og‘zaki va yozma nutqini o‘stirish, ilmiy tadqiqot olib borayotgan tadqiqotchilar, ta’lim maskanlarida faoliyat yuritayotgan pedagoglarga lisoniy qatlami boy o‘zbek tilining XV asrdagi leksik qirralarini ochib berish va Alisher Navoiy ijodiy merosini jahon miqyosida targ‘ib etish, Milliy merosimizni zamonaviy axborot-kommunikatsiya tizimida keng qo‘llanishiga erishish, buning uchun ham ajdodlarimiz asarlarini yoshlar o‘rtasida targ‘ib etish, mumtoz adabiyot namunalarini o‘qishli va tushunarli tarzda tadqim etuvchi filologik korpuslarni yaratishga omil bo‘lishi maqsadida Alisher Navoiy mualliflik korpusining zamonaviy ko‘rinishdagi, ko‘p tarkibli va filtrli qidiruv tizimiga ega varianti yaratildi (http://alishernavoicorpus.uz/uz). Mazkur korpusning prototipi 2022-yilning 22-aprelida foydalanishga topshirilgan bo‘lib, hozirda yangi tip tarkibida o‘z havolasiga ega (http://v1.alishernavoicorpus.uz/).

1. Yangi tipdagi Alisher Navoiy mualliflik korpusi elektron manzili havolasi:
   http://alishernavoicorpus.uz/uz
2. Korpusning prototipi (ilk versiyasi) havolasi:
   http://v1.alishernavoicorpus.uz/

Alisher Navoiy mualliflik korpusi birinchi marta **o‘rta maxsus va oliy ta’lim talabalari, umuman, keng omma uchun** yangi formatdagi tizim hisoblanadi. Undan foydalanishda qulaylik uchun qidiruv menejeri (filtrli qidiruv), to‘rt tilli interfeys shakllantirililgan, bu, o‘z navbatida, foydalanuvchilarning Navoiy ijodi, umuman, XV asr manbalari bilan mustaqil ishlash ko‘nikmalarini rivojlantirish, o‘sha davr so‘zligini tushunish qobiliyatlarini oshirishga xizmat qiladi. Anglashilganidek, Alisher Navoiy mualliflik korpusi **keng omma uchun** mo‘ljallab yaratildi.

Mazkur korpusni yaratish uchun Navoiy ijodiy merosidagi leksik birliklar semantik tavsiflandi va teglandi. Natijada Alisher Navoiyning 4 devondan iborat “Xazoyin ul-ma’oniy” kulliyoti g‘azallaridagi leksik birliklarning kontekstual semantik tavsiflari bazasi yaratildi.

“Xazoyin ul-ma’oniy” kulliyoti “G‘aroyib us-sig‘ar” (“Yoshlik g‘aroyibotlari”), “Navodir ush-shabob” (“Yigitlik nodirlik (she’r)lari”), “Badoye’ ul-vasat” (“O‘rta yosh badialari”) va “Favoyid ul-kibar” (“Keksalik foydalari”) nomli devonlardan tarkib topgan mukammal

yig‘ma devon. Xalq orasida “Chor devon” deb ham yuritiladi va har bir devonda 650 tadan – jami 4 devonda 2600 ta g‘azal mavjud.

Jahon va o‘zbek filologiyasida Alisher Navoiy ijodi, uning shaxsi, asarlarining tarjimasi borasida talaygina tadqiqot ishlari qilingan. Hozirgi kunga qadar Alisher Navoiy tarjimayi holi va uning asarlari matni jamlangan saytlar, turli mobil ilovalar va Navoiy asarlarining pdf formatdagi ko‘rinishlari mavjud. Ammo bularning o‘zi Alisher Navoiy ijodini o‘rganish, uning so‘zligini tushunish, Navoiyni anglashga hozirgi davr o‘quvchisi uchun yetarli emas. Navoiy korpusida mazkur bo‘shliqni to‘ldirish uchun bugungi kunda o‘quvchi tushunishga qiynalgan izohtalab so‘zlar izohini hech bir lug‘atsiz joriy vaqtda, tezkor bilish va shunday so‘zning misradagi ma’nosini anglashi uchun semantik tavsiflar bazasi yaratildi.

Alisher Navoiy mualliflik korpusi (MK) XV asr tilini o‘rganish uchun ham lingvodidaktik tizim va lingvistik tadqiqotlarni amalga oshirishda zarur elektron manbalardan sanaladi. Korpusni yaratish ishlari yetti bosqichda amalga oshirildi:

– birinchi bosqichda Navoiy kulliyoti Word formatiga o‘tkazilib, lotin yozuviga almashtirildi;

– ikkinchi bosqichda matnlar tahrir qilindi va semantik tavsiflash uchun har bir leksik birlik qayta ishlandi;

– uchinchi bosqichda kontekstual izohga ega bo‘lishi uchun izohtalab leksik birliklar g‘azal misralari bilan bog‘lab chiqildi;

– to‘rtinchi bosqichda navoiyshunos olimlar tomonidan leksik birliklar semantik tavsiflandi;

– beshinchi bosqichda semantik tavsiflar jamlanib, ularning ma’lumotlari bazasi yaratildi;

– oltinchi bosqichda qayta ishlangan ma’lumotlar asosida korpus ishining algoritmi tuzilib, korpus yaratildi.

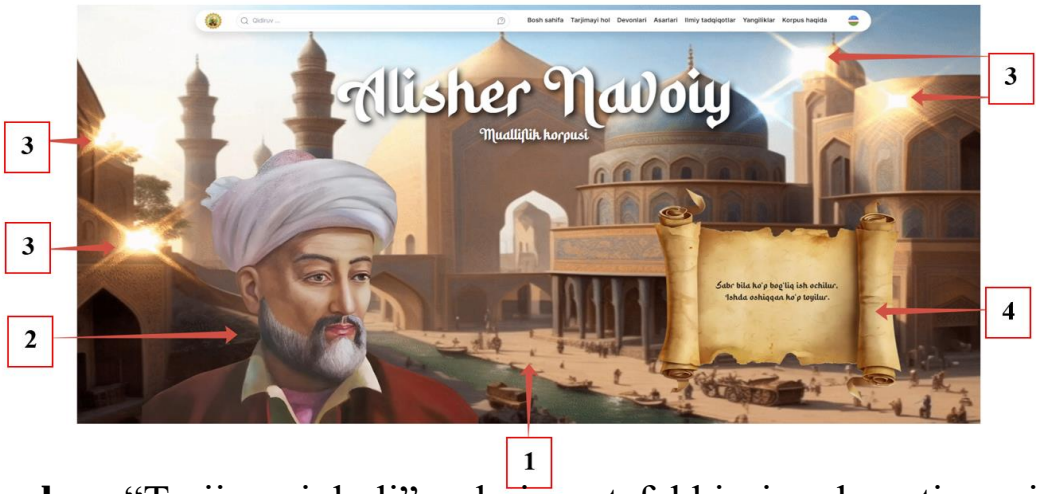
Ushbu korpus va uning mobil ilovasi Navoiy ijodi ta’limining informatsion vositalari sifatida xizmat qiladi, uning yordamida o‘zbek tili vakili yoki xorijliklar uchun Alisher Navoiy ijodi hamda tilini o‘rganishning zamonaviy imkoniyatlari yuzaga keldi, shuningdek, korpus hozirgi o‘zbek tili va eski o‘zbek (chig‘atoy) tilini qiyosiy aspektda tadqiq etish imkoniyatini ham beradi.

Alisher Navoiy mualliflik korpusi elektron kutubxonadan farqli ravishda quyidagi afzalliklarga ega:

- izohtalab leksik birliklarning kontekstual semantik tavsifini interaktiv tarzda (sichqoncha leksik birlik ustiga olib borish natijasida) taqdim etish;
- ijodkor uslubi va uning so‘z qo‘llash mahoratini o‘rganish;
- adib ijodini lingvopoetik tahlil qilish;
- ijodkor qo‘llagan turg‘un birikmalarni (iboralarni) tahlil qilish;
- asar badiiyligini oshirishda keng foydalanilgan she’riy san’at turlarini tahlil etish;
- lirik turdagi janrlarda foydalanilgan xalq og‘zaki ijodi namunalarini aniqlash;
- ijodkor asarini auditoriya yoshiga mos ravishda taqsimlash;
- izohtalab so‘zlarning izohini, matn mazmunini matndagi korpusdagi semantik izohga tayanib teran anglash;
- asar matni tipini aniqlay olish;
- qidirilayotgan so‘zni g‘azal raqami, matn tipi va auditoriya yoshi bo‘yicha ham filtrlar qidirish;
- g‘azallarning metama’lumoti bilan tanishish;
- raqamli texnologiyadan foydalangan holda axborot olishni tezlashtirish.

Yangi tipdagi Alisher Navoiy korpusi 8 rukndan iborat:

1-rukn: Bosh sahifa. Unda Alisher Navoiy yashagan Hirot ko‘rinishi aks etgan fon (1), Alisher Navoiy siymosi (2), bu ulug‘vor shoirning barhayotligini anglatuvchi ko‘tarilayotgan quyosh shu’lalarining 3D effekti (3), Navoiy hikmatlaridan parchalarni namoyon etib turuvchi bitik (4) – barchasi jam bo‘lib, Alisher Navoiy yashagan davr va uning ijodi haybati illyustratsiyasini berishga xizmat qilgan.



2-rukn: “Tarjimayi holi” rukni mutafakkirning hayoti va ijodiy faoliyati haqidagi ma’lumotlar bazasi hisoblanadi.

3-rukn: “Devonlari” deb nomlanib, Alisher Navoiyga tegishli 9 ta devon matnlari (muxlislari tomonidan tuzilgan “Ilk devon” bilan birga). “Xazoyin ul maoniy” kulliyotidagi 2600 g‘azal va she’riy san’atlar, maqol va iboralar (turg‘un birikmalar) semantik teglangan holda foydalanuvchiga taqdim etildi.

4-rukn: “Asarlari” deb nomlangan mazkur ruknda Alisher Navoiyga tegishli 24 asarning pdf shakli (qasidalari; ilmiy, badiiy, tazkira, tarixiy, diniy mavzularda yozilgan) o‘rin olgan bo‘lib, ularni o‘qish va saqlab olish imkoniyati mavjud.

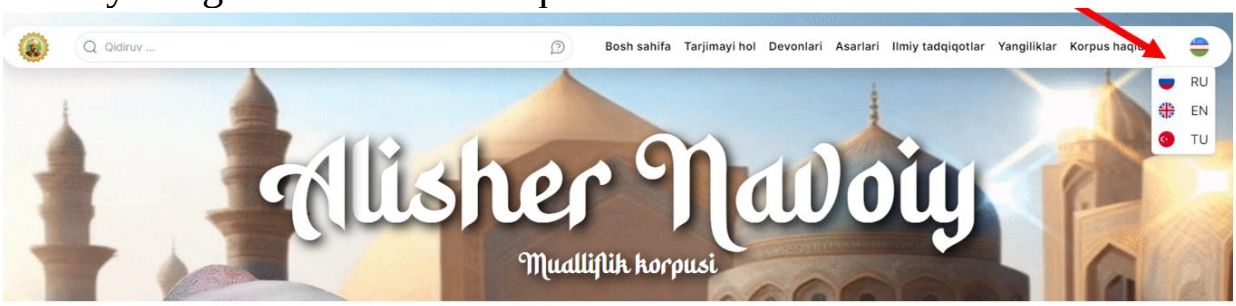
5-rukn: “Hikmatlari” deb nomlangan ruknda 9 kategoriya bo‘yicha jamlangan hikmatlar o‘rin olgan.

6-rukn: “Ilmiy tadqiqotlar” ruknida mazkur korpusga oid tadqiqot natijalari, Alisher Navoiy mualliflik korpusining ahamiyati, dolzarbligi, korpusning ilmiy, ta’limiy, ijtimoiy, ta’limiy ahamiyatini yorituvchi ilmiy maqolalar, til korpusini yaratish texnologiyasi, korpus matnlarini qayta ishlash bosqichlari xususidagi ilmiy ishlar joylashgan.

7-rukn: “Yangiliklar” ruknida loyiha doirasida amalga oshirayotgan ishlar to‘g‘risida, taqdimotlar haqida ma’lumotlar berib boriladi.

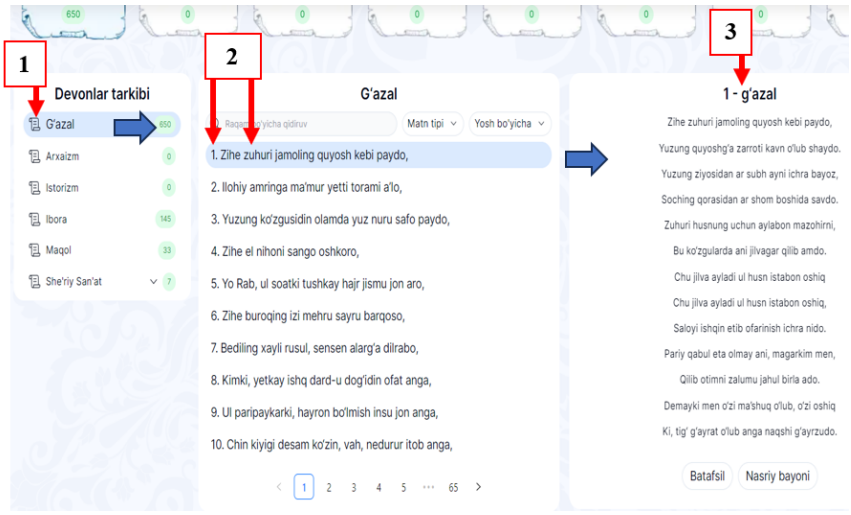
8-rukn: “Korpus haqida” ruknida til korpusi ta’rifi, mualliflik korpusining boshqa korpuslardan farqi, Alisher Navoiy MKni yaratish dolzarbligi va uning ahamiyati, korpusning semantik bazasi kabilar xususida savol-javob tarzida ma’lumotlar berilgan.

Xorijlik qiziquvchilar uchun foydalanishga qulaylik yaratish maqsadida korpus interfeysi 4 tilli (o‘zbek, ingliz, rus va turk tillari) qilindi. Shuningdek, asosiy sahifadagi bitikda berilgan hikmatlar ham interfeys tiliga asosan 4 tilda taqdim etiladi.

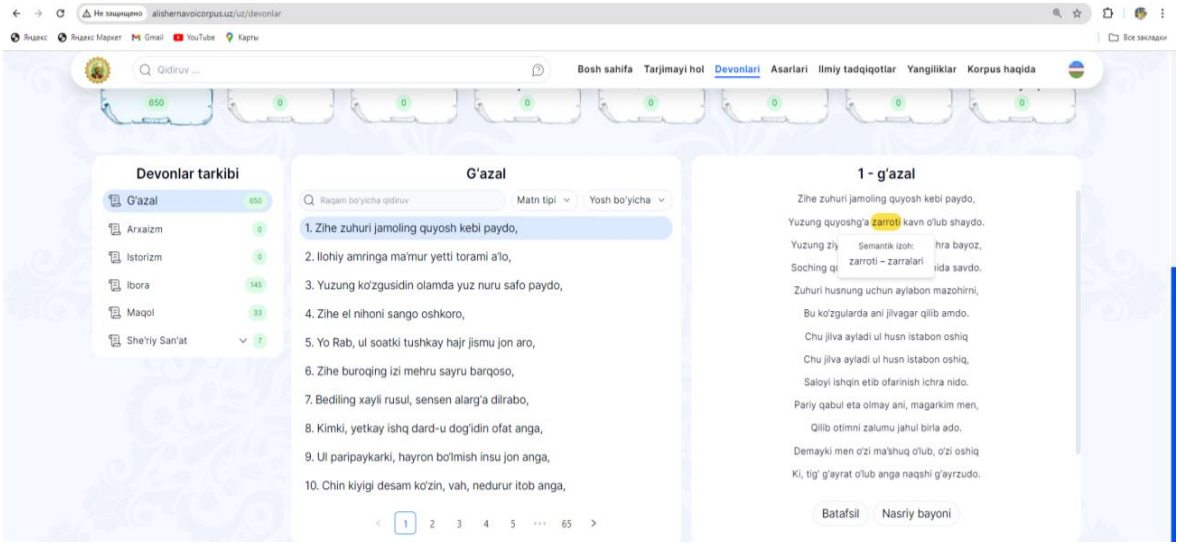


AL-662205561 raqamli “Alisher Navoiy mualliflik korpusini yaratish (“Xazoyin ul-maoniy” kulliyotidagi g‘azallar asosida)” nomli amaliy loyiha doirasida qilingan barcha ma’lumotlar bazasi ushbu “Devonlari” ruknida namoyon bo‘ladi. Misol uchun, “G‘aroyib us-sig‘ar” devoniga o‘tilganda undagi jamiki ma’lumotlar bazasi “Devon tarkibi”da ko‘rinadi. Jumladan, “G‘azal” satri bosilganida (1) 650 g‘azal tartib raqami bo‘yicha, g‘azalning 1-satri bilan (bunday qulaylik ma’lum

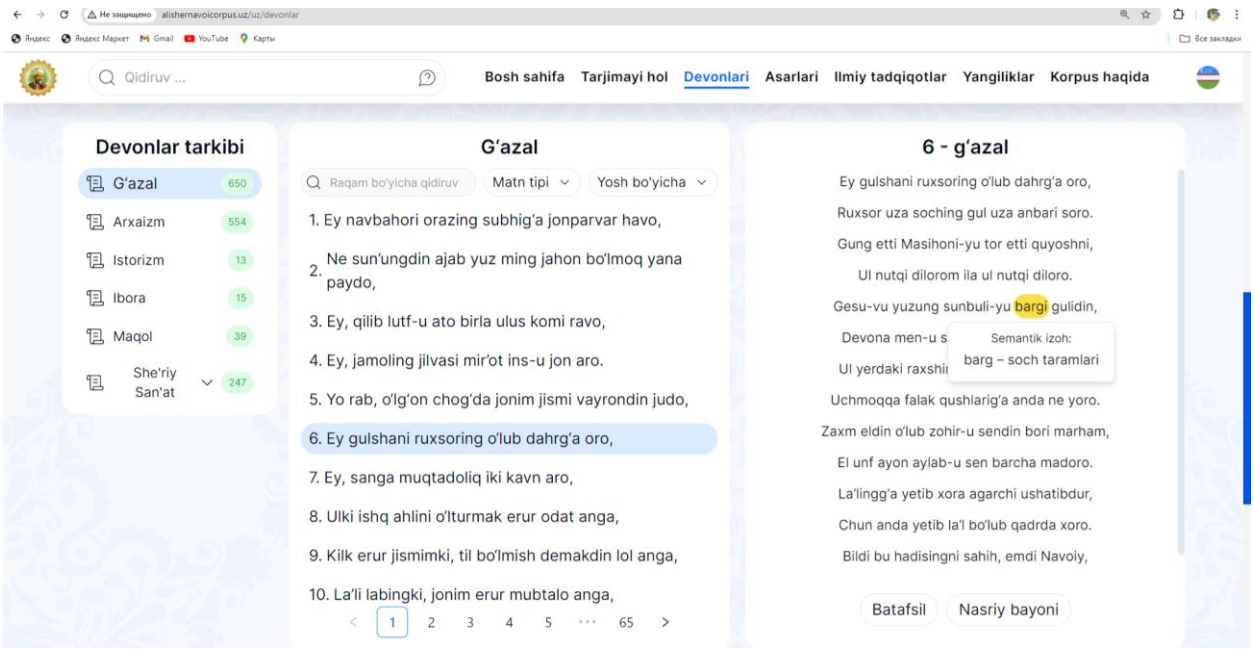
raqam ostida qanday g‘azal o‘rin olganligini aniqlashga xizmat qiladi) yon oynada ochiladi (2). Muayyan g‘azal tanlab bosilganida uning yonida boshqa oynada tanlangan g‘azalning to‘liq matni ochiladi (3).



Semantik tavsif. Amaliy loyihaning asosiy maqsadi o‘laroq “Xazoyin ul-maoniy” kulliyotidagi jami 2600ta (har bir devonda 650tadan*4 devon=2600) g‘azaldagi izohtalab leksik birliklar (hozirgi zamon o‘quvchisi uchun tushunarsiz so‘zlar: arxaizm va istorizmlar; forsiy izofalar, izohlovchilar, mashhur shaxs va joy, tarixiy nomlar, so‘z birikmali holatidagi badiiy ifodalar, kontekstual ko‘chma ma’nolar)ning semantik tavsiflari bazasi tayyorlangan bo‘lib, buning natijasida korpusdagi g‘azallarni o‘qiyotgan foydalanuvchi tushunmagan yoki umuman bilmagan leksik birlikning ustiga sichqonchani olib borishi bilan uning **kontekstual semantik tavsifi** chiqariladi.



1-rasm. Korpusdagi “G‘aroyib us-sig‘ar” devonining 1-g‘azali 2-misrasida mavjud “*zarroti*” so‘ziga “*zarralari*” kontekstual semantik tavsifining berilishi.



2-rasm. Korpusdagi “Badoye’ ul-vasat” devonining 6-g‘azali 5-misrasida mavjud “*barg*” so‘ziga “*soch taramlari*” kontekstual semantik tavsifining berilishi.

Yangi tipdagi korpus mutaxassislar uchun ma’naviy ehtiyojni qondirish manbasi, ta’lim bosqichlarida o‘quv materiali, sohalarga oid ma’lumotlar manbai bo‘lib xizmat qilishi mumkin.

Alisher Navoiy mualliflik korpusi ta’limiy, tarixiy, lingvistik, ijtimoiy, tarbiyaviy va ma’naviy ahamiyatga ega bo‘lib, ushbu korpus yordamida quyidagi imkoniyatlar yuzaga keladi:

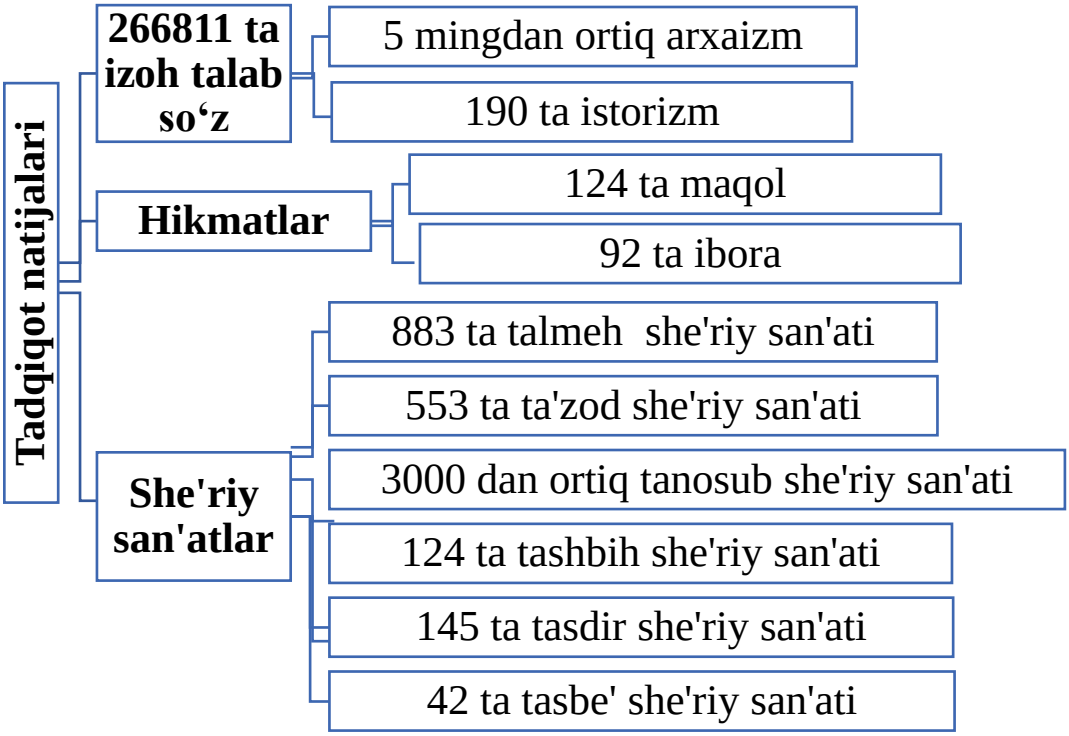
– Navoiy shaxsini o‘rganish;
– adib uslubini tadqiq etish;
– shoir ijodini lingvopoetik tahlil qilish;
– ijodkorning so‘z qo‘llash imkoniyati va mahoratini tadqiq etish;
– mualliflik lug‘atlarini yaratish;
– mualliflik iboralarini jamlash;
– MKdagi ijodkor shaxsi va uslubini namoyon etuvchi parametrlar orqali anonim asarlar muallifini topish;
– mualliflik parafraza, parema, hikmatlarini jamlash; tasviriy ifodalarning qo‘llanilish ko‘lamini ijodkor kontekstidan aniqlash mumkin bo‘ladi.



O‘zbekiston Respublikasi Prezidenti Sh.Mirziyoyevning 2019-yil 21-oktyabrda “O‘zbek tilining davlat tili sifatidagi nufuzi va mavqeyini tubdan oshirish chora-tadbirlari to‘g‘risida”gi PF-5850-son Farmonida o‘zbek tilining xalqimiz ijtimoiy hayotida va xalqaro miqyosdagi obro‘-e’tiborini tubdan oshirish, davlat tilining xalqaro miqyosdagi o‘rni va nufuzini yuksaltirish, o‘zbek tilining axborot va kommunikatsiya texnologiyalari, xususan, Internet jahon axborot tarmog‘ida munosib o‘rin egallashini ta’minlash, o‘zbek tilining kompyuter dasturlarini yaratish kabi vazifalar belgilab berilgan. Shuningdek, Prezidentimiz tomonidan 2020-yil 20-oktabrdagi “Mamlakatimizda o‘zbek tilini yanada rivojlantirish va til siyosatini takomillashtirish chora-tadbirlari to‘g‘risida”gi Farmoni bilan tasdiqlangan “2020-2030-yillarda o‘zbek tilini rivojlantirish va til siyosatini takomillashtirish Konsepsiyasi”da belgilangan davlat tilining zamonaviy axborot texnologiyalari va kommunikatsiyalariga faol integratsiyalashuvini ta’minlash ustuvor yo‘nalishidagi o‘zbek tiliga oid barcha ilmiy, nazariy va amaliy ma’lumotlarni o‘zida jamlagan elektron ko‘rinishdagi yirik resursni yaratish va o‘zbek tilini Internet jahon axborot tarmog‘ida ommalashtirish, unda munosib o‘rin egallashini ta’minlash vazifalarining ko‘rsatib berilishi bilan biz mutaxassislarga katta mas’uliyat bo‘ldi. Ayniqsa, O‘zbekiston Respublikasi Prezidentining 2022-yil 28-yanvardagi “2022-2026-yillarga mo‘ljallangan Yangi O‘zbekistonning Taraqqiyot Strategiyasi to‘g‘risida”gi PF-60-son Farmonining “V. Ma’naviy taraqqiyotni ta’minlash va sohani yangi bosqichga olib

chiqish” tamoyili ostida belgilangan 71-, 72-, 73-, 75-, 76-, 77-maqsadlar, shuningdek, 3-tamoyildagi 25-, 4-tamoyildagi 42-, 69-, 70-maqsadlar, 7-tamoyildagi 98-maqsadlarga to‘liq hamohang.

Kulliyotning ***“G‘aroyib us-sig‘ar”*** devonida g‘azallar jami 4975 bayt – 9950 misra (devondagi so‘z miqdori: 75 ming 350 ta, g‘azallarda 66 954 ta), ***“Navodir ush-shabob”*** devonida 4998 bayt – 9996 misra (devondagi so‘z miqdori: 71 ming 527 ta, g‘azallarda 66 596 ta), ***“Badoye’ ul-vasat”*** devonida 5001 bayt – 10002 misra (devondagi so‘z miqdori: 71 ming 580 ta, g‘azallarda 66 539 ta), ***“Favoyid ul-kibar”*** devonida 5029 bayt – 10058 misra (devondagi so‘z miqdori: 75 911 ta, g‘azallarda 66 722 ta) bo‘lib, ***“Xazoyin ul-maoniy”***dagi 2600 ta g‘azalda **20003** bayt – **40006** misra (kulliyotda jami **294368** ta so‘z(shakl), g‘azallarda **266811** ta so‘z(shakl)) mavjud. Yangi tipdagi Alisher Navoiy mualliflik korpusida quyidagi leksik birliklarning teglanishi korpusning takomillashishiga asos bo‘ldi:

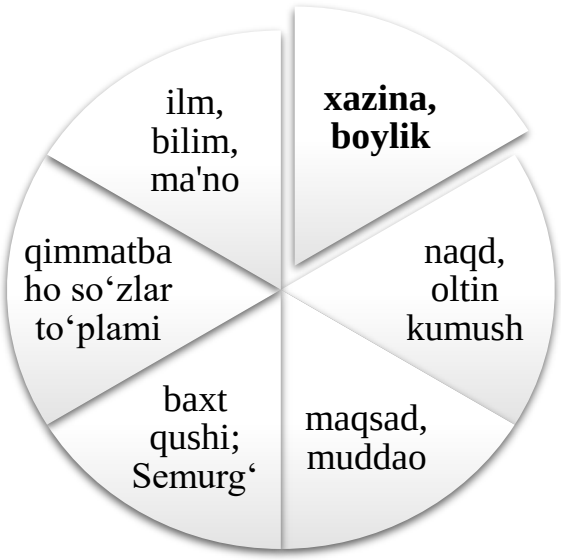


Yangi tipdagi Alisher Navoiy MKni takomillashtirishda asosan, *qoidalarga asoslangan metod* va *statistik metodga* tayanildi. Ta’kidlash joizki, Alisher Navoiyning “Xazoyin ul-maoniy” kulliyoti mantiqiy mezonlar asosida tartiblagan. Kulliyot 4 devondan iborat, har bir devonda 650 tadan g‘azal joylashtirilgan. Hozirda o‘zbek adabiyotida XV asr tilini tushunish va tadqiq etish uchun Navoiy asarlaridan ko‘p foydalaniladi, shu bois korpus uchun ijodkorning eng sara she’rlari jamlangan ushbu

kulliyotdagi g‘azallar semantik teglandi va tarixiy so‘zlar qo‘l mehnati bilan hozirgi o‘zbek tilida kontekstual semantik tavsiflandi.

Qoidalarga asoslangan metod (Rule-based method)

Alisher Navoiy XV asrda yashab ijod qilgan. O‘rta asrlardagi o‘zbek tili bilan hozirgi o‘zbek tili katta farqlanishga ega. Unda bugungi kun o‘quvchisi uchun ko‘plab iste’moldan chiqqan yoki shakliy ifodasi boshqa holatga o‘tgan leksik birliklar mavjud. Ularni biz **izohtalab so‘zlar** deymiz. Bunday so‘zlar izohini foydalanuvchiga aniqlashtirib bermasdan, uning semantik guruhi yoki semantik maydonini ko‘rsatish mantiqsizlik hisoblanadi. Hozirda Navoiy davri tilining 60%i bugungi kun o‘quvchisiga tushunarsiz, ya’ni o‘sha davrdagi ko‘plab so‘zlar arxaiklashgan, iste’moldan chiqib ketgan. Natijada Alisher Navoiy asarlarini to‘g‘rida-to‘g‘ri o‘qib tushunish uchun maxsus lug‘atlar talab qilinadi. Korpusdagi Navoiy g‘azallarini o‘qish jarayonida tushunish qiyin bo‘lgan so‘zlarning semantik izohi interaktiv tarzda taqdim etilishi uchun korpus materiallaridagi tarixiy va eskirgan so‘zlar 18 ta lug‘at yordamida kontekstda anglatgan ma’nosi bo‘yicha navoiyshunos mutaxassislar tomonidan qo‘l mehnatida aniqlab bazaga kiritildi. Masalan, “Xazoyin ul-maoniy” kulliyotidagi g‘azallarda izohtalab “ganj” so‘zi 65 o‘rinda qo‘llangan bo‘lib, turli semantik ma’nolarni ifodalab kelgan. E.Fozilov tahriri ostida nashr etilgan “Alisher Navoiy asarlari tilining izohli lug‘ati”da *“ganj”* so‘zining 6 xil ma’nosi baytlar misolida izohlangan. Aksariyat g‘azallarga *ganj so‘zi* xazina, boylik ma’nolarini ifodalagan, g‘azallarda, shuningdek, boshqa ma’nolarda ham qo‘llangan (1-rasm):



1-rasm. *Ganj* so‘zining semantik ma’nolari.

Korpusdan foydalanuvchi kursorni izohtalab so‘z hisoblangan *ganj* so‘zining ustida harakatlantirsa, misrada qaysi leksik ma’noni anglatib kelishi ma’lum bo‘ladi. Bu innovatsion yondashuv orqali foydalanuvchi shu ondayoq izohtalab so‘z(shakl)ning aniq ifoda ma’nosini anglab oladi. *Ganj l*eksemasi ko‘p ma’noli bo‘lib, semantik teglashda ham misralarda uchragan barcha ma’nolarini hisobga olish zarur. Yana bir misol, 3-jadvalda *subh* so‘zi asosida berildi.

3-jadval. *Subh* leksimasining g‘azallarda ifodalab kelgan ma’nosi

G‘azal raqami	**So‘z (shakl)**	**Asosi – izohi / ma’nodoshi**	**Misra**
1	subhig‘a	subh – go‘zallik	Ey navbahori orazing subhig‘a jonparvar havo
16	subh	subh – tong	G‘am tuni subh tilarsen, ko‘ngul uz, zaxming ko‘p
39	subh	subh – tong	Subh chun esti sabo, ichkil qadahkim, bo‘lmog‘ung
76	subhi	subh – tong	Jamoling subhi ochib erdi yuz gul
101	subhg‘a	subh – tong	Ne subhg‘a bu sabohat, ne mehr muncha sabih
148	subhin	subh – tong	Vasl subhin to abad ko‘z tutmasun ushshoq aro
161	subhdin	subh – tong	Qamarg‘a subhdin ravnaq, quyoshqa shomdin zevar
170	subhidek	subh – tong	Shomi hijron subhidek bag‘rimni chok etti sipehr
334	subh	subh – yuz yorug‘ligi	Garchi ruxsori erur subhi dilafro‘z, valek
448	subhning	subh – tong	Subhning bir nafase asra damin

Bunday kontekstuallik tamoyilidagi asosiy e’tibor qoida asosida muayyan eskirgan so‘zning kontekstdagi boshqa so‘zlar bilan birgalikdagi ma’nosini aniqlash muhim hisoblanadi. Ushbu metod keyinchalik korpus materiallarini N-gram metodi yordamida avtomatik semantik tavsiflashga xizmat qiladi.

Statistik tahlil metodi

Navoiy g‘azallaridagi hozirgi o‘zbek tiliga oid so‘zlar 40%ni tashkil etishi statistik jihatdan aniqlandi va ularning kontekstual semantikasi

o‘rganildi. Tadqiqot natijasida bunday so‘zlarning (masalan, *kitob, olam, dunyo, yer; yosh, quyosh, ko‘z; men, sen, u, biz, siz, ular; sari, uzra*) 15%i maxsus semantik tavsifni talab etmasligi aniqlandi. Masalan, *quyosh* so‘zi nafaqat koinot jismi sifatida, balki *mehr, muhabbat tafti* kabi ma’nolarda qo‘llangan. Demak, bunday ma’nolar o‘z misrasida kontekstual semantik izohini talab qiladi. Qolgan 15% ko‘chma ma’noga ega bo‘lmagan so‘zlar esa korpusda avtomatik tarzda o‘z semantik ma’nosini ifodalash imkoniyati yaratildi.

“Xazoin ul-maoniy” kulliyotidagi 2600 g‘azalda Navoiyning ijod uslubi, so‘z qo‘llash mahorati, g‘azallarda qo‘llangan so‘zlar ko‘lami, o‘ziga xos yozish uslubi *statistik tahlil* metodi yordamida aniqlandi. Alisher Navoiy mualliflik korpusi uchun kulliyotdagi jamiki so‘zlar ikki guruhga ajratildi: 1) tarixiy, eskirgan – bugungi kunda tushunish qiyin bo‘lgan so‘zlar; 2) hozirgi o‘zbek tilida qo‘llanilayotgan so‘zlar. Ishning ko‘lami va hajmi 1-jadvalda statistik jihatdan ko‘rsatildi: jadvalda kulliyotdagi 4 ta devon, ularning har biri 650 ta g‘azalga egaligi, g‘azallardagi misralar miqdori, kulliyot bo‘yicha jami so‘zlar va 2600 ta g‘azaldagi jami so‘zshakllar miqdori.

1-jadval. “Xazoyin ul-maoniy” kulliyotidagi so‘zshakllar miqdori.

“G‘aroyib us-sig‘ar”	650 g‘azal: 4975 bayt – 9950 misra	Jami 75 350 000 ta, g‘azallarda 66 954 ta so‘zshakl
“Navodir ush-shabob”	650 g‘azal: 4998 bayt – 9996 misra	Jami 71 527 000 ta, g‘azallarda 66 596 ta so‘zshakl
“Badoye’ ul-vasat”	650 g‘azal: 5001 bayt – 10002 misra	Jami 71 580 000 ta, g‘azallarda 66 539 ta so‘zshakl
“Favoyid ul-kibar”	650 g‘azal: 5029 bayt – 10058 misra	Jami 75 911 000 ta, g‘azallarda 66 722 ta so‘zshakl
Jami:	**2600 g‘azal: 20003 bayt – 40006 misra**	**Jami 294 368 000 ta, g‘azallarda 266 811 ta so‘zshakl mavjud.**

Tadqiqot natijasi

G‘azallar konseptuallik tamoyi asosida, ya’ni muayyan so‘z o‘zi bilan bir baytda kelgan boshqa so‘zlar qurshovida, baytning asosiy mazmuniga hamohang tarzda ma’lumotlar bazasida semantik tasnifga ega bo‘ldi. 1-jadvaldan ayon bo‘lganidek, tadqiqotimizda Alisher Navoiyning “Xazoyin ul-maoniy” kulliyoti devonlarida mavjud 2600 ta g‘azaldagi 266 811 ta so‘zshakl 1.2.1-metod asosida semantik qayta

ishlandi. 2-jadvalda korpus bazasida semantik tavsifga va tegga ega bo‘lgan mumtoz adabiyotga xos adabiy-janriy birliklar statistikasi berildi.

2-jadval. Alisher Navoiy mualliflik korpusi bazasidagi semantik teglangan birliklar statistikasi.

Teglangan so‘zlar	**Maqol**	**Ibora**	**Talmeh**	**Tanosib**	**Tazod**	**Tashbih**	**Tasdir**	**Tasbe’**
266 811 ta	124	92	883	3000 mingdan ortiq	253	124	145	32

Tadqiqot natijasida SQL bazasida g‘azallarga quyidagi ma’lumotlar biriktirildi:

1) g‘azallarning matn tipi;
2) auditoriya yoshi;
3) g‘azalning tartib raqami;
4) misradagi tarixiy, iste’moldan chiqqan so‘z va uning hozirgi semantik izohi alohida maydonlarda berildi;
5) har bir izohtalab so‘zlar ID kodlandi (4-jadval).

Teglash jarayonida Alisher Navoiy g‘azallarida bir misrada muayyan so‘z kollokatsiya holatida kontekstual ma’noni bera olishi, aniqrog‘i, Alisher Navoiy nazarda tutgan ma’no butunligi yuzaga kelishi e’tiborga olinib, muayyan bir ma’noni beruvchi so‘z birikmalari bitta semantik guruhga kiritildi, bunday holda ular bitta belgi bilan kodlanadi. Masalan, 590-g‘azalning “Dayr aro tushsa falak engiga xirqam yuruni” misrasidagi izohtalab so‘zlar semantik teglanganida maxsus 13536 kod raqami misradagi barcha so‘zshakllariga biriktirib chiqildi. Bu, birinchidan, misrani mashinaga tanitish usuli hisoblansa, ikkinchidan, ushbu satrdagi so‘zlarga berilgan semantik tavsif aynan 13536 kodga ega 590-raqamli g‘azalga mansub semantik izoh ekanligini mashina tushunadi.

4-jadval. Misralarning kodlanishi

10691	13536	Dayr aro tushsa falak engiga xirqam yuruni.	590
10692	13537	Dahr bog‘ida nechuk vasl guli butsunkim,	590
10693	13538	Hajr o‘qidur yog‘ini, ashk suyidur juvuni.	590
10694	13539	Gar Navoiy so‘ngakiga tutashur ko‘nglidin o‘t,	590
10695	13540	Ne ajab, ishq o‘tidur ulu bu aning o‘tuni.	590
10696	13541	Ul quyosh oquyda-yu men muztaribmen har sari	591
10697	13542	Uylakim, fonusdin parvona qolg‘ay tashqari.	591

4-jadvalda ko‘rsatib o‘tilgan misradagi: 1) *dayr – dunyo; 2) falak – osmon; 3) eng – yuz; 4) xirqa – eski juldur kiyim; 5) yurun – yamoq* so‘zshakllari 13536 raqam bilan identifikatsiyalangan.

SQL ma’lumotlar bazasidagi yuqorida berilgan maydonlari yordamida Alisher Navoiy mualliflik korpusi [http://alishernavoicorpus.uz/uz]da qidiruv filtri yuzaga keldi. Qidiruv tizimida kalit so‘z(shakl)ning qo‘llanish o‘rni va chastotasi ko‘rsatiladi.

Mualliflik korpusining tarixiy ahamiyati. Alisher Navoiy g‘azallarida tarixiy, adabiy, mifik shaxslar, geografik va etnik joy nomlari ishtirok etgan baytlar juda ko‘p uchraydi, bu badiiy nuqtayi nazardan talmeh san’atini yuzaga keltiradi. Asosiy jihati esa o‘quvchi baytdagi izohtalab so‘zlarning mazmunini aniqlash jarayonida tarixiy, badiiy shaxslar va geografik, etnik joy nomlari haqida ma’lumotga ega bo‘ladi. Shoir quyidagi baytda *Hotam, Qorun, Afridun kabi* tarixiy shaxslar va afsonaviy qahramon – *Jamshid* obrazlari orqali o‘quvchiga tarbiyaviy ahamiyatga ega fikrlar bilan birga tarixiy ma’lumotlarni taqdim etmoqda:

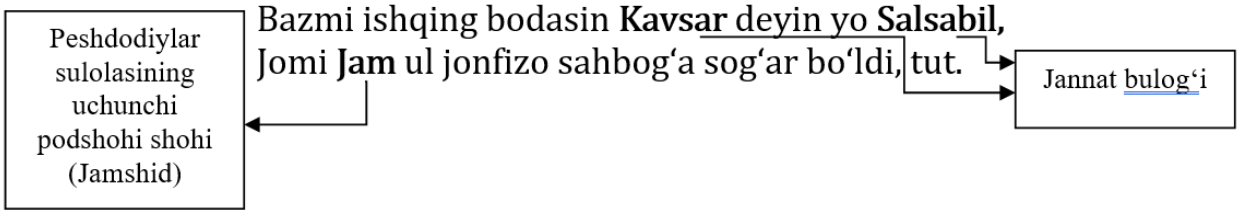
Qani Hotam, qani Qorun, qani Jamshid-u Afridun?
Bas ehson qil sanga gardundin adno e’tibor o‘lg‘ach[1].

Hotam – saxiyligi va oliyjanobligi bilan Sharq mamalakatlarida dong taratgan shaxs. Yamandagi toy qabilasidan bo‘lganligi uchun Hotami Toy nomi bilan shuhrat qozongan. *Qorun* – Muso paygambar *(*a) zamonida yashagan xasis boyning nomi. Sehr-jodu tufayli juda ko‘p boylikka ega bo‘lib, Muso (a)ga qarshi fitna uyushtiradi[2]. Muso (a) duosi tufayli yer qa’riga kirib ketadi. Rivoyatlarga ko‘ra, bugun topilayotgan oltin konlari aslida Qorun xazinasi bo‘lgan ekan[3]. *Jamshid* – qadimgi Eronning afsonaviy podshohi. U “Jomi jahonnamo” – jahonni ko‘rsatuvchi jom ixtiro qilgan bo‘lib, unda dunyodagi nafaqat hozirgi, balki o‘tmishda yuz bergan va kelajakda sodir bo‘ladigan voqaelarni ham aks etar ekan. *Afridun (Faridun)* – qadimgi Eronning peshdodiylar sulolasiga mansub oltinchi hukmdor. U adolat timsoli hisoblanadi. Ularga mana shunday ulug‘ marhamatlar: toj-u taxt, behisob mol-u davlat in’om etilgan edi, lekin ular ham bu foniy dunyoda mangu qolmadilar, olamdan o‘tdilar. Bayt mazmuniga shunday xulosa qilish mumkinki, Olloh insonni mukofotlab mol-u davlat bilan siylasa, muhtojlarga ehson qilib, hamisha

[2] Ochilov E. Navoiy hikmatlari. – Toshkent: O‘zbekiston, 2011. – B. 23.
[3] Навоий А. Бадоеъ ул- васат. – Тошкент: Тамаддун, 2011. – B. 721.

yaxshilik sari intilish, ezgu amallar qilish uning nomini manguga muhrlaydi.

“Badoye’ ul-vasat” devonidagi g‘azallarda “kavsar” so‘zi yigirma uch marta uchraydi, bu so‘z moddiy va ma’naviy to‘qlik ma’nolarini ifodalaydi. Quyidagi baytda esa “jannatdagi buloq nomi” semantik tavsifini bermoqda:



Alisher Navoiy mualliflik korpusiga kiritilgan talmeh she’riy san’ati orqali keltirilgan tarixiy shaxslar, aziz avliyolar va tarixiy joylar, mashhur maskan nomlarining semantik teglanishi natijasida o‘quvchilarda moziydagi mashhur shaxslar, ilohiy kitoblarda keltirilgan payg‘ambarlar, to‘qima obrazlar, muqaddas qadamjolar, asar nomlari borasidagi bilimlari shakllantiradi va rivojlantiradi.

Mualliflik korpusining lingvistik ahamiyati. Mualliflik korpusida muallif tilini to‘liq, keng, obyektiv ko‘rsatish imkoniyati bor, shuning uchun bunday korpuslar boshqa axborot bankidan afzalligi bilan ajralib turadi. Korpus turli xildagi tadqiqot uchun asos, manba, vosita vazifasini o‘tay oladi. Bunday korpuslarning afzalligi yana shundaki, ular yordamida nafaqat biron bir so‘z yoki jumlaning, balki butun boshli asar tilini bilish imkoniyati mavjud[4]. Ta’kidlash joizki, mualliflik korpuslari tadqiqotchilar uchun eng qulay axborot manbayi hisoblanishi bilan bugungi kunning nazariy hamda amaliy sohalarining uzviy ajralmas va muhim qismiga tayanib ulgurdi. Fanga oid tadqiqotlar hamisha dalillar asosida ish ko‘rishni, muayyan tadqiq mavzusi doirasida faktlar yig‘ishni, to‘plangan materiallarni sistemaga solishni taqozo etadi. Bunday katta hajmli ishni bajarishda mualliflik korpuslari tadqiqotchining vaqtini, mehnatini tejaydigan bebaho ish qurolidir. Aslida, mualliflik korpuslari texnik jarayonni tezlashtiruvchi vosita bo‘libgina qolmay, muayyan muallif asarlarining axborot tizimiga kiritilgan, ijodkor uslubini o‘rganishga, muallif haqidagi kutilmagan savollarga ham javob topishga yordam bera oladigan tizimdir.

Navoiy mualliflik korpusidan mutafakkir so‘z birliklarining barcha lingvistik xususiyatlari, undagi o‘zgarishlar – o‘sha davr nuqtayi nazarida tildagi yangilanish va bugungi ijtimoiy hayotda so‘zlarning iste’moldan

[4] Rahimov A. Kompyuter lingvistikasi asoslari – Toshkent: Akademnashr, 2011. – B. 156.

chiqishi, faollashish va passivlashish holatlari hamda lingvistik hodisalari haqida tezkor, aniq va to‘liq ma‘lumotlarni oladi, osonlik bilan turli tipdagi katta hajmli akademik lug‘atlar tuzish, matnlarga avtomatik ishlov berish imkoniyatini yaratadi. Mualliflik korpuslaridagi ma’lumotlarning ilmiy manbalar asosida tahrir qilinganligi korpusning ishonchliligini kafolatlaydi. Lingvistik hodisalarning butun spektrini to‘liq aks ettirishi – zaruriy ma’lumotlarni har tomonlama va obyektiv o‘rganishga imkon beradi[5]. Katta hajmdagi ma’naviy xazina joylashgan korpusdan tilshunoslikning qiyosiy-tarixiy va chog‘ishtirma-tipologik tadqiqotlarida, leksikografik izlanishlarni olib borishda, Alisher Navoiy asarlari yordamida XV asr chastotali lug‘atlarini yaratishda, istorizm va arxaizmlarni jamlashda, so‘zlar etimologiyasiga oid tadqiqotlarni olib borishda, bugungi zamon o‘quvchisi tushunishi qiyin bo‘lgan so‘zlar izohini korpusdagi tezkor ravishda taqdim etilgan kontekstual misollar massivi yordamida tushunishga, uning semantik izohini topishda yordamchi vosita hisoblanadi. Bu esa auditoriya yoshidan qat’i nazar mumtoz adabiyotimizga qiziquvchilar, Navoiy davri tilini tushunuvchilar va uning asarlarini mutolaa qilib Navoiy ma’naviy xazinasidan bahramand bo‘luvchilar safining oshishiga xizmat qiladi. Mualliflik korpusining lingvistik asosi “so‘z – leksemadan uning mazmuniga qarab borish” hisoblanadi. Bunda tarjima tilning morfologik, sintaktik va semantik tahlili, lug‘atlar, grammatik qoidalar, matnlar korpusiga asoslanib amalga oshiriladi.

Mualliflik korpusining ta’limiy ahamiyati. MK ta’lim jarayonida muallif asarlarining ta’limiy, ijtimoiy, tarixiy, lingvodidaktik, ahamiyatini yoritib berishda, muallif asarlarida qo‘llanilgan so‘zlarning dialektal xususiyatlarini tasniflashda, Milliy tilning semantik xususiyatlarini, integral va differensial semalarni o‘rganishda muhim sanaladi.

Mualliflik korpusi materialidan ta’limiy maqsadda foydalanish o‘ta ahamiyatli masala. Darhaqiqat, til korpuslari ta’lim jarayonida eng muhim o‘quv quroli. Sababi mavzulashtirilgan matn ta’lim jarayonida o‘quv materiali tayyorlashda qulay axborot manbayi vazifasini bajaradi. Lingvodidaktikada mualliflik korpusining ahamiyati shundan iboratki, o‘qituvchi uchun korpus tengsiz xazina, undan o‘quv mashg‘uloti uchun serqirra, mazmunli o‘quv materialini tayyorlashi mumkin. XV asr til

[5] Волков С., Герд А., Гринбаум Н., Захаров П., Муратов А., Панков И. Корпус текстов как особый тип лингвистической электронной библиотеки / Словарь русского языка XIX века. Проблемы. Исследования. Перспективы. СПб.: Наука, 2003. – С. 86.

uslubini bugungi tilga qiyosan o‘quvchilarga o‘rgatish mumkin. Badiiy matnlarning statistik tahlili natijasida matnda tez-tez qo‘llaniluvchi til birliklari (otlar, sifatlar, kalit so‘zlar, fe’llar, grammatik shakllar, jumla qurilishi, bir so‘z bilan aytganda, yozuvchining uslubi – o‘ziga xos yozish uslubini ko‘rsatuvchi vositalar) lingvostatistik tahlil yordamida aniqlanadi. Turli matnlardan olingan dalillarning qiyosiy tahlili bizga o‘sha matnning mazmun-mundarijasini, matn tuzilgan davrni, dalillarni argumentlash xarakterini va hatto mualliflikni aniqlashga imkon beradi[6]. Alisher Navoiy MK semantik bazasini shakllantirishda bugungi kunda iste’moldan chiqqan, tarixiy va arxaik so‘zlar, kam qo‘llanilgan izohtalab so‘zlarga asosiy e’tibor qaratilgan. Navoiy shaxsi va XV asr davr tilini foydalanuvchiga anglatish uchun aynan shunday leksik birliklarning semantik bazasi yaratildi[7]. Izohtalab so‘zlarning mazmunini anglamasdan turib g‘azallarning chin ma’nosini tushunish oddiy kitobxon uchun mushkul. Navoiyning “Badoye’ ul-vasat” devonidan joy olgan 650 g‘azaldagi izohtalab so‘zlarning izohli lug‘atlar asosidagi semantik teglar bazasi asosida yaratilgan Alisher Navoiy MK tez va qulay, ishonchli ma’lumotlarni beradi. Korpusda baytlar, misralar Navoiy yashagan davr mulohazalari bilan yondashilgan, izohtalab so‘zlar manbalar asosida tahlil qilingan. Navoiy g‘azallarida bugungi kunda iste’moldan chiqqan, talaffuzi va ma’nosi mutlaqo o‘zgarib ketgan so‘z va so‘z birikmalar ko‘p sonni tashkil etadi. Jumladan:

Navoiy g‘azallaridagi bugungi kunda iste’moldan chiqqan so‘zlar	**Navoiy g‘azallaridagi bugungi kunda iste’moldan chiqqan so‘zlarning zamonaviy o‘zbek tilshunosligidagi ifodasi**
joma	to‘n, kiyim
ajmal	eng go‘zal, juda chiroyli
azhar	juda ochiq, eng porloq
baso	ko‘p, ancha
dark	idrok, aql, fahmlash
deh	qishloq
zardak	sabzi

[6] Rahimov A. Kompyuter lingvistikasi asoslari. – T.: Akademnashr, 2011. – B 154.
[7] Abjalova M., G‘ulomova N., Rashidov H. Alisher Navoiy mualliflik korpusi uchun Navoiyning “Badoye’ ul-vasat” devonidagi g‘azallarning semantik bazasi. Guvohnoma № BGU 00583. – Toshkent, 2022.

Ta’lim jarayonida adabiyot darg‘alari ijodiga bot-bot murojaat qilishning asosiy sababi ijodkor iste’dodining serqirraligi, teran mulohazaga yetaklovchi yuksak saviyadagi asarlarining mavjudligi, shuningdek, ularga berilgan jahoniy e’tiroflar, asarlaridagi badiiy-estetik g‘oyalarning san’atkorona ifodalari bilan bog‘liq. Shu bois uzluksiz ta’lim tizimida yangi davr Milliy o‘quv dasturida Alisher Navoiy hayoti va ijodini ta’lim va tarbiya berishda o‘rganish boshlang‘ich hamda yuqori sinf o‘quvchilarida milliy g‘ururni yuksaltiradi. Milliy g‘urur insonni ma’naviy jihatdan shakllantirishning bosh omili hisoblanadi. O‘quvchilarning Navoiyona aks etuvchi nodir adabiy durdonalarning falsafiy, ilohiy-irfoniy mohiyatini his qilishda, mag‘zini anglashda umumta’lim maktablari uchun yaratilayotgan o‘quv dasturlarining ahamiyati katta hisoblanadi. Zero, misralar mag‘ziga chuqur mulohazasiz yetish imkondan tashqaridir[8].

Shu o‘rinda 3-sinfdan 11-sinfgacha amaldagi dasturlarda Alisher Navoiyning ijodiga ajratilgan vaqt va mavzularga e’tibor qaratish o‘rinli. Buning uchun, avvalo, umumiy o‘rta ta’lim maktablari uchun 2021-2022-o‘quv yiliga mo‘ljallangan tayanch o‘quv reja va dasturiga murojaat qilindi [9]. Unga ko‘ra Alisher Navoiyning hayoti va ijodi o‘quv reja va dastur asosida quyidagicha mavzu va soatlarda o‘rganiladi:

Sinf	O‘rganiladigan mavzu nomi	Soat
3-sinf	“Donolarning donosi” (matn)	1 soat
4-sinf	“Alisherning yoshligi” (matn)	1 soat
5-sinf	Alisher Navoiy hayoti va ijodi. “Hayrat ul-abror” dostonida berilgan “Sher va Durroj” hikoyatini o‘qish. “Sher va Durroj” hikoyatini tahlil qilish. “Hayrat ul-abror” dostonidagi egrilik va to‘g‘rilik tushunchalari yuzasidan suhbat.	3 soat
6-sinf	Alisher Navoiyning “Mahbub ul-qulub” asaridagi hikmatlar va hikmatli so‘zlar matni ustida ishlash. Hikmatli so‘zlarning ta’limiy-tarbiyaviy ahamiyati.	3 soat
7-sinf	Alisher Navoiyning hayoti va ijodi. “Mehr va Suhayl”. (“Sab’ai sayyor” dan). “Mehr va Suhayl” she’riy san’atlar haqida. Nazorat ishi (insho) “Suhayl timsoliga tavsif”.	4 soat

[8] Vohidov R., Eshonqulov H. O‘zbek mumtoz adabiyoti tarixi. O‘zbekiston Yozuvchilar uyushmasi. – Toshkent: Adabiyot jamg‘armasi, 2006. – B. 255.

[9] Xalq ta’limi vazirligining “Umumiy o‘rta ta’lim maktablari uchun 2021-2022-o‘quv yiliga mo‘jallangan tayanch o‘quv rejani tasdiqlash to‘g‘risida”gi 297-buyrug‘i. 2020-yil. 9-dekabr.

8-sinf	Shoirning hayoti va ijodi haqida qisqacha ma’lumot. Ruboiylari tahlili. Nazariy ma’lumot: ruboiy. Tuyuqlari tahlili. Fardlarni o‘qib, tahlil qilish. Nazariy ma’lumot: fard.	4 soat,
9-sinf	Alisher Navoiy hayoti va ijodi. Xamsachilik tarixi. “Farhod va Shirin” dostonidan o‘qish. Doston matni ustida ishlash. Doston timsollari tahlili. Nazariy ma’lumot: komil inson. Nazorat ishi (insho)	12 soat
10-sinf	Alisher Navoiy lirikasi. Alisher Navoiy haqida uning zamondoshlari. Navoiy g‘azallar tahlili. Navoiy qit’alari tahlili. Navoiy ruboiylari tahlili. Nazorat ishi (insho) “Navoiy lirikasining badiyati” mavzusida.	5 soat
11-sinf	Alisher Navoiyning hayoti va ijodi. Alisher Navoiy “Saddi Iskandariy” dostoni. Saddi Iskandariy” dostonining ma’rifiy va adabiy ahamiyati. Dostonning poetik xususiyatlari. Nazorat ishi (insho) “Saddi Iskandariy” dostonida adolatli hukmdor sifatidagi qarashlarning aks etishi”.	6 soat

Ushbu mavzularni o‘quvchilarga mazmunli yetkazish, Navoiy tilini tushuntirish uchun ham korpus asosiy elektron majmua bo‘la oladi. Uzluksiz ta’lim tizimida Navoiyning hayoti va ijod namunalarini o‘quvchi yosh xususiyatidan kelib chiqqan holda o‘rgatilishi samarali ta’limga erishishning yo‘llaridan biri hisoblanadi.

Mualliflik korpusining ijtimoiy ahamiyati. Mualliflik korpuslari o‘quvchilarning izlanuvchanlik salohiyatini o‘stirib, kichik tadqiqotlarni ishonchli dalillar asosida bajarishiga imkoniyat beradi. Ta’kidlash joizki, mualliflik korpuslarining ijtimoiy ahamiyati – keng qamrovli hisoblanib, undan lingvistik, etnopsixolingvistik, sotsiologik tadqiqotlarda, ona tili, adabiyot, xorijiy til ta’limida, matnga avtomatik ishlov berish, tarjima dasturlarini tuzishda foydalanish mumkin. Mualliflik korpuslaridan “ish quroli – so‘z” bo‘lgan barcha soha vakillari: tilshunos, tarjimon, o‘qituvchi, dasturchi, jurnalist, muharrir kundalik faoliyati jarayonida keng foydalanishlari mumkin. Muayyan muallifga tegishli bo‘lgan parafraza, parema, hikmatli so‘zlar so‘z boyligimizni oshirib, nutqiy ko‘nikmalarning rivojlanishiga yordam beradi. Mualliflik korpuslari tilning lug‘at boyligida bo‘layotgan o‘zgarishlar (neologizm, istorizm, arxaizm hodisalari)ni kuzatishning eng qulay vositasi hamdir. Muallif qo‘llagan so‘zlarning leksik-semantik birikish imkoniyatini tahlil qilish

jarayonida qadimiy va yangi avlod lug‘atlarini, grammatikasini taqqoslash imkoniyati kengayadi. MK vositasida muallif so‘zining serqirraligi va bir vaqtning o‘zida bir necha semantik kategoriyaga mansub bo‘la olishini farqlashda amaliy yordam beradi. Mualliflik korpuslari orqali shoirning lisoniy qarashlari bilan bir qatorda, ijtimoiy sohalarga munosabatini, siyosiy masalalarga qarashlarini ham bilish imkoniyati bo‘ladi. N.Mallayev Navoiy g‘azallarining ijtimoiy ahamiyati haqida fikr yuritib, shunday deydi: “Navoiy haroratli ishqiy g‘azallar bilan birga ijtimoiy-siyosiy mavzularda ham g‘azallar bitdi, oshiq, raqib va rind obrazlari bilan chegaralanib qolmadi, obrazlar turkumiga mutafakkir va murabbiy obrazlarini hamda shohlarni, shayx-zohid va voizlarni kiritdi”[10]. Shoir har bir g‘azalidagi ma’no va g‘oyaga mos tarzda ohangdorlik hamda joziba yarata oldi. Navoiyning g‘azaliyoti bilan birga o‘zbek lirikasiga birinchi marta ishqiy tematikadan tashqari, falsafiy-didaktik va ijtimoiy muammolar ham muhim mavqeni egallaydi[11]. Navoiyning barcha lirik merosi inson va jamiyat haqidagi qarashlar desak, mubolag‘a bo‘lmaydi.

Mualliflik korpuslarining tarbiyaviy ahamiyati. Ma’naviy merosimizni asrab-avaylash, o‘quvchilarda ajdodlar ruhini ulug‘lash ko‘nikmalarini rivojlantirish, mutolaa madaniyatini oshirish, ulug‘ ijodkorlar merosi va o‘zbek mumtoz adabiyotini o‘qib tushunish ko‘nikmasini shakllantirish muhim ahamiyat kasb etadi. Axloqiy-ta’limiy mavzuda Ibrohim Haqqul shunday mulohaza yuritadi: “Yoshlarimiz Navoiyni qanchalik chuqur va puxta bilsa, ma’rifat, ezgulik, komillik sirlarini o‘shancha kengroq egallaydi. Navoiyning so‘zlari diliga o‘rnashgan odam, o‘zi istasin-istamasin, odamiylik sharafi va kuch qudratini idrok etadi. Navoiy saboqlariga amal qilgan kishi o‘z-o‘zidan xalq dardi – tashvishlarini yengillatishga bel bog‘laydi. Fikrni fikrsizlikka, ilm-ma’rifatni nodonlikka va jaholatga qarshi qurol o‘rnida ishlatadi. Navoiyni yetarli darajada bilish-adolat, diyonat, imon-e’tiqodning kuchiga ishonch demakdir”[12].

Umuman, Alisher Navoiy o‘ta keng qamrovli ijod mahsuliga ega bo‘lib, Alisher Navoiy mualliflik korpusi o‘quvchiga Navoiydagi komillik fazilatlarini, asarlaridagi falsafiy, ishqiy, ta’limiy, tarbiyaviy,

[10] Маллаев Н. Ўзбек адабиёти тарихи. – Тошкент, 1965. – Б. 399.
[11] Husan M. Oshiq sharhi holi ifodasida badiiy san’atlarning o‘rni. // https://kh-davron.uz/kutubxona/alisher-navoiy/husan-maqsud-oshiq-sharhi-holi-ifodasida-badiiy-sanatlarning-orni.html. 2015.
[12] Ibrohim H. Navoiyga qaytish. – Toshkent: – 2007. – B. 10.

axloqiy, ijtimoiy, lingvistik kabi ma’lumotlarni anglashga yordam beradi, foydalanuvchini mushohada yuritishga undaydi.

Loyihaning asosiy maqsadi Alisher Navoiyning “Xazoyin ul maoniy” kulliyotidagi to‘rt devon (“G‘aroyib us-sig‘ar”, “Navodir ush-shabob”, “Badoye’ ul-vasat” va “Favoyid ul-kibar”)da mavjud 2600 ta g‘azaldagi leksik birliklarning semantik tavsiflari bazasini yaratish va ushbu bazalar yordamida yangi tipdagi Alisher Navoiy mualliflik korpusini shakllantirish sanaladi. Loyiha davomida ushbu maqsadga erishildi.

Ushbu maqsadga erishish uchun quyidagi asosiy vazifalar bajarildi:

1. Alisher Navoiyning “Xazoyin ul maoniy” kulliyotidagi to‘rt devonning xatoliklari kam bo‘lgan nashri o‘rganildi.
2. Aniqlangan nashr kirill yozuvidan lotin yozuviga o‘tkazilib, qayta tahrir qilindi.
3. Har bir so‘z(shakl) kontekstual izohni namoyon etishi uchun misrasi bilan bog‘lab chiqildi.
4. G‘azallardagi izohtalab so‘z aniqlandi.
5. Izohtalab leksik birlik semantik tavsiflandi.
6. Izohtalab so‘z va so‘z birikmalarning izohi (bugungi kunda iste’molda bo‘lgan leksik ma’nosi) berildi.
7. Izohtalab so‘z va so‘z birikmalari (bugungi kunda iste’molda bo‘lmagan leksik ma’nosi) izohi bilan ko‘rsatildi.
8. Izohtalab qadimiy geografik va etnik nomlar ko‘tsatkichlari, ya’ni o‘rin-joy, makon nomlari bazasi shakllantirildi.
9. Tarixiy, adabiy va mifik shaxslar nomi ko‘rsatkichlari (Payg‘ambarlar, podshohliklar, asar qahramonlari va hakazo) semantik teglandi va tavsiflandi.
10. So‘zlarning shakldosh variantlari orqali kontekstlar bilan ishlash va g‘azalning to‘liq matniga o‘tish imkoniyati yaratildi.
11. (Bu jarayonni amalga oshirishda quyidagi turdagi harakatlar amalga oshirildi: lug‘atlar bilan ishlash, matnlar bilan ishlash, tushunish qiyin bo‘lgan so‘z va so‘z birikmasi bilan ishlash, shuningdek, kontekstlar bilan ishlandi).
12. Korpus menejeri yaratildi. Unda turli shakllar bo‘yicha qidiruv imkoniyati va qidiruv filtri mavjud.
13. Korpusning dizayni, strukturasining loyihasi tayyorlandi.
14. Alisher Navoiy mualliflik korpusi interfeysi loyihalandi va o‘zbek tilidan tashqari, ingliz, rus va turk tillariga tarjima qilinib, to‘rt tilli interfeysga aylantirildi.

15. Alisher Navoiy mualliflik korpusi uchun domen va hosting olindi.
16. Bir nechta tadqiqot ishi bajarildi.
17. Alisher Navoiy mualliflik korpusi ruknlariga ma’lumot va materiallar kiritildi.
18. Loyiha natijalari bo‘yicha mahalliy ilmiy nashrlarda, Scopus ma’lumotlar bazasida indekslangan xorijiy nashrlarda maqolalar e’lon qilindi.
19. Navoiy asarlari asosida o‘zbek tilidagi sinonimlarning tarixiy shakllari aniqlanib, 2500ga yaqin sinonimik qator aks etgan “O‘zbek tili sinonimlarining o‘quv lug‘ati” nashr etildi.
20. Loyiha natijalari bo‘yicha respublika ilmiy jurnallari hamda xorijiy impakt faktorli jurnallarda maqolalar e’lon qilindi.
21. Loyiha mobaynida 2ta darslik va 2ta o‘quv qo‘llanma yartildi.
22. Loyiha mavzusiga doir 4ta malakaviy bitiruv ishi himoya qilindi. 1ta DSc dissertatsiyasi tayyorlandi.
23. Internet tarmog‘ida http://alishernavoicorpus.uz/uz sayti yaratilib, ishga tushirildi.
24. Korpusning maxsus ishlangan matnlar bazasi mavjud bo‘lib, matnlari qayta ishlangan devonlar bo‘yicha qidiruv imkoniyatini beradi. Korpusdagi statistik ma’lumotlar ham ushbu baza asosida taqdim etiladi.
25. Ayni damda “G‘aroyib us-sig‘ar”da ushbu devondagi 650 ta g‘azal+63 ta ibora+121 ta she’riy san’atlarga doir misollar – jami 854 ta ijod namunasi; “Navodir ush-shabob”ga oid 650ta g‘azal+145 ta ibora+33 ta maqol+7 ta she’riy san’atlar bo‘yicha misollar – jami 835 ta; “Badoye ul-vasat”da mazkur devondagi 650 g‘azal+527 ta arxaizm+13 ta istorizm+15 ta ibora+39 ta maqol+247 ta she’riy san’atlarga oid misollar – jami 1491 ta; “Favoyid ul-kibar” qismida esa 650ta g‘azal matnining ma’lumotlari shakllantirilgan.

ALISHER NAVOIY MUALLIFLIK KORPUSI LINGVISTIK MA’LUMOTLAR BAZASI STATISTIKASI

I. Semantik tavsiflangan va teglangan so‘zlar miqdori:

“G‘aroyib us-sig‘ar” – 61057 ta so‘z;

“Navodir ush-shabob” – 62963 so‘z;

“Badoye’ ul-vasat” – 22590 so‘z;

“Favoyid ul-kibar” – 66 171 so‘z;

Jami: “Xazoyin ul-maoniy” kulliyotida mavjud 2600 ta g‘azaldagi **212 781** ta so‘z semantik teglangan**.**

II. G‘azallar tarkibidagi quyida berilgan adabiy birliklar jamlandi:

Maqol – 110 ta

Ibora – 260 ta

Talmeh – 883 ta

Tazod – 474 ta

Tanosib – 2566

Tasbe’ – 32

Tasdir – 145, **Tashbeh** – 124 ta, **Arxaik so‘zlar** – 527 ta

Tarixiy so‘zlar – 13 ta kiritilgan

III. Kulliyot devonlari g‘azallaridagi so‘zlar miqdori quyidagi miqdorda ekanligi aniqlandi:

“G‘aroyib us-sig‘ar” devonidagi g‘azallarda 4975 bayt – 9950 misra 66 954 ta so‘z bor;

“Navodir ush-shabob” devonida 4998 bayt – 9996 misra g‘azallarda 66 596 ta so‘z bor;

“Badoye’ ul-vasat” devonida 5001 bayt – 10002 misra 66 539 ta so‘z bor;

“Favoyid ul-kibar” devonida 5029 bayt – 10058 misra 66 722 ta so‘z bor.

“Xazoyin ul-maoniy”dagi 2600 ta g‘azalda 20003 bayt – 40006 misra 266811 ta so‘z mavjud.

Xulosa o‘rnida Alisher Navoiy mualliflik korpusiga oid quyidagi asosiy faktlarni keltirish o‘rinli:

1. Turkiy xalqlar fenomini Alisher Navoiy qalamiga mansub asarlar korpusini yaratishning lingvistik va texnik asoslari ishlab chiqildi.

2. Alisher Navoiy asarlaridagi bugungi kun o‘quvchisi uchun tushunish qiyin bo‘lgan 213 mingga yaqin so‘z (so‘z birikma)lar izohlandi.

3. Korpus interfeysi to‘rt til – o‘zbek, ingliz, rus va turk tillarida namoyon bo‘ladi.

4. Hozirda korpus bazasida 20003 bayt – 40006 misradan iborat 2600 g‘azalda mavjud 212 781 ta izohtalab so‘zlarning semantik bazasi o‘rin olgan.

5. Korpusda, g‘azallar tarkibidagi quyida berilgan adabiy birliklar jamlandi: maqol – 110 ta, ibora – 260 ta, talmeh – 883 ta, tazod – 474 ta, tanosib – 2566, tasbe’ – 32, tasdir – 145, tashbeh – 124 ta, arxaik so‘zlar – 527 ta, tarixiy so‘zlar – 13 ta.

6. Mazkur loyihaning debochasi, ya’ni boshlang‘ich varianti (http://v1.alishernavoicorpus.uz/) va uning takomillashtirilgan yangi tipi (http://alishernavoicorpus.uz/uz) tayyor qilinib, foydalanuvchilarga taqdim etilgan, foydalanish bo‘yicha videoyo‘riqnoma ham tayyorlangan (https://youtu.be/744o55Tqx9E).

7. Korpus dizayni milliy koloritga ega holda ishlab chiqilgan.

8. Korpus va semantik teglar bazasi uchun Intellektual mulk agentligidan 5 ta mualliflik guvohnomasi olingan.

Alisher Navoiy mualliflik korpusidan oliy va o‘rta maxsus o‘quv yurtlari o‘qituvchi va talabalari, xalq ta’limi tizimi sohasida faoliyat yurituvchi o‘qituvchilar, barcha maktab yoshidagi o‘quvchilar, shuningdek, marketologlar, xorijda yashovchi vatandoshlarimiz, o‘zbek tilini o‘rganuvchi xorijlik o‘qituvchi va talabalar, aholining o‘zbek tiliga qiziquvchi barcha qatlamlari o‘z faoliyatlarida foydalanishlari mumkin.

STRUCTURE AND COMPOSITION OF THE NEW TYPE OF ALISHER NAVOI AUTHORSHIP CORPUS

A modern, multi-contented and filter search version of Alisher Navoi was created in order to cultivate the oral and written speech of students and youth, to reveal the lexical aspects to researchers conducting scientific research, pedagogues working in educational institutions of the rich linguistic layer of the Uzbek language in the 15th century, to promote the creative heritage of Alisher Navoi on a global scale, as well as to achieve wide use of our national heritage in the modern information and communication system, promoting the works of our ancestors among young people and to create philological corpora that present examples of classic literature in a readable and understandable way (http://alishernavoicorpus.uz/uz). The prototype of this corpus was commissioned on April 22, 2022, and now has its own link in the new type (http://v1.alishernavoicorpus.uz/).

Alisher Navoi's authorship corpus is in a new format for students of secondary special and higher education, as well as for the general public for the first time a system. For the convenience of its use, a search manager (filter search), a four-language interface has been created, which, in turn, helps users to develop the skills of independent work with Navoi's creativity, in general, the sources of the 15th century, and to increase the ability to understand the vocabulary of that time. As it is understood, Alisher Navoi's corpus of authorship was created for the use of general public.

In order to create this corpus, the lexical units of Navoi's creative heritage were semantically described and tagged. As a result, a database of contextual semantic descriptions of lexical units in the ghazals of Alisher Navoi's "Khazayin ul-ma'ani" collection of 4 divans was created.

"Khazayin ul-ma'ani" is a perfect collection consisting of 4 different of divans names "Garayib us-sigar" ("Strange things of youth"), "Navodir us-shabab" ("Poems of youthlessness"), "Badoye' "Ul-Wasat" ("Middle Age Badias") and "Fawaid ul-Kibar" ("Benefits of Old Age"). It is also called "Chor Divan" among the people, and there are 650 ghazals in each divan - a total of 2600 ghazals in 4 divans.

In world and Uzbek philology, Alisher Navoi's work, his personality, and the translation of his works have been extensively researched. Until now, there are sites that collect Alisher Navoi's biography and the text of his works, various mobile applications and

views of Navoi's works in pdf format. But this sole information is not enough for the modern reader to study Alisher Navoi's work, to understand his rich vocabulary. In order to fill this gap in Navoi's corpus, a database of semantic descriptions has been created so that the reader can quickly find out the meaning of words that are difficult to understand today, without any dictionary, and understand the meaning of such a word in verse.

Alisher Navoi's authorship corpus (AC) is considered one of the necessary electronic resources for studying the language of the 15th century, as well as for the linguistic didactic system and the implementation of linguistic research. The creation of the corpus was carried out in seven stages:

– at the first stage, Navoi's Kulliyat was transferred to Word format and changed to Latin script;

– in the second stage, texts were edited and each lexical unit was processed for semantic description;

– in the third stage, lexical units were linked with ghazal verses in order to have a contextual explanation;

– at the fourth stage, the lexical units were semantically described by the lexical scientists;

– at the fifth stage, semantic descriptions were compiled and their database was created;

– at the sixth stage, based on the processed data, the algorithm of the corpus work was created and the corpus was created.

This corpus and its mobile application serve as informational tools for the education of Navoi's works. With the help of this, modern opportunities for learning Alisher Navoi's works and language were created for the Uzbek people as well as foreigners, furthermore, the corpus provides with an opportunity to study current Uzbek language and old Uzbek (Chigatai) language in a comparative aspect.

Alisher Navoi's authorship corpus has the following advantages, unlike an electronic library:

• interactive presentation of the contextual semantic description of the lexical units (as a result of hovering the mouse over the lexical unit);

• study the artist's style and his skill of using words;

• linguopoetic analysis of literary works;

• analysis of fixed combinations (phrases) used by the creator;

• analysis of the types of poetic art widely used to increase the artistry of the work;

• identifying examples of folk oral works used in lyrical genres;

• distribution of the artist's work according to the age of the audience;

• to deeply understand the meaning of words and the content of the text based on the semantic explanation in the corpus of the text;

• to be able to determine the type of the text of the work;

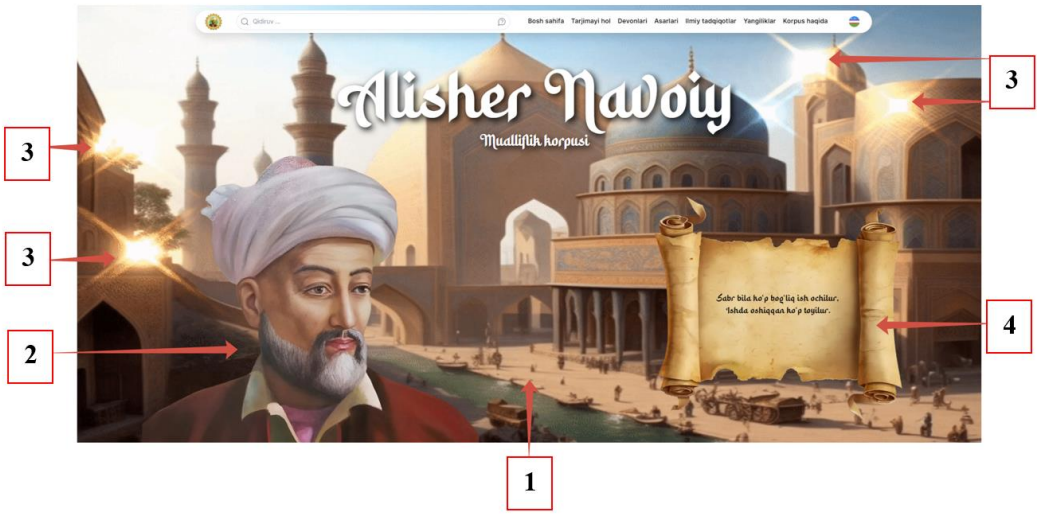
• search filters by ghazal number, text type and age of the audience;

• get acquainted with the metadata of ghazals;

• acceleration of information acquisition using digital technology.

The new type of Alisher Navoi corpus consists of 8 Sections:

Section 1: Home page. It has a background showing the view of Herat where Alisher Navoi lived (1), Alisher Navoi's figure (2), a 3D effect of the rays of the rising sun (3), an inscription showing fragments of Navoi's wisdom (4).



Section 2: "Biographical status" column is a database of the thinker's life and creative activity.

Section 3: 9 divan texts belonging to Alisher Navoi, called "Divans" (along with "The First Divan" compiled by his fans). 2,600 ghazals and poetic arts, proverbs and phrases (stable combinations) from the collection of "Khazayin ul Maoniy" were presented to the user with semantic tagging.

Section 4: In this column called "Works" there is a pdf format of 24 works of Alisher Navoi (odes; written on scientific, artistic, tazkira, historical, religious topics) and it is possible to read and save them. .

Section 5: In the column called "Proverbs" there are wisdoms collected in 9 categories.

Section 6: In the "Research" section, the results of research on this corpus, the importance and relevance of Alisher Navoi's authorship corpus, scientific articles highlighting the scientific, educational, social, and educational significance of the corpus, the technology of creating a language corpus, the stages of corpus text processing special scientific works are located.

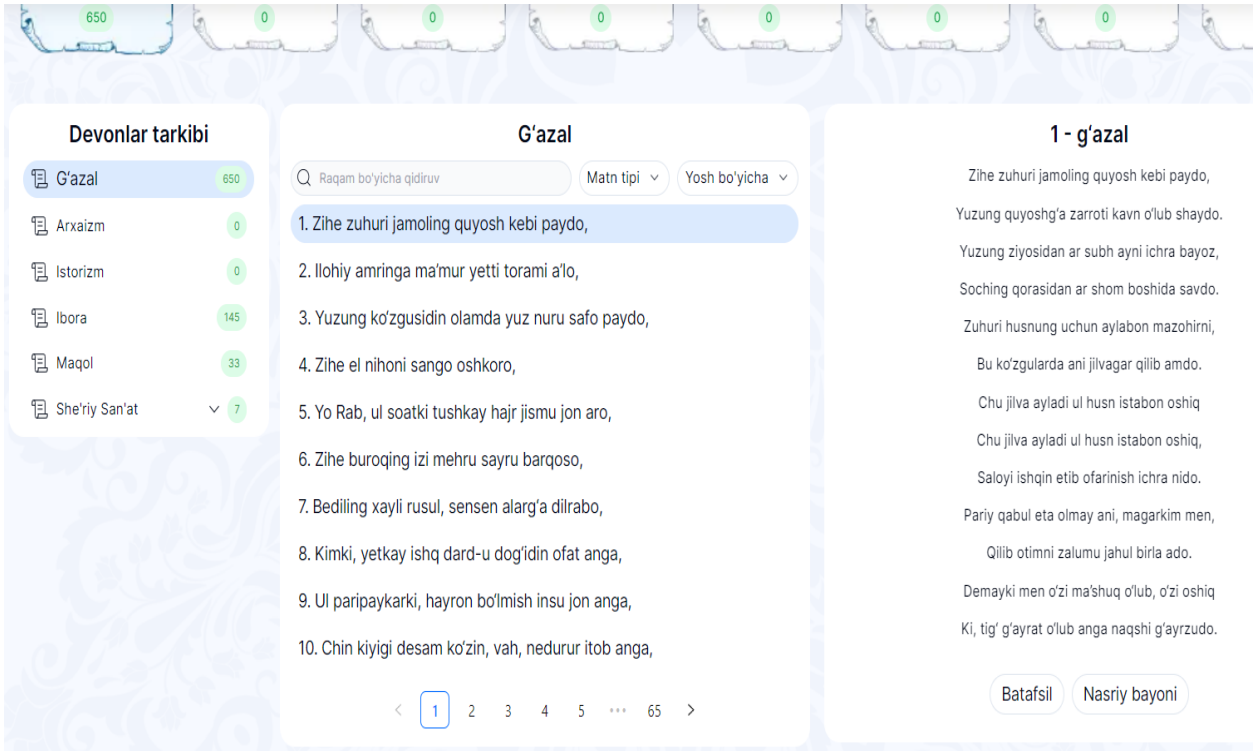
Section 7: In the "News" section, information is given about the work being carried out within the project, about presentations.

Section 8: In the section "About the corpus" the definition of the language corpus in the form of questions and answers, the difference of the author's corpus from other corpuses, the relevance and importance of creating the Alisher Navoi AC, the semantic base of the corpus information are provided.

In order to make it easier to use for foreigners, the corpus interface has been made available in 4 languages (Uzbek, English, Russian and Turkish). Also, the proverbs given in the inscription on the main page are also presented in 4 languages based on the language of the interface.



All databases created within the framework of the practical project "Creating Alisher Navoi's Authorship Corpus (Based on Ghazals from the Collection of Khazayin ul-Maoni)" numbered AL-662205561, are displayed in this "Divans" section. For example, when you go to the "Gharayib us-sigar" cabinet, the total database in it is visible in the "Content of the Cabinet". In particular, when the line "Ghazal" is clicked (1) 650 ghazals according to the order number, with the 1st line of the ghazal (this convenience serves to determine which ghazal is placed under a certain number) opens in a window (2). When a specific ghazal is clicked, the full text of the selected ghazal opens next to it in another window (3).



Semantic description. As the main goal of the practical project, a total of 2600 (650*4 divans = 2600) explanatory lexical units in the ghazal (words that are incomprehensible to the modern reader: archaism and historicisms; Persian database of semantic descriptions of idioms, commentators, famous person and place, historical names, artistic expressions in the form of a phrase, contextual figurative meanings) was prepared, as a result of which the user reading the ghazals in the corpus do not understand at all by moving the mouse over an unfamiliar lexical unit, its contextual semantic description is displayed.

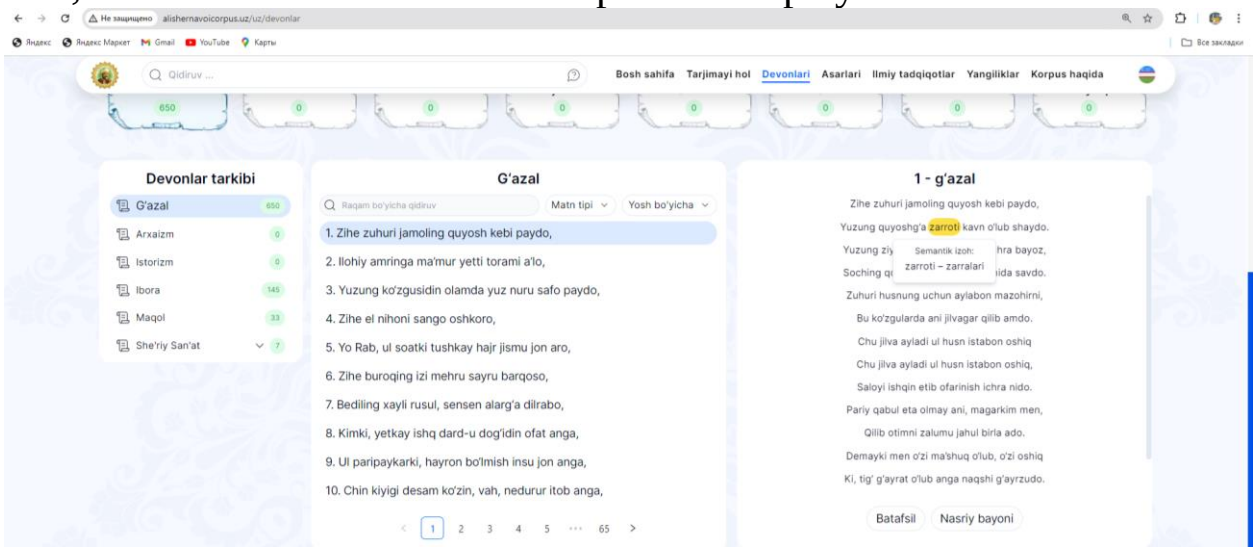
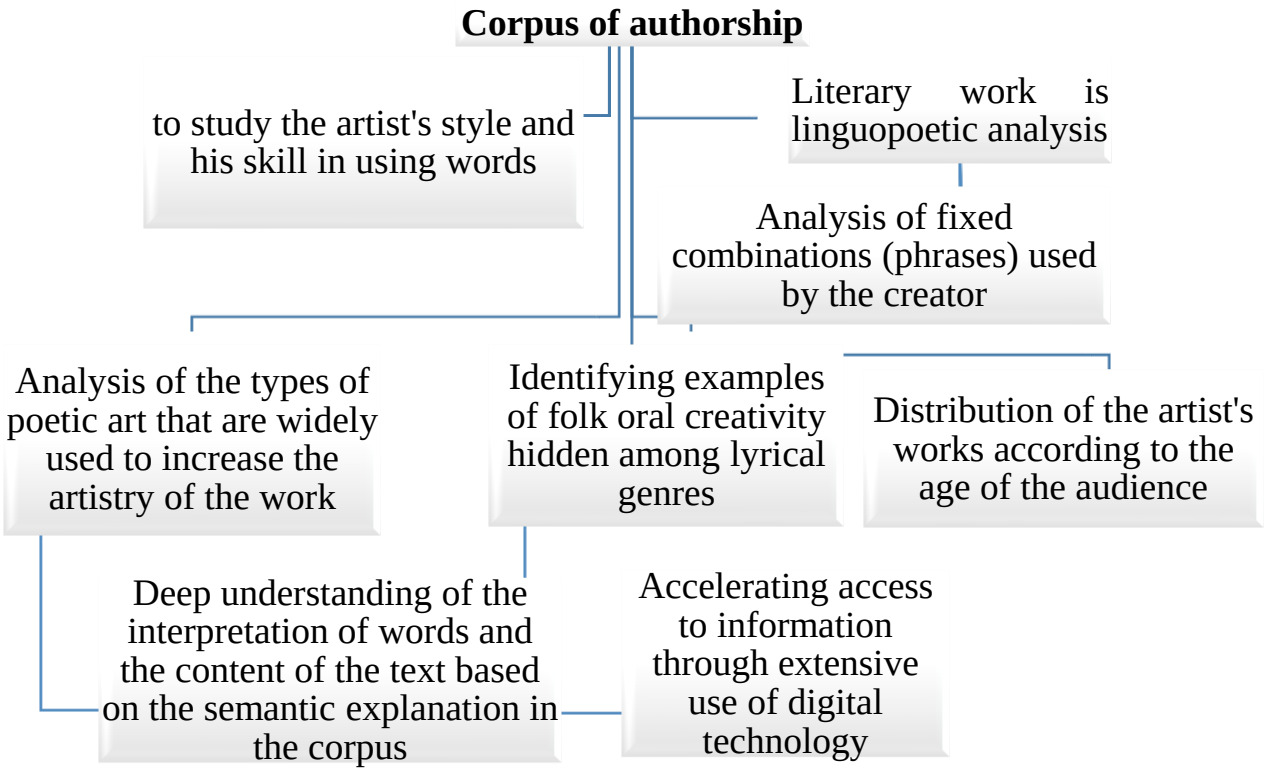


Figure 1. Contextual semantic description of "particles" to the word "zarroti" in verse 1 of ghazal 2 of "Garayib us-sigar" divan in the corpus.

A new type of corpus can serve as a source of spiritual need satisfaction for specialists, educational material at the educational stages, and a source of information related to fields.

Authorship corpus of Alisher Navoi has educational, historical, linguistic, social, educational and spiritual significance, and the following possibilities arise with the help of this corpus and can be determined from the context of the creator:

– studying Navoi's personality;
– study of literary style;
– linguopoetic analysis of the poet's work;
– researching the ability and skill of the creator to use words;
– creation of author's dictionaries;
– compilation of author's phrases;
– finding the author of anonymous works through the parameters that show the personality and style of the creator in AC;
– summarizing the author's paraphrase, paremia, and wisdom; the scope of use of figurative expressions.



In recent years, the issues of modelling lexical units, morphological and semantic analysis of corpus texts, identification of homonyms, grammatical and semantic tagging of lexical units have been studied in Uzbek corpus linguistics. Today, along with the creation of

morphoanalyzer, parser, and semantic analyzer capabilities for the Uzbek language corpora, creation of the author corpus (AC), a private/structural corpus of the National Corpus of the Uzbek language, is one of the most urgent tasks facing corpus scientists. Maintaining the purity of the state language, enriching it and improving the speech culture of the population, ensuring the active integration of the state language into modern information technologies and communications is becoming a priority. Achieving widespread use of our national heritage in the modern information and communication system, promoting the works of our ancestors among young people, creating philological corpora that present examples of classic literature in a readable and understandable manner, including improving Alisher Navoi AC and for this Semantic tagging of Navoi's creative heritage is an important task. The main purpose of improving the corpus is as follows:

- Increasing the importance of Alisher Navoi's authorship corpus as an innovative base and educational resource;

- Enriching the base of Alisher Navoi AC with the semantic base of ghazals from the "Khazayin ul-maoni" collection of the writer in order to read and understand classic literary materials using the corpus, to analyze the artistic work of the students, as well as to form their linguistic, literary and speech competences;

- Providing a semantic description of lexical units in ghazals, including historical words, and forming their database;

- Semantic tagging of the names of historical and cultural famous places and famous people in order to expand the spiritual and mental thinking of users, to increase their knowledge of history;

- Compilation of the classification of content-semantic categories of the lexicon of Alisher Navoi's ghazals forms the basis of our research work.

The principles of authorship corpora improvement technology, the advantages of using a new type of Alisher Navoi's authorship corpus and the requirements for its lexical-semantic tag base have been determined, and the principles of conceptualization of providing information to the corpus have been theoretically justified.

METHODOLOGY

It was mainly relied on the rule-based method and statistical method to improve the author's corpus of a new type. It should be noted that Alisher Navoi's collection "Khazayin ul-maoni" was sorted based on logical criteria. Kulliyat consists of 4 divans, each divan contains 650 ghazals. Currently, in Uzbek literature, Navoi's works are used a lot to understand and study the language of the 15 th century, therefore, the ghazals in this collection, which contains the best poems of the creator, have been semantically tagged, and the historical words have been manually translated into the current language. Additionally, contextual semantics was described in Uzbek language.

A. Rule-based method

Alisher Navoi lived and worked in the 15th century. There is a big difference between the Uzbek language of the Middle Ages and the modern Uzbek language. It contains many lexical units that are out of use for today's readers or whose formal expression has changed. We call them explanatory words. It is unreasonable to show the semantic group or semantic field of such words without clarifying them to the user. Currently, 60% of the language of the Navoi period is incomprehensible to today's readers, that is, many words from that period have become archaic and have fallen out of use. As a result, special dictionaries are required to properly read and understand the works of Alisher Navoi. In order to interactively present the semantic explanation of words that are difficult to understand in the process of reading Navoi's ghazals in the corpus, the historical and obsolete words in the corpus materials were analyzed by Navoi experts according to their meaning in the context using 18 dictionaries. It was identified in the work and included in the database. For example, in the ghazals of the "Khazayin ul-maoni" collection, the word "ganj" is used in 65 places, expressing different semantic meanings. In the "Annotated Dictionary of the Language of Alisher Navoi's Works" published under the editorship of E. Fazilov, 6 different meanings of the word "ganj" are explained on the example of stanzas. In most ghazals, the word ganj means treasure, wealth, it is used in ghazals, as well as in other meanings (Fig. 1).

If the user of the corpus moves the cursor over the word ganj, which is considered as a word, it will be known which lexical meaning it means in the verse (Fig. 2). Through this innovative approach, the user immediately understands the exact meaning of the word (form) by

interpreting it. The lexeme ganj is multi-meaningful, and it is necessary to take into account all its meanings found in verses in semantic tagging. Another example is given in table 1 based on the word *subh* (Table I).

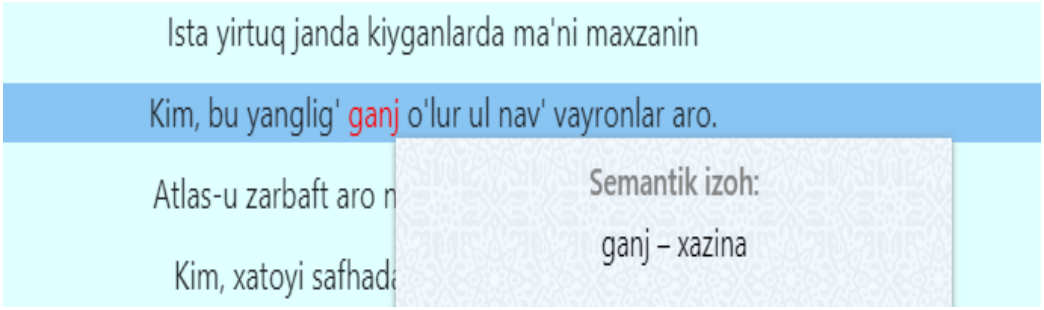


Fig. 2. Semantic description of the word ganj in the 20th ghazal of "Badoe' ul-wasat" divan on the page http://v1.alishernavoicorpus.uz/gazalin_gazal/20/?csrfmiddlewaretoken=17ppht7iQCLs7LfqxXGw2uvtjc JADs JLlQx2615fi8aaWg11oE2CcsCHOcxAw9oD&search_word=ganj in the prototype of the Alisher Navai authorship corpus

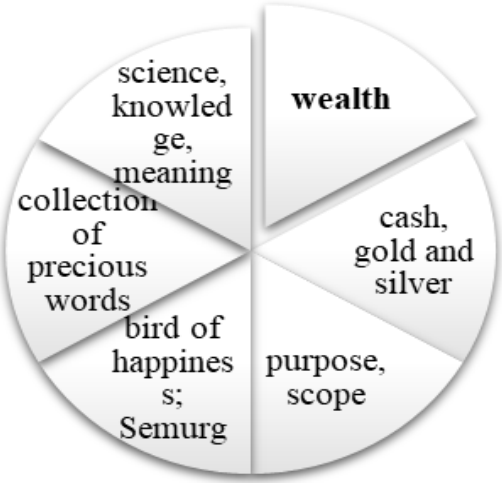


Fig. 1. Semantic meanings of the word "ganj"

TABLE I. THE meaning of the *SUBH* LEXEME EXPRESSED IN GHAZALS

Ghazal number	**word (form)**	**The basis-explanation / meaning**	**Verses**
1	subhig‘a	subh – beauty	Ey navbahori orazing subhig‘a jonparvar havo
16	subh	subh – morning	G‘am tuni subh tilarsen, ko‘ngul uz, zaxming ko‘p
39	subh	subh – morning	Subh chun esti sabo, ichkil qadahkim, bo‘lmog‘ung
76	subhi	subh – morning	Jamoling subhi ochib erdi yuz gul
101	subhg‘a	subh – morning	Ne subhg‘a bu sabohat, ne mehr muncha sabih
148	subhin	subh – morning	Vasl subhin to abad ko‘z tutmasun ushshoq aro
161	subhdin	subh – morning	Qamarg‘a subhdin ravnaq, quyoshqa shomdin zevar
170	subhidek	subh – morning	Shomi hijron subhidek bag‘rimni chok etti sipehr
334	subh	subh – facial light	Garchi ruxsori erur subhi dilafro‘z, valek
448	subhning	subh – morning	Subhning bir nafase asra damin

The main focus of this contextuality principle is to determine the meaning of a specific obsolete word in conjunction with other words in the context based on the rule. This method serves for automatic semantic description of corpus materials using N-gram method.

B.Method of statistical analysis

It was statistically determined that 40% of the words in Navoi’s ghazals are related to the modern Uzbek language, and their contextual semantics was studied. As a result of the research, it was found that 15% of such words (for example, kitob, olam, dunyo, yer; yosh, quyosh, ko‘z; men, sen, u, biz, siz, ular; sari, uzra)) do not require a special semantic description. For example, the word “Sun” is used not only as a cosmic body, but also in meanings such as love and affection. Therefore, such meanings require a contextual semantic explanation in their verse. The

remaining 15% of words that do not have a figurative meaning were automatically given the opportunity to express their semantic meaning in the corpus.

In 2600 ghazals of "Khazain ul-maoni" collection, Navoi's style of creation, skill of using words, range of words used in ghazals, unique writing style were determined using statistical analysis method. For Alisher Navoi's corpus of authorship, the total words in the lexicon were divided into two groups: 1) historical, obsolete - words that are difficult to understand today; 2) words used in modern Uzbek language. The scope and volume of the work are shown statistically in Table II: the table shows 4 divans in the kulliyat, each of which has 650 ghazals, the number of verses in the ghazals, the total number of words in the kulliyat and 2600 ghazals the total number of word forms in the past.

TABLE II. THE AMOUNT OF WORD FORMS IN "KHAZAYIN UL-MAONI" COLLECTION

Name of divans in "Khazain ul-maoni" collection	**Statistics of ghazals, stanzas and verses**	**The total number of words in a divan and the number of words in 650 ghazals**
"G'aroyib us-sig'ar"	650 ghazals: 4975 stanzas – 9950 verses	75,350,000 words in total, 66,954 words in ghazals
"Navodir ush-shabob"	650 ghazals: 4998 stanzas – 9996 verses	71,527,000 words in total, 66,596 words in ghazals
"Badoye' ul-vasat"	650 ghazals: 5001 stanzas – 10002 verses	71,580,000 words in total, 66,539 words in ghazals
"Favoyid ul-kibar"	650 ghazals: 5029 stanzas – 10058 verses	75,911,000 words in total, 66,722 words in ghazals
Total:	**2600 ghazals: 20003 stanzas – 40006 verses**	**There are 294,368,000 words in total, 266,811 words in ghazals.**

RESEARCH RESULTS

Ghazals received a semantic classification in the database based on the principle of conceptuality, that is, a specific word is surrounded by other words that appear in the same stanza, in harmony with the main content of the stanza. As can be seen from Table III, in our research, 266,811 word forms in 2,600 ghazals available in Alisher Navoi's

“Khazayin ul-maoni” collection were semantically processed based on method of statistical analysis. Table III gives the statistics of literary-genre units specific to classic literature with semantic description and tags in the corpus base.

TABLE III. STATISTICS OF SEMANTICALLY DESCRIPTION UNITS IN THE DATABASE OF ALISHER NAVOI’S AUTHOR CORPUS

Explanatory lexical units in Alisher Navoi's ghazals	**Words**	**Proverb**	**Idiomatic expressions**	**Literary poetic arts**					
	Tagged words	***Proverb***	***Expressions***	***Talmeh***	***Tanosib***	***Tazod***	***Tashbih***	***Tasdir***	***Tasbe’***
statistics	266 811	124	92	883	More than 3000	253	124	145	32

As a result of the research, the following information was added to the gazelles in the SQL database:

1) text type of ghazals;

2) audience age;

3) serial number of the ghazal;

4) the historical, obsolete word in the verse and its current semantic explanation was given in separate fields;

5) each comment was coded by ID (Table IV).

In the process of tagging, it was taken into account that a certain word in one verse of Alisher Navoi’s ghazals can give a contextual meaning in the case of collocation, or more precisely, that the totality of meaning intended by Alisher Navoi occurs, in which case they are coded with a single character. Thus, word combinations with a certain meaning were included in one semantic group. For example, when the explanatory words in the verse of ghazal 590 “*Dayr aro tushsa falak engiga xirqam yuruni*” were semantically tagged, a special code number 13536 was attached to all the word forms in the verse. This is, firstly, a way of introducing the poem to the machine, and secondly, the machine

understands that the semantic description given to the words in this line is exactly the semantic description of ghazal number 590 with code 13536.

In the verse shown in Table IV:a) dayr – dunyo; b) falak – osmon; c) eng – yuz; d) xirqa – eski juldur kiyim; e) yurun – yamoq word forms were identified with the number 13536.

TABLE IV. ENCODING OF VERSES

Sequence number in the annotated word base	ghazals number	Word (form)	Explanation / meaning	ID number
20720	590	dayr	dayr – dunyo (world)	13536
20721	590	engiga	eng – yuz (face)	13536
20722	590	falak	falak – osmon (sky)	13536
20723	590	yuruni	yurun – yamoq (patch)	13536
20724	590	engiga	eng – yuz (face)	13536
20725	590	xirqam	xirqam – eski juldur kiyim (old clothes)	13536
20726	590	hajr	hajr – ayriliq (loss)	13537
20727	590	yog‘ini	yog‘in – yomg‘ir (rain)	13537
20728	590	ashk	ashk – ko‘z yosh (tears)	13537
20729	590	juvuni	juvun – daryo (rever)	13537

A search filter was created in Alisher Navoi’s author corpus [http://alishernavoicorpus.uz/uz] using the above fields in the SQL database. The search engine shows the place of use and frequency of the keyword (form).

In the project, six Navoi scientists worked on writing a semantic description of archaic words in 1950 gazelles, in the first version of the corpus – 650, a total of 2,600 gazelles (Fig. 3). This process lasted a year. After completing the semantic description process, each archaic word ID was coded (Table V). It also makes repetitive archaisms recognizable in software and links each word form to its contextual meaning.

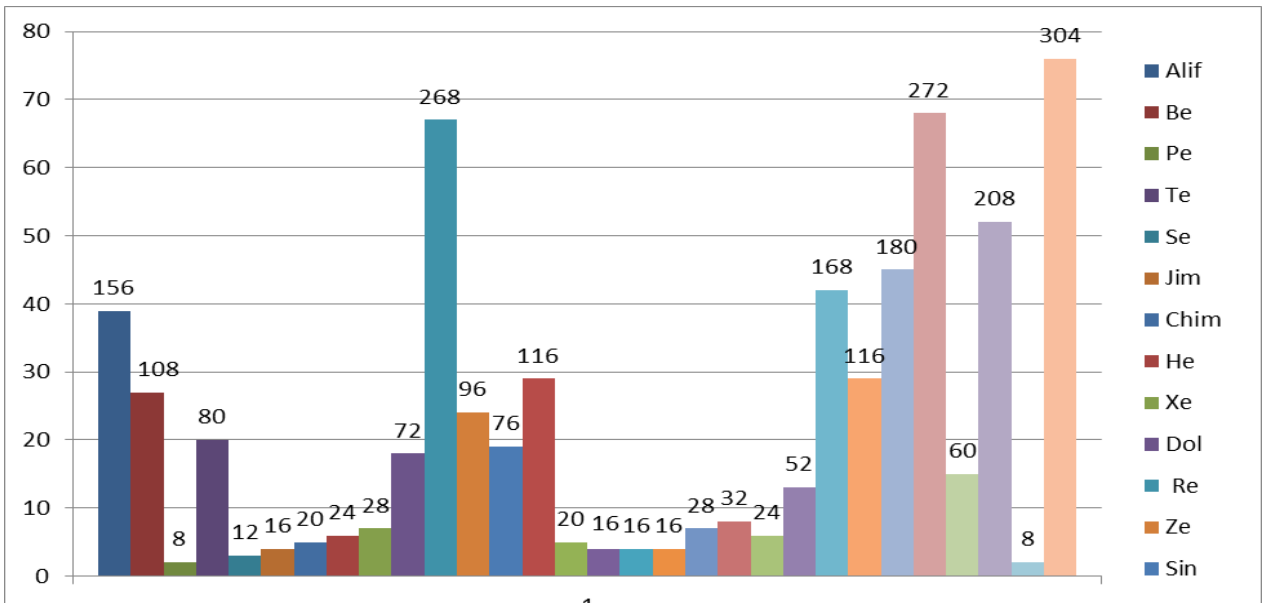


Fig. 3. Arrangement and statistics of 2,600 ghazals in the “Khazayin ul-maoni” kulliyat based on the arabic alphabet

TABLE V. ID ENCODING OF THE WORD “DIMOG”

Ghazal number	**Explanation / meaning *of* the word "dimog‘"**	**ID code**	**Ghazal lines**
167	dimog‘ – kayfiyat, ruhiy holat ***(moodt)***	14898	Birovki mushkdin osoyishi *dimog‘* istar
300	dimog‘ – aql, miya (***mindt)***	28550	Xabt o‘lg‘an elga mash’ala dudi bila *dimog‘*
318	dimog‘ – burun ***(nose)***	31565	Binafshaning nega bo‘lmish *dimog‘i* muncha uluq
395	dimog‘– istak, xohish ***(dream)***	37612	Sen dog‘i bir gul ishi birla *dimog‘imni* qizit
507	dimog‘ – ko‘ngil ***(heart)***	44946	Kim erur andin *dimog‘im* ichra o‘t, ko‘zimda – su

The word “dimog‘” is used 41 times in the ghazals of collection "Khazayin ul-Maoni". The lexeme "dimog" is considered a polysemantic word (in a special explanatory dictionary it has 6 meanings) (Fig. 4), the context is necessary to determine its meaning in the poems. At this stage, the semantic valences of the archaic word on the left and right should be taken into account based on the N-gram method. Only then will the

original semantics appear. As a result of providing a semantic description that does not depend on the contextual meaning of an individual word, the main idea expressed in the entire ghazal may change. This is, in fact, a subtle and complex aspect of the semantic analysis of ghazals. The subtle spiritual differences in the word "dimag'" in stanzas in poems were revealed only with the help of explanatory dictionaries and Navoists. Dictionaries are the main source, but contextual semantics not reflected in dictionaries is quickly promoted by Navoists. Thus, as a result of the line-by-line semantic description of archaic words in Alisher Navoi's ghazals, they have a contextual explanation, and the exact dictionary meaning of a certain archaism in a line is presented to the user interactively when clicking on it in the corpus (Fig. 5).

Based on the performed works and prepared databases, the workflow in the corpus was algorithmized based on the architecture shown in Fig.7.

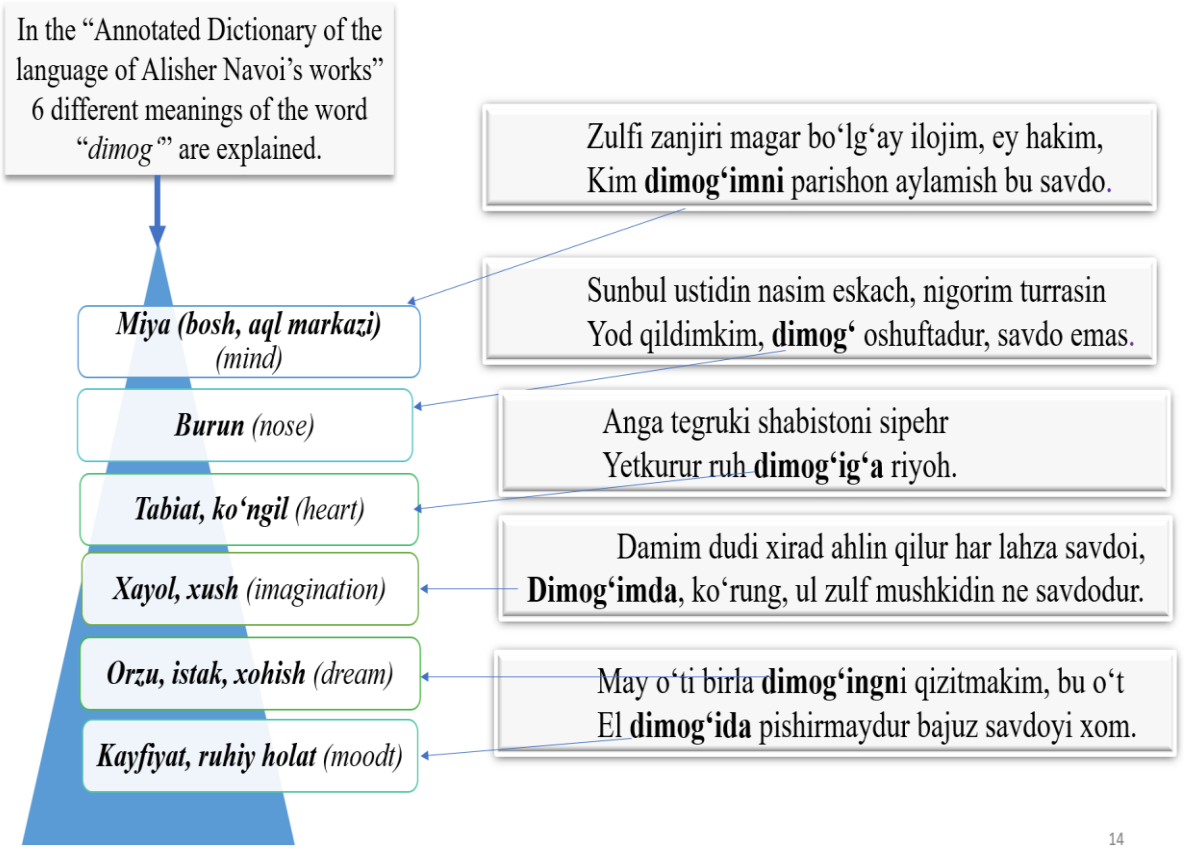


Fig. 4. "Dimog" is given 6 comments in the "Dictionary of Alisher Navoi's works"

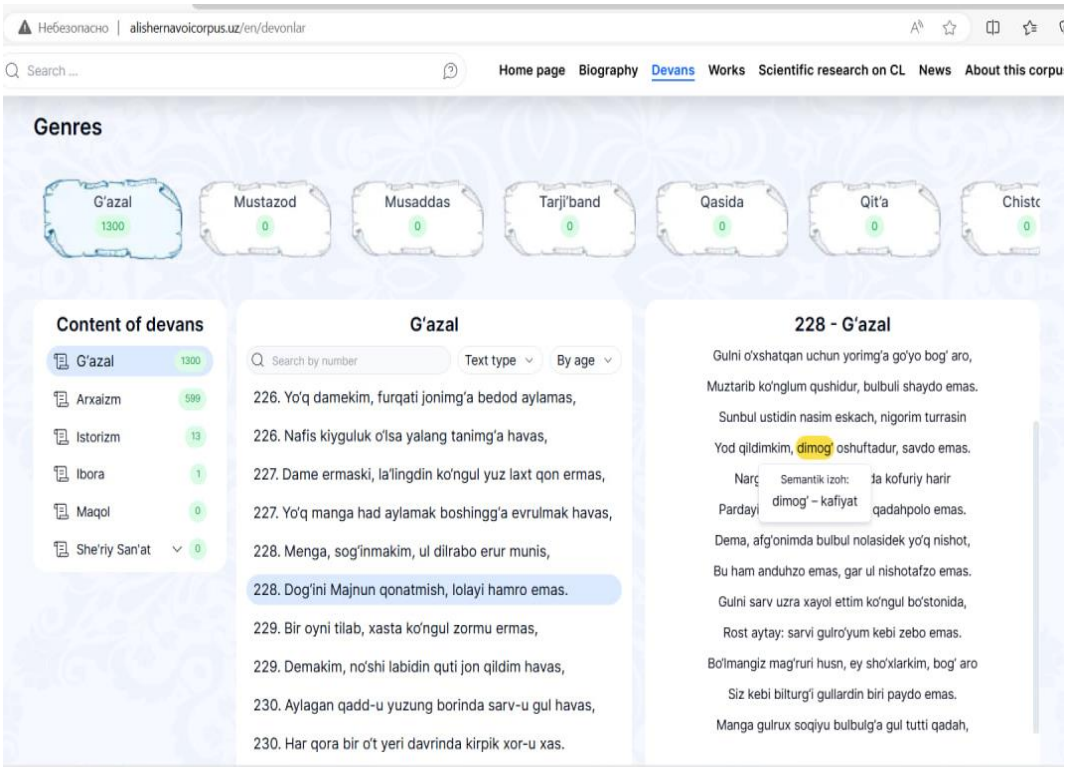


Fig. 5 In the corpus, the semantic description of the word “dimog” in verse 4 of ghazal 228 is presented interactively (by clicking the mouse on this word) (http://alishernavoicorpus.uz/uz/devonlar?search=dimog%27)

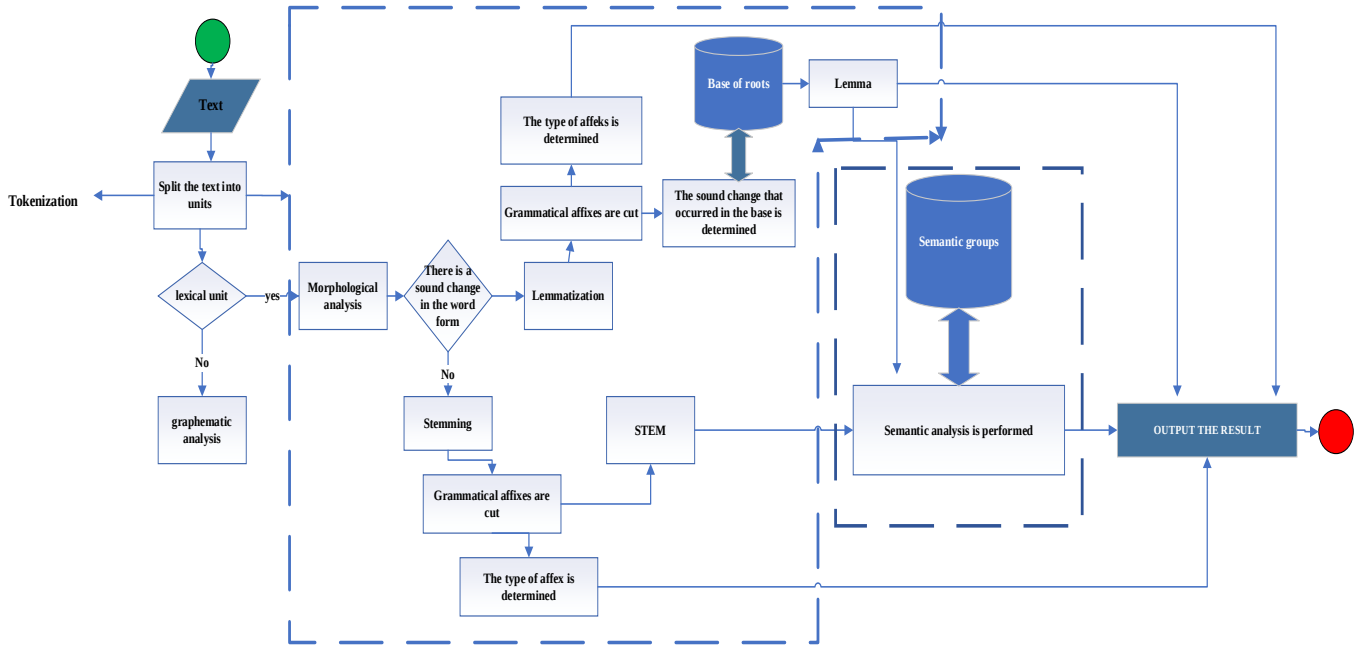


Fig. 7. Alisher Navoi authorship corpus workflow has the following architecture (e.i. BPMN)

The historical significance of the author's corpus. Another advantage of Navoi's ghazals is that they contain historical, literary, mythical figures, geographical and ethnic place names, which creates the art of talmeh from an artistic point of view. The main thing is that the reader learns about the names of historical, artistic, and geographical, ethnic places in the process of determining the content of the explanatory words in the bayts. In the following bayt, the poet provides the reader with both educational and historical information through the images of historical figures such as Hotam, Qarun, Afridun and the legendary hero - Jamshid:

Where is Hotam, where is Qarun, where is Jamshid-u Afridun?
So donate when you get the attention of the world [6].

Hotam is a man known in the East for his generosity and nobility. He is known as Hotami Toy because he is from a Tay tribe in Yemen. Qarun is the name of a greedy rich man who lived in the time of Moses (a). He became very rich because of his magic and plotted against Moses. Moses (a) goes into the depths of the earth because of his prayer. Legend has it that the gold deposits discovered today were in fact the treasures of Qarun. Jamshid is the legendary king of ancient Iran. He invented the World Cup, which reflects not only the present, but also the past and future of the world. Afridun (Faridun) is the sixth ruler of the Peshdodi dynasty of ancient Iran. He is the epitome of justice. They were blessed with such a great blessing: a crown, a throne, innumerable possessions, but they did not live forever in this mortal world, they died. It can be concluded from the content of the verse that if Allah rewards a person with wealth and state, and gives alms to the needy, and always strives for good, good deeds will seal his name forever.

Linguistic significance of AC. The author's corpus has the ability to show the author's language in a complete, wide, objective way, thus such corpora have an advantage over other databases. The corpus can serve as a basis, source, and tool for a variety of research. Another advantage of such corpuses is that they allow you to know not only the language of any word or sentence, but also the language of the whole work. It should be noted that the author's corpus, being the most convenient source of information for researchers, has relied on an integral and important part of today's theoretical and practical fields. Scientific research always requires evidence-based work, the collection of facts within a specific research topic, and the systematization of collected material. In carrying out such a large-scale work, author's corpus is an

invaluable tool that saves the researcher's time and effort. In fact, author's corpus is not only a tool to speed up the technical process, but also a system that can include various forms of a particular author's language into an information system and answer unexpected questions about the author.

From the Navoi author's corpus all the linguistic features of the poet's vocabulary, its changes - the renewal of the language from the point of view of that period and the rapid, clear and accurate knowledge of the obsolescence, activation and passivation of words and linguistic phenomena in today's social life gets accurate information; allows a user to easily create large-scale academic dictionaries of various types and automatically process textsThe fact that the information in the author's corpus is edited on the basis of scientific sources guarantees the reliability of the corpus. A complete reflection of the whole spectrum of linguistic phenomena allows for a comprehensive and objective study of the necessary information. The large linguistic corpus can be used in comparative-historical and comparative-typological researches of linguistics, lexicographic researches, creation of XV-century dictionaries with the help of Alisher Navoi's works, consolidation of historism and archaisms, researches on word etymology, understanding the interpretation of words that are difficult for the modern reader to understand using the rapidly presented array of contextual examples in the corpus. It also provides many linguistic possibilities, such as finding its semantic interpretation. This will serve to increase the number of those who are interested in our classical literature, regardless of age, understand the language of the Navoi period and enjoy the spiritual treasures of Navoi by reading his works. The linguistic basis of the author's corpus is "going from a word-lexeme to its content". In this case, the translation is based on the morphological, syntactic and semantic analysis of the language, dictionaries, grammatical rules, the body of the text.

The educational value of AC. AC is important in highlighting the educational, social, historical, linguodidactic, significance of the author's works in the educational process, in classifying the dialectal features of words used in the author's works, in studying the semantic features of the national language.

The use of copyrighted material for educational purposes is a very important issue. Indeed, language corporations are the most important learning tool in the educational process. This is because the thematic text serves as a convenient source of information in the preparation of

educational material in the educational process. The importance of the author's corpus in linguodidactics is that the corpus is an incomparable treasure for the teacher, from which he can prepare a multifaceted, meaningful teaching material for teaching. The 15th century language style can be taught to students in a way that is comparable to today's language. As a result of statistical analysis of literary texts, the most frequently used language units in the text (nouns, adjectives, keywords, verbs, grammatical forms, sentence construction, in a word, the writer's style – a specific style of writing indicative means) are determined using lingvostatic analysis. A comparative analysis of evidence from different texts allows us to determine the content of the text, the period in which the text was composed, the nature of the arguments, and even the authorship. Alisher Navoi's author's corpus focuses on historical and archaic words that are no longer in use today, as well as words that are rarely used. The semantic base of such lexical units was created to express the personality of Navoi and the language of the XV century to the user. It is difficult for the average reader to understand the true meaning of poems without understanding the meaning of the words. Alisher Navoi's author's corpus, created on the basis of semantic tags based on annotated dictionaries of 650 ghazals of Navoi's Badoye ul-vasat, provides fast, convenient and reliable information. The bytes and verses in the corpus are approached from the perspective of Navoi's time, and the explanatory words are analyzed on the basis of sources. Navoi's ghazals contain a large number of words and phrases that are out of use today, and their pronunciation and meaning have completely changed (Table 1).

TABLE 1. WORDS WHOSE MEANING HAS CHANGED TODAY

Words that are out of use in Navoi's ghazals today	**The words in Navoi's ghazals that are out of use today in modern Uzbek linguistics**
joma	coat (cloth)
ajmal	the most beautiful, the most handsome
azhar	very clear, the brightest
baso	a lot, many
dark	perception, intellect, comprehension
deh	village
zardak	carrot

The main reason for the appeal to the works of some great representatives of literature in the educational process is the diversity of

creative talent, the presence of high-level works that lead to deep reflection, as well as the world recognition given to them, the artistic expression of artistic and aesthetic ideas.

The social significance of the author's corpus. Author corpora increase students' research potential and allow them to conduct small-scale research based on credible evidence. It should be noted that the social significance of the author's corpus is wide and can be used in linguistic, ethnopsycholinguistic research, native language, literature, foreign language teaching, automatic word processing, translation programs. Author's corpus can be widely used in all spheres of life: linguists, translators, teachers, programmers, journalists, editors. Paraphrases, paremas, and wise sayings from a particular author increase our vocabulary and help us develop our speaking skills. Authorship corpus is also the most convenient means of tracking changes in the vocabulary of a language (neologisms, historisms, archaisms). The possibility of lexical-semantic combination of words used by the author in the process of analysis expands the possibility of comparing the dictionary and grammar of the ancient and modern generations. Through the author's corpus, the versatility of an author's word provides practical help in distinguishing the possibility that it may belong to several semantic categories at the same time. Through the corpus of authorship, it is possible to find out not only the poet's linguistic views, but also his attitude to the social sphere and his views on political issues.

Educational significance of author's corpus. Preserving our spiritual heritage, developing the skills of honoring the spirit of our ancestors, developing a culture of reading, deep thinking, broadening our thinking. On moral and educational issues, Ibrahim Haqqul thinks: "The deeper and more thoroughly our youth knows Navoi, the more they will master the secrets of enlightenment, kindness and perfection. A person who is deeply rooted in Navoi's words, whether he wants to or not, realizes the dignity and power of humanity. Anyone who follows Navoi's teachings is determined to alleviate the people's suffering.

In this study, the semantic description of archaic words in the ghazals of the "Khazayin ul-maoni" collection for Alisher Navoi author's corpus was highlighted.

The lexicology of the time Navoi lived and the current lexicon differ in many aspects, in particular, in order to ensure that the archaism and historicisms found in ghazals and explanatory lexemes with narrowed meaning are understandable and readable, semantic tagging and lexical,

morphological should be analyzed. Currently, in the corpus database, each semantic relationship of polysemous words expressed in verses is being semantically tagged on the basis of faceted classification. Such an approach has a semantic group of all the words in the corpus materials, and helps to correctly derive their contextual semantics. By dividing the words in the ghazal into lexical-semantic groups, it becomes possible to know the poet's style, the skill of using words, in a clear and complete way, in a short time.

In conclusion, it is appropriate to mention the following main facts about the authorship corpus of Alisher Navoi:

1. Linguistic and technical foundations of creation of the corpus of works belonging to Alisher Navoi, a phenomenon of Turkic peoples, were developed.

2. About 213,000 words (phrases) in the works of Alisher Navoi, which are difficult for today's readers to understand, were explained.

3. The corpus interface is displayed in four languages - Uzbek, English, Russian and Turkish.

4. Currently, the semantic base of 212,781 explanatory words in 2,600 ghazals consisting of 20,003 bytes - 40,006 verses are included in the corpus database.

5. The corpus of ghazals includes the following literary units: proverb - 110, idiom - 260, talmeh - 883, tazad - 474, tanosib - 2566, tasbe' - 32, tasdeer - 145, tashbeh - 124 archaic words - 527, historical words - 13.

6. The prologue of this project, i.e. the initial version (http://v1.alishernavoicorpus.uz/) and its improved new type (http://alishernavoicorpus.uz/uz) have been prepared and presented to users for use. (https://youtu.be/744o55Tqx9E)

7. The design of the corpus is developed with a national spirit.

8. Received 5 copyright certificates from the Intellectual Property Agency for corpus and semantic tag database.

Teachers and students of higher and secondary special educational institutions, teachers working in the field of public education, readers of all school age, as well as marketers, our compatriots living abroad, foreign teachers and students learning the Uzbek language, all sections of the population interested in the Uzbek language can use From Alisher Navoi's corpus of authorship in their advantage.

O‘ZBEKISTON RESPUBLIKASI
OLIY TA’LIM, FAN VA INNOVATSIYALAR VAZIRLIGI

TOSHKENT DAVLAT O‘ZBEK TILI VA ADABIYOTI UNIVERSITETI



ALISHER NAVOIY MUALLIFLIK KORPUSI

FOYDALANISH BO‘YICHA YO‘RIQNOMA

Toshkent – 2024

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I. KIRISH

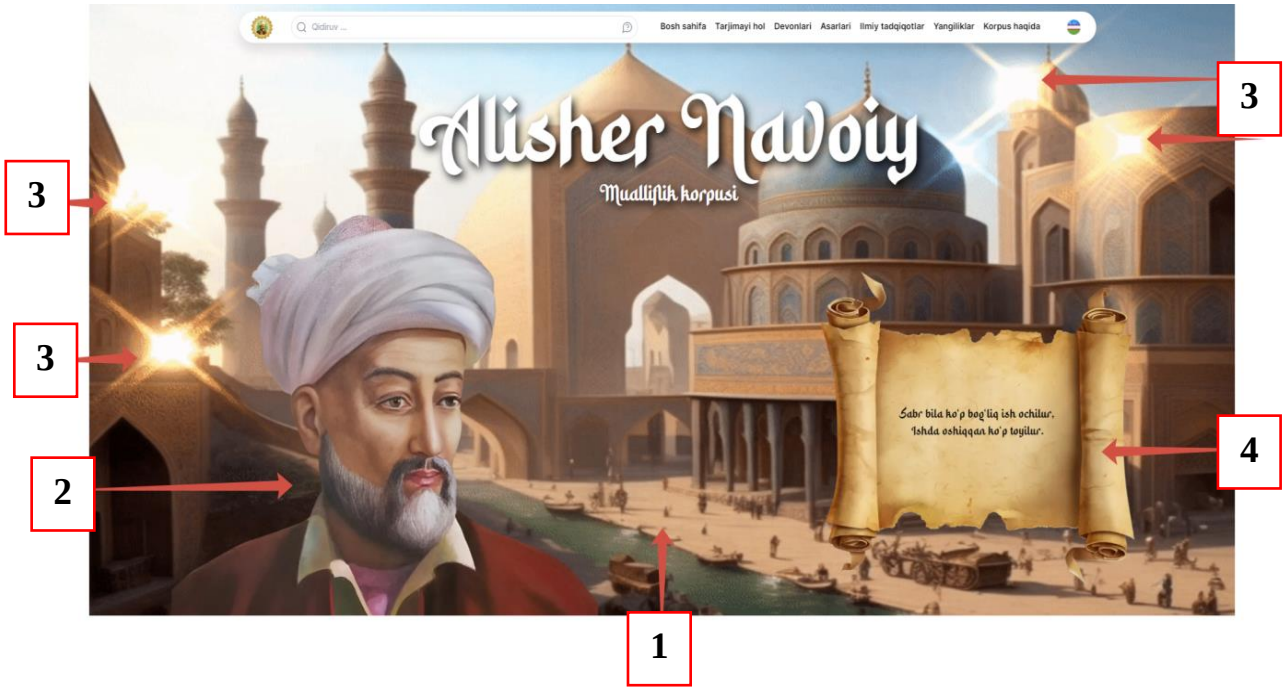
Alisher Navoiy mualliflik korpusiga kirish

1. Internet brauzeri ochiladi.
2. Brauzerning URL satriga alishernavoicorpus.uz hosting nomi yoziladi, Inter tugmasini bosilib, Alisher Navoiy mualliflik korpusi (keying o‘rinlarda: korpus)ga kiriladi (http://alishernavoicorpus.uz/uz).



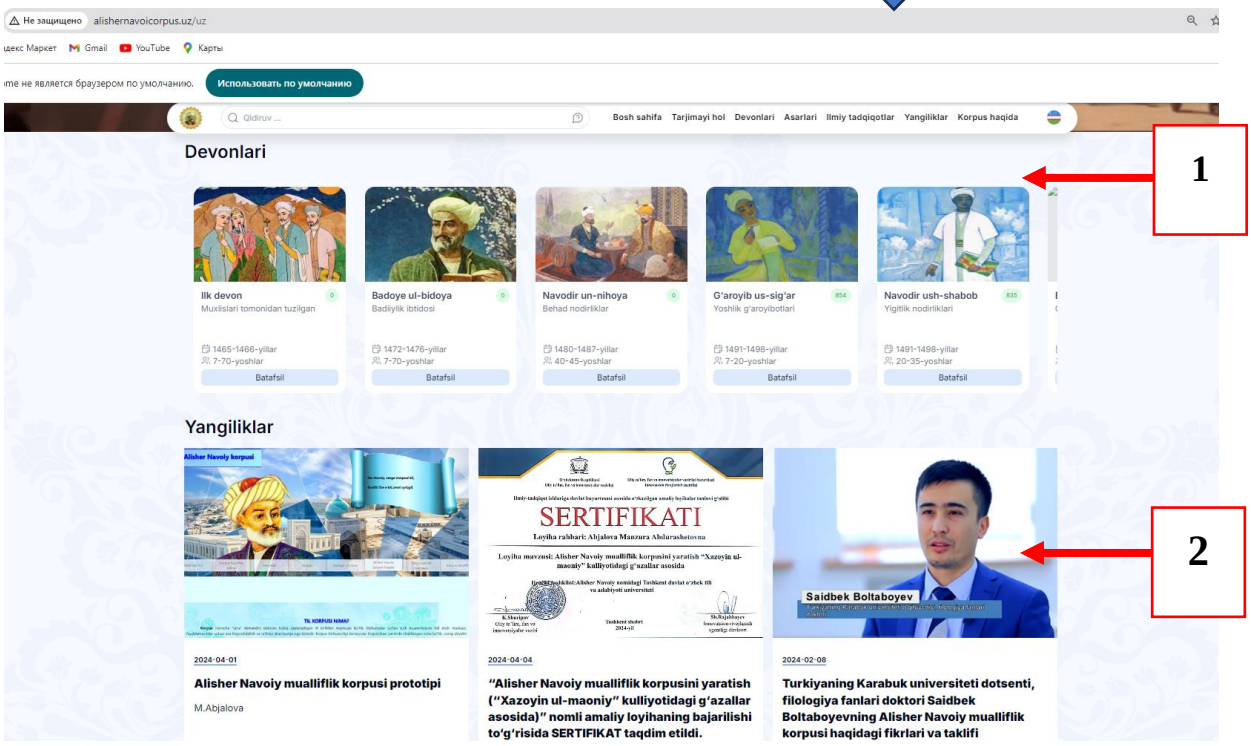
II. BOSH SAHIFA

Dastlab bosh sahifa ochiladi. Unda Alisher Navoiy yashagan Hirot ko‘rinishi aks etgan fon (1), Alisher Navoiy siymosi (2), bu ulug‘vor shoirning barhayotligini anglatuvchi ko‘tarilayotgan quyosh shu’lalarining 3D effekti (3), Navoiy hikmatlaridan parchalarni namoyon etib turuvchi bitik (4) – barchasi jam bo‘lib, Alisher Navoiy yashagan davr va uning ijodi haybati illyustratsiyasini berishga xizmat qilgan.

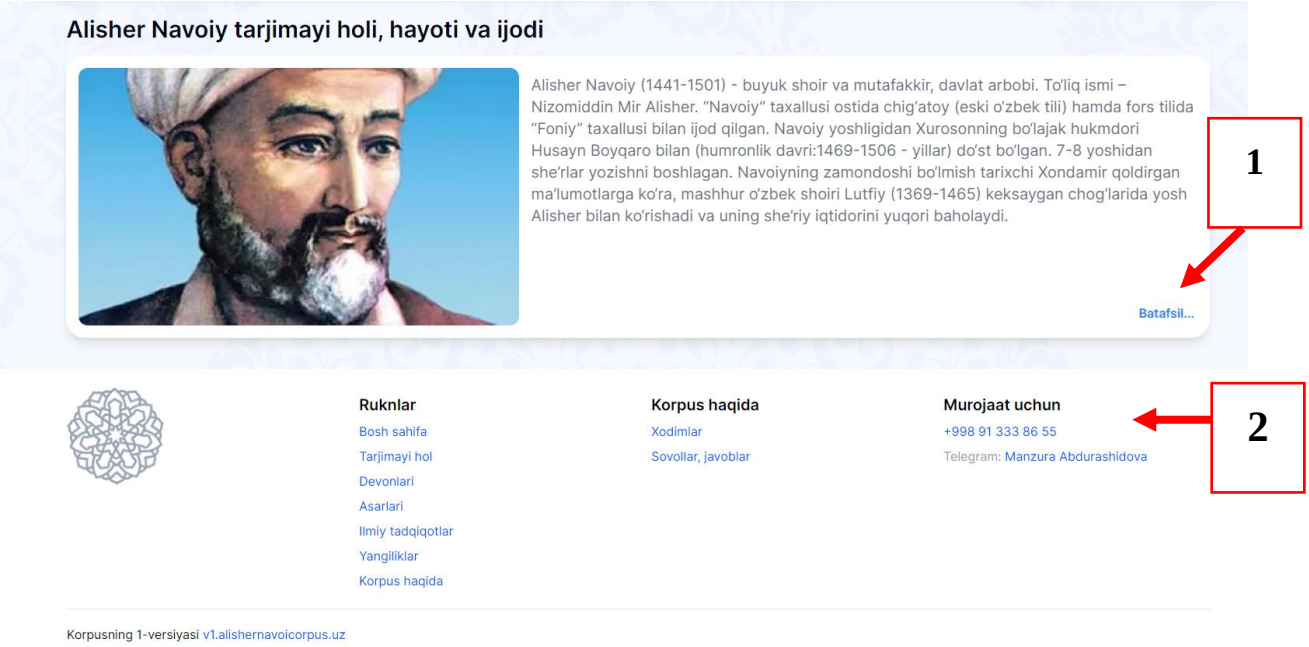


Ushbu asosiy fon pastida Alisher Navoiy devonlariga o‘tish havolasi berilgan (1).

Keyinda esa “Yangiliklar” havola qilingan (2):



Bosh sahifaning so‘ngida Navoiy hayoti va ijodi sahifasiga havola (1) va “Korpus ruknlari”, “Korpus haqida”, “Murojaat uchun” ma’lumotlar berilgan maydon berilgan (2)



III. INTERFEYS

Xorijlik qiziquvchilar uchun foydalanishga qulaylik yaratish maqsadida korpus interfeysi 4 tilli (o‘zbek, ingliz, rus va turk tillari) qilindi. Shuningdek, asosiy sahifadagi bitikda berilgan hikmatlar ham interfeys tiliga asosan 4 tilda taqdim etiladi.



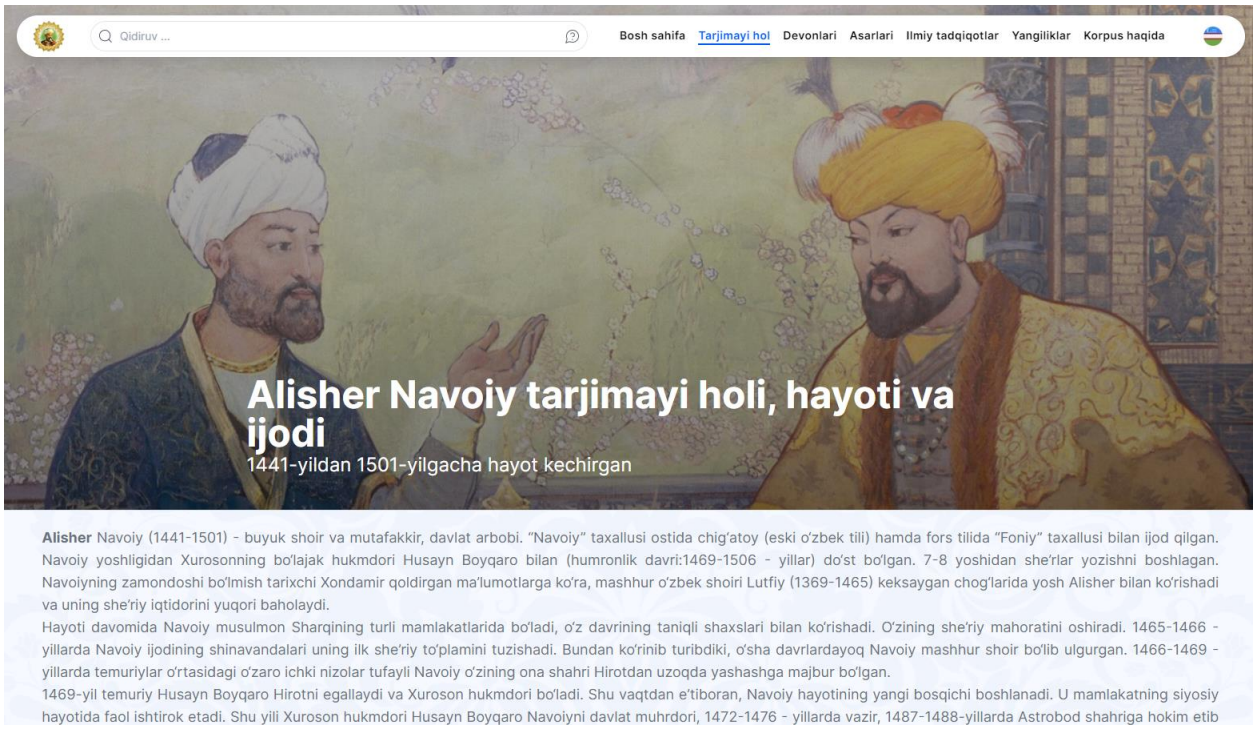
IV. RUKNLAR

Korpus quyidagi 8 rukndan iborat:

- Bosh sahifa
- Tarjimayi hol
- Devonlari
- Asarlari
- Hikmatlari
- Ilmiy tadqiqotlar
- Yangiliklar
- Korpus haqida

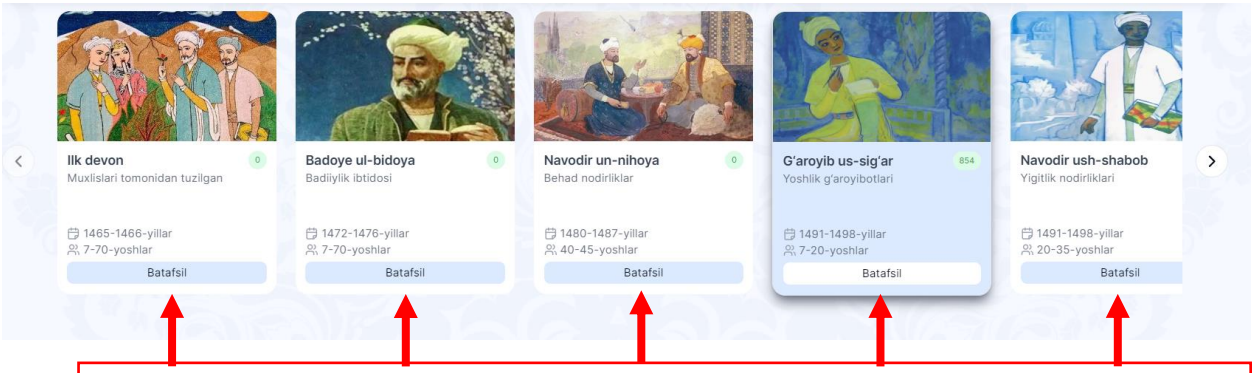


Korpusning “Tarjimayi hol” ruknida asosiy ilmiy manbalar asosida Alisher Navoiy hayoti va ijodiga oid muhim ma’lumotlar, e’tiborga molik hayotiy va ijodiy faktlar berilgan. Ustozlari yozilgan.



4.1. DEVONLARI

“Devonlari” ruknida shogirdlari tomonidan jam qilingan “Ilk devon” (1465-1466), Alisher Navoiyning o‘zi yaratgan 8 devon va keyinchalik ulug‘ mutafakkirning muxlislari tomonidan jamlangan “Oqqo‘yinli muxlislar” (1471) devoni berilgan. Har bir devon nomi va unga oid qisqacha tavsif ostidagi “Batafsil” tugmasi bosilganida mazkur nomdagi devonning (“To‘la asarlar to‘plami”dan olingan) to‘liq pdf shakli ochiladi. Foydalanuvchi devonni to‘liq holatida o‘qishi, uni yuklab olishi mumkin bo‘ladi.



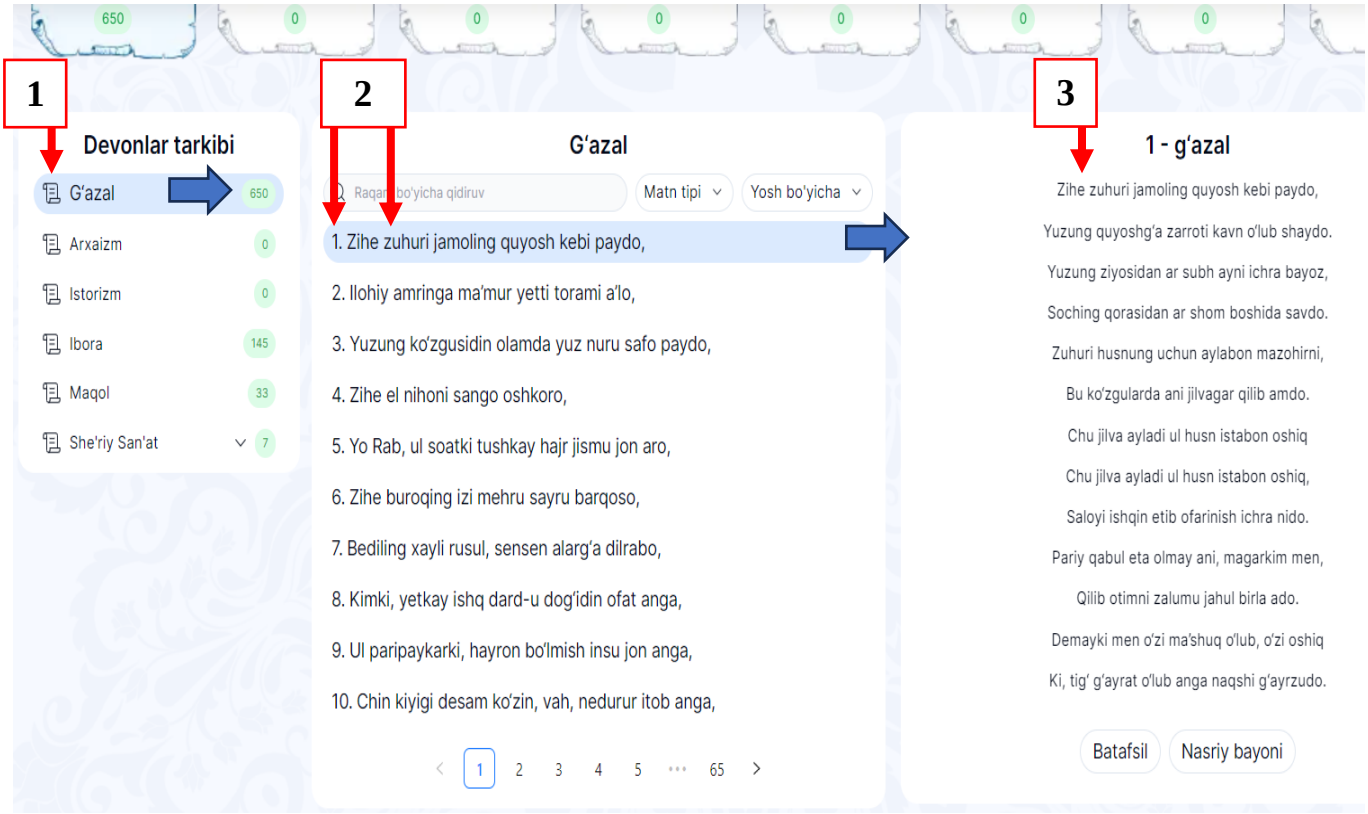
"Batafsil" tugmasi bosilganda ko'rsatilgan nomdagi devonning ("To'la asarlar to'plami"dan olingan) to'liq pdf shakli ochiladi.

E'tiborli jihati shundaki, mazkur rukn korpusning maxsus ishlangan matnlar bazasi bilan bog'langan bo'lib, matnlari qayta ishlangan devonlar bo'yicha qidiruv imkoniyati mavjud. Korpusdagi statistic ma'lumotlar ham ushbu baza asosida taqdim etiladi. Ayni damda "G'aroyib us-sig'ar"da ushbu devondagi 650ta g'azal+63ta ibora+121ta she'riy san'atlarga doir misollar – jami 854ta ijod namunasi; "Navodir ush-shabob"ga oid 650ta g'azal+145ta ibora+33ta maqol+7ta she'riy san'atlar bo'yicha misollar – jami 835ta; "Badoye ul-vasat"da mazkur devondagi 650 g'azal+527ta arxaizm+13ta istorizm+15ta ibora+39ta maqol+247ta she'riy san'atlarga oid misollar – jami 1491ta; "Favoyid ul-kibar" qismida esa 650ta g'azal matnining ma'lumotlari shakllantirilgan.



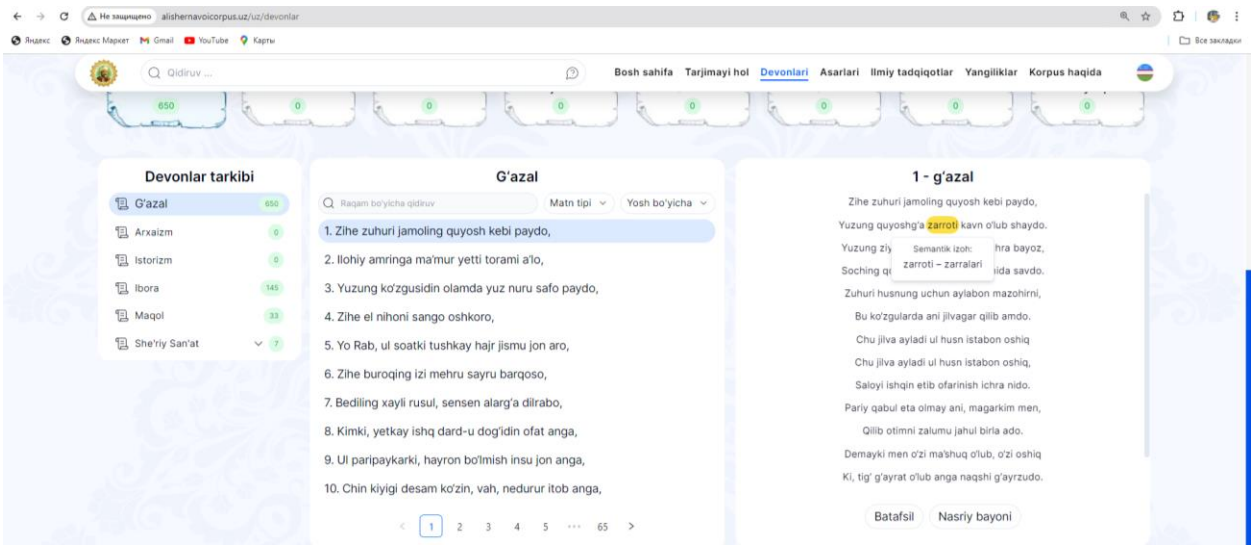
AL-662205561 raqamli "**Alisher Navoiy mualliflik korpusini yaratish ("Xazoyin ul-maoniy" kulliyotidagi g'azallar asosida)**" (keying o'rinlarda: amaliy loyiha) nomli amaliy loyiha doirasida bajarilgan barcha ma'lumotlar bazasi ushbu "Devonlari" ruknida namoyon bo'ladi. Misol uchun, "G'aroyib us-sig'ar" devoniga o'tilganda undagi jamiki ma'lumotlar bazasi "Devon tarkibi"da ko'rinadi.

Jumladan, “G‘azal” satri bosilganida (1) 650 g‘azal tartib raqami bo‘yicha, g‘azalning 1-satri bilan (bunday qulaylik ma’lum raqam ostida qanday g‘azal o‘rin olganligini aniqlashga xizmat qiladi) yon oynada ochiladi (2). Muayyan g‘azal tanlab bosilganida uning yonida boshqa oynada tanlangan g‘azalning to‘liq matni ochiladi (3).

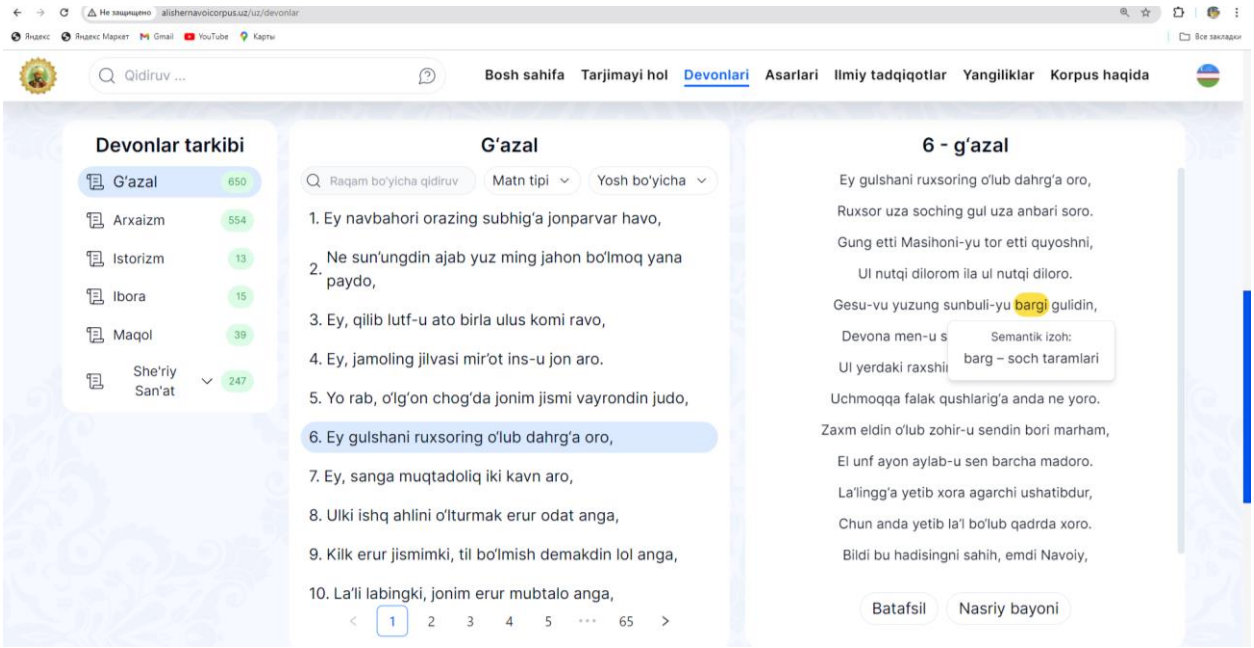


SEMANTIK TAVSIF

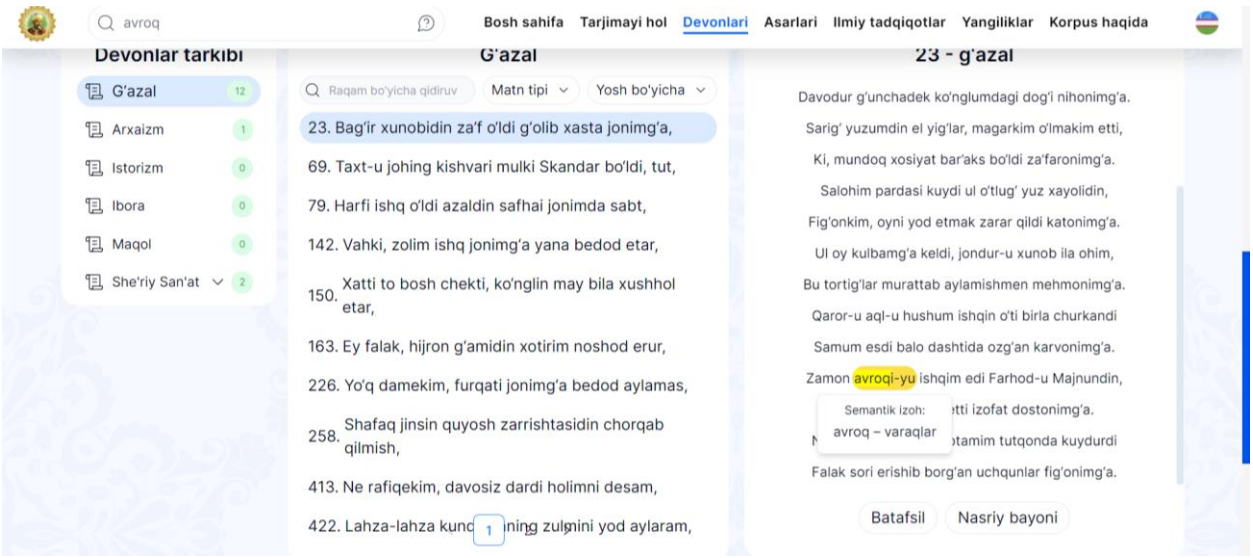
Amaliy loyihaning asosiy maqsadi o‘laroq “Xazoyin ul-maoniy” kulliyotidagi jami 2600ta (har bir devonda 650tadan*4 devon=2600) g‘azaldagi izohtalab leksik birliklar (*hozirgi zamon o‘quvchisi uchun tushunarsiz so‘zlar: arxaizm va istorizmlar; forsiy izofalar, izohlovchilar, mashhur shaxs va joy, tarixiy nomlar, so‘z birikmali holatidagi badiiy ifodalar, kontekstual ko‘chma ma’nolar*)ning semantik tavsiflari bazasi tayyorlangan bo‘lib, buning natijasida korpusdagi g‘azallarni o‘qiyotgan foydalanuvchi tushunmagan yoki umuman bilmagan leksik birlikning ustiga sichqonchani olib borishi bilan uning **kontekstual semantik tavsifi** chiqariladi.



1-rasm. Korpusdagi “G‘aroyib us-sig‘ar” devonining 1-g‘azali 2-misrasida mavjud “*zarroti*” so‘ziga “*zarralari*” kontekstual semantik tavsifining berilishi.



2-rasm. Korpusdagi “Badoye’ ul-vasat” devonining 6-g‘azali 5-misrasida mavjud “*barg*” so‘ziga “*soch taramlari*” kontekstual semantik tavsifining berilishi.

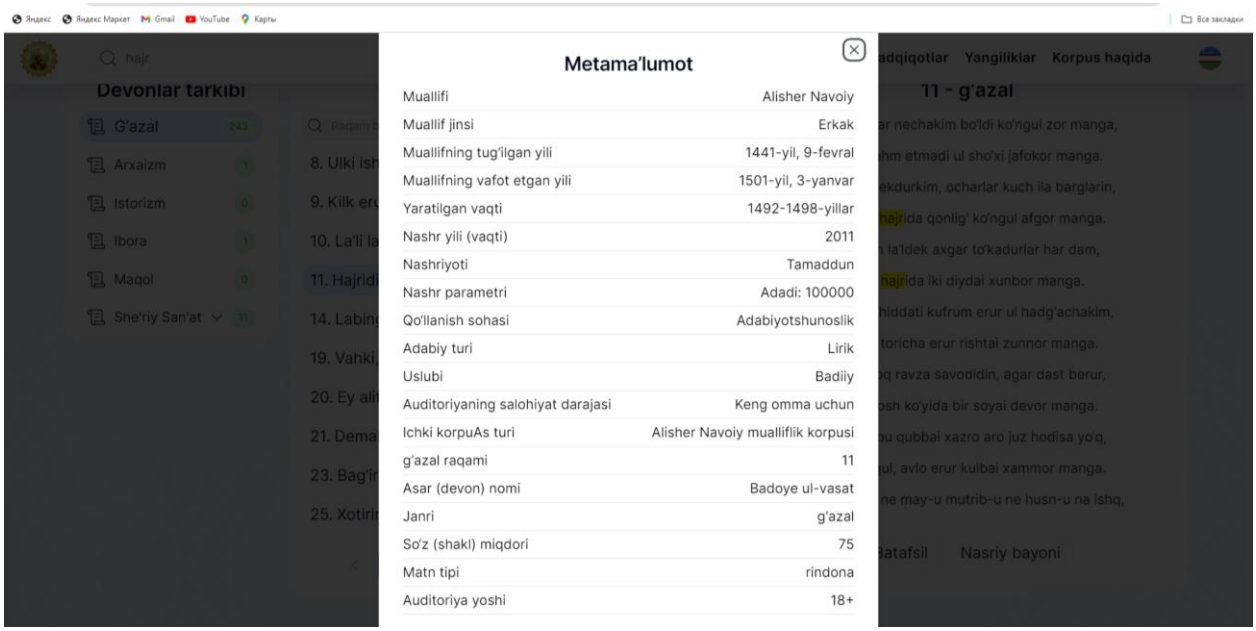


3-rasm. Korpusdagi “Badoye’ ul-vasat” devonining 23-g‘azali 10-misrasida mavjud “*avroq*” so‘ziga “*varaqlar*” kontekstual semantik tavsifining berilishi.

METAMA’LUMOT

Til korpuslariga qo‘yilgan talablardan biri unda matnlarning metama’lumoti bo‘lishi talab etiladi, ya’ni matn muallifi, muallif jinsi, yozilgan vaqti, nashr yili, qo‘llanish sohasi, auditoriya Yoshi, matn uslubi kabi ma’lumotlar berilishi talab etiladi. Bu bir tomondan matn yuzasidan asosiy ma’lumotlarni taqdim etsa, ikkinchi tomondan korpus menejerini shakllantirishga xizmat qiladi. Korpus talabiga monand va aytilgan 2 imkoniyatni yuzaga keltirish uchun Alisher Navoiy mualliflik korpusida ham har bir devon g‘azallari uchun jami 2600 xil metama’lumot ishlab chiqildi. Metama’lumot bilan tanishish uchun g‘azalning to‘liq matni berilgan oyna pastidagi “Batafsil” tugmasi sichqoncha yordamida bosiladi va natijada “Metama’lumot” oynasi ochiladi.

Quyidagi korpusdan olingan rasm (skrinshot / fragment)dan “Badoye’ ul-vasat” devonidagi 11-g‘azal metama’lumoti bilan tanishish mumkin. Undan g‘azal 75 so‘zdan iboratli, g‘azal matni rindona tipga mansubligi, g‘azalni 18+ yoshdagi foydalanuvchilar yaxshi tushuna olishi (auditoriya yoshi)ni bilib olish mumkin.



4-rasm. “Badoye’ ul-vasat” devonidagi 11-g‘azalga metama’lumotning taqdim etilishi.

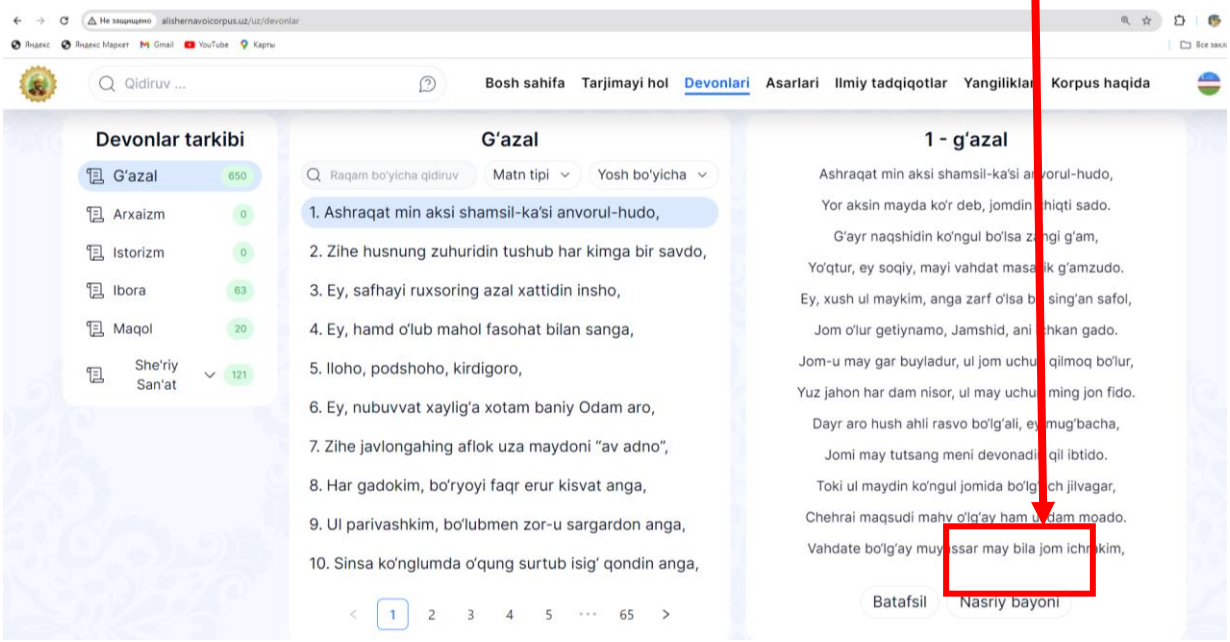
Umumiy metama’lumot. Bunda devonga mansub umumiy ma’lumotlar beriladi. Masalan, Alisher Navoiyning “Badoye’ ul-vasat” devoni g‘azallari qamrab olingan umumiy metama’lumotlarga quyidagilar kiradi:

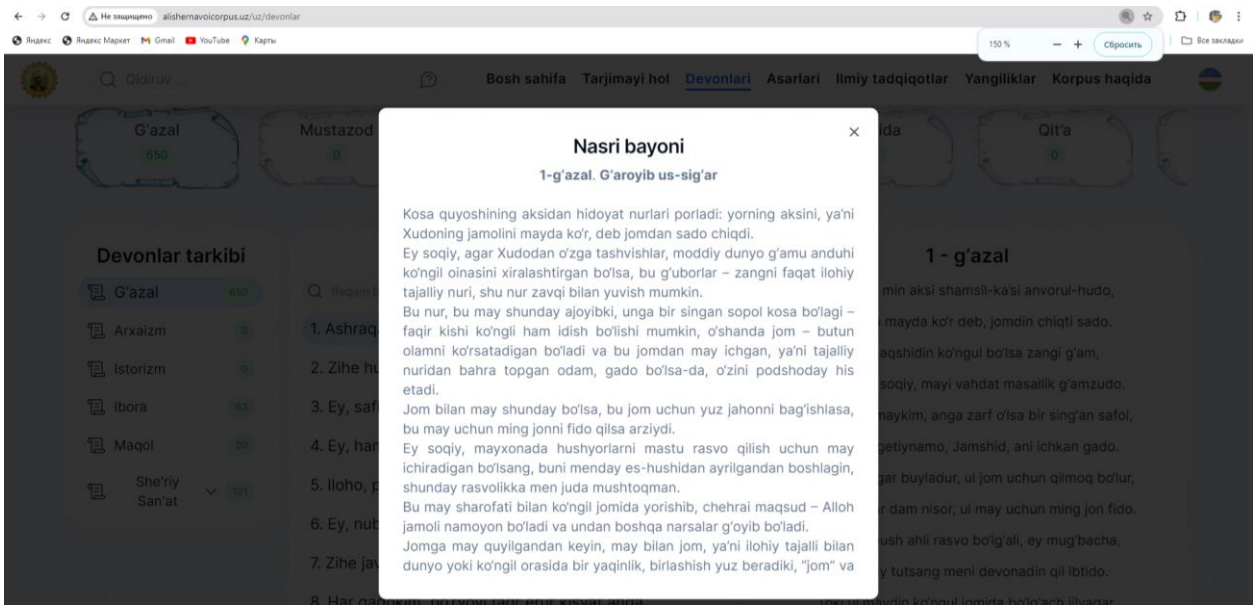
1) asar nomi (“Badoye’ ul-vasat”);
2) muallifi (Alisher Navoiy)
3) muallif jinsi (erkak);
4) muallifning tug‘ilgan yili (1441-yil, 9-fevral);
5) muallifning vafot etgan yili (1501-yil, 3-yanvar);
6) devon tuzilgan vaqt (1492-1498 yillar)
7) nashr yili (2011-yil);
8) nashr parametri (adadi);
9) nashriyoti (“Tamaddun” MChJ nashriyoti);
10) qo‘llanish sohasi (adabiyotshunoslik);
11) adabiy turi (lirik);
12) janri (g‘azal);
13) voqeya vaqti va joyi (Hirot);
14) matn uslubi (badiiy)
15) matn tipi (orifona, oshiqona, rindona);
16) auditoriya yoshi (15+,18+ yosh);
17) auditoriyaning salohiyati (keng omma uchun);

18) ichki korpus turi (mualliflik);
so‘zshakl miqdori (66 539).

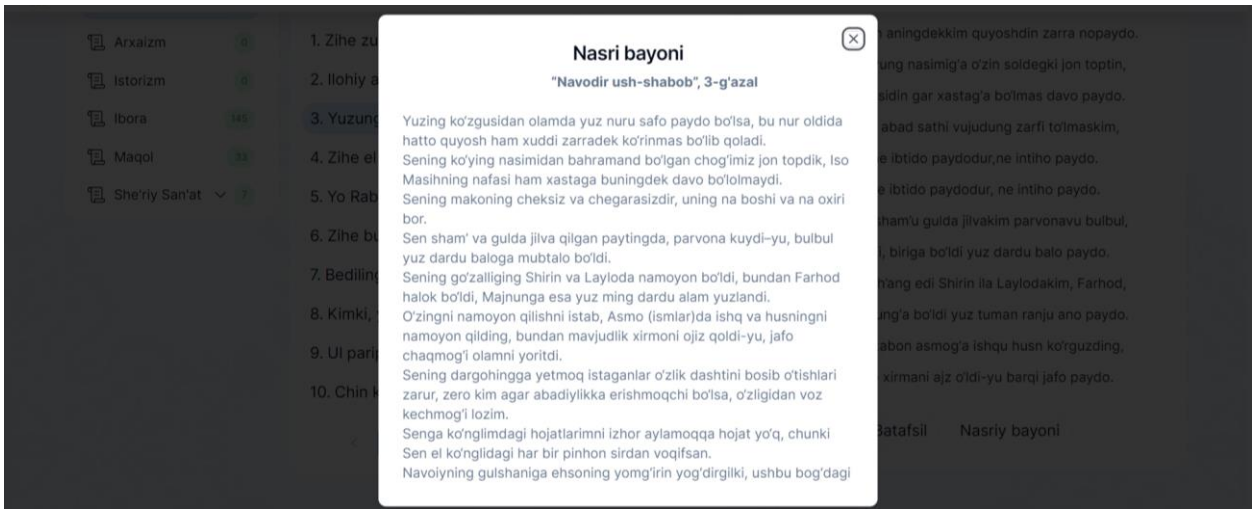
NASRIY BAYON

Alisher Navoiy ijodini o‘qib tushunish, ma’nolar maxzan (xazinasi)ni topish, Navoiy ijodini ommalashtirish maqsadida nafaqat kontekstual semantik izohlar bazasi yaratildi, balki g‘azallarning to‘liq matniga ularning nasriy bayonlari (ilmiy sharh emas) ham alohida baza sifatida jamlanib, har bir g‘azalga tegishli nasriy bayoni biriktirib chiqildi. Nasriy bayon bilan tanishish uchun g‘azalning to‘liq matni berilgan oyna pastki qismidagi “Nasriy bayoni” tugmasi sichqoncha yordamida bosiladi va natijada bayon alohida oynada ochiladi (5,6-rasmlar).



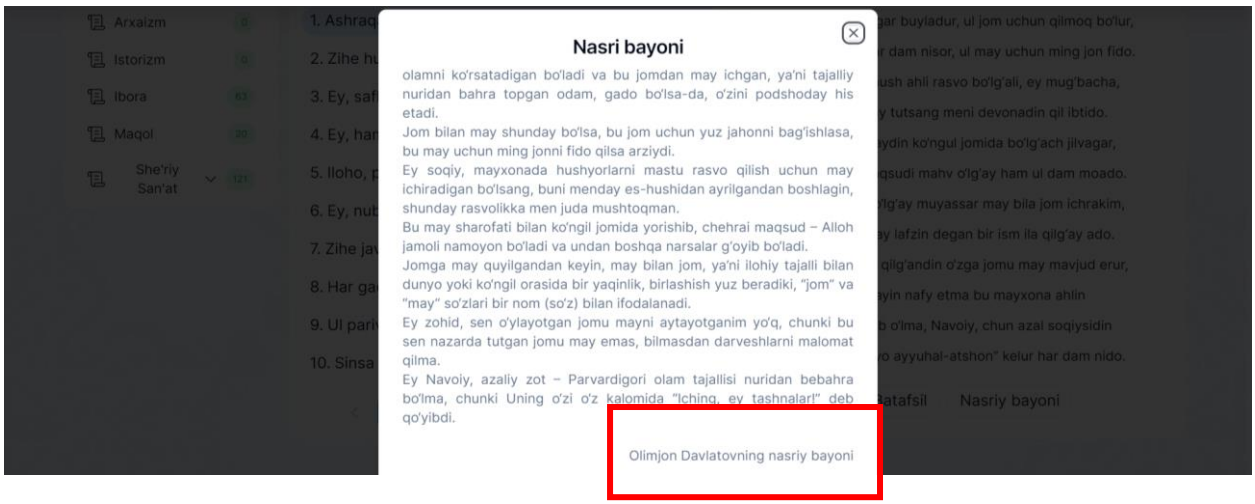


5-rasm. “G‘aroyib us-sig‘ar” devonining 1-g‘azalining nasriy bayoni.



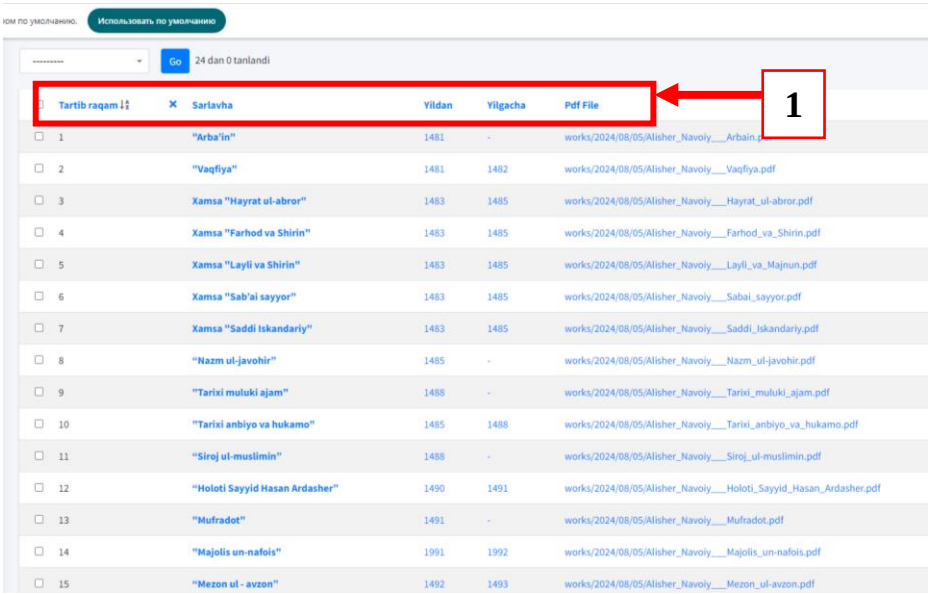
6-rasm. “Navodir ush-shabob” devonining 3-g‘azalining nasriy bayoni.

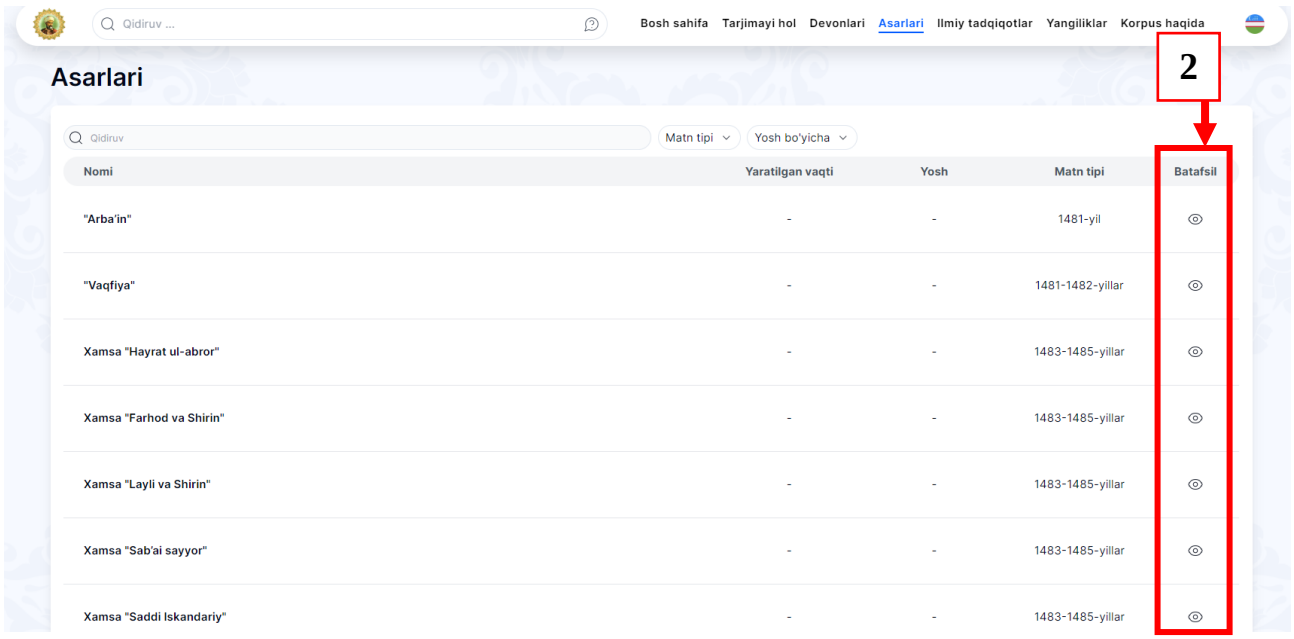
Eslatma: mualliflik huquqini himoya qilish maqsadida nasriy bayonlarning mualliflari ham ko‘rsatildi:



4.2. ASARLARI

Mazkur nomdagi ruknda Alisher Navoiy qalamiga mansub 24 asar o‘rin olgan. Asarlar yozilish yillari bo‘yicha xronologik ketma-ketlikda joylashtirilgan bo‘lib (1), “Batafsil” nomli ustundagi 👁 (ko‘rmoq) belgisini sichqoncha yordamida bosish natijasida asarning to‘liq matni (“To‘la asarlar to‘plami”dan olingan)ga o‘tiladi.





4.3. HIKMATLARI

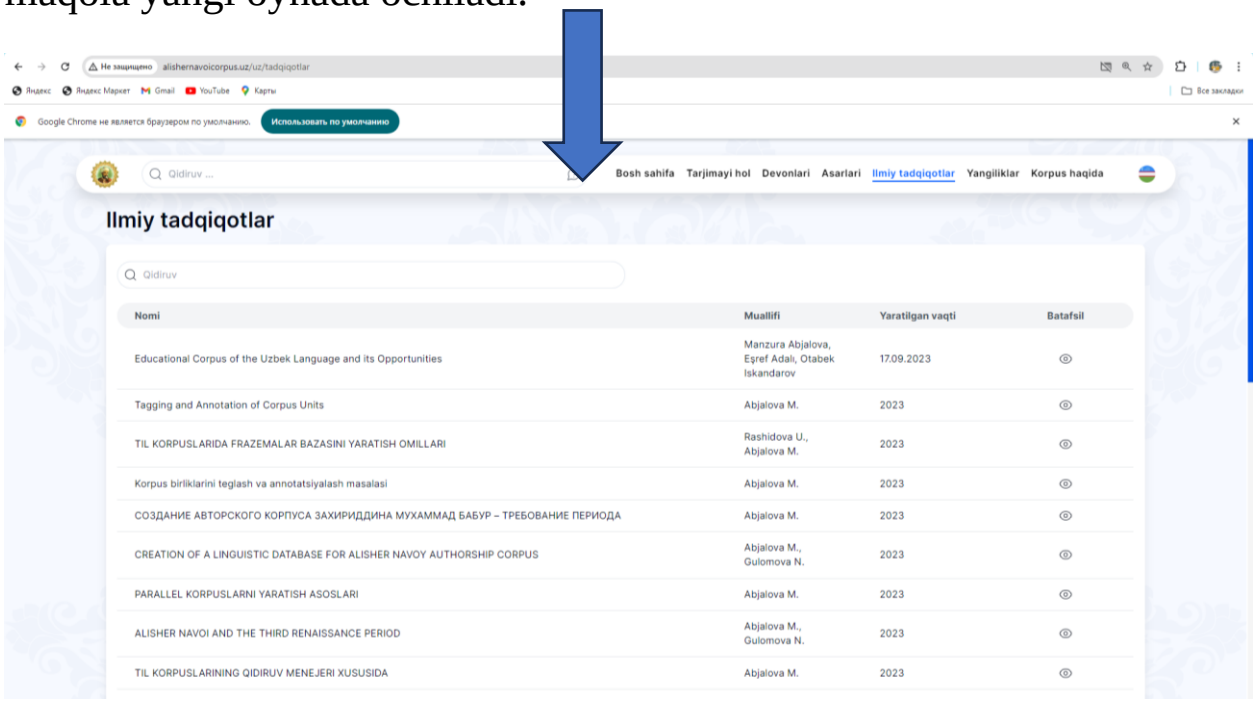
Mazkur ruknda quyidagi 9 mavzu doirasida Alisher Navoiy asarlaridan jamlangan hikmatlar aks etgan:

Ordering number	Name
1	Ilm haqida
2	Odob haqida
3	Odamiylik haqida
4	So‘z qudrati haqida
5	Kamtarlik haqida
6	Hunar haqida
7	Vafo-sadoqat haqida
8	Donishmandlik haqida
9	Tarbiya haqida

7-rasm. “Hikmatlari” ruknidagi kategoriyalar.

4.4. ILMIY TADQIQOTLAR

Ushbu ruknda korpus mualliflarining korpus lingvistikasi bo‘yicha amalga oshirgan tadqiqot natijalari o‘rin olgan. Ilmiy ishlarni o‘qish va yuklab olish imkoniyati mavjud. Buning uchun “Batafsil” nomli ustundagi 👁 (ko‘rmoq) belgisi sichqoncha yordamida bosiladi va ilmiy maqola yangi oynada ochiladi.



4.5. YANGILIKLAR

Ushbu ruknda Alisher Navoiy mualliflik korpusini yaratish, uning taqdimotini o‘tkazish borasidagi quyidagi mavzulardagi yangiliklar o‘rin olgan:

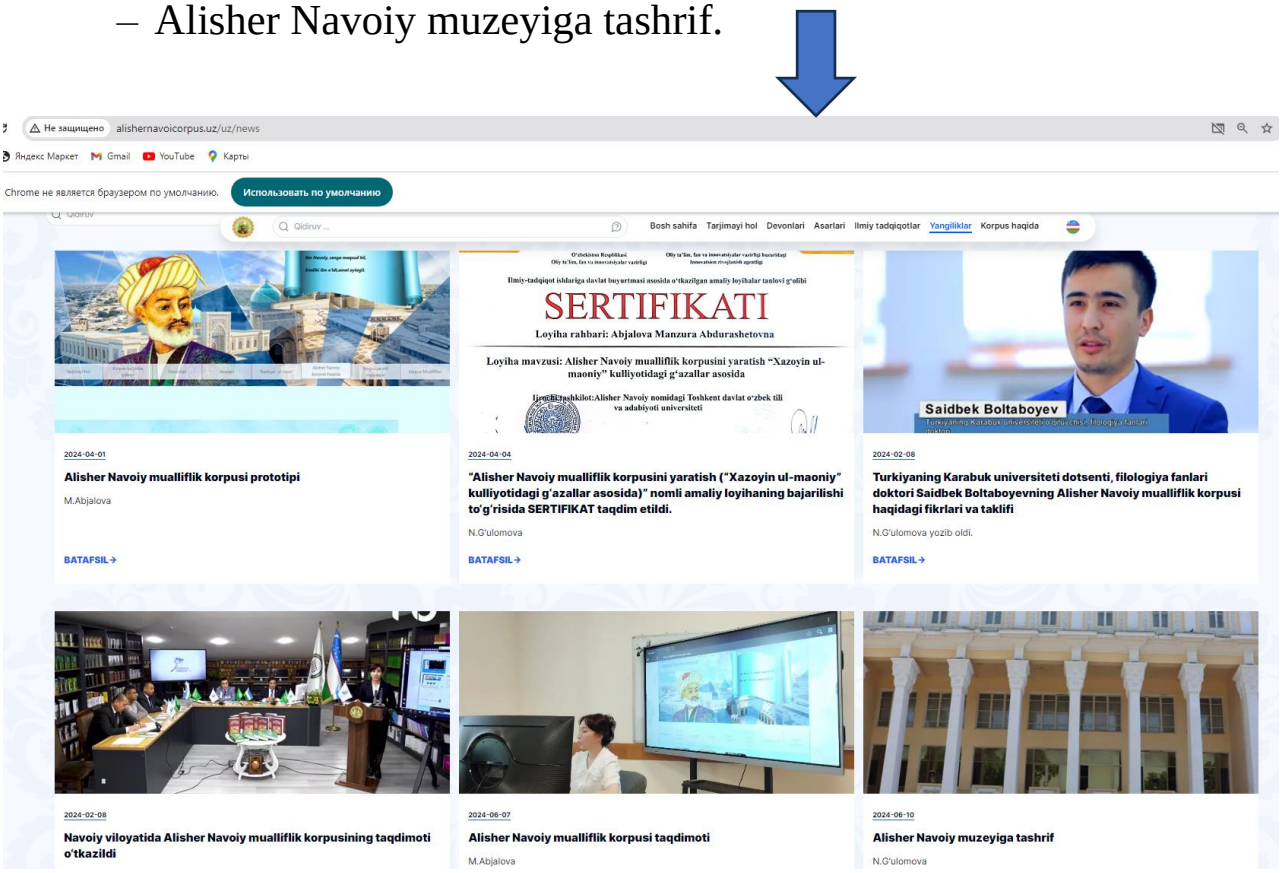
– Alisher Navoiy mualliflik korpusi prototipi

– “Alisher Navoiy mualliflik korpusini yaratish (“Xazoyin ul-maoniy” kulliyotidagi g‘azallar asosida)” nomli amaliy loyihaning bajarilishi to‘g‘risida SERTIFIKAT taqdim etildi

– Turkiyaning Karabuk universiteti dotsenti, filologiya fanlari doktori Saidbek Boltaboyevning Alisher Navoiy mualliflik korpusi haqidagi fikrlari va taklifi

– Navoiy viloyatida Alisher Navoiy mualliflik korpusining taqdimoti o‘tkazildi

– Alisher Navoiy muzeyiga tashrif.



8-rasm. Korpusning “Yangiliklar” rukni

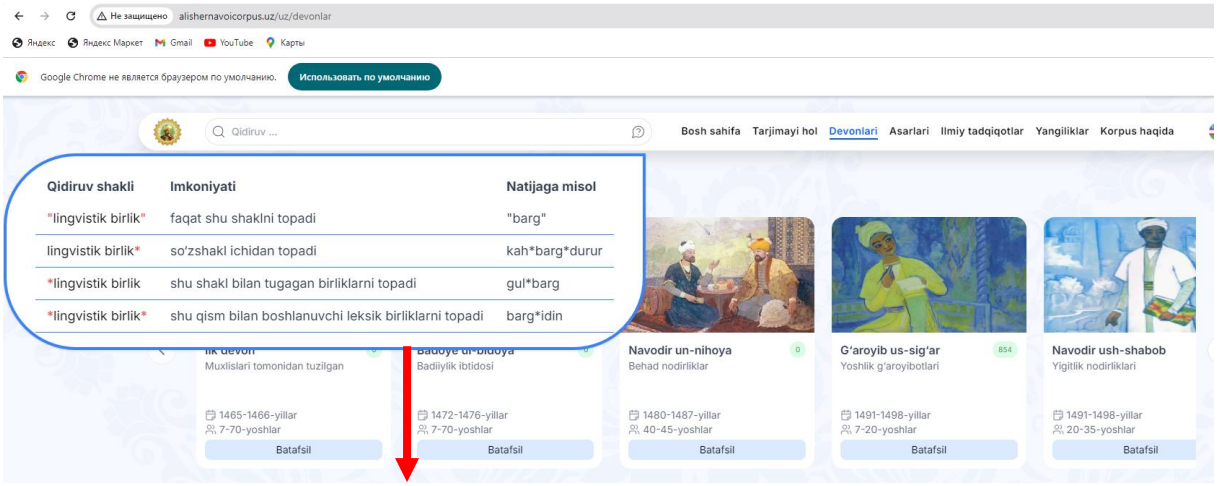
4.6. KORPUS HAQIDA

Mazkur ruknda quyidagi mavzular qamrovida korpusga tegishli ma’lumotlar berilgan:

– **TIL KORPUSI NIMA?**
– **ALISHER NAVOIY MUALLIFLIK KORPUSINING DOLZARBLIGI**
– **MAZKUR KORPUSNI YARATISH ZARURATI**
– **ALISHER NAVOIY MUALLIFLIK KORPUSI SEMANTIK BAZASI**
– **KORPUS TARKIBI**
– **ALISHER NAVOIY MUALLIFLIK KORPUSINING TARIXIY AHAMIYATI**
– **ALISHER NAVOIY MUALLIFLIK KORPUSINING LINGVISTIK AHAMIYATI**
– **ALISHER NAVOIY MUALLIFLIK KORPUSINING TA’LIMIY AHAMIYATI**
– **ALISHER NAVOIY MUALLIFLIK KORPUSINING IJTIMOIY AHAMIYATI**
– **ALISHER NAVOIY MUALLIFLIK KORPUSINING TARBIYAVIY AHAMIYATI**
– **FOYDALANILGAN ASOSIY LUG‘ATLAR**
– **ALISHER NAVOIY MUALLIFLIK KORPUSI REPREZENTATSIYASI**

V. QIDIRUV IMKONIYATLARI

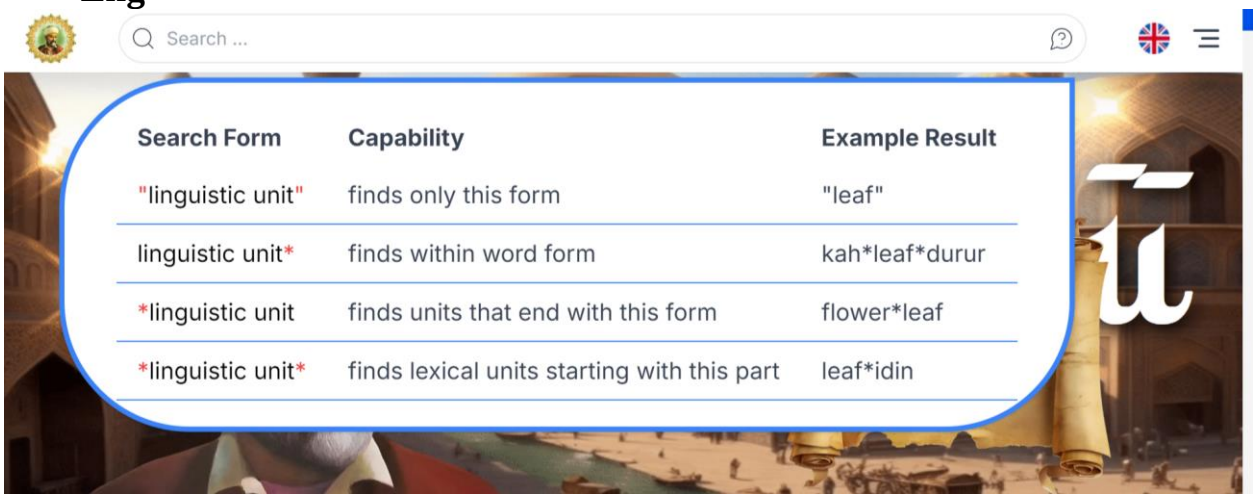
Korpusda maxsus qidiruv imkoniyatlari bo‘lib, foydalanuvchi hatto affikslarni ham undan qidirib topishi mumkin.



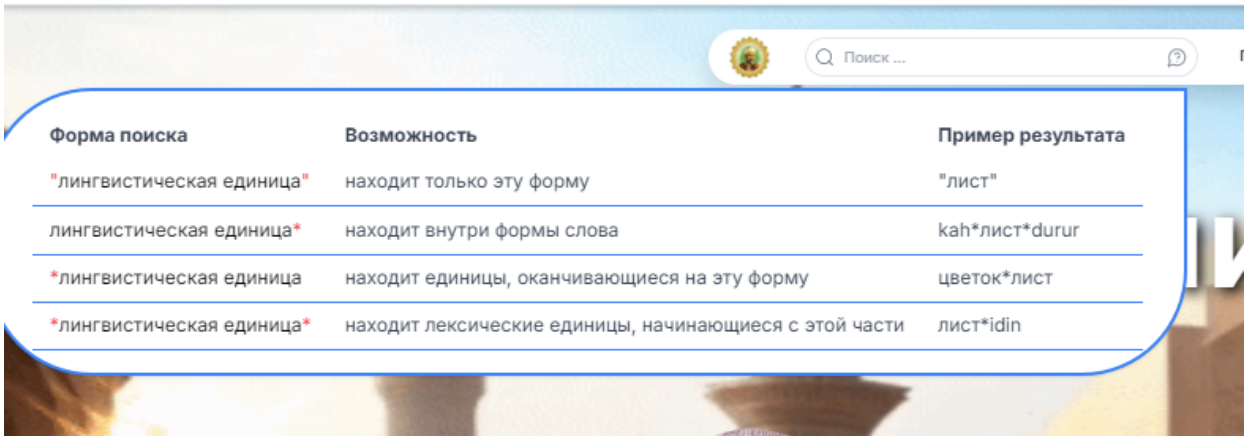
9-rasm. Korpusda leksik birlik (so‘z, so‘zshakl, affiks)ni qidiruv imkoniyati

Tillar bo‘yicha qidiruv imkoniyati quyidagi izohlar bilan namoyon bo‘ladi:

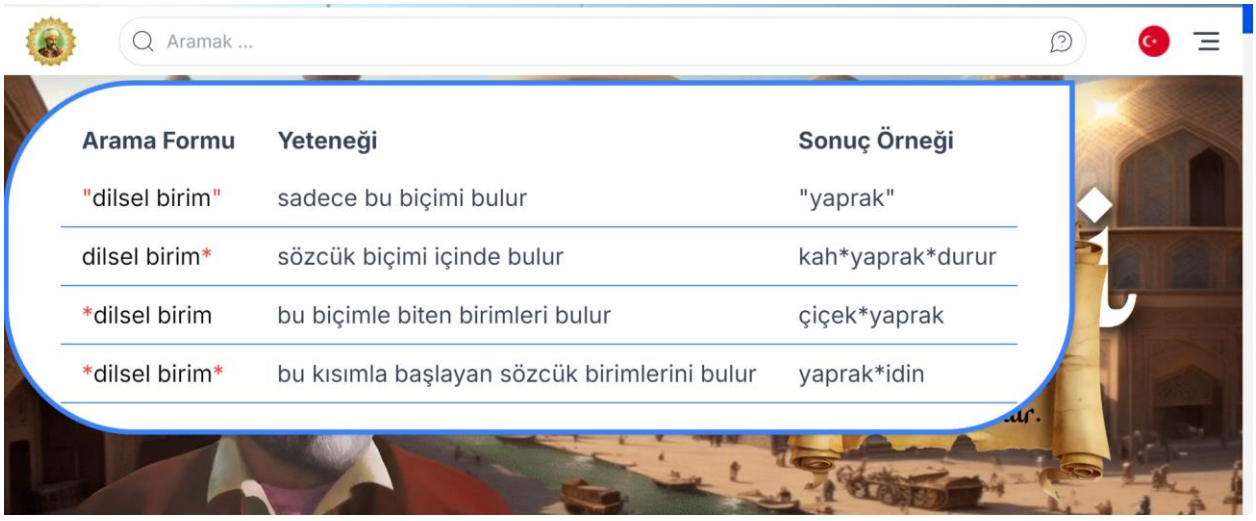
Eng



Rus



Turk

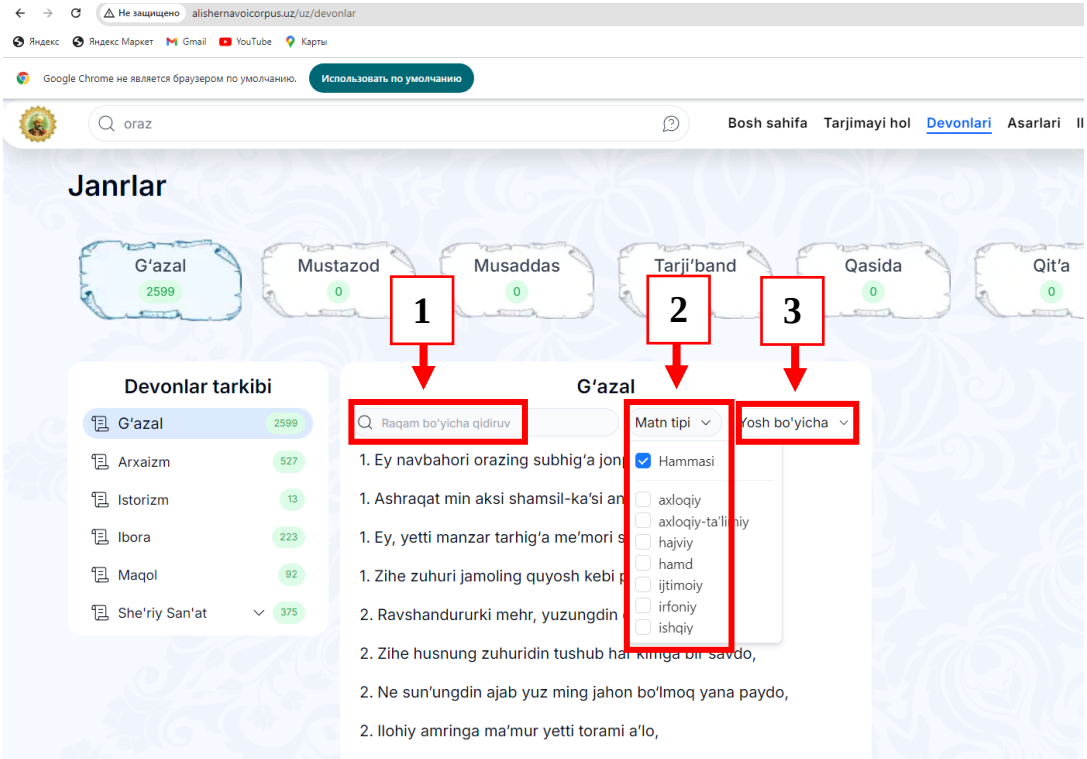


VI. KORPUS MENEJERI

Korpusda korpus menejeri (ing. corpus manager) mavjud bo‘lib, u matnli va lingvistik ma’lumotlarni boshqarish tizimini o‘z ichiga oladi. *Korpus menejeri* – korpusdagi ma’lumotlarni qidirish, statistik ma’lumotlarni olish va foydalanuvchiga natijalarni qulay shaklda taqdim etuvchi dasturiy vositalarni o‘z ichiga olgan maxsus qidiruv tizimi. Ta’kidlash joizki, korpus menejeri til korpusidagi birlamchi talablardan biri hisoblanadi.

Korpuslar til va nutq birliklari to‘g‘risida turli ma’lumot va statistik ko‘rsatkichlarni olish uchun foydalanilishi mumkin. Xususan, korpuslar asosida so‘z va uning shakllari chastotasi, leksemalar va grammatik kategoriyalarning qo‘llanilish ko‘lami to‘g‘risida ma’lumot olish, turli davrlarda chastota va kontekstlarning o‘zgarishini kuzatish, leksik birliklarning birgalikda uchrashi yoki valentligini ko‘rish va h.k.larni aniqlash mumkin bo‘ladi. Bu jarayonda korpus menejeri juda muhim sanaladi.

Alisher Navoiy korpusida ham korpus menejeri yaratilgan bo‘lib, u qidiruv filtriga ham ega. Jumladan, muayyan leksik birlikni g‘azallar raqami (1), matn tipi (2) va auditoriya yoshi (3) bo‘yicha qidirish mumkin.



Qidiruv filtrining afzallik tomoni shundaki, har bir devondagi 650 g‘azaldan sahifalab o‘tirmasdan istalgan raqamdagisini tezda topib o‘qish, axloqona, tarbiyaviy, rindona, oshiqona kabi matn tiplariga mansub g‘azallarni filtr qilib aniqlash, 15+, 16+ kabi yosh toifasiga muvofiq g‘azallarni saralash imkonini beradi.

Demak, korpus menejeri:

– korpusning alohida elementlari bo‘yicha statistik ma’lumotlarni taqdim etadi;

– qidiruv filtriga ega bo‘lib, unda leksik birlikni g‘azalning tartib raqami, matn tipi, auditoriya yoshi bo‘yicha qidirish mumkin;

– topilgan so‘z shakllarini cheklanmagan miqdordagi kontekstlardan ko‘rsatish imkoniyatini beradi;

– natijalar ro‘yxatini foydalanuvchi tomonidan tanlangan bir nechta mezonlarga muvofiq tartiblaydi;

– nafaqat so‘zlar, balki so‘z birikmalarini ham izlaydi;

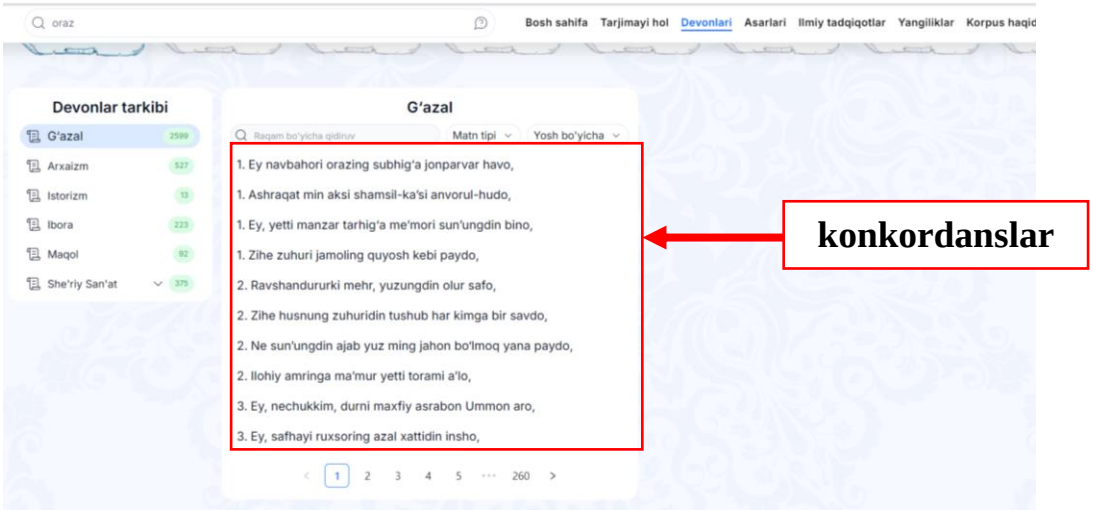
– shablon (murakkab so‘rov)lar bo‘yicha qidiruvni amalga oshiradi;

– metama’lumot (bibliografik, tipologik)larni ko‘rsatadi;

– so‘rovlarni tezda qayta ishlab, natijalarni chiqaradi;

– tajribali foydalanuvchi uchun ham, korpusga ilk marotaba kirgan o‘quvchi uchun ham foydalanishda qulaylikni yaratadi.

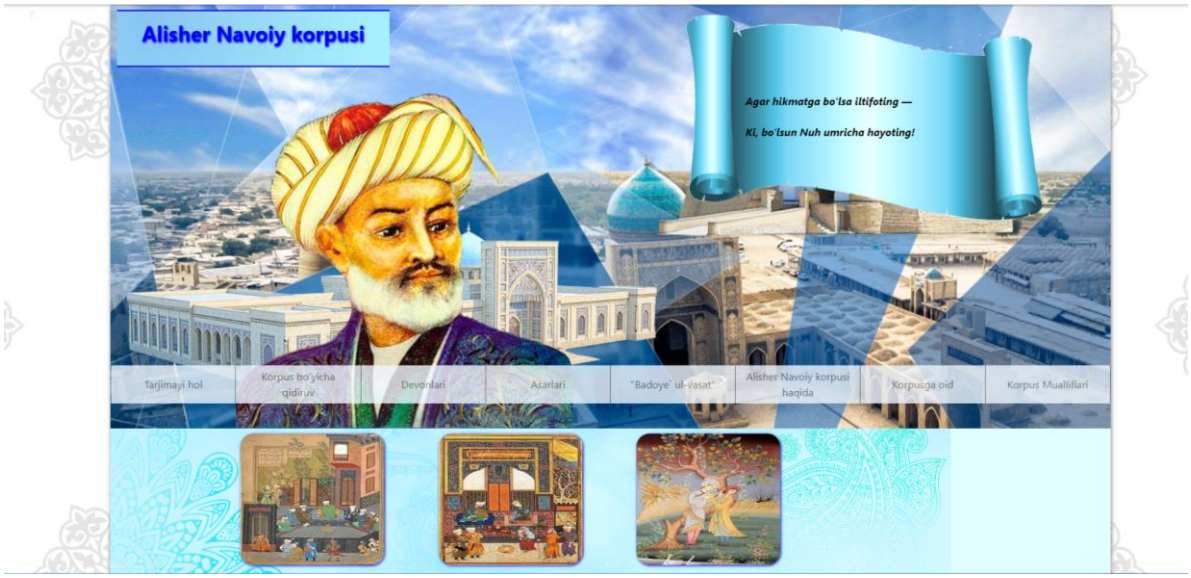
Korpusda qidirish har qanday so‘z uchun konkordans yaratishga imkon beradi. Konkordans – manbaga havolasi bilan berilgan, kontekstda ushbu so‘zning barcha qo‘llanish shakllarining ro‘yxati. Ilk konkordanslash XIII ars boshlaridan Muqaddas Injil matnlaridan boshlangan.



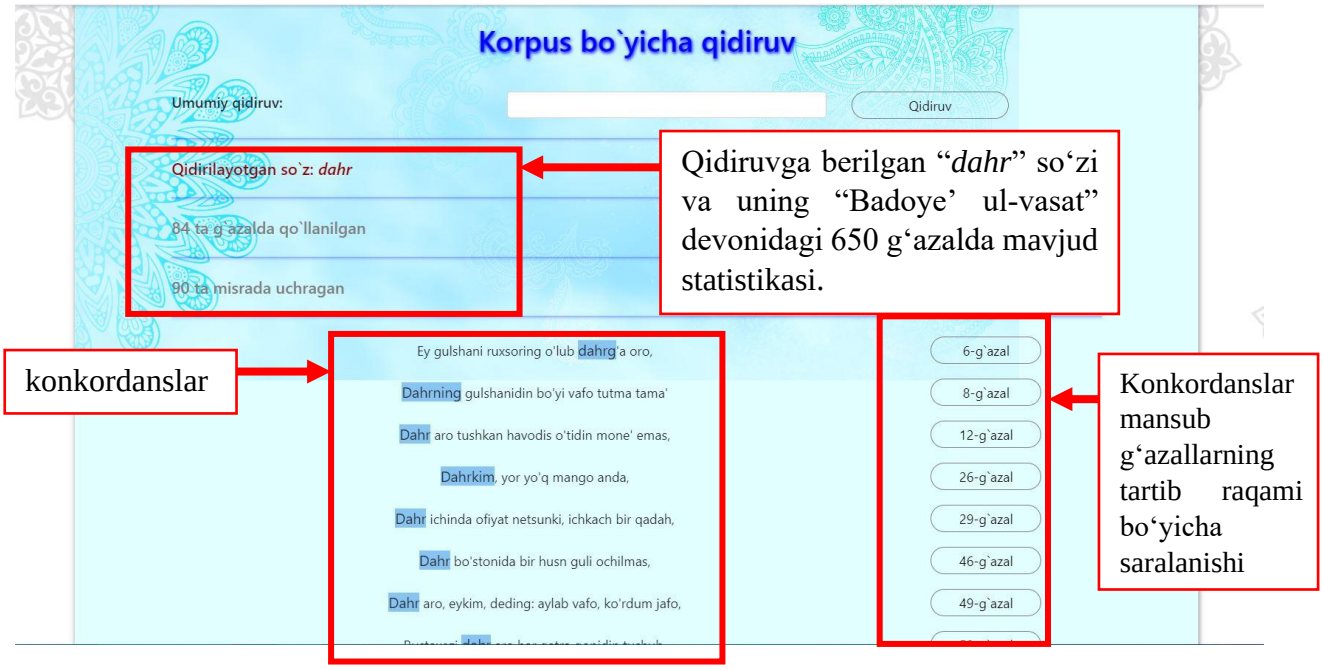
VII. KORPUS PROTOTIPI (ilk versiyasi)

2022-yilning 22-aprelidan Alisher Navoiy mualliflik korpusi prototipi bir necha yillik mehnat evaziga foydalanishga ochiq internet resursi tarzida **ishga tushirildi**. Yangi tipdagi Alisher Navoiy korpusining eng pastki qismida prototip (ilk versiya) linki mavjud bo‘lib, unga (http://v1.alishernavoicorpus.uz/) sichqonchani bosish orqali prototipga o‘tiladi.

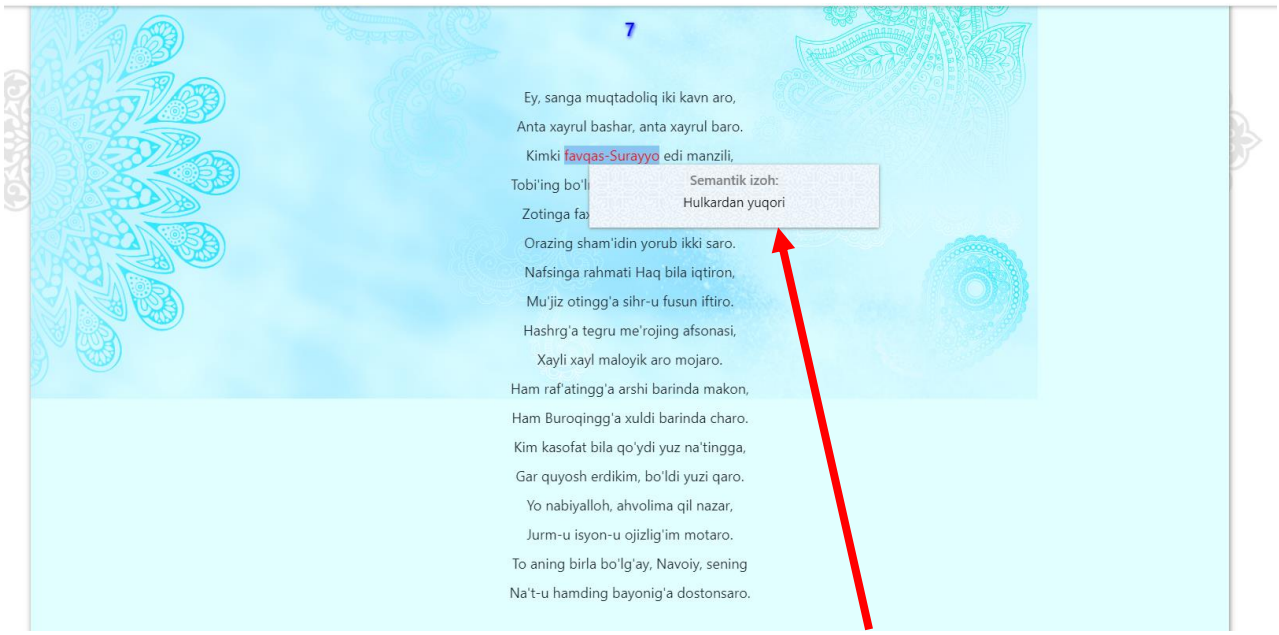




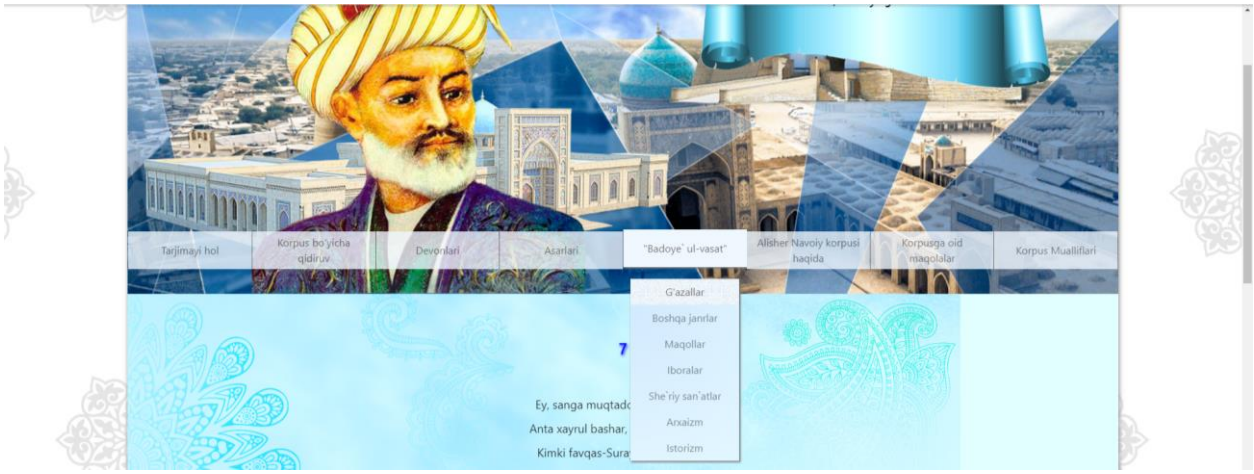
10-rasm. Korpus prototipining bosh sahifasi.



11-rasm. Qidiruv imkoniyati va natijalari.



12-rasm. 7-g‘azalning to‘liq matni va unda izohtalab leksik birliklardan “favqas-Surayyo”ga berilgan semantik izoh



13-rasm. 5-rukn – “Badoye’ ul-vasat” devonida ma’lumotlar bazasining aks etishi



14-rasm. “Badoye’ ul-vasat” devonidagi 650ta g‘azalning tartiblanishi.

Qolgan ruknlarga ham sichqonchaning chap tomonini bosish bilan kiriladi. Mazkur prototip imkoniyatlari va undan foydalanish bo‘yicha havoladagi videoyo‘riqnoma orqali tanishib olish mumkin: https://youtu.be/744o55Tqx9E

Dastlabki qadamda o‘rta ta’lim uchun chiqarilgan o‘quv adabiyotlarining aksariyatida Navoiyning “Xazoyin ul-ma’oniy” kulliyotidagi “Badoye’ ul-vasat” devonidagi ijod namunalari tashkil etganligi bois o‘quvchilarni Alisher Navoiy ijodini o‘qib tushunish, Navoiyni anglash va o‘quvchilarni Navoiyga oshno etish maqsadida **“Badoye’ ul-vasat” devonidagi 650 g‘azalning semantik teglari asosida Alisher Navoiy mualliflik korpusi yaratildi**.

Hozirda mazkur prototip 1-versiyasi nomida, () manzilida ishchi holatda turibdi.

Alisher Navoiy mualliflik korpusi (MK) uchun “Badoye’ ul-vasat” devonidagi 21226 ta izohtalab so‘z, 5 mingdan ortiq arxaizm, 170 istorizm, 43 ta maqol, 30 ta ibora, 236 ta talmeh san’atiga oid so‘zlar, 164 ta zid ma’noli so‘zlar (tazod), 806 ta tanosub, 124 ta tashbih she’riy san’atiga oid leksik birliklarning teglanishi Alisher Navoiy MK yaratilishiga asos bo‘ldi.

“Badoye’ ul-vasat” devonida g‘azallar 5001 bayt – 10002 misra, jami 66539 ta so‘zdan iborat bo‘lib, har bir g‘azal hajmi 6 baytdan 13 baytgacha: 6 baytli – 1 ta, 7 baytli – 437 ta, 8 baytli – 8 ta, 9 baytli – 187 ta, 10 baytli – 1 ta, 11 baytli – 14 ta, 12 baytli – 1 ta, 13 baytli – 1 tani tashkil etadi. Alisher Navoiy MKdagi bu kabi statistik tahlillar, muhim hisoblanib, foydalanuvchiga aniq hisobni beradi va ma’lumotlar bazasi ustida ishlash qamrovini ko‘rsatadi.

“Badoye’ ul-vasat” devonidagi g‘azallariga mazmunan singdirilgan 50 dan ortiq maqol va xuddi shuncha turg‘un birikma (ibora)lar qatnashgan baytlar ilmiy tahlil qilinib, 5-rukn tarkibiga kiritildi.

Mazkur prototip yaratilishiga asos bo‘lgan ilmiy tadqiqot ishi (G‘ulomova N. Alisher Navoiy mualliflik korpusi va uning semantik teglari bazasini yaratish (“Badoye’ ul-vasat” devoni asosida). Filol. fan. bo‘yicha fal. dok. (PhD) diss. – Toshkent, 2023. – 190 b.) muvaffaqiyatli himoya qilindi.

Bitta monografiya yuzaga keldi:

Abjalova M., G‘ulomova N. Mualliflik korpuslari: Alisher Navoiy mualliflik korpusi. [Matn]: monografiya / M.A. Abjalova, N.S. G‘ulomova. – Navoiy, 2023. – 216 b.

5 ta mualliflik guvohnomasi olindi:

1. Alisher Navoiy mualliflik korpusi uchun Navoiyning “Badoe’ ul-vasat” devonidagi g‘azallarning semantik bazasi. Guvohnoma № BGU 00583. – Toshkent, 2022. (mualliflik guvohnomasi). (Abjalova Manzura Abdurashetovna; G‘ulomova Nargiza Sa’dullayevna; Rashidov Husniddin Axror o‘g‘li)

2. Alisher Navoiy mualliflik korpusi. Guvohnoma № DGU 18544. – Toshkent, 2022. (mualliflik guvohnomasi). (Abjalova Manzura Abdurashetovna; G‘ulomova Nargiza Sa’dullayevna, Sadullayeva Shahrizoda)

Asosiysi, mazkur prototip 2023-yilda AL-662205561 raqamli “**Alisher Navoiy mualliflik korpusini yaratish** (“Xazoyin ul-maoniy” kulliyotidagi g‘azallar asosida)” nomli **amaliy loyiha**ning Innovatsiyalar agentligi tomonidan moliyalashtirilib, korpusning takomillashtilishiga asos bo‘ldi.

Hozirgacha mazkur korpus va uning bazalariga 5 ta mualliflik guvohnomasi olingan. Loyiha jarayonida olingan 3 ta guvohnoma quyida:

3. Abjalova M. va boshq. Alisher Navoiyning “Navodir ush-shabob” devonidagi 650 g‘azalning semantik bazasi. Mualliflik guvohnomasi, № BGU 20240164. – Toshkent, 2024.

4. Abjalova M. va boshq. Alisher Navoiyning “Favoyid ul-kibar” devonidagi 650 g‘azalning semantik bazasi. Mualliflik guvohnomasi, № BGU 20240217. – Toshkent, 2024.

5. Abjalova M. va boshq. Alisher Navoiyning “G‘aroyib us-sig‘ar” devonidagi 650 g‘azalning semantik bazasi. Mualliflik guvohnomasi, № BGU 20240165. – Toshkent, 2024.

ALISHER NAVOIY
MUALLIFLIK KORPUSI

REPUBLIC OF UZBEKISTAN
MINISTRY OF HIGHER EDUCATION, SCIENCE AND INNOVATIONS
TASHKENT STATE UNIVERSITY OF UZBEK LANGUAGE AND LITERATURE



ALĪ SHĪR NAVĀĪ AUTHORSHIP CORPUS

USER GUIDE

Tashkent – 2024

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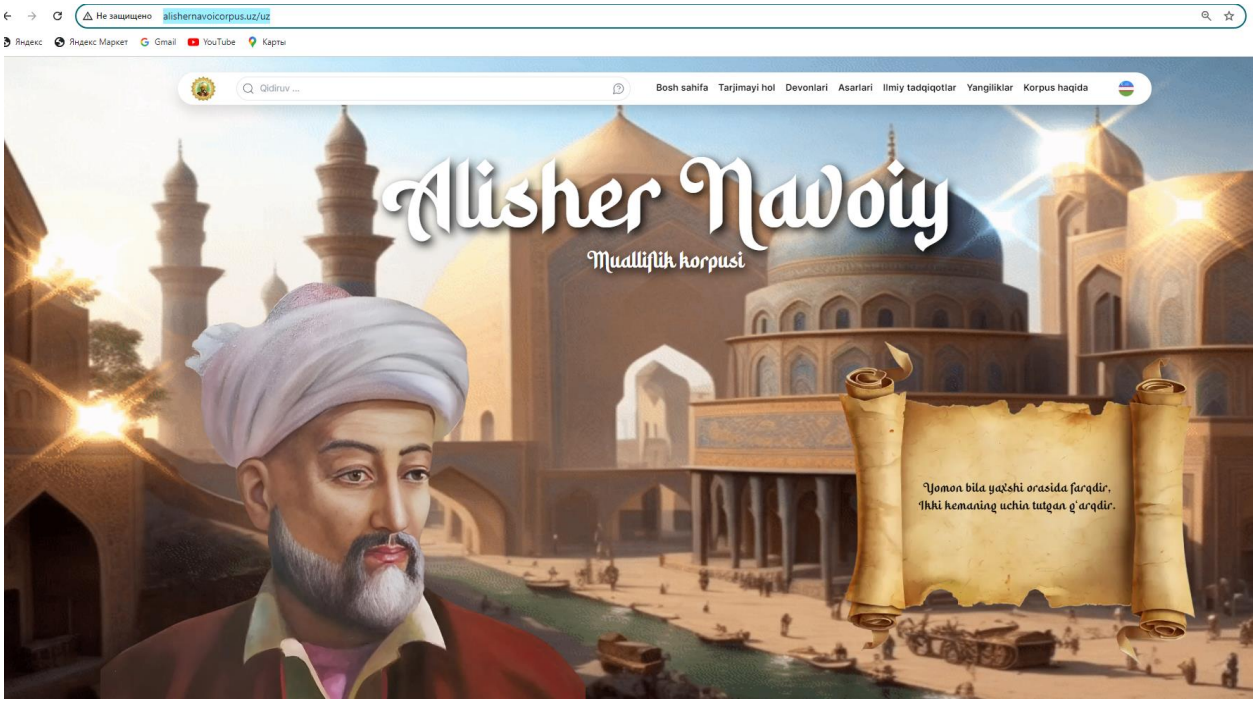
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II. INTRODUCTION

The process for accessing the Alī Shīr Navāī Authorship Corpus of

1. Opening the Internet Browser: Start by launching your preferred internet browser.

2. Entering the URL: In the browser's address bar, type in the domain name alishernavoicorpus.uz and press the Enter key to access the website (http://alishernavoicorpus.uz/uz).



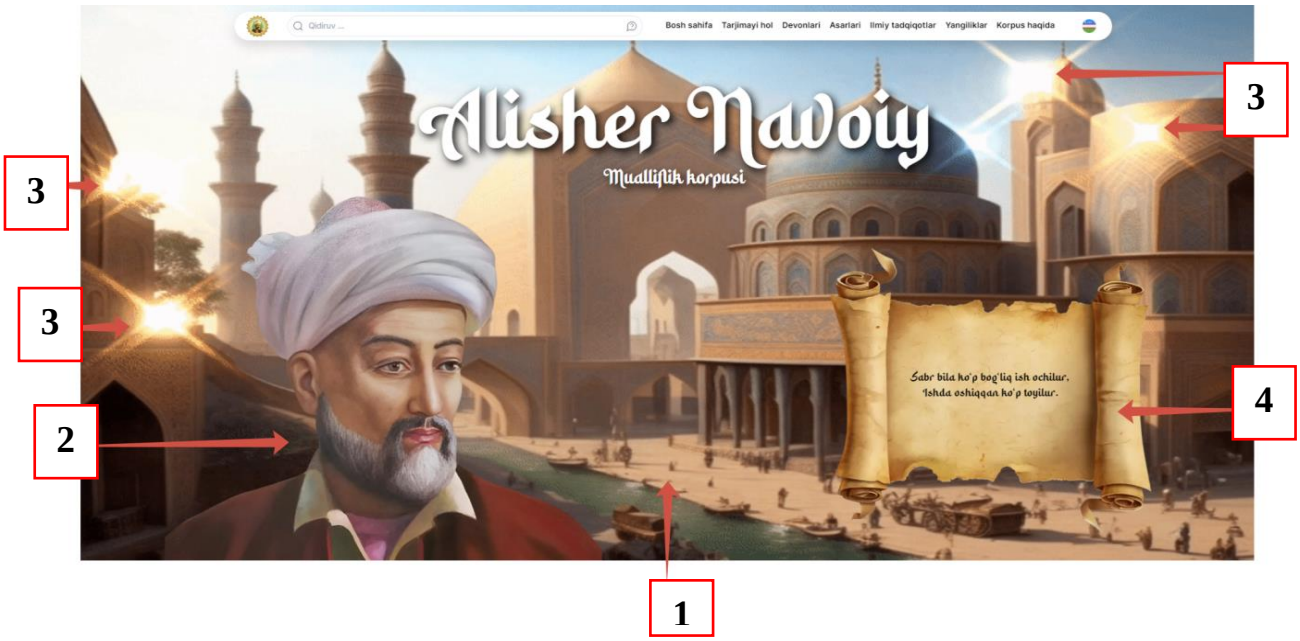
II. HOME PAGE

Upon entering the site, the home page will open, displaying a visually rich layout that evokes the time and essence of Alisher Navoi's life and work. The key elements on the page include:

1. **Herat's Scenic View (1)**: The background showcases the city of Herat, representing the historical setting where Navoi lived.
2. **Alisher Navoi's Portrait (2)**: A prominent image of Alisher Navoi is displayed, symbolizing his lasting legacy and influence.
3. **3D Effect of the Rising Sun's Rays (3)**: The 3D visualization of sun rays symbolizes the immortality of Navoi's literary works, emphasizing his enduring presence in the literary world.

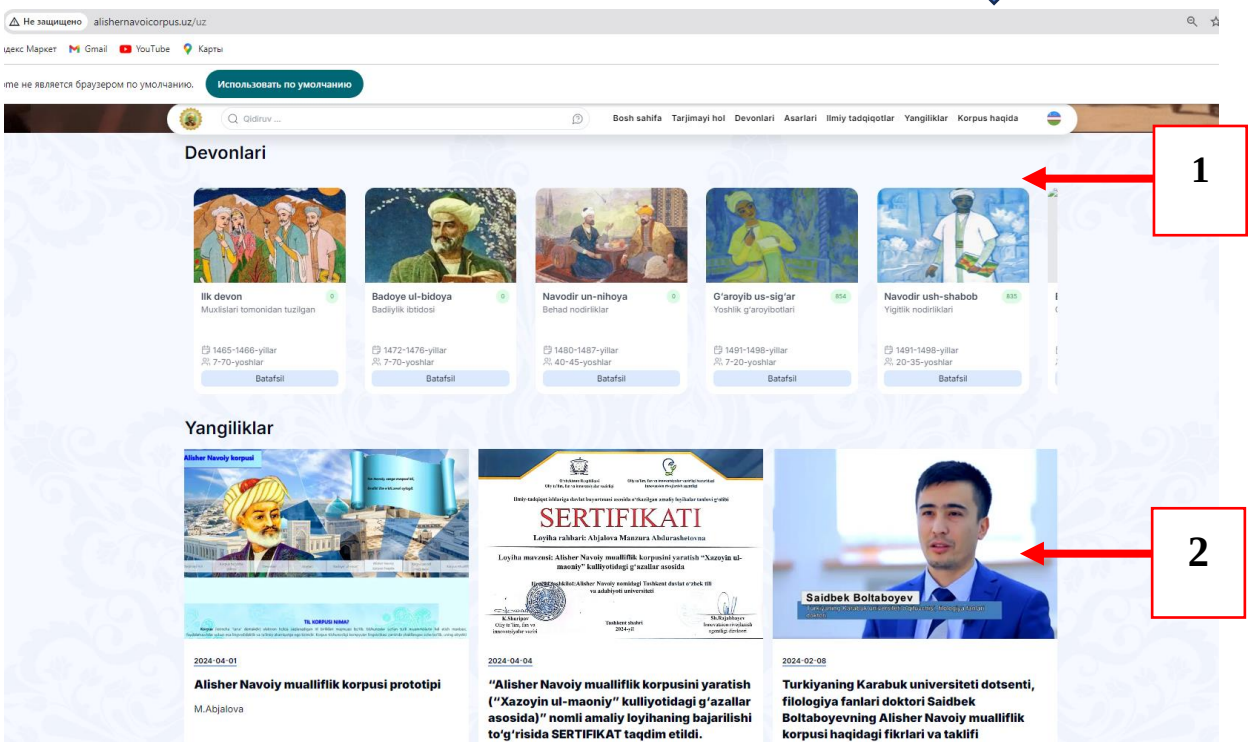
4. **Scroll with Navoi's Wisdom (4)**: A digital scroll is presented, continuously displaying excerpts of Alisher Navoi's timeless wisdoms.

These combined visual elements create an immersive illustration of the era in which Alisher Navoi lived and the grandeur of his work, enriching the user's experience on the website.

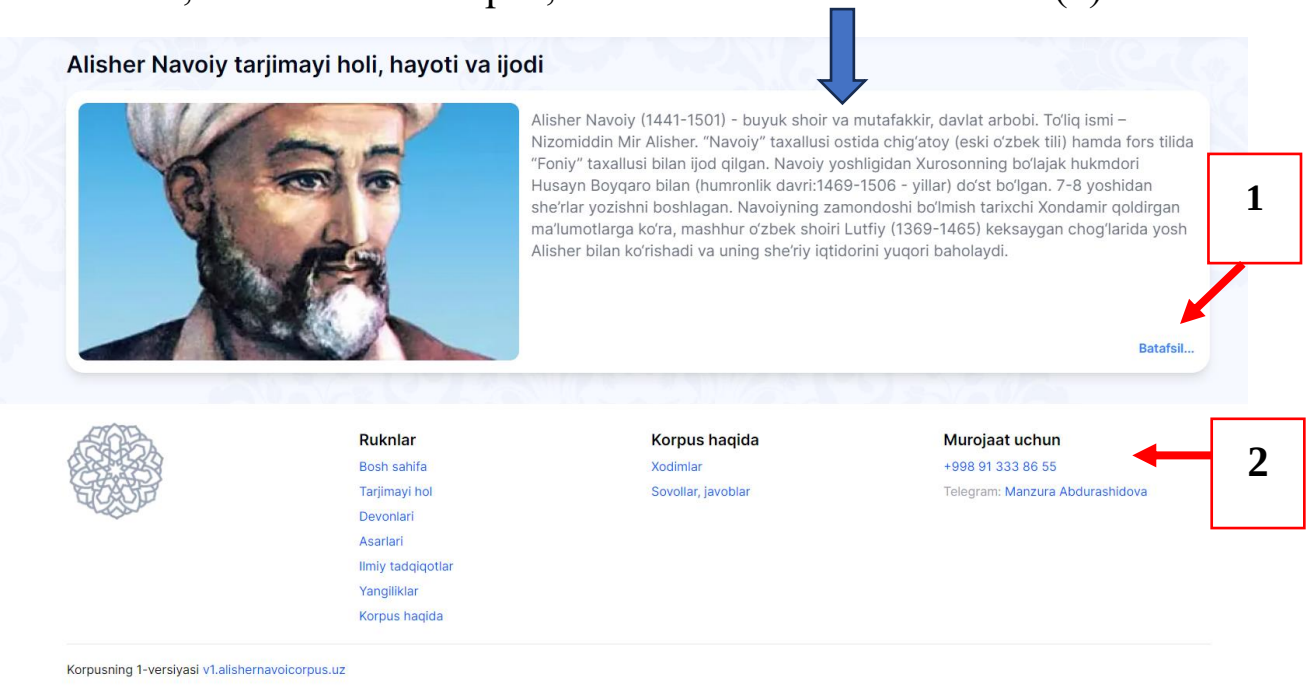


Beneath the main background, a link to Alisher Navoi's divans is provided (1).

Following that is a link to the "News" section (2):



At the bottom of the homepage, there is a link to the page about Navoi's life and work (1) and sections with information on "Corpus Sections," "About the Corpus," and "Contact Information" (2).



III. INTERFACE

To facilitate ease of use for foreign users, the corpus interface is available in four languages (Uzbek, English, Russian, and Turkish). Additionally, the wisdom displayed in the main page's scroll is also presented in all four interface languages.



IV. SECTIONS

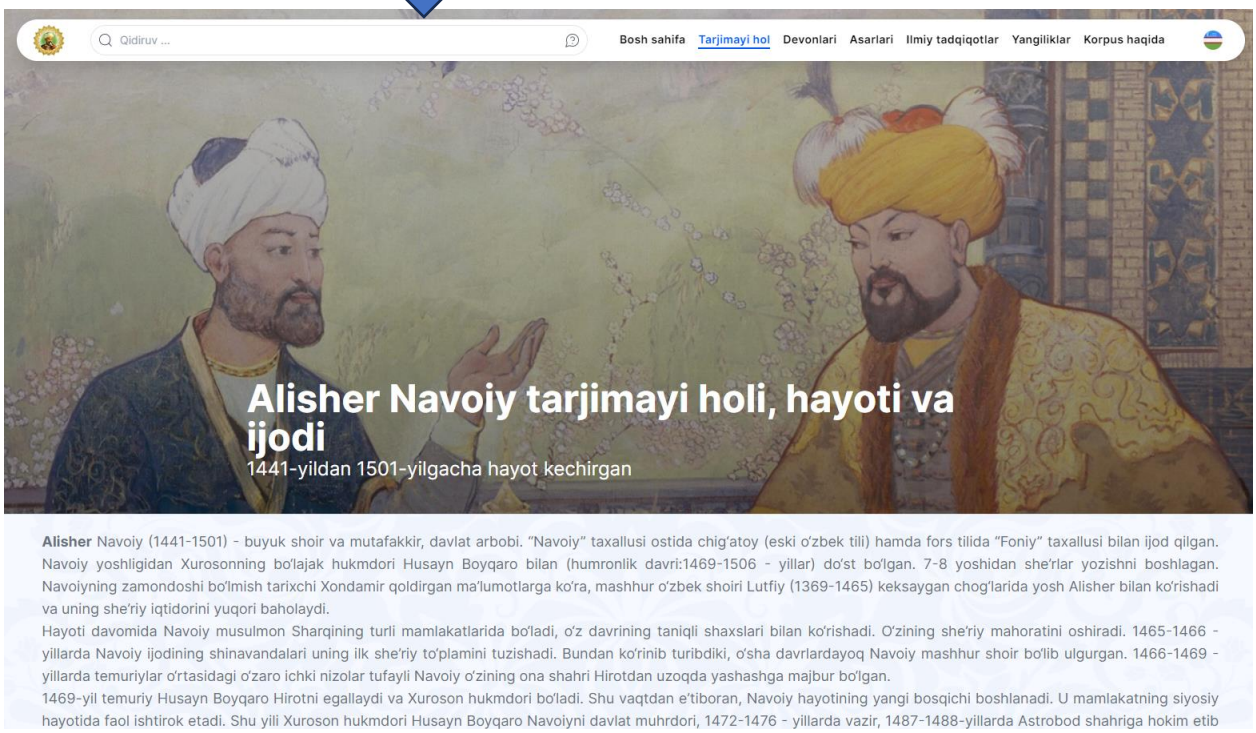
The corpus consists of the following 8 sections:

- Home page
- Biography
- Divans
- Works
- Wisdoms

- Scientific Researches
- News
- About the corpus



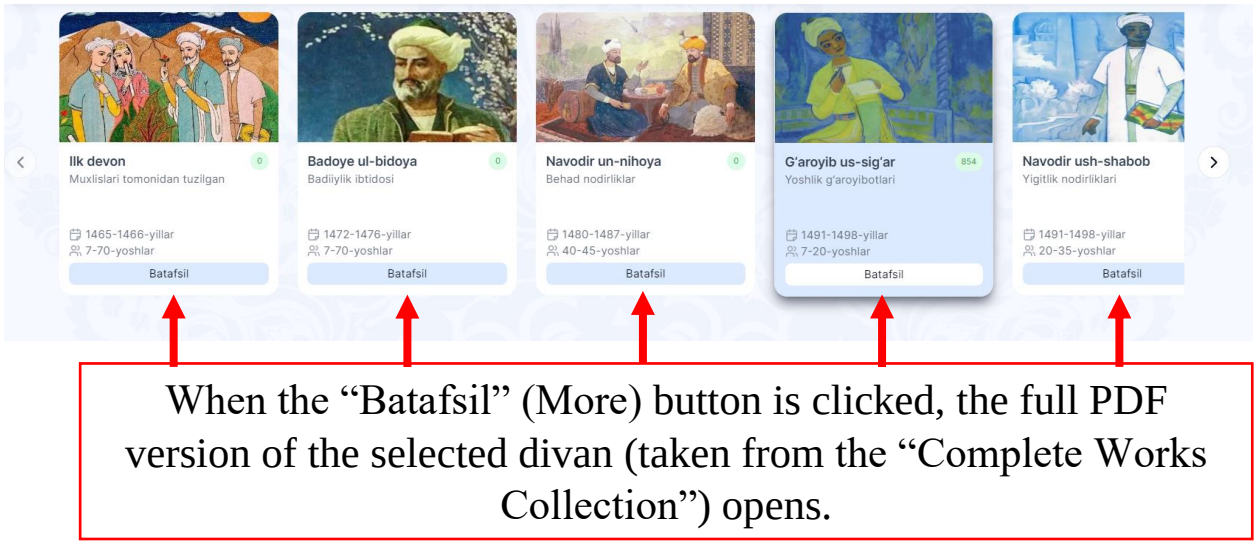
In the “Tarjimayi hol” (Biography) section, based on primary academic sources, essential information about Alisher Navoi’s life and creative work is provided, including notable life events, creative facts, and his mentors.



4.1. DIVANS

The “Devonlari” (Divans) section includes the “First Divan” (1465-1466), compiled by his students, Alisher Navoi’s eight self-created divans, and the divan “Oqqo‘yinli muxlislar” (1471), compiled later by admirers of the great thinker. By clicking on the “Batafsil” (More) button under the name of each divan, users can access the full PDF version of the corresponding divan, sourced from the “To‘la asarlar to‘plami”

(Complete Works Collection). Users can read the divan in full and download it.



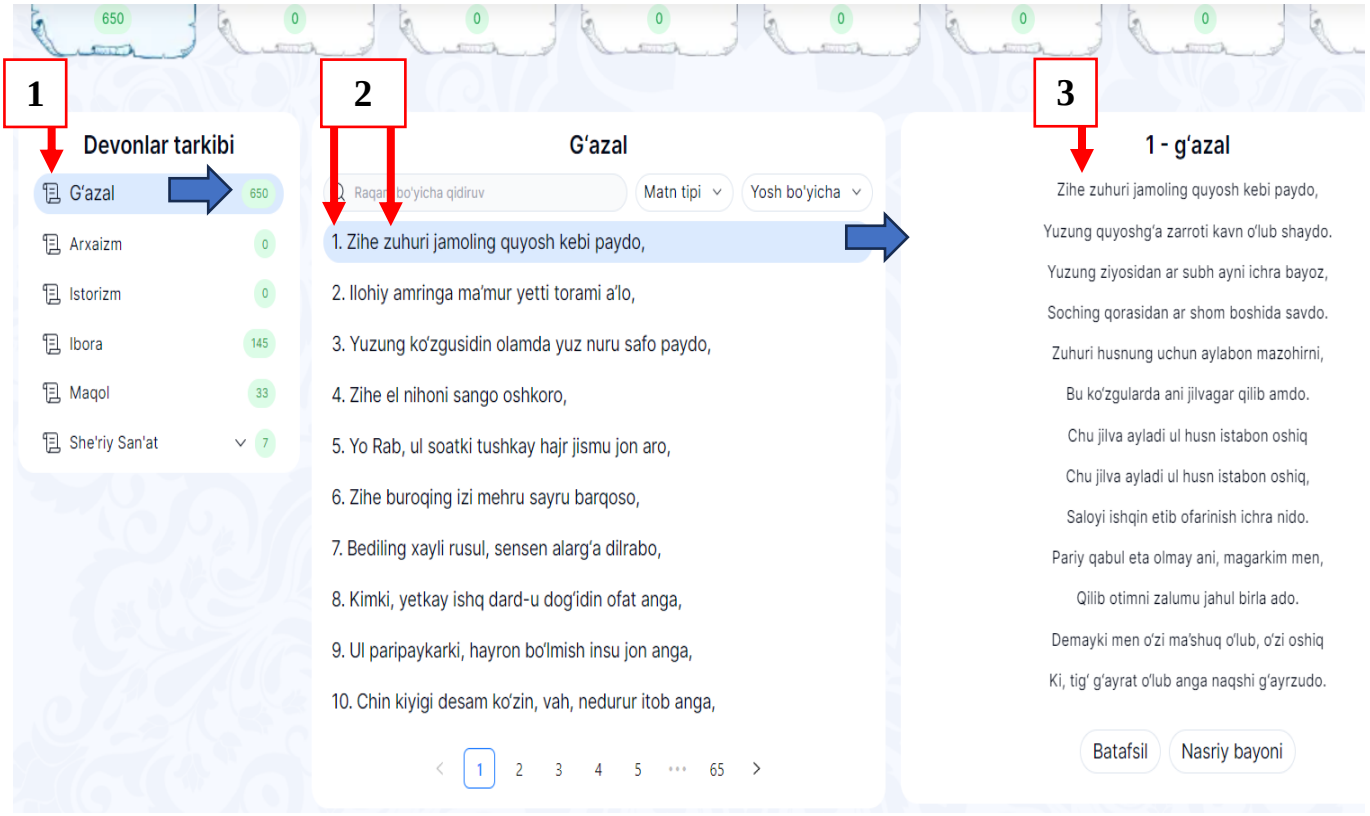
When the “Batafsil” (More) button is clicked, the full PDF version of the selected divan (taken from the “Complete Works Collection”) opens.

An important feature of this section is that it is linked to the corpus's specially designed text database, allowing users to search through the divans whose texts have been processed. Statistical information in the corpus is also based on this database. Currently, the “G‘aroyib us-sig‘ar” divan contains data on 650 ghazals, 63 phrases, 121 examples of poetic art – a total of 854 creative works. The “Navodir ush-shabob” includes 650 ghazals, 145 phrases, 33 proverbs, and 7 examples of poetic art – a total of 835 entries. The “Badoye ul-vasat” includes 650 ghazals, 527 archaisms, 13 historical terms, 15 phrases, 39 proverbs, and 247 examples of poetic art – a total of 1491 entries. In the “Favoyid ul-kibar” section, data on 650 ghazals has been compiled.



All the data in the “Divans” section has been compiled within the framework of the practical project **“Creation of Alisher Navoi Authorship Corpus (Based on Ghazals from the “Khazoyin ul-**

maoniy" Collection)" (practical project code AL-662205561). For example, when accessing the "G'aroyib us-sig'ar" divan, all available database information is displayed under "Divan Content". When the "Ghazal" row is clicked (1), 650 ghazals are displayed by index number with their first line (this functionality helps to identify which ghazal corresponds to a particular number) in a side window (2). When a specific ghazal is selected and clicked, its full text will appear in another window (3).



SEMANTIC DESCRIPTION

As the primary objective of the practical project, a semantic database has been prepared for the 2,600 ghazals found in the "Khazoyin ul-Ma'ani" collection (650 ghazals in each of the four divans, totaling 2,600). This database includes semantic descriptions of lexicon units that require explanation *(words unclear to modern readers, such as archaisms and historicisms; persian compound structures, historical names of places and people, idiomatic expressions, and context-dependent figurative meanings).* As a result, when reading the ghazals, a user who encounters an unfamiliar lexical unit can hover over it with the cursor, and its **contextual semantic description** will be displayed.

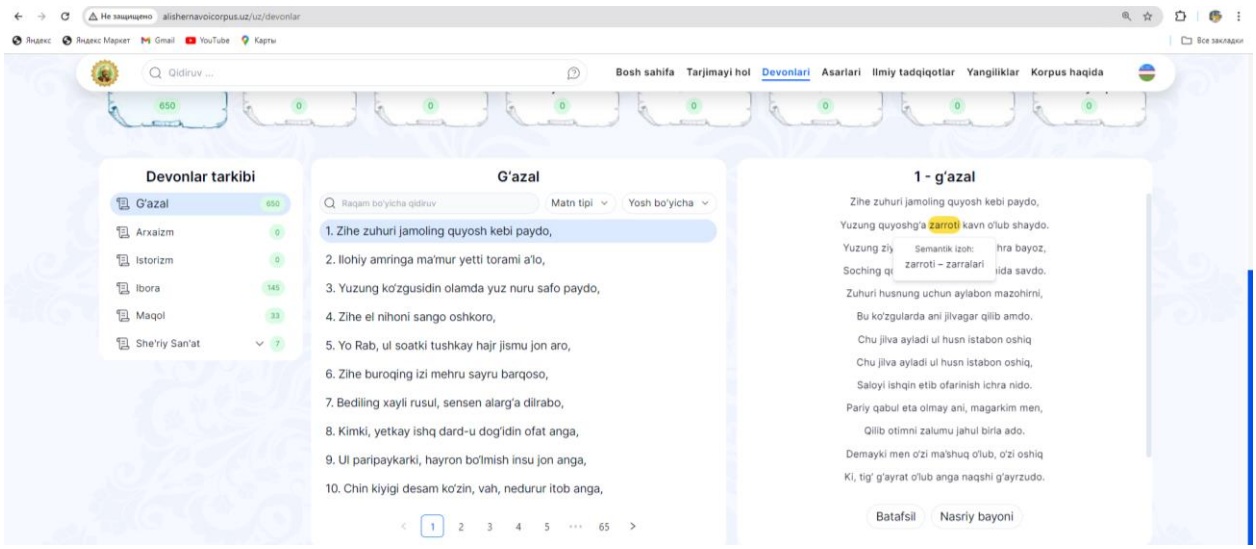


Figure 1. The display of the contextual semantic description of the word *“zarralari”* ("particles") found in the second line of the first ghazal from the “Gharoyib us-Sighar” divan in the corpus.

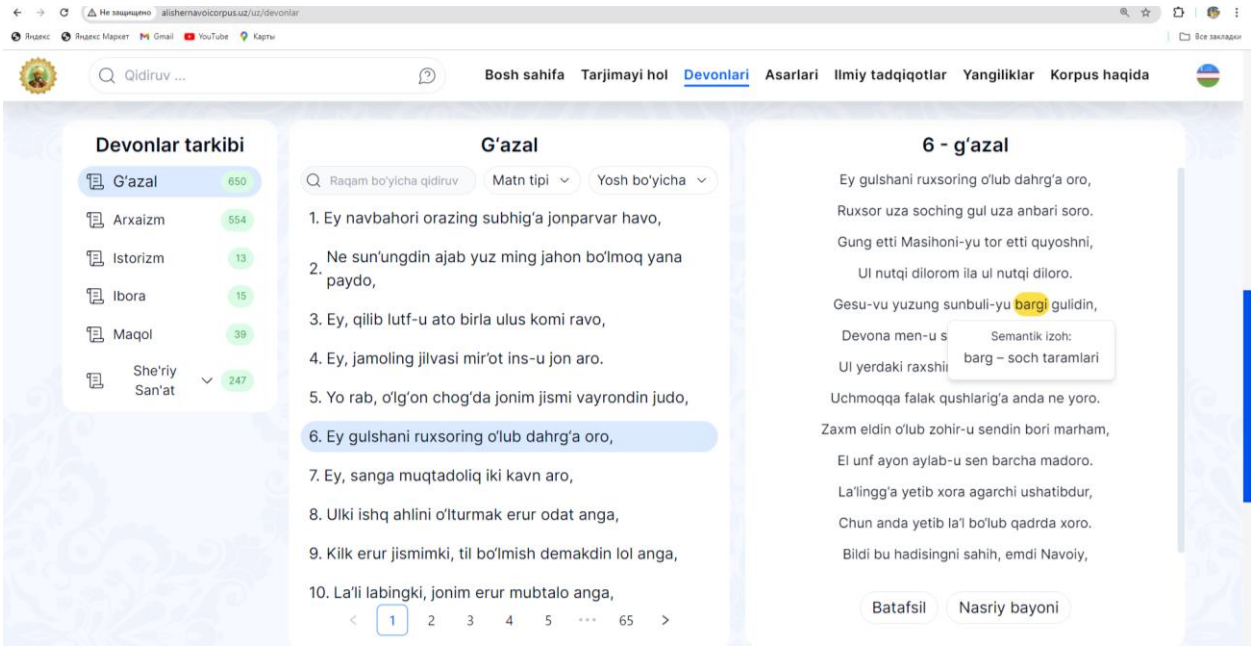


Figure 2. The display of the contextual semantic description of the word “barg” ("hair strands") found in the fifth line of the sixth ghazal from the “Badoye' ul-Vasat” divan in the corpus.

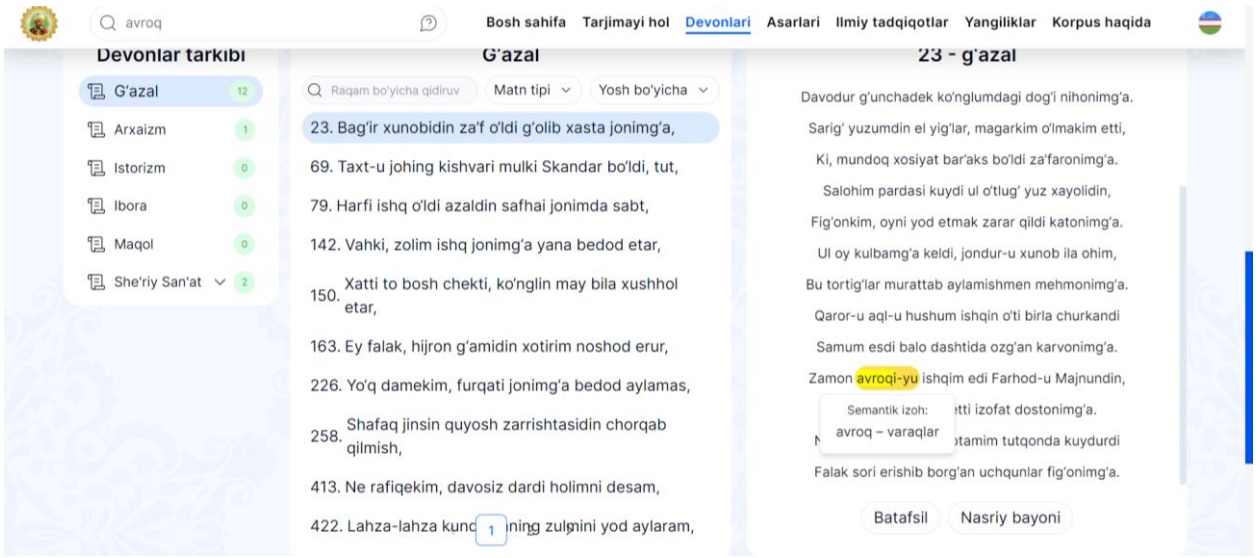


Figure 3. The display of the contextual semantic description of the word “avroq” ("pages") found in the tenth line of the twenty-third ghazal from the “Badoye' ul-Vasat” divan in the corpus.

METADATA

One of the essential requirements for language corpora is the inclusion of metadata. This metadata provides important details about the text, such as the author, gender of the author, date of writing, year of publication, field of usage, audience age, style of the text, and more. On one hand, it presents key information about the text, and on the other, it contributes to the development of the corpus manager. To meet the corpus requirements and provide these two benefits, 2,600 different metadata sets have been created for the ghazals in the Alisher Navoi authorship corpus. To access the metadata, users can click the “Batafsil” (Details) button located below the full text of a ghazal, and the “Metama’lumot” (Metadata) window will open.

The following image (screenshot/fragment) taken from the corpus shows the metadata for the 11th ghazal in the “Badoye’ ul-Vasat” divan. From this, it can be seen that the ghazal consists of 75 words, is classified as "rindona" (carefree) in tone, and is suitable for readers aged 18+.

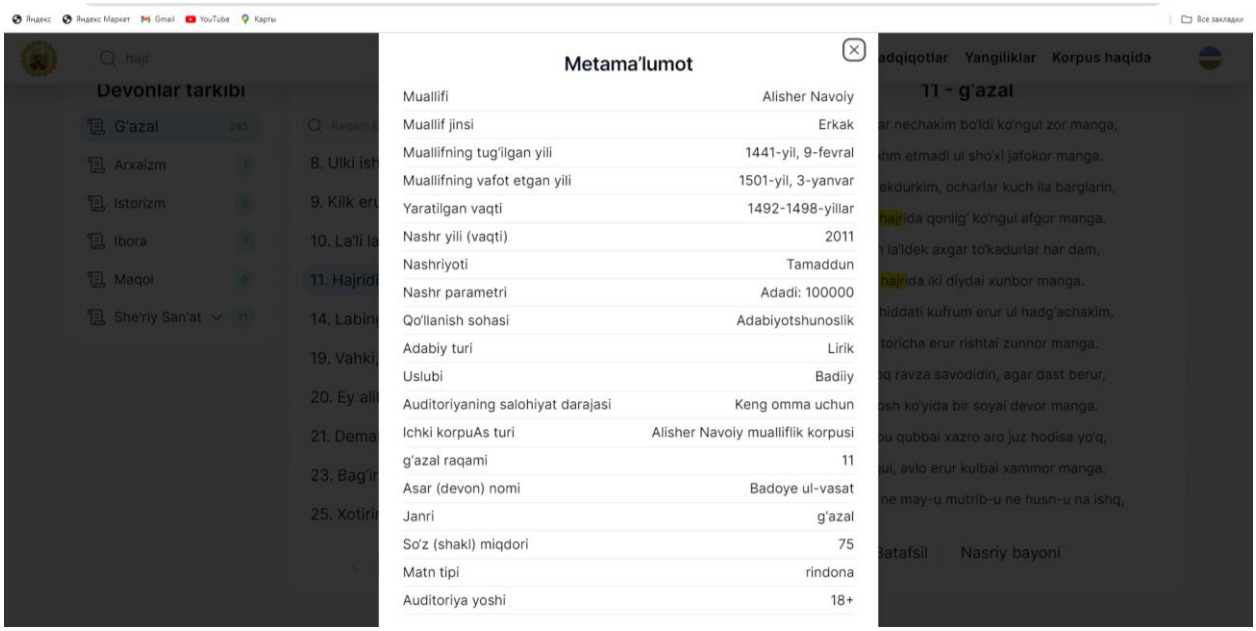


Figure 4. The display of the metadata for the 11th ghazal in the “Badoye' ul-Vasat” divan.

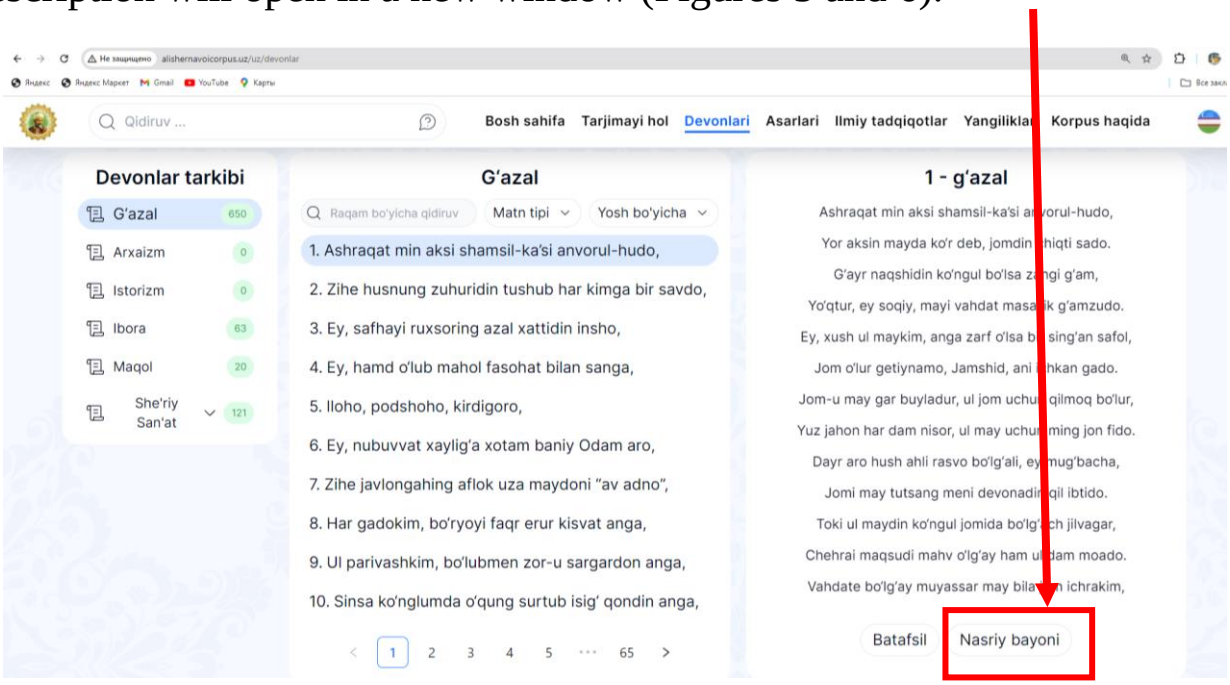
General metadata. General metadata provides comprehensive information about the divan as a whole. For example, for Alisher Navoi's “Badoye' ul-Vasat” divan, the following general metadata is included:

1. Title of the work (“Badoye' ul-Vasat”);
2. Author (Alisher Navoi);
3. Gender of the author (male);
4. Author’s birth date (February 9, 1441);
5. Author’s death date (January 3, 1501);
6. Compilation date of the divan (1492–1498);
7. Year of publication (2011);
8. Publication parameters (circulation number);
9. Publisher (“Tamaddun” LLC Publishing House);
10. Field of usage (literary studies);
11. Literary type (lyric);
12. Genre (ghazal);
13. Time and place of events (Herat);
14. Style of the text (artistic);
15. Text type (philosophical, romantic, carefree);
16. Target audience age (15+, 18+);

17. Audience capability (general public);
18. Corpus type (authorial);
19. Number of word forms (66,539).

PROSE DESCRIPTION

To facilitate the understanding and dissemination of Alisher Navoi's work, along with the creation of a contextual semantic database, prose descriptions (not scientific commentary) of each ghazal have been compiled as a separate database. These prose descriptions are attached to each ghazal. To access the prose description, users can click the "Prose Description" button located below the full text of a ghazal, and the description will open in a new window (Figures 5 and 6).



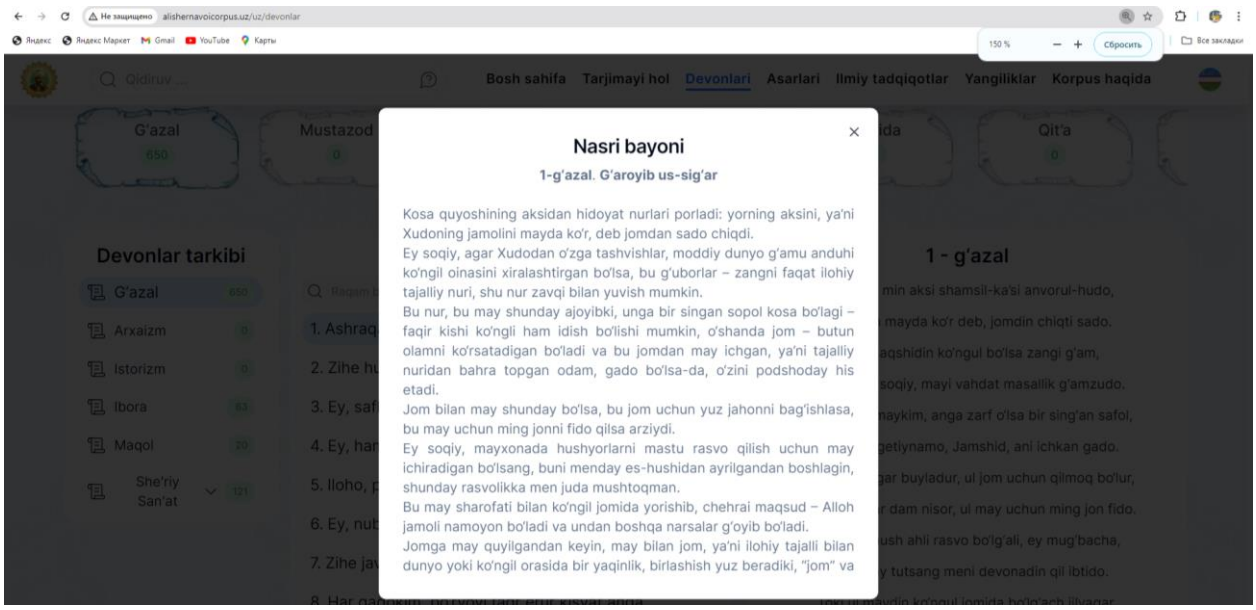


Figure 5. Prose description of the first ghazal from the “Gharoyib us-Sighar” divan.

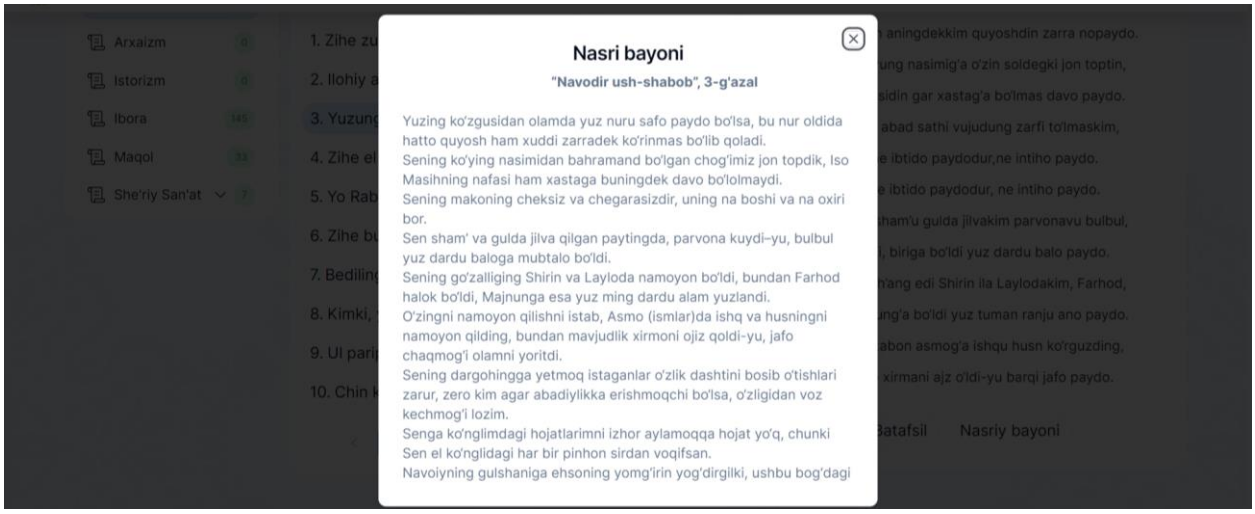
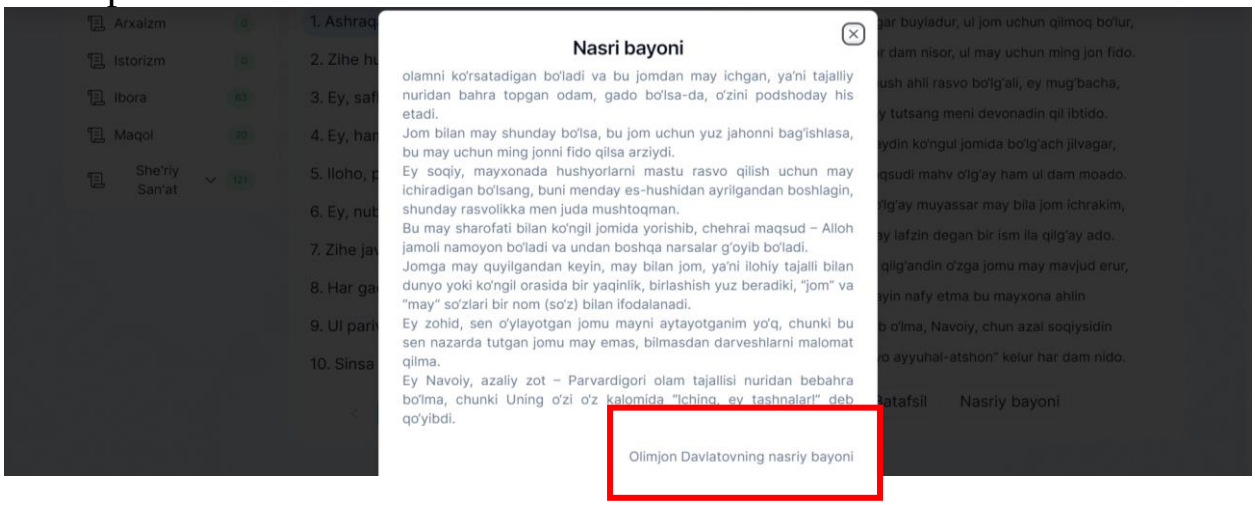


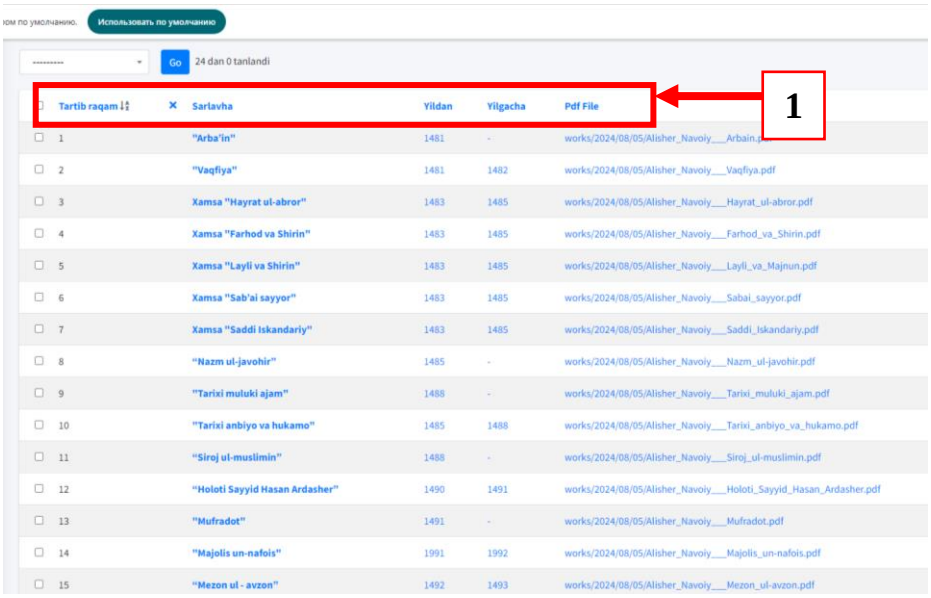
Figure 6. Prose description of the third ghazal from the “Navodir ush-Shabob” divan.

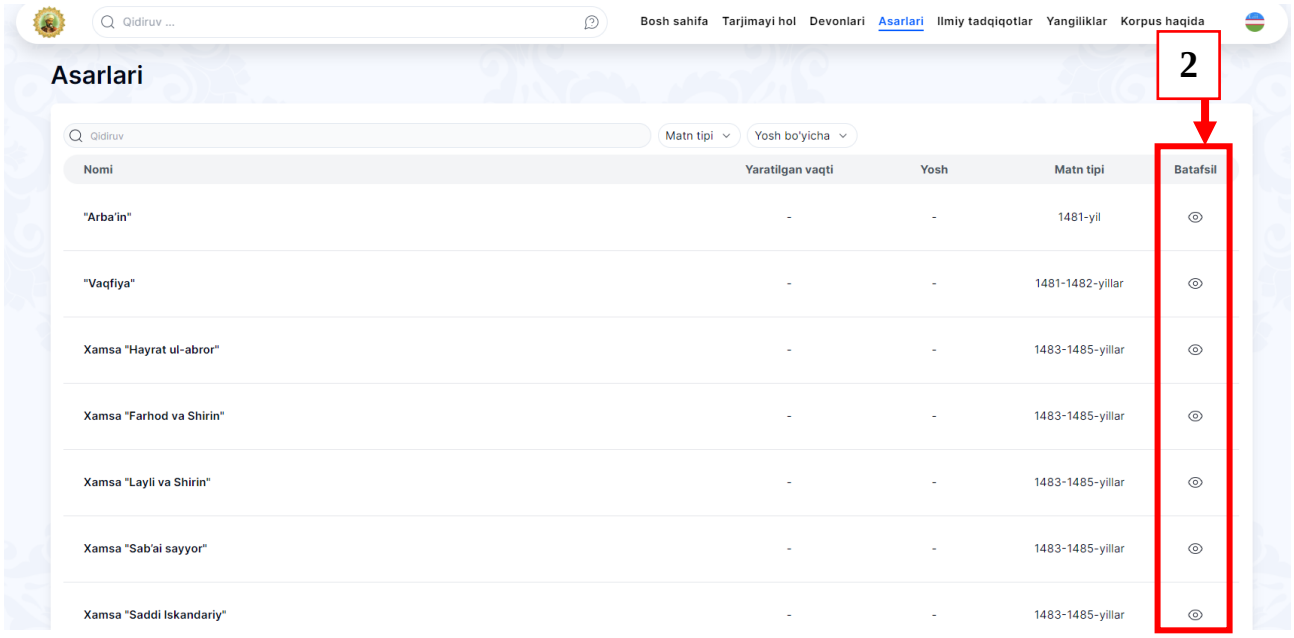
Note: In order to protect authorship rights, the authors of the prose descriptions are also credited.



4.2. WORKS

This section contains 24 works attributed to Alisher Navoi. The works are arranged chronologically by the year of writing. By clicking on the sign 👁 (to see) in the "Details" column, users can access the full text of each work (retrieved from the "Complete Works Collection").





4.3. WISDOMS

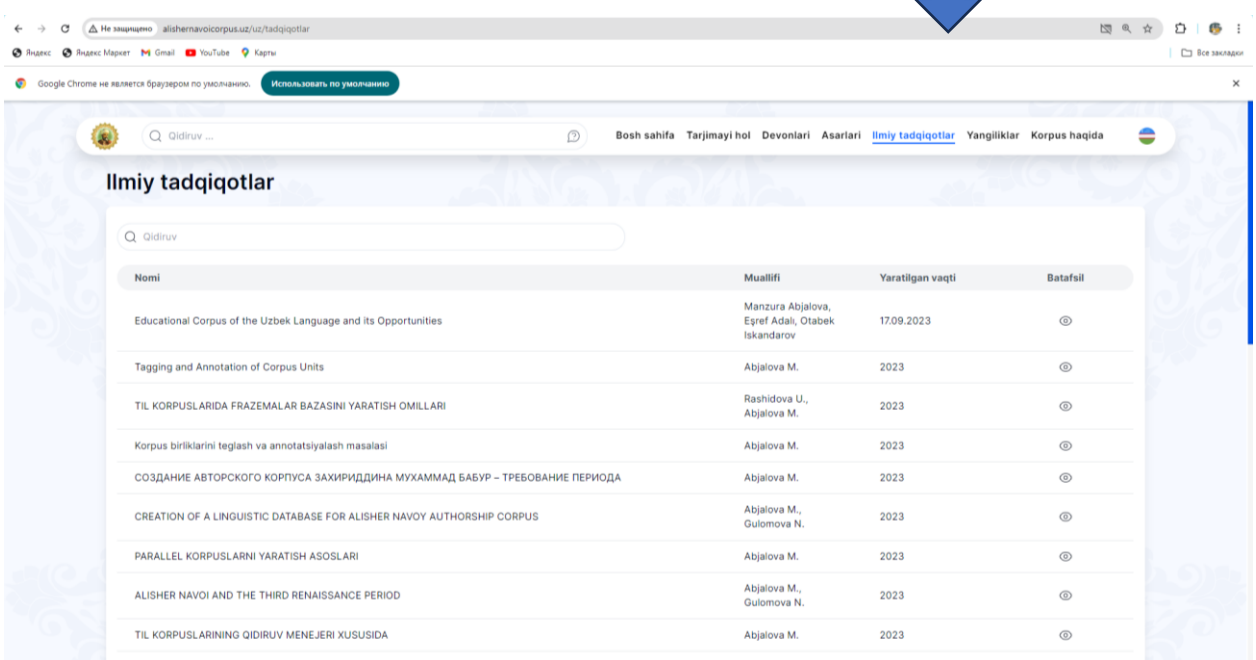
This section contains a collection of wise sayings from Alisher Navoi's works, categorized into nine thematic topics:

	Ordering number		Name
☐	1		Ilm haqida
☐	2		Odob haqida
☐	3		Odamiylik haqida
☐	4		So‘z qudrati haqida
☐	5		Kamtarlik haqida
☐	6		Hunar haqida
☐	7		Vafo-sadoqat haqida
☐	8		Donishmandlik haqida
☐	9		Tarbiya haqida

Picture 7. Categories of the “Wisdoms” section.

4.4. SCIENTIFIC RESEARCH

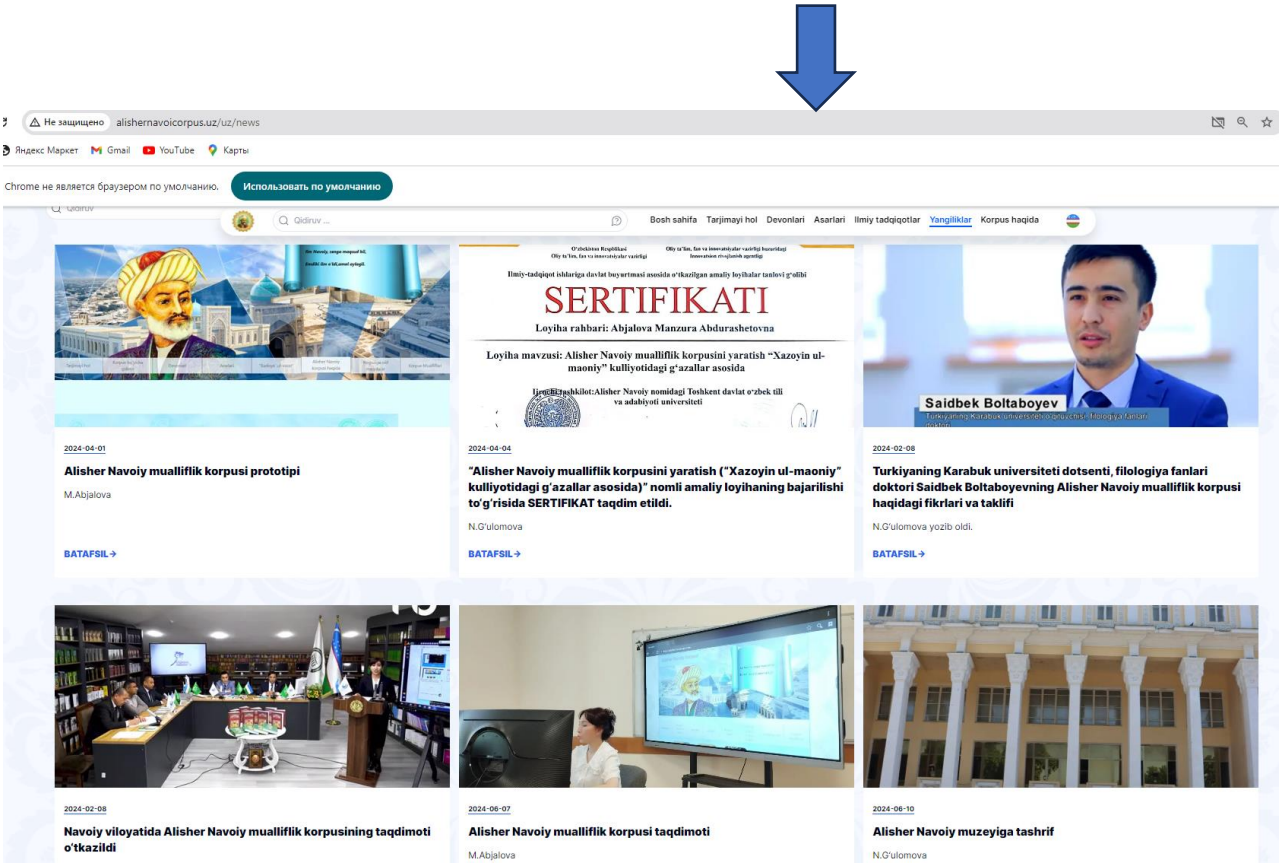
This section includes research studies on corpus linguistics conducted by the authors of the corpus. 👁 Users can read and download scientific papers by clicking on the sign (to see) in the “Details” column, which opens the article in a new window.



4.5. NEWS

This section contains news related to the creation of the Alisher Navoi authorship corpus, as well as presentations of the corpus, including topics such as:

- The prototype of the Alisher Navoi authorship corpus;
- Certificate presentation for the completion of the practical project “Creating the Alisher Navoi Authorship Corpus (based on the ghazals from the ‘Khazoyin ul-Ma'ani’ collection)”;
- Opinions and suggestions from Saidbek Boltaboyev, Ph.D. in Philology and Associate Professor at Karabük University in Turkey, on the Alisher Navoi authorial corpus;
- Presentation of the Alisher Navoi authorship corpus in Navoi province;
- Visit to the Alisher Navoi Museum.



8-rasm. The “News” section of the corpus

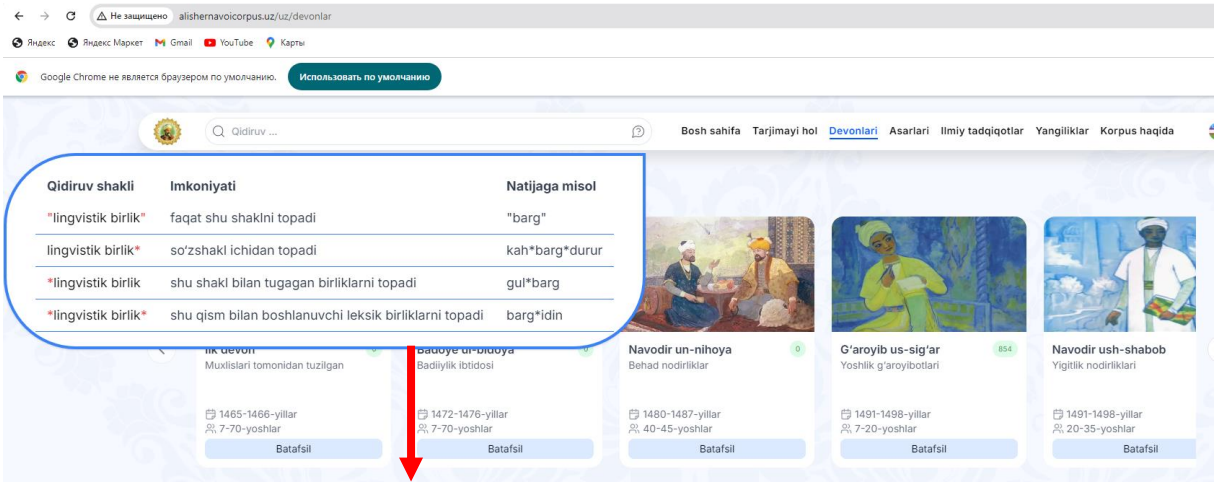
4.6. ABOUT THE CORPUS

This section contains information about the following topics:

- **WHAT IS A LANGUAGE CORPUS?**
- **THE SIGNIFICANCE OF THE ALISHER NAVOI AUTHORSHIP CORPUS;**
- **THE NECESSITY OF CREATING THIS CORPUS;**
- **THE SEMANTIC DATABASE OF THE ALISHER NAVOI AUTHORSHIP CORPUS;**
- **THE STRUCTURE OF THE CORPUS;**
- **THE HISTORICAL SIGNIFICANCE OF THE ALISHER NAVOI AUTHORSHIP CORPUS;**
- **THE LINGUISTIC IMPORTANCE OF THE ALISHER NAVOI AUTHORSHIP CORPUS;**
- **THE EDUCATIONAL VALUE OF THE ALISHER NAVOI AUTHORSHIP CORPUS;**
- **THE SOCIAL RELEVANCE OF THE ALISHER NAVOI AUTHORSHIP CORPUS;**
- **THE MORAL AND EDUCATIONAL VALUE OF THE ALISHER NAVOI AUTHORSHIP CORPUS;**
- **THE MAIN DICTIONARIES USED;**
- **THE REPRESENTATION OF THE ALISHER NAVOI AUTHORSHIP CORPUS.**

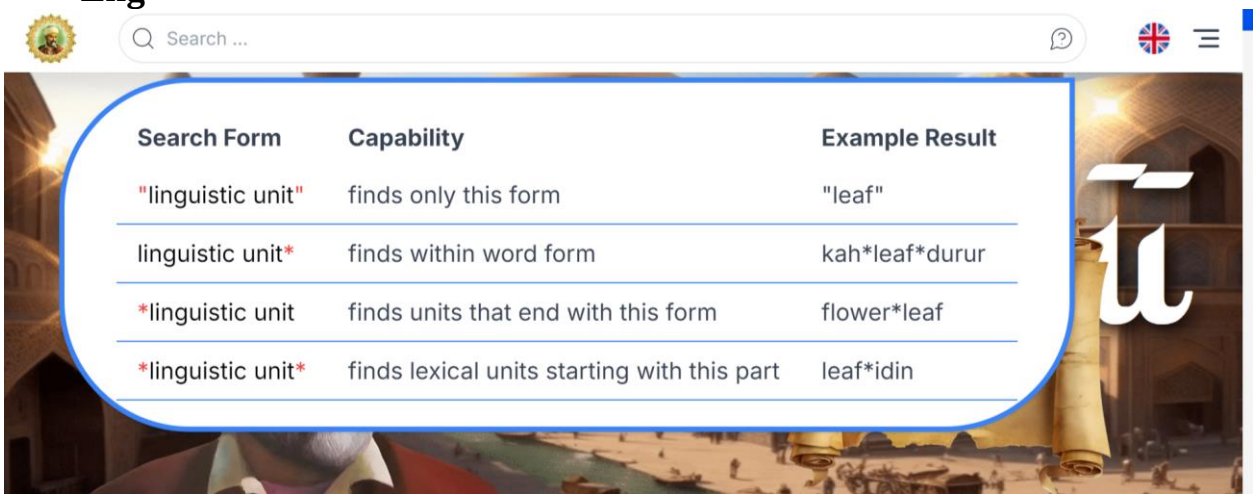
V. SEARCH CAPABILITIES

The corpus has advanced search capabilities, allowing users to search for specific affixes.

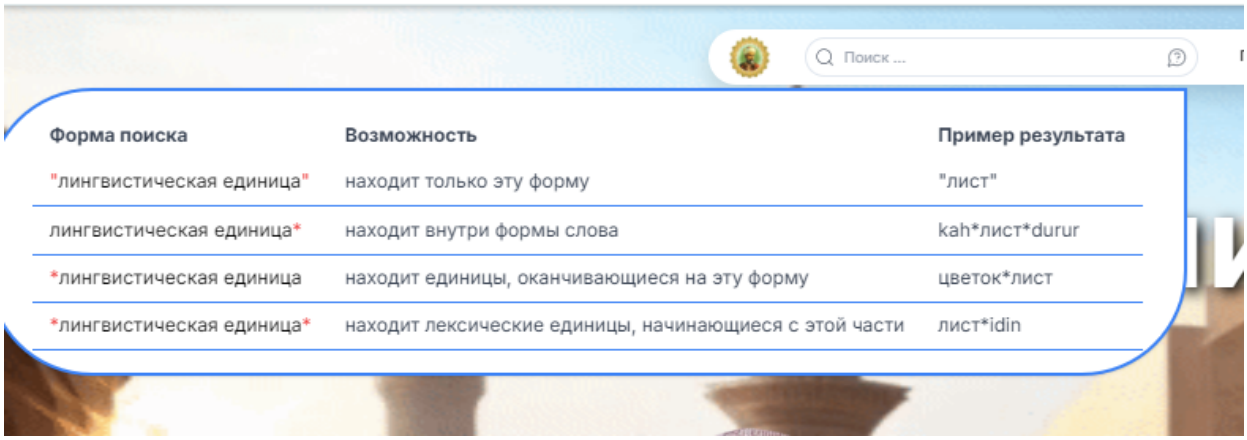


9-rasm. Search Capability for Lexical Units (words, word forms, affixes) in the Corpus. The search capability by languages is manifested with the following explanations:

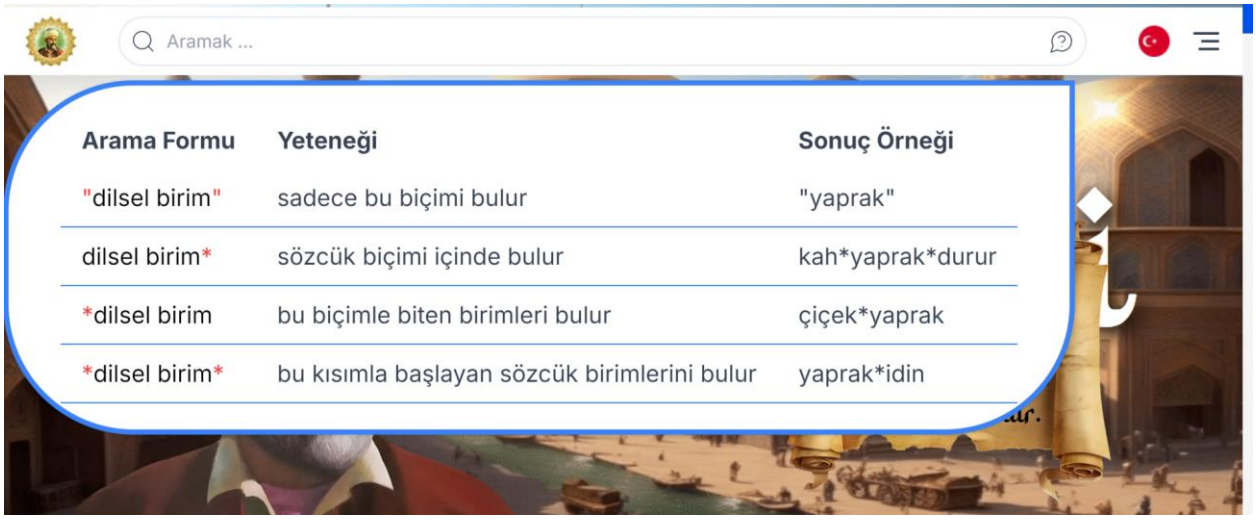
Eng



Rus



Turk

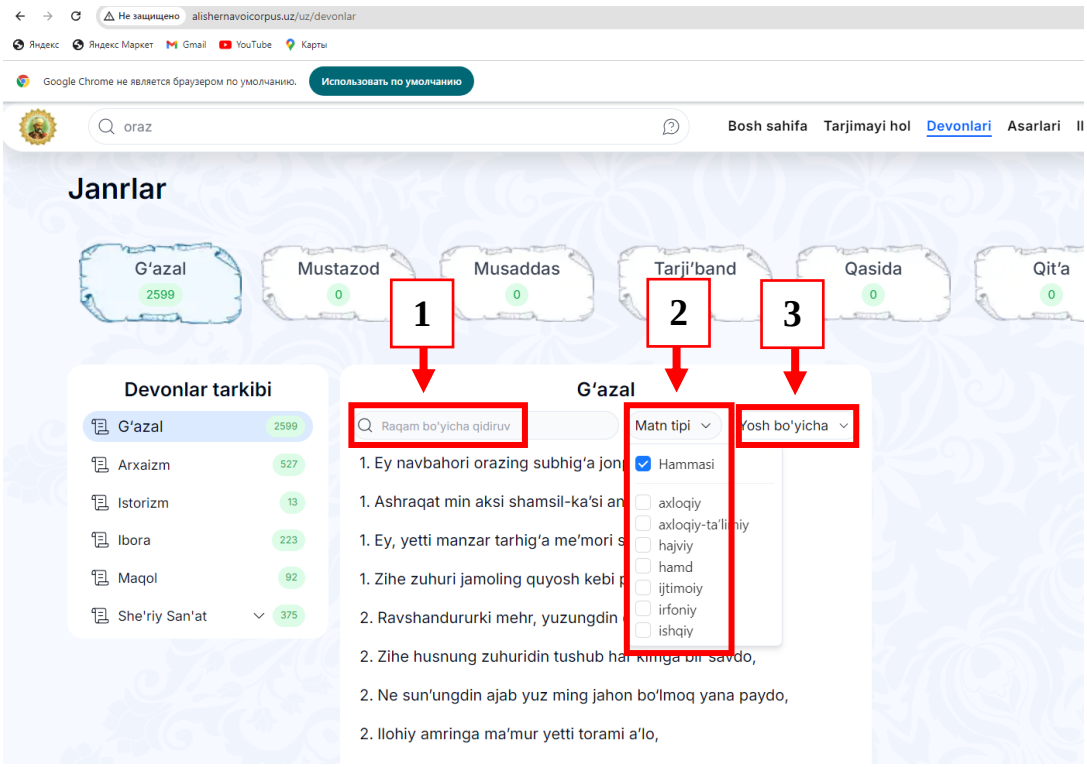


VI. CORPUS MANAGER

The corpus contains a corpus manager that includes a system for managing textual and linguistic data. *The corpus manager* is a special search system that facilitates searching within the corpus, retrieving statistical information, and presenting results to users in a convenient form. It is important to note that a corpus manager is one of the primary requirements of any language corpus.

Corpora can be used to obtain various information and statistical indicators about language and speech units. Specifically, corpora can provide insights into the frequency of words and their forms, the usage range of lexemes and grammatical categories, track changes in frequency and context over different periods, identify collocations or valency of lexical units, and so on. In this process, the corpus manager plays a vital role.

The Alisher Navoi corpus also has a corpus manager that includes a search filter. For instance, a particular lexical unit can be searched based on the number of the ghazal (1), the text type (2), and the audience age (3).



The advantage of the search filter is that users can quickly locate any ghazal from the 650 in each divan without scrolling through every page. They can also filter ghazals based on text types such as ethical, educational, philosophical, or romantic, as well as age categories like 15+ or 16+.

Thus, the corpus manager:

– Provides statistical data on individual elements of the corpus.

– Includes a search filter, allowing users to search lexical units by ghazal number, text type, or audience age.

– Displays the found word forms in an unlimited number of contexts.

– Organizes the results list according to multiple criteria selected by the user.

– Searches not only for words but also for word combinations.

– Conducts searches based on templates (complex queries).

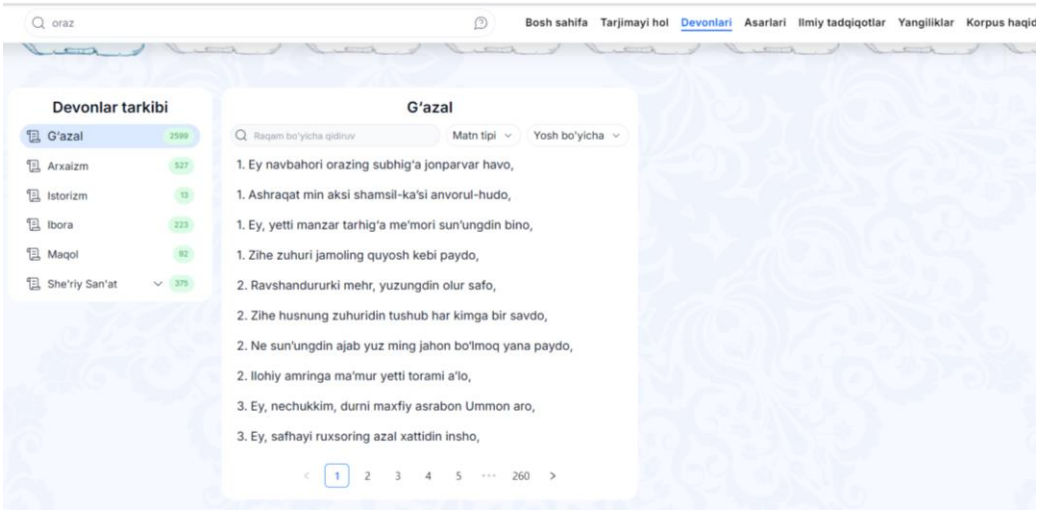
– Displays metadata (bibliographic, typological).

– Processes requests quickly and presents the results.

– Offers ease of use for both experienced users and first-time readers of the corpus.

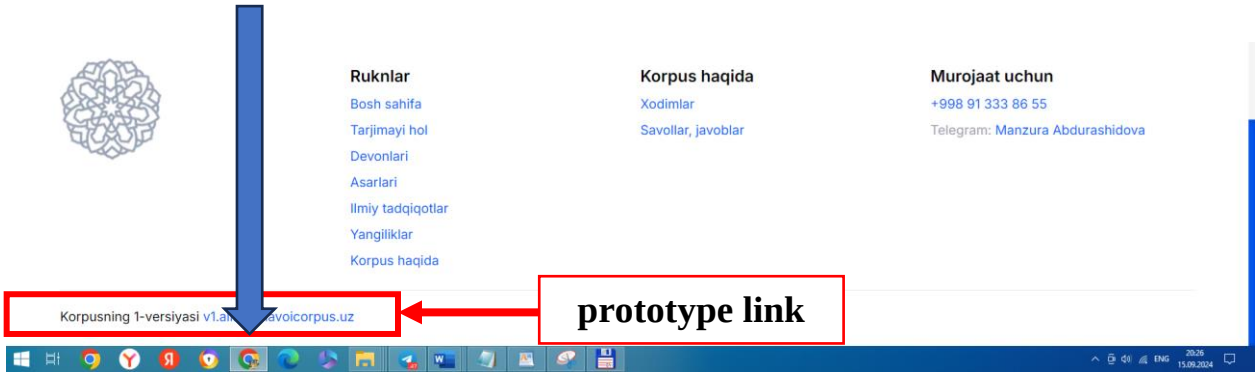
The corpus allows for searching any word to generate a concordance. A concordance is a list of all occurrences of a word in context, with a

reference to the source. The first concordances date back to the early 13th century from the texts of the Holy Bible.



VII. CORPUS PROTOTYPE (first version)

As of April 22, 2022, the prototype of the Alisher Navoi authorship corpus, developed after several years of work, was launched as an open internet resource. A link to the prototype (first version) is available at the bottom of the new Alisher Navoi corpus, and it can be accessed by clicking on the link (http://v1.alishernavoicorpus.uz/).



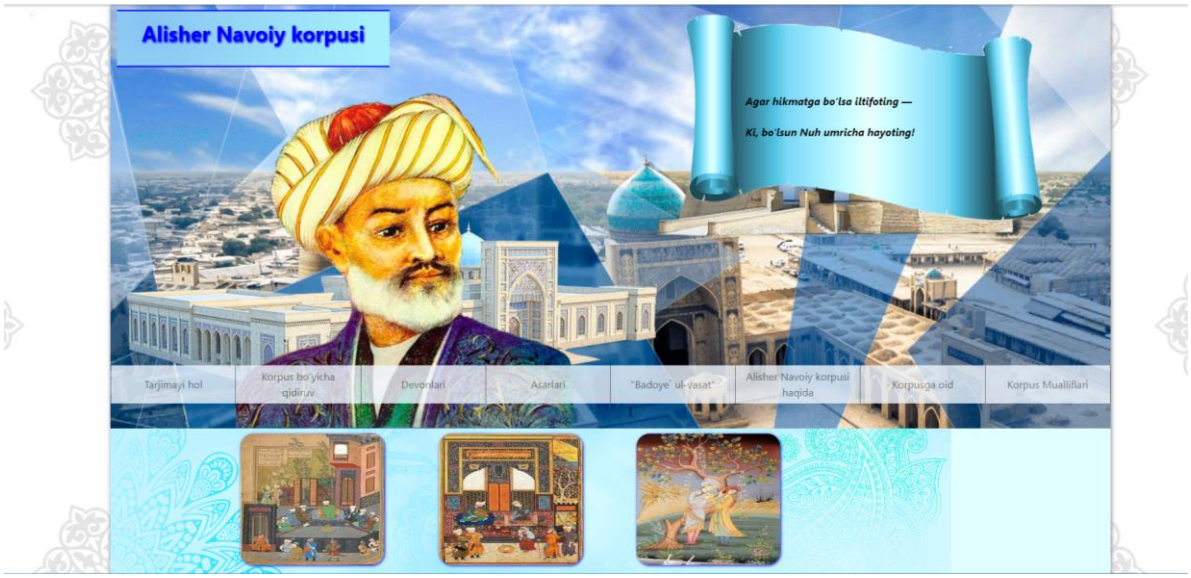


Figure 10. Home page of corpus prototype.

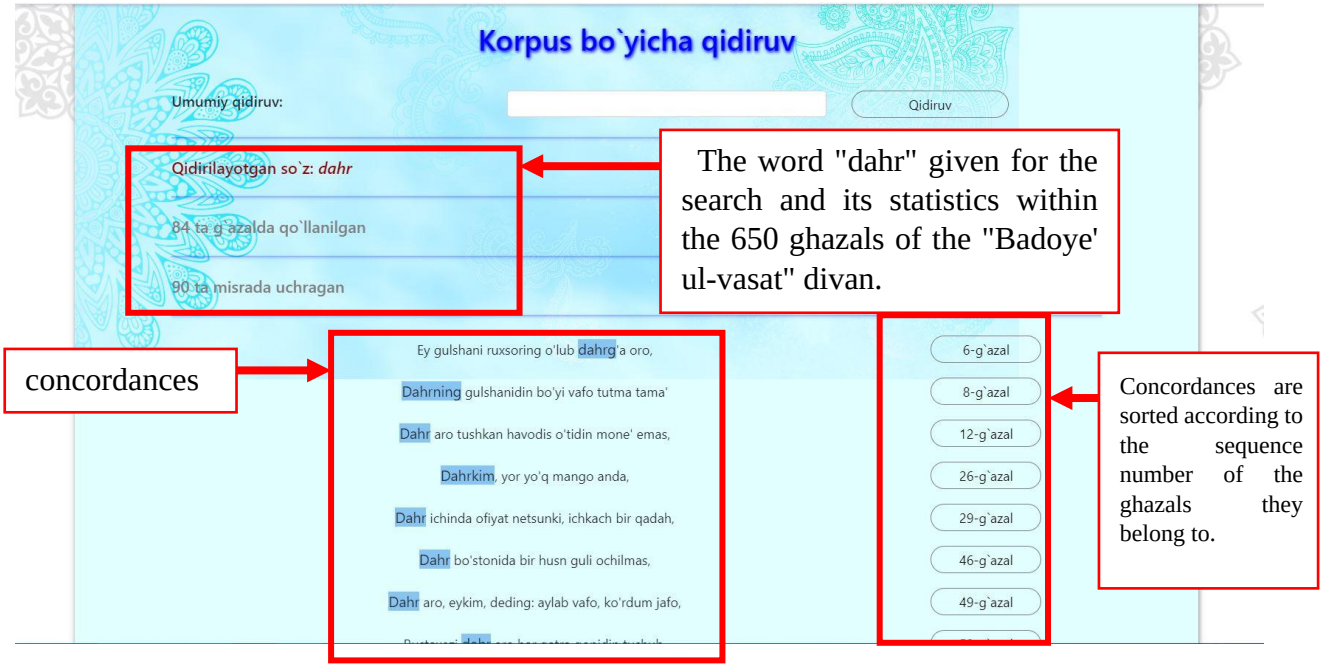


Figure 11. Search capabilities and results.

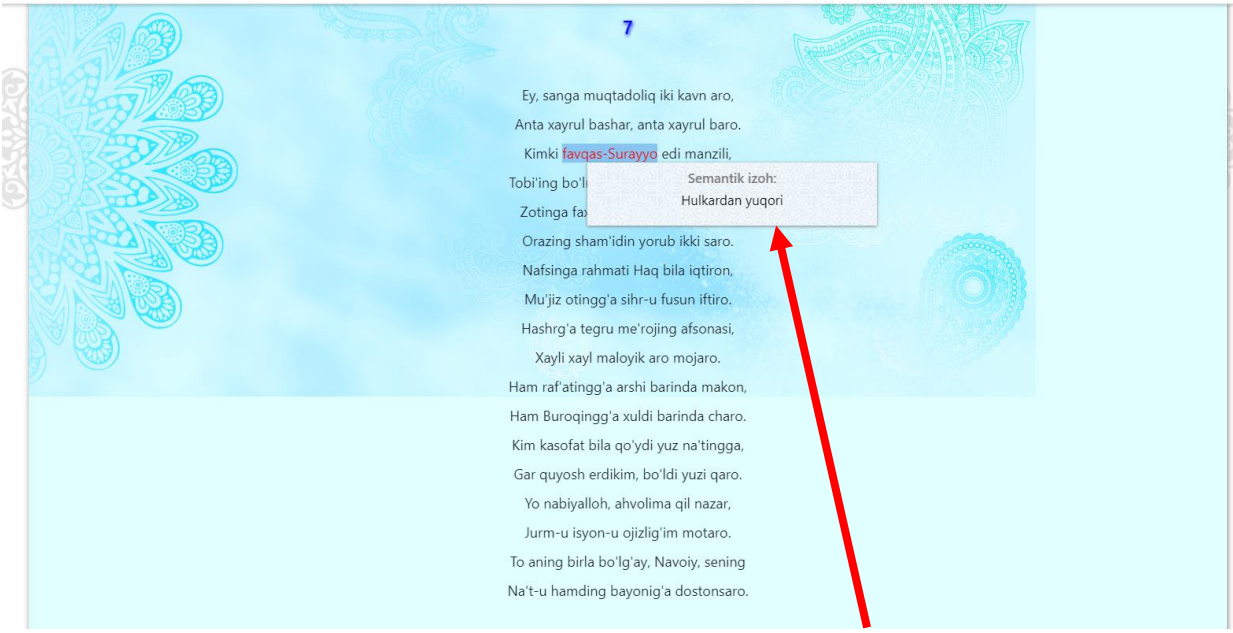


Figure 12. The full text of the 7th ghazal and the semantic explanation provided for the lexeme “favqas-Surayyo.”

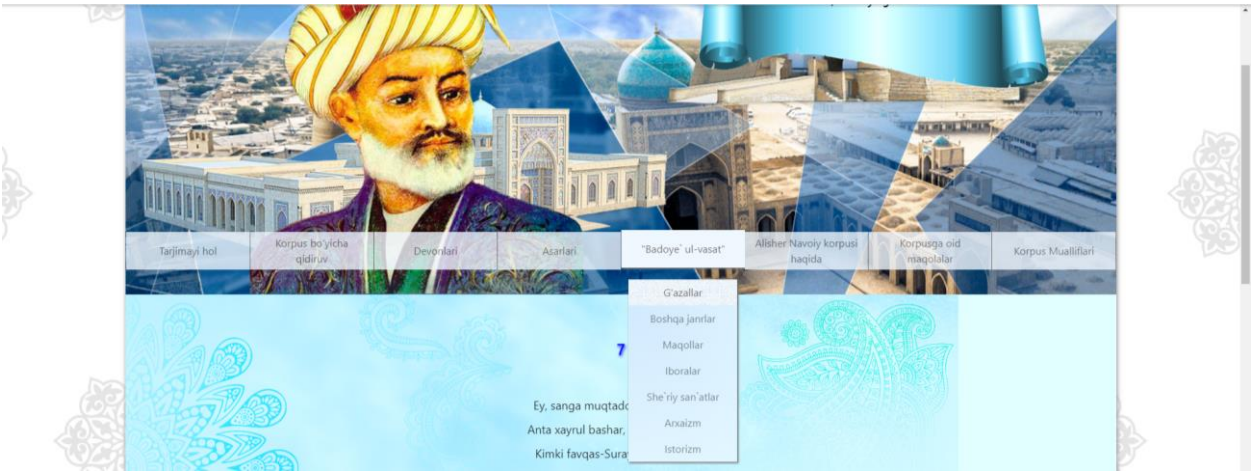


Figure 13. 5th section – Reflection of the database in the “Badoye’ ul-vasat” divan.



Figure 14. Arrangement of the 650 ghazals in the “Badoye’ ul-vasat” divan..

You can access the remaining sections by clicking the left mouse button. The prototype's features and instructions for use can be found via the video guide at the following link: https://youtu.be/744o55Tqx9E.

In the initial phase, the majority of the educational literature for secondary schools consisted of examples of Alisher Navoi's works from the "Badoye' ul-vasat" divan of the "Xazoyin ul-maoniy" collection. To help students understand and connect with Navoi's works, **the authorial corpus of Alisher Navoi was created based on the semantic tagging of the 650 ghazals from the "Badoye' ul-vasat" divan.**

Currently, this prototype is operational under the name "Version 1" at the following address ().

For the Alisher Navoi Authorial Corpus (AC), the following lexemes have been tagged in the "Badoye' ul-vasat" divan:

- 21,226 lexemes requiring explanation
- Over 5,000 archaic words
- 170 historical terms
- 43 proverbs
- 30 idioms
- 236 words related to the literary device of "talmeh"
- 164 antonyms (tazod)
- 806 examples of "tanosub" (proportion)
- 124 examples of simile (tashbih).

This tagging laid the foundation for the creation of Alisher Navoi's AC.

The "Badoye' ul-vasat" divan consists of 5,001 couplets (10002 hemistichs) and a total of 66,539 words, with each ghazal ranging from 6 to 13 couplets:

- 1 ghazal contains 6 couplets
- 437 ghazals contain 7 couplets
- 8 ghazals contain 8 couplets
- 187 ghazals contain 9 couplets
- 1 ghazal contains 10 couplets
- 14 ghazals contain 11 couplets
- 1 ghazal contains 12 couplets

- 1 ghazal contains 13 couplets.

These statistical analyses of the “Badoye’ ul-vasat” divan in Alisher Navoi’s AC are essential as they provide users with precise data and highlight the scope of work on the database.

In the ghazals of the “Badoye’ ul-vasat” divan, more than 50 proverbs and an equal number of idiomatic expressions have been scientifically analyzed and included in the 5th section.

The scientific research that laid the foundation for this prototype: PhD Dissertation in Philological Sciences the theme “Alisher Navoiy mualliflik korpusi va uning semantik teglari bazasini yaratish (“Badoye’ ul-vasat” devoni asosida)” by G‘ulomova N. was successfully defended.

(G‘ulomova N. Alisher Navoiy mualliflik korpusi va uning semantik teglari bazasini yaratish (“Badoye’ ul-vasat” devoni asosida). Filol. fan. bo‘yicha fal. dok. (PhD) diss. – Toshkent, 2023. – 190 b.)

One monograph has been published:

Abjalova M., G‘ulomova N. Mualliflik korpuslari: Alisher Navoiy mualliflik korpusi. [Matn]: monografiya / M.A. Abjalova, N.S. G‘ulomova. – Navoiy, 2023. – 216 b.

Five authorship certificates have been obtained:

1. Alisher Navoiy mualliflik korpusi uchun Navoiyning “Badoe’ ul-vasat” devonidagi g‘azallarning semantik bazasi. Guvohnoma № BGU 00583. – Toshkent, 2022. (mualliflik guvohnomasi). (Abjalova Manzura Abdurashetovna; G‘ulomova Nargiza Sa’dullayevna; Rashidov Husniddin Axror o‘g‘li)

2. Alisher Navoiy mualliflik korpusi. Guvohnoma № DGU 18544. – Toshkent, 2022. (mualliflik guvohnomasi). (Abjalova Manzura Abdurashetovna; G‘ulomova Nargiza Sa’dullayevna, Sadullayeva Shahrizoda)

Most importantly, in 2023, **the project** titled “Creation of the Alisher Navoi Authorial Corpus (Based on the Ghazals in the ‘Xazoyin ul-maoniy’ Collection),” with registration number AL-662205561, was funded by the Innovation Agency, which contributed to the development of the corpus.



ALĪ SHĪR NAVĀĪ AUTHORSHIP CORPUS



ÖZBEKİSTAN CUMHURİYETİ
YÜKSEK ÖĞRENİM, BİLİM VE İNOVASYONLAR BAKANLIĞI
TAŞKENT DEVLET ÖZBEK DİLİ VE EDEBİYATI ÜNİVERSİTESİ



ALİ ŞİR NEVÂİ
MÜELLİFLİK DERLEMİ

KULLANIM KILAVUZU

Taşkent 2024

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I. GİRİŞ

Ali Şir Nevâi müelliflik derlemine giriş

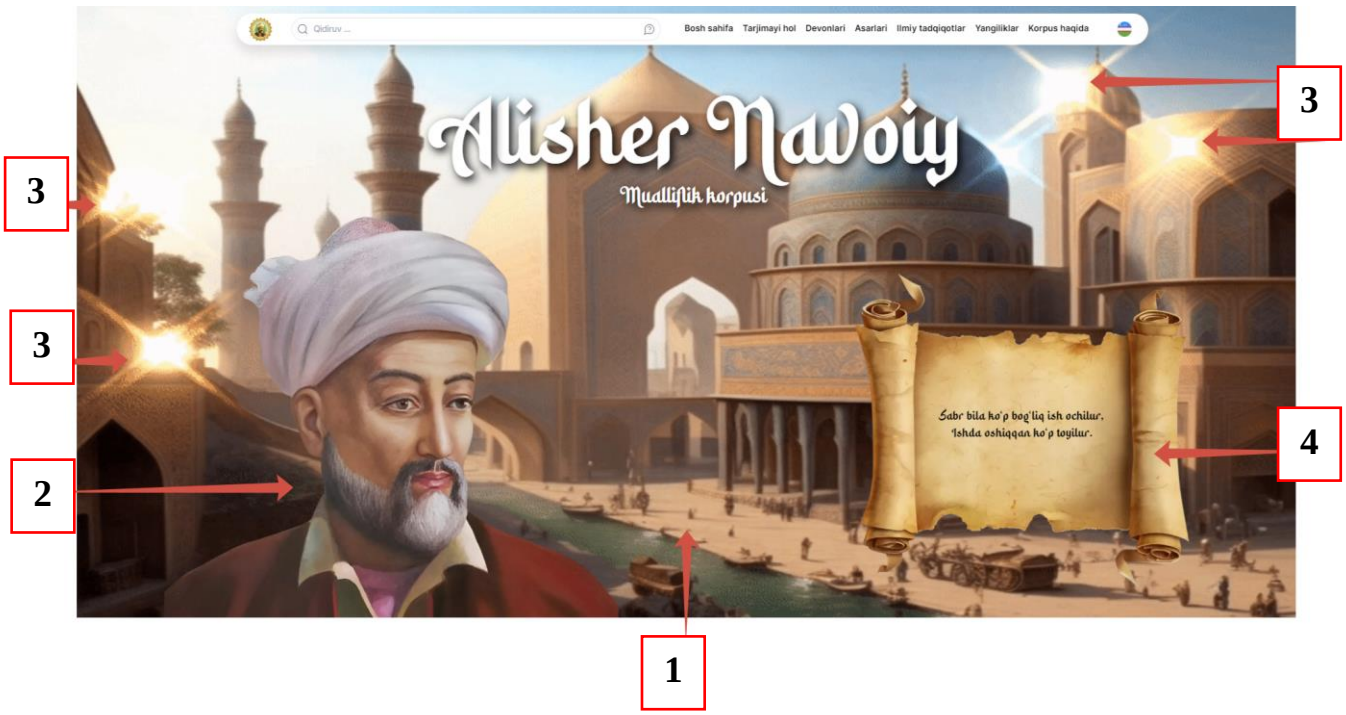
6. İnternet tarayıcısı açılır.

7. Tarayıcının URL sırasına alishernavoicorpus.uz hosting adı yazılır. Klavyedeki Enter tuşuna basılarak Ali Şir Nevâi müelliflik derlemi (sonraki sıralarda: derlem)ne girilir (http://alishernavoicorpus.uz/uz).



II. ANA SAYFA

Öncelikle baş sayfa açılır. Burada Heart şehrinin Ali Şir Nevâi zamanındaki görünümünü tesvir eden bir fon (1), Ali Şir Nevâi'nin siması (2), arka planda bu ulu şairin sonsuzluğunu temsil edici yükselen güneş ışıklarının 3D görüntüsü (3), Nevâi'nin hikmetleriden parçaları yansıtan yazılar (4) – tam unsurlar birleşerek, Ali Şir Nevâi'nin yaşadığı dönem ve onun edabıyatının görkemini tesvir etmeye hizmet eder.

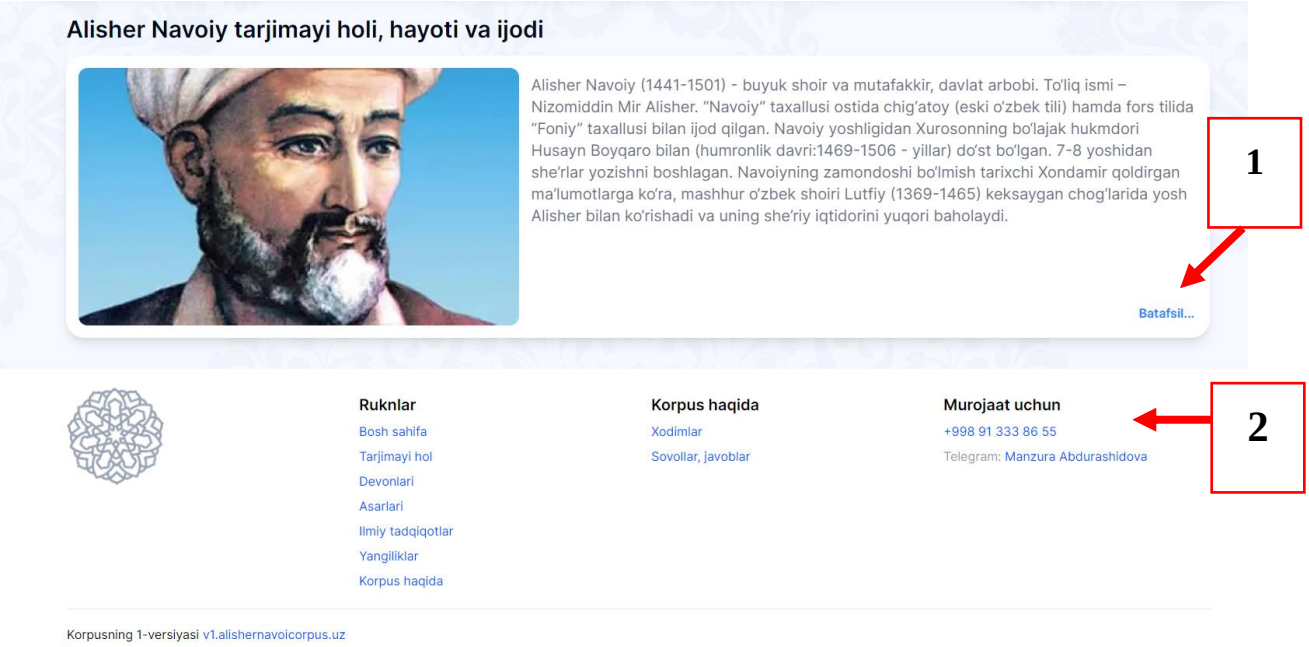


Bu ana fonun altında Ali Şir Nevâi divanlarına geçiş bağlantısı verilmektedir (1).

Sonrasında ise “Yenilikler” bağlantırıldı (2):



Ana sayfanın sonunda Nevâi’nin hayatı ve eserleri sayfasına bağlantı (1) ve “Derlem bölümleri”, “Derlem hakkında”, “İletişim için” bilgiler verilen alan mevcüt (2).



III. ARAYÜZ

Yabancı meraklıların kullanımına kolaylık sağlamak amacıyla derlem arayüzü 4 dilli (Özbek, Ingiliz, Rus ve Türk dilleri) hale getirildi. Ayrıca, ana sayfadaki hikmetler de arayüzü diline göre 4 dilde sunulabilir.



IV. Bölümler

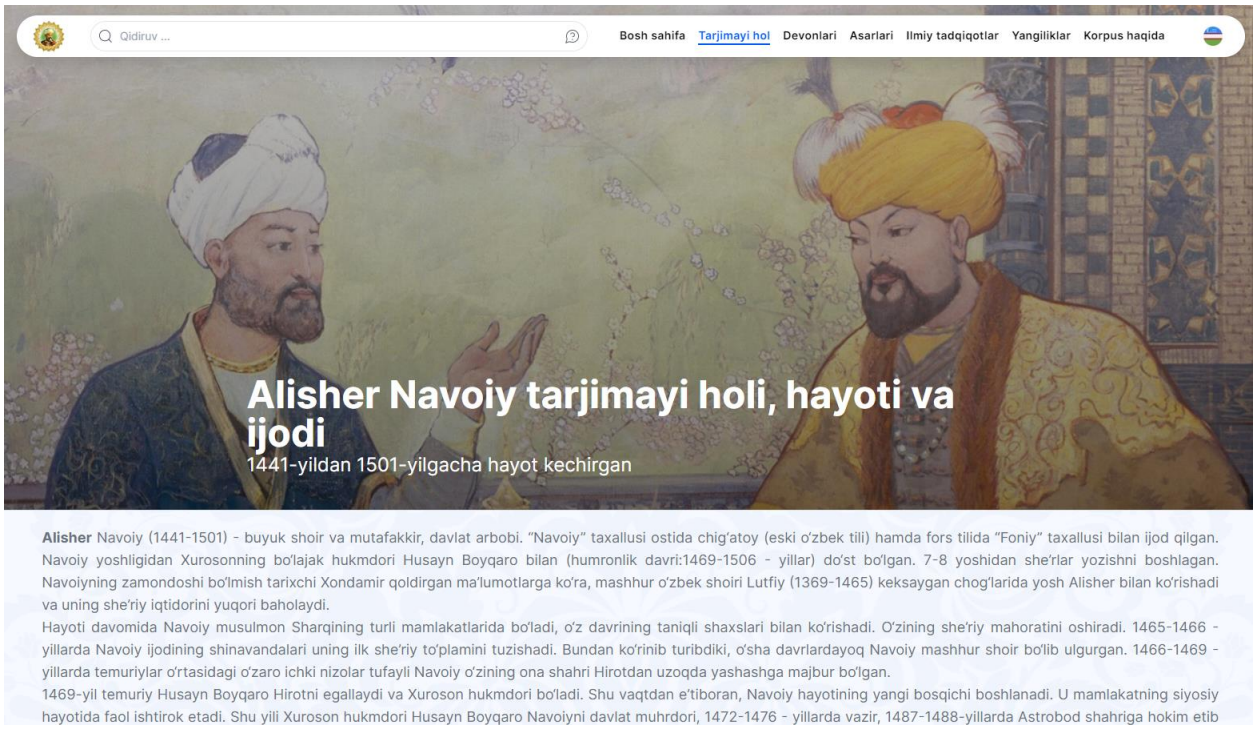
Derlem aşağdaki 8 bölümden oluşur:

- Ana sayfa
- Özgeçmiş
- Divanları
- Eserleri
- Hikmetleri
- Bilimsel araştırmalar
- Yenilikler

- Derlem hakkında

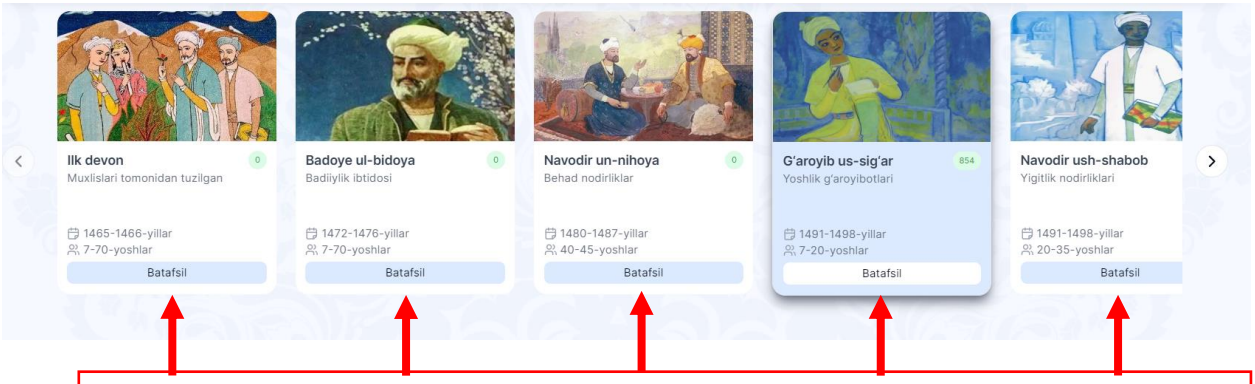


Derlemin "Tarjimayi hol" (Özgeçmişi) bölümünde Ali Şir Nevâi'nin hayatı ve eserleri hakkında temel bilimsel kaynaklara dayanan önemli veriler, dikkat çeken hayatı ve edebi bilgiler kaydedilerek, öğretmenleri hakkında da yazılandır.



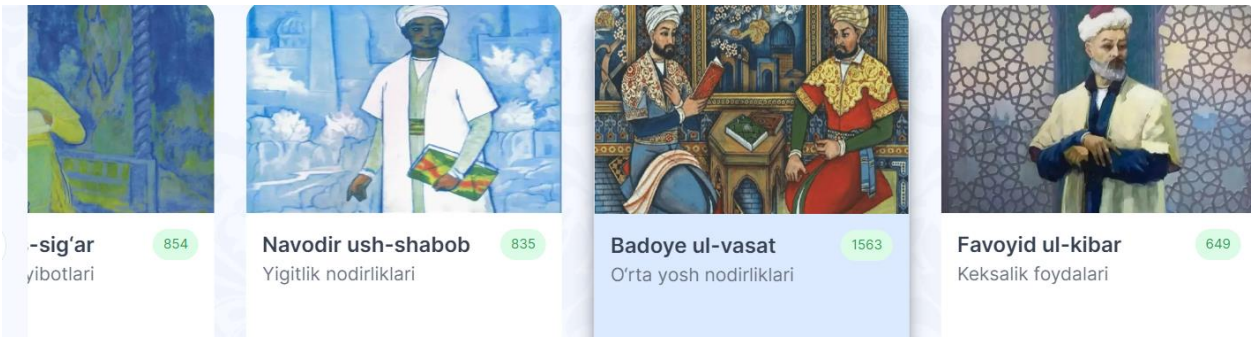
4.1. DİVANLARI

"Divanlar" bölümünde öğrencileri tarafından toplanan "İlk Divan" (1465-1466), Ali Şir Nevâi'nin kendisi oluşturan 8 divan ve daha sonra büyük mütefekkirin hayranları tarafından toplanan "Akkuyunlu Hayranların Divanı" (1471) kitapları aktarılan. Her bir divan adı ve ona ait kısa tanıtım altındaki "Ayrıntılı bilgi" bağlantısına tıklandığında belirtilen divanın ("Tam Eserler Derlemesi"nden alınan) tam PDF dosyası açılır. Kullanıcı divanı tam halinde okuyabilir.



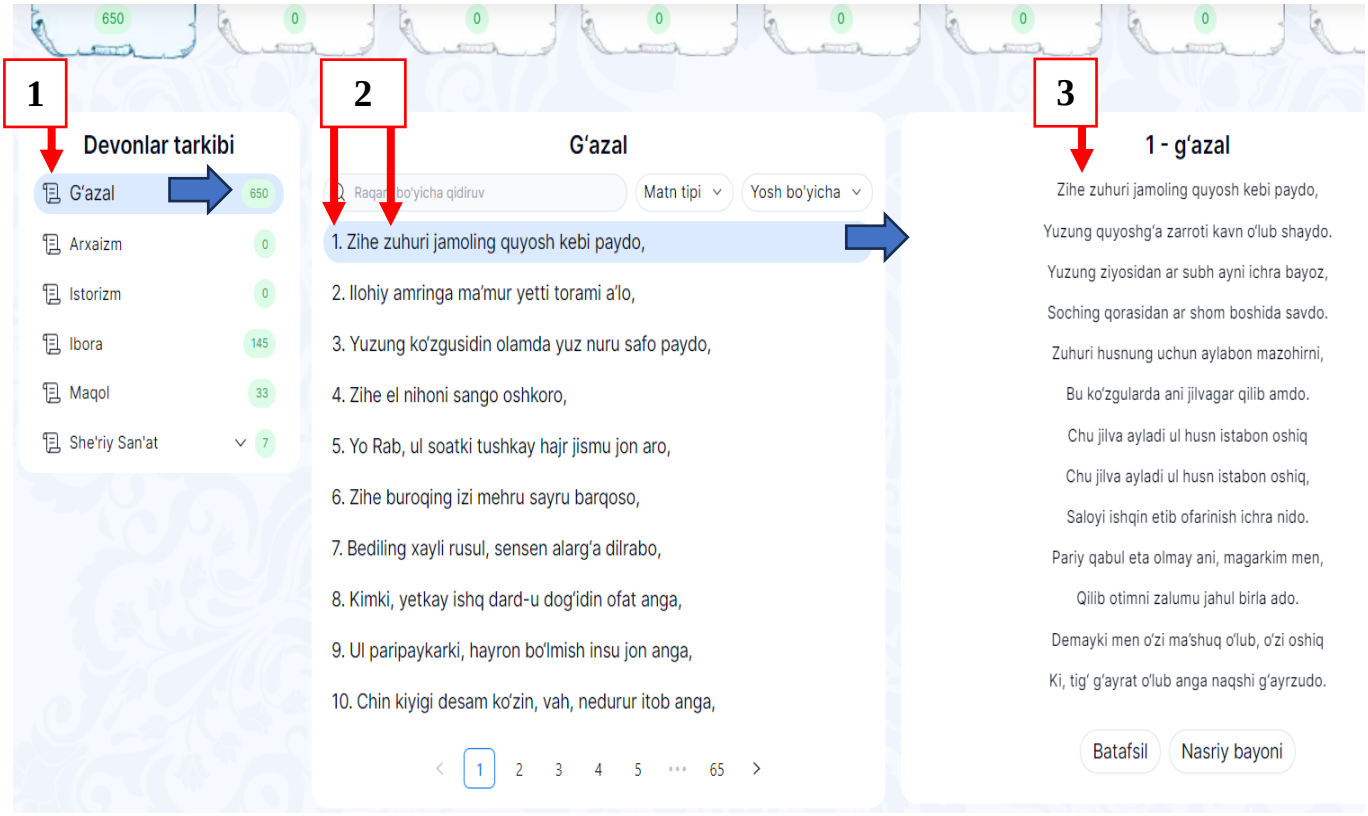
"Detayli bilgi" tuşuna tıklandığında, belirtilen divanın ("Tam Eserler Derlemesi"nden alınan) tam PDF dosyası açılır.

Önemli noktası şudurki, bu bölüm derlemin özel olarak hazırlanmış metinler veritabanı ile bağlıntılıdır ve işlenmiş divanlar üzerinde de arama imkanı sunabilir. Derlemdeki istatistik veriler de bu veritabanıya dayanarak sunulmaktadır. Ayni anda "Garâibüs-Sağır"da bu divandaki 650 gazel+63deyim+121 şiir sanatıyla ilgili örnekler – toplamda 854 yaratım örneği; "Nevadirü'ş Şebab"a ait 650 gazel+145 deyim+33 atasözü+7 şiir sanatı ile ilgili örnekler –toplam 835; "Bedâyiü'l-Vasat"ta bu divandaki 650 gazel+527 arkaizm+13 tarihsel kelime(istorizm)+15 deyim+39 atasözü+247 şiir sanatı ile ilgili örnekler – toplum 1491; "Fevaidü'l-Kiber" bölümünde ise 650 gazel metninin bilgileri oluşturuldu.



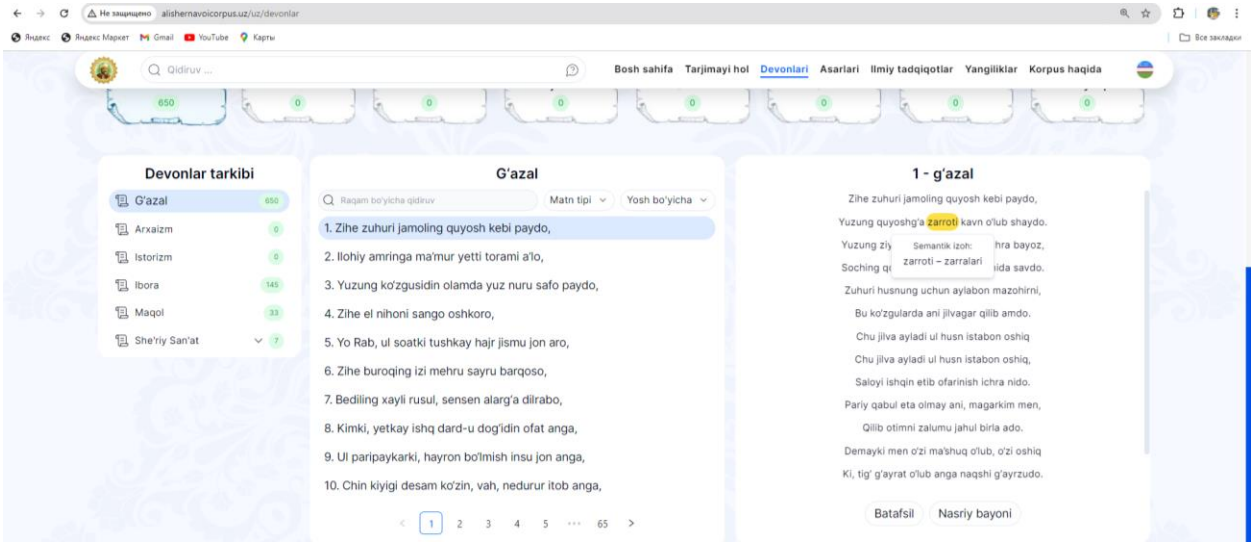
AL-662205561 numaralı **"Ali Şir Nevâi Müelliflik Derlemini Oluşturmak ("Hazâinül Maânî" Külliyatındaki Gazelleri Temelinde)**" (sonraki sıralarda: uygulama projesi) adlı uygulama projesi kapsamında gerçekleştirilen tüm bilgiler veritabanı bu "Divanlar" bölümünde sünülmüştür. Örneğin, "Garâibüs-Sağır divanına

geçildiğinde, içindeki tüm bilgiler veritabanı “Divanlar İçeriği”nde görünmektedir. Ayrıca, “Gazel” satırına takıldığında (1) 650 gazel sıra numarasına göre gazelin 1. satırıyla (böyle kolaylık belli numara altında hangi gazelin yer aldığını belirlemeye yardımcı olur) yan pencere açılır (2). Berirli bir gazel seçilip tıklandığında, onun yanından başka pencerede seçilen gazelin tam metni açılır (3).

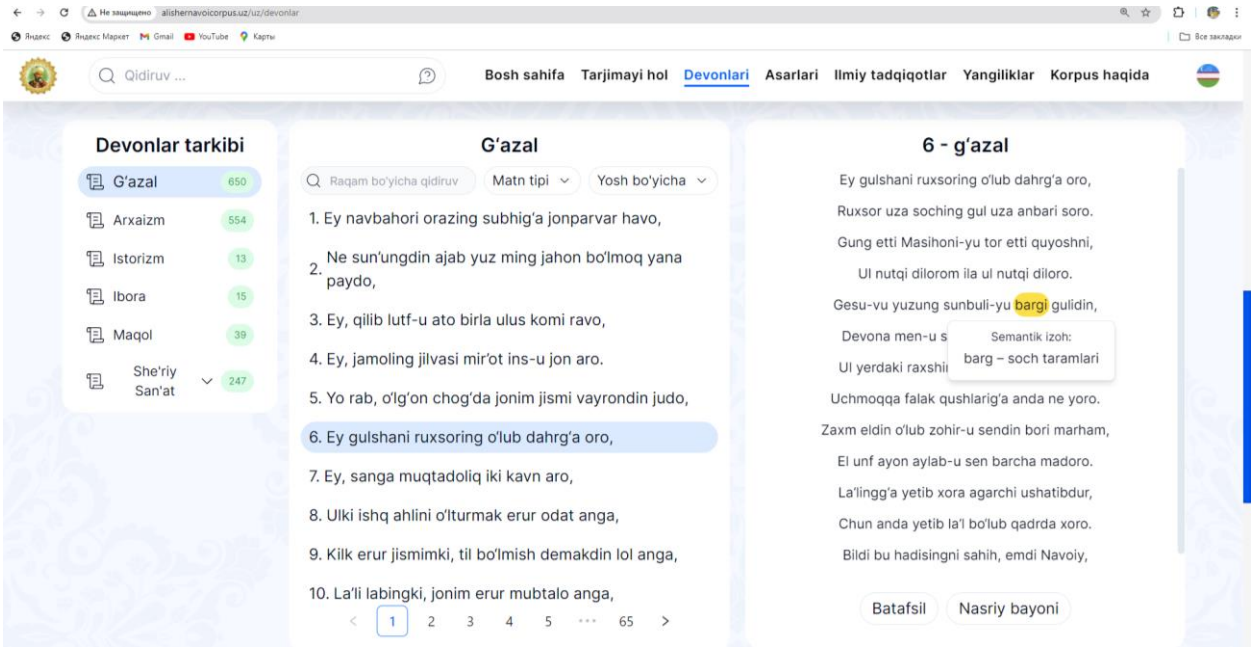


Anlamsal açıklama

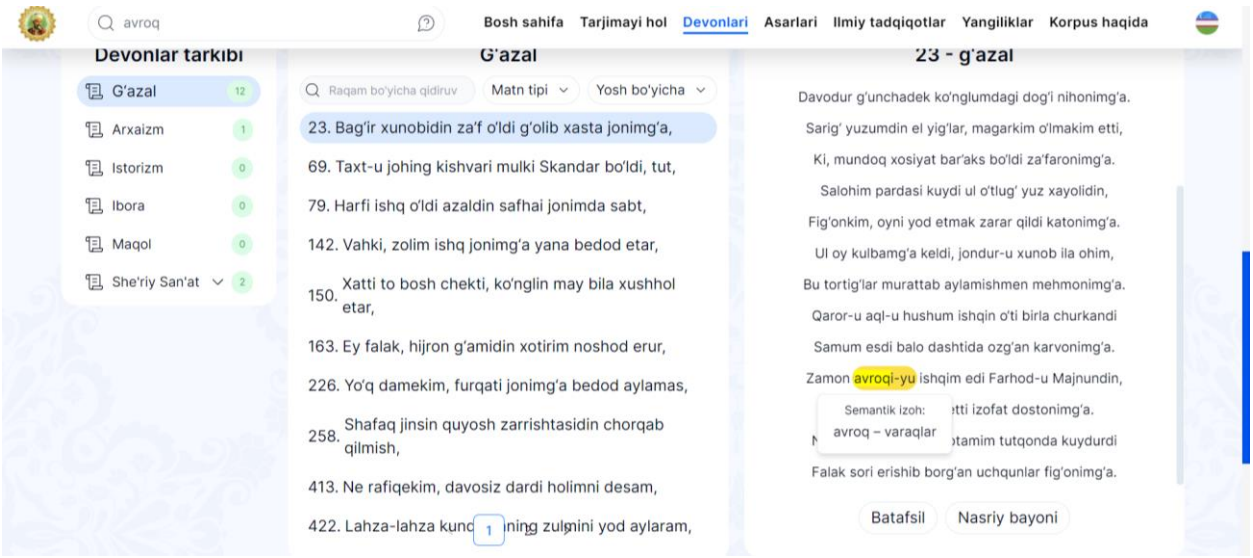
Uygulama projenin temel amacı olarak “Hazâinül Maânî” külliyatındaki tüm 2600 tane (her bir divanda 650gazel bulunan*4 divan=2600) gazaldaki açıklama gerektiren leksik birimler (*şimdiki zaman öğrencisi için anlaşılması zor olan kelimeler: arkaizm ve istorizmler; Farsça izafeler, açıklayıcılar, ünlü şahıs ve yerlerin tarihi isimleri gibi söz öbekleriyle kullanılan edebi ifadeler. Bağlamsal mecaz anlamlar*)ın anlamsal açıklamalar veritabanı hazırlandı ve bunun sonucunda derlemin içindeki gazelleri okuyan kullanıcı anlamadığı veya bilmediği leksik birimin üzerine fareyi getirerek onun **bağlamsal anlamsal açıklamasını** öğrenebilir.



1.resim. Derlemdeki “Garâibüs-Sağır” divanının 1.gazeli 2.dizesindeki “*zarroti*” kelimesine “*zerreler*” bağlamsal anlamsal açıklamanın verilmesi.



2.resim. Derlemdeki “Bedâyiü’l-Vasat” divanının 6.gazeli 5.dizesindeki “*barg*” kelimesine “*soch taramlari*” bağlamsal anlamsal açıklamanın verilmesi.

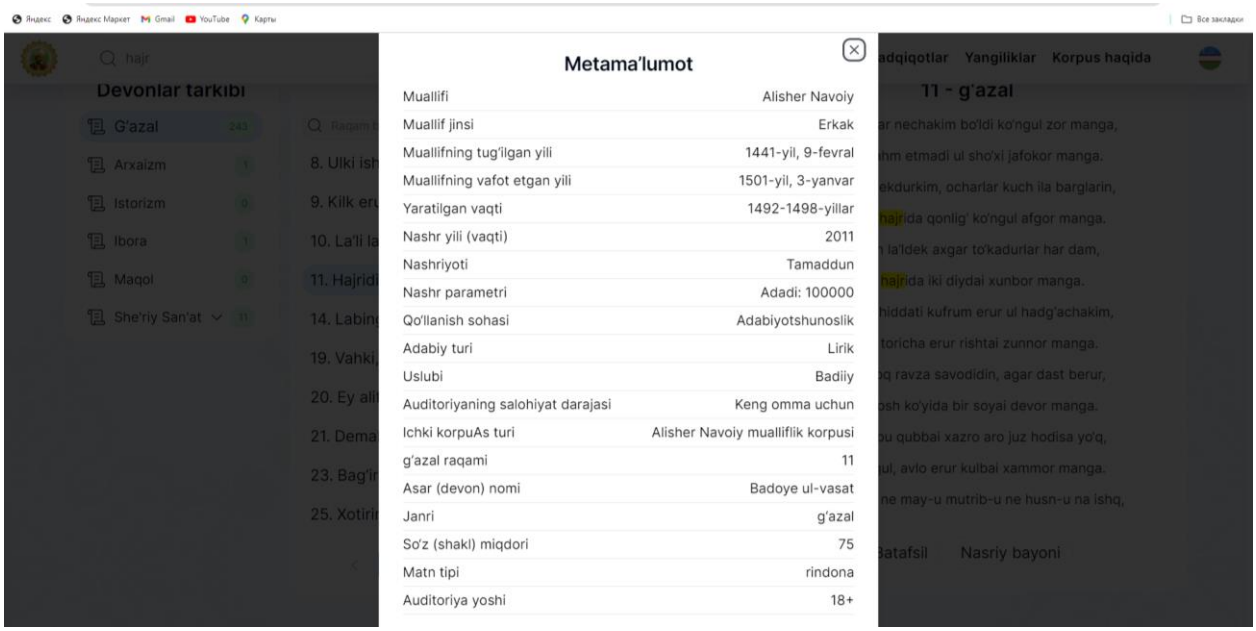


3.resim. Derlemdeki "Bedâyiü'l-Vasat" divanının 23.gazeli 10.dizesindeki "*avroq*" kelimesine "*varaqlar*" bağlamsal anlamsal açıklamanın verilmesi.

METAVERİ

Dil derlemlerinden telep edilen gereksinimleriden biri, metinlerin meteveri bilgilerinin bulunması gerektiğidir, yani matin yazarı, yazarın cinsiyeti, yazıldığı tarih, yayımlanma senesi, kullanım alanı, hedef kitle yaşı, metinin üslubu gibi bilgilerin sağlanması gerekmektedir. Bu bir yandan metinle ilgili temel bilgileri sunarken, diğer yandan derlem yöneticisini oluşturmasına yardımcı olur. Derlem telebine uygun olarak ve belirtilen iki imkani sağlayabilmek için Ali Şir Nevâi müelliflik derlemine de her bir divan gazelleri için toplam 2600 çeşitli metadata üretildi. Metadata ile tanışmak için gazelin tam metni verilen pencere altındaki "Detaylı bilgi" batonuna fare ile basılır ve sonucunda "Metadata" penceresi açılır.

Aşağdaki derlemden alınan resim (ekran görüntüsü)den "Bedâyiü'l-Vasat" divanındaki on birinci gazel metadatası ile tanışmak mümkindir. Bundan gazel 75 kelimeden oluştuğunu, gazel metninin rindane türüye ait olduğu, gazelin 18+ yaş üzere kullanıcıların daha iyi anlayabileceği (hedef kitle yaşı)ni tespit edebilir.



4.resim. “Bedâyiü’l-Vasat” divanındaki 11.gazele metadatanın sunulması.

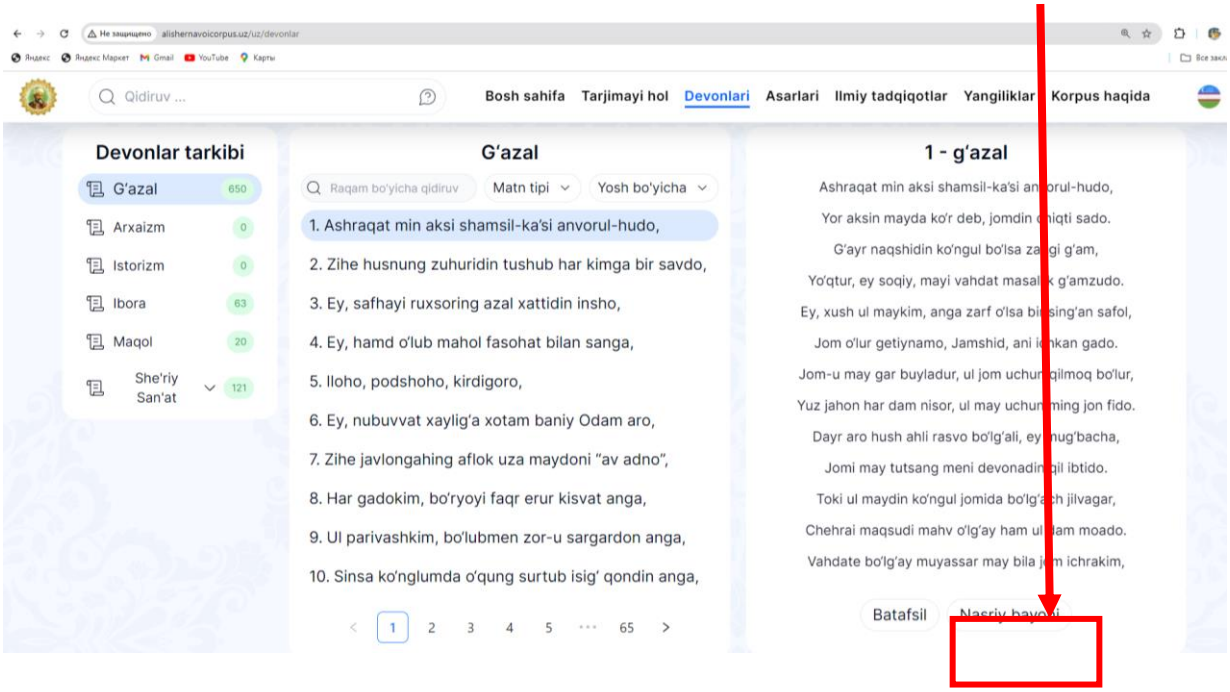
Genel metadata. Bunda divana ait genel bilgiler verilir. Örneğin, Ali Şir Nevâi’nin “Bedâyiü’l-Vasat” divanı gazellerini kapsayan genel metadatalara aşağdakiler dahildir:

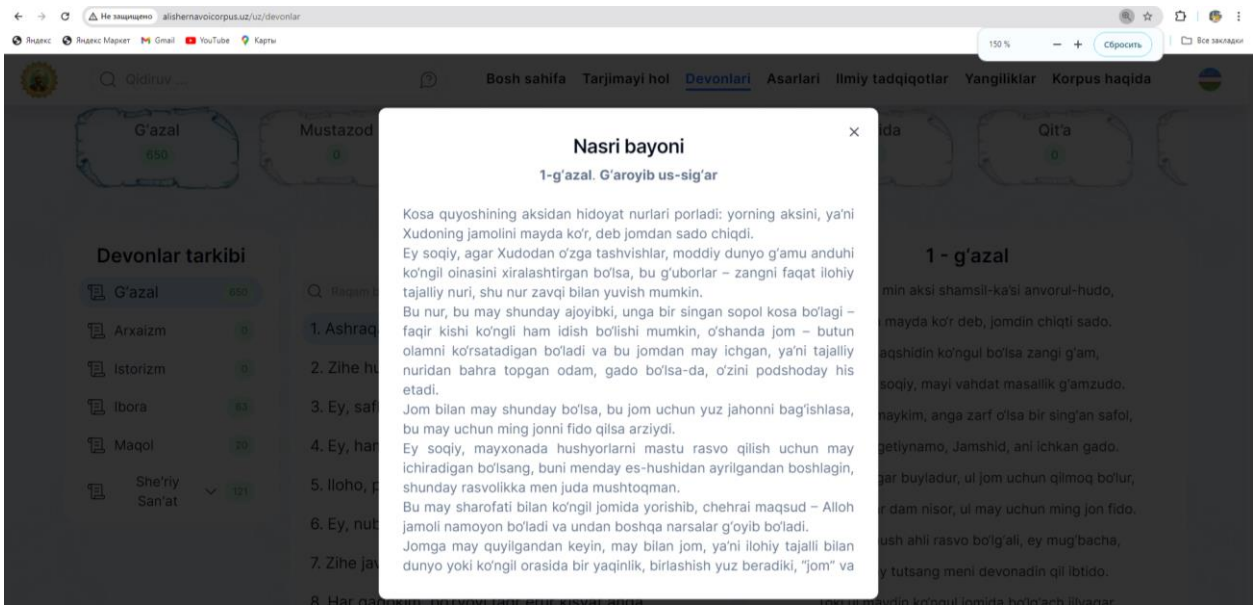
19) eser adı (“Bedâyiü’l-Vasat”);
20) müellifi (Ali Şir Nevâi)
21) müellif cinsiyeti (erkek);
22) yazarın doğum tarihi (1441yıl, 9 Subat);
23) yazarın vefat tarihi (150 yıl, 3 Şubat);
24) divan teşkil etildiği tarih (1492-1498 yıllar)
25) yayın yılı (2011 yil);
26) yayın parametrisi (sayısı);
27) yayın evi (“Tamaddun” MChJ yayın evi);
28) kullanım alanı (edebiyat bilimi);
29) edebiy türü (lirik);
30) türü (gazel);
31) olayın zamanı ve mekanı (Hirat);
32) metin üslubu (sanatsal)
33) metin tipi (aşıkane, rindane, hakimane, şuhane, sofüyane);
34) hedef kitle yaşı (15+,18+ yaş);
35) hedef kitle selahiyeti (geniş kitle için);
36) içerik derlem türü (müelliflik);

37) kelime biçim sayısı (66 539).

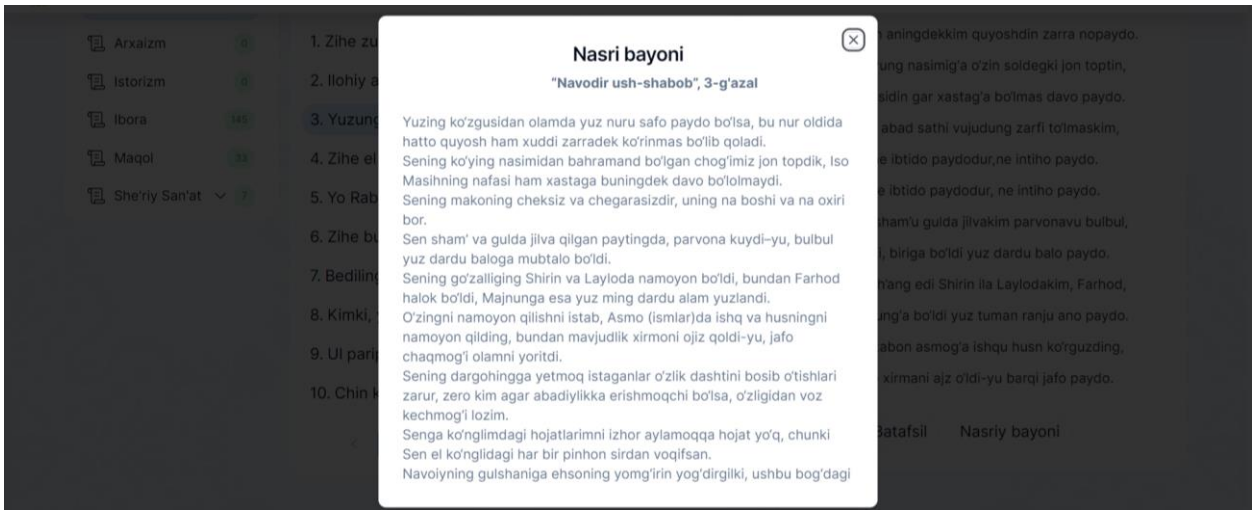
NESİR AÇIKLAMASI

Ali Şir Nevâi'nin eserlenini okuyarak anlamak, anlam katmanlarını ortaya çıkararak Nevâi'nin edebi faaliyetini daha geniş kitelere ulaştırmak amacıyla bağlamsal ve anlamsal açıklamalar veritabanı oluşturuldu hemde gazellerin tam metni onların nesir biçimindeki açıklanması (bilimsel yorum değil) da ayrı bir veri olarak toplanarak her bir gazele ait nesir açıklanması eklendi. Nesir açıklaması ile tanışmak için gazelin tam metni sunulan pencere altındaki "Nesri açıklama" tuşuna fare ile tıklanır ve sonucunda açıklama diğer pencerede açılır. (5,6.resimlar).



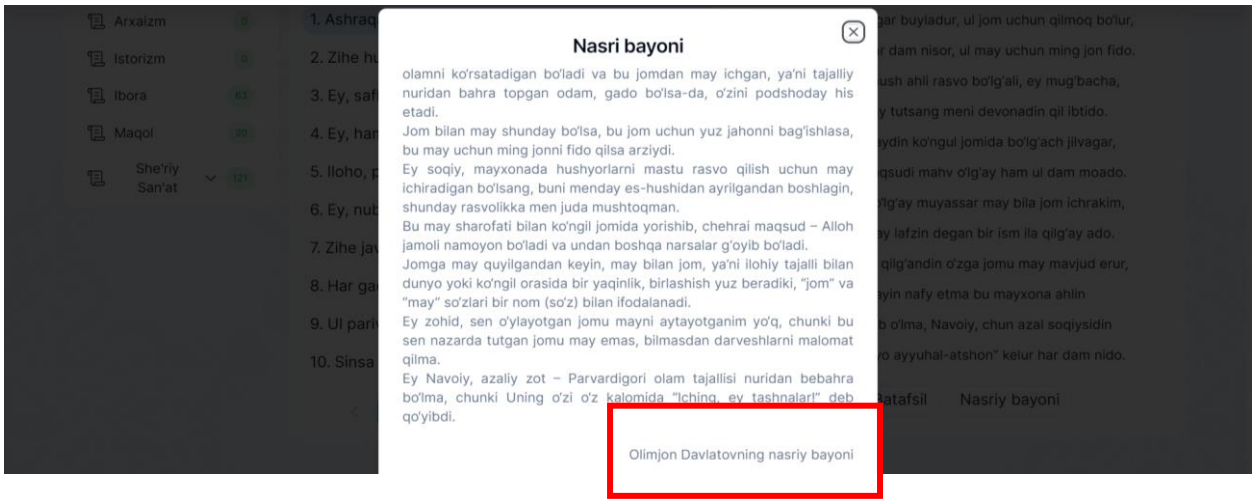


5.resim. “Garâibüs-Sağır” divanının 1.gazelinin nesri açıklanması.



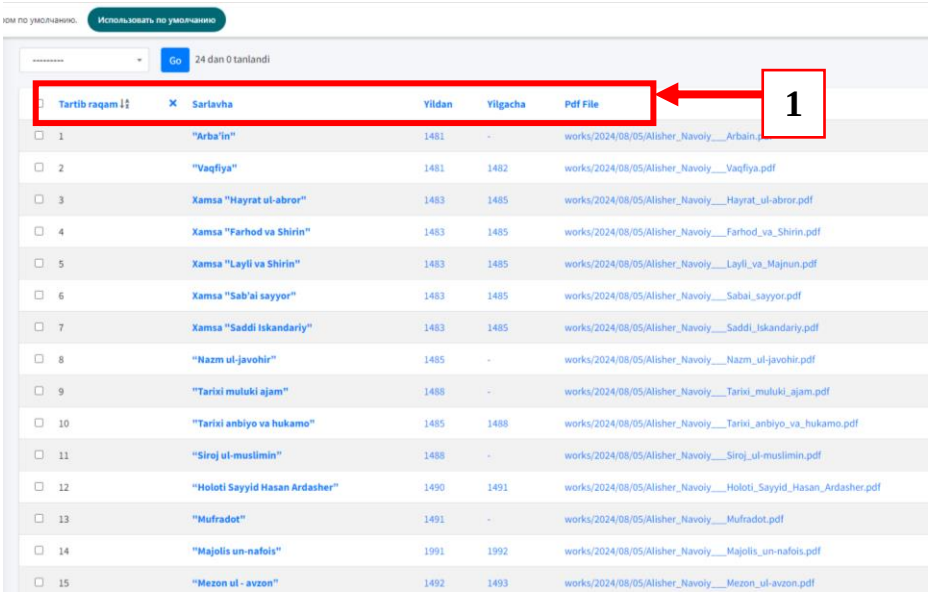
6.resim. “Nevadirü’ş Şebab” divanının 3.gazelinin nesri açıklanması.

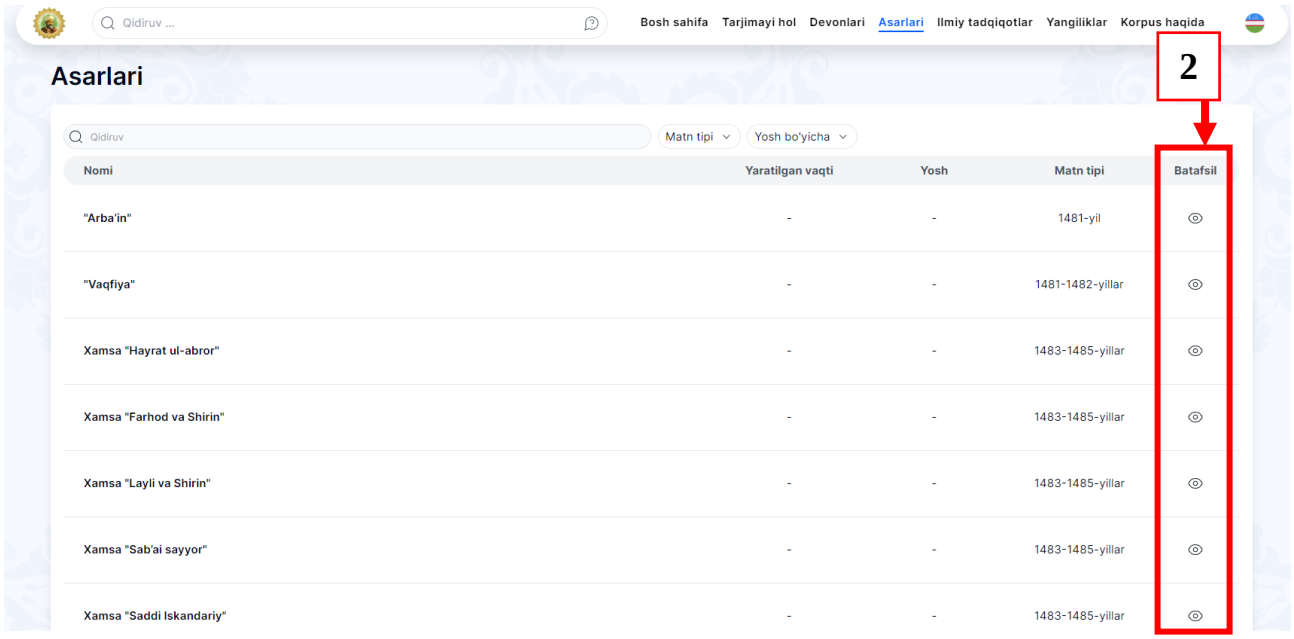
Hatırlatma notu: eser sahipliği hukukunu koruma amacıyla bu açıklamaların yazarları da belirtildi.



4.2. ESERLERI

Bu başlıktaki bölümde Ali Sir Nevâi'nin 24 eseri yer almaktadır. Eserlerin yazılan yıllarına göre kronologik sıralamada düzenlenmiştir (1), "Ayrıntılı" başlıklı sütundaki (görmek) simgesi fare yardımıyla tıklandığında eserin tam metni ("Tam Eserler Derlemesi")ye geçilir.





4.3. HİKMETLERİ

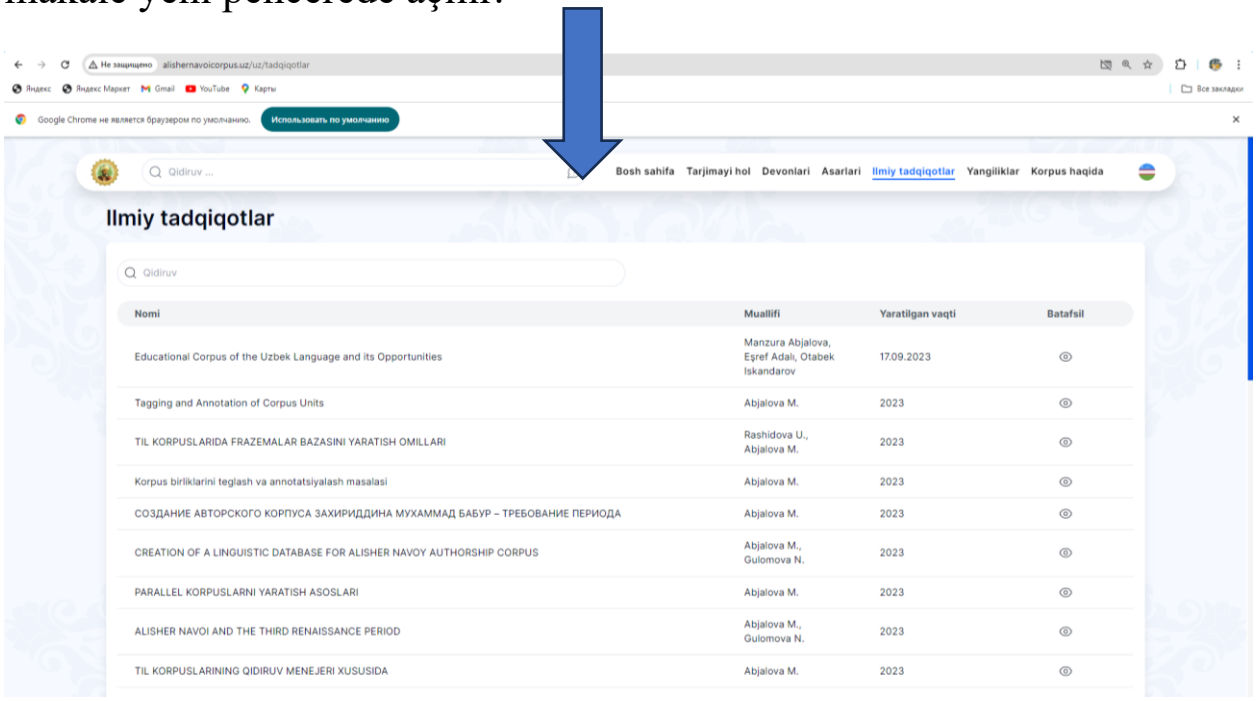
Bu bölümde aşağdaki 9 konu kapsamında Ali Şir Nevâi eserlerinden derlenen hikmetler yansıtılan:

	Ordering number		Name
☐	1		Ilm haqida
☐	2		Odob haqida
☐	3		Odamiylik haqida
☐	4		So‘z qudrati haqida
☐	5		Kamtarlik haqida
☐	6		Hunar haqida
☐	7		Vafo-sadoqat haqida
☐	8		Donishmandlik haqida
☐	9		Tarbiya haqida

7.resim. “Hikmetler” bölümündeki kategoriler.

4.4. BİLİMSEL AÇIKLAMALAR

Bu bölümde derlem müelliflerinin derlem dilbimi alanında gerçekleştirilen araştırma sonucu yer almaktadır. Bilimsel çalışmaları okuma ve indirme imkanı mevcüttür. Bunun için “Detaylı bilgi” başlıklı sütundaki 👁 (görmek) simgesi fare yardımıyla tıklanır ve bilimsel makale yeni pencerede açılır.



4.5. YENİLİKLER

Bu bölümde Ali Şir Nevâi müelliflik derlemini oluşturma ve onun tanıtımını gerçekleştirme konusundaki aşağdaki başlıklardaki yenilikler sunulmaktadır:

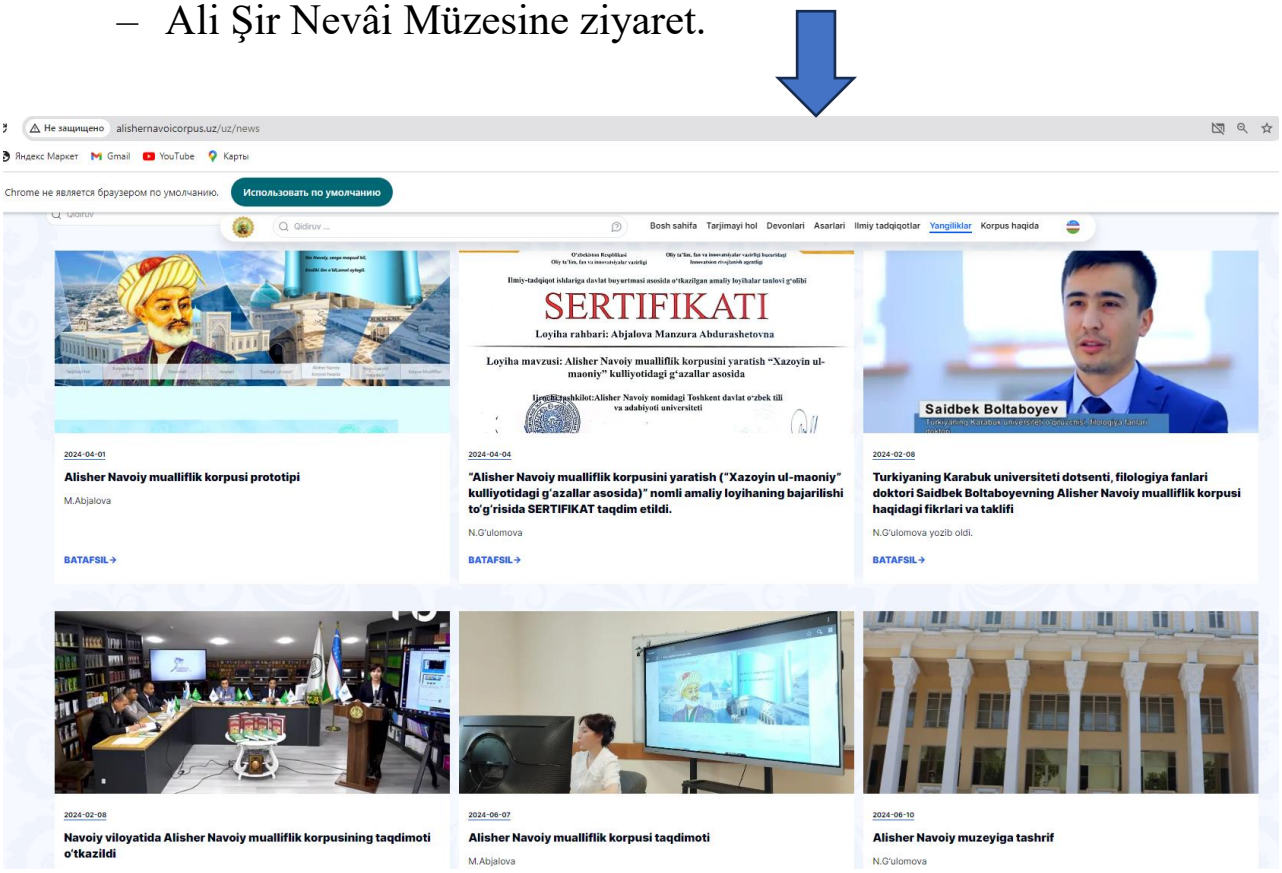
– Ali Şir Nevâi müelliflik derlemi prototipi

– “Ali Şir Nevâi müelliflik derlemini oluşturmak (“Hazâinül Maânî” külliyatındaki gazelleri temelinde)” adlı uygulama projesinin gerçekleştirilmesi hakkında SERTİFİKA sunuldu.

– Türkiye’nin Karabuk Üniversitesi Doçenti, Filoloji Bilimler Doktoru Saidbek Boltaboyev’in Ali Şir Nevâi müelliflik derlemi hakkında düşünceleri ve önerileri.

– Navoiy bölgesinde Ali Şir Nevâi müelliflik derleminin tanıtımı gerçekleştirildi.

– Ali Şir Nevâi Müzesine ziyaret.



8.resim. Derlemin “Yenilikler” bölümü

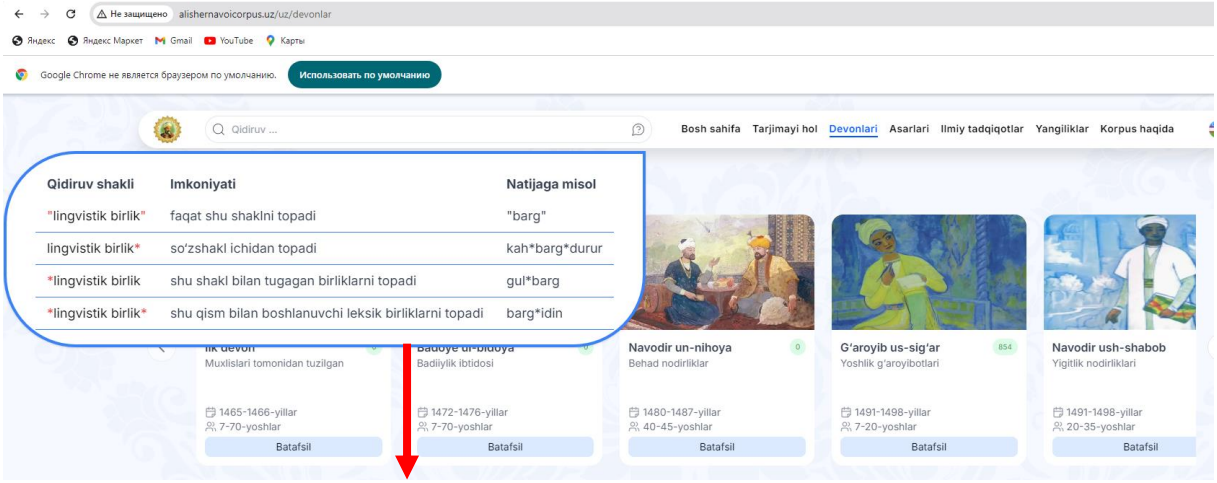
4.6. DERLEM HAKKINDA

Bu bölümde aşağdaki konular kapsamında derleme ait bilgiler sunulandır:

– **DİL DERLEMİ NE?**
– **ALİ ŞİR NEVÂİ MÜELLİFLİK DERLEMİNİN GÜNCELLİĞİ**
– **BU DERLEMİ OLUŞTUMA GEREKSİNİMİ**
– **ALİ ŞİR NEVÂİ MÜELLİFLİK DERLEMİNİN ANLAMSAL VERİTABANI**
– **DERLEM İÇERİĞİ**
– **ALİ ŞİR NEVÂİ MÜELLİFLİK DERLEMİNİN TARİHSEL ÖNEMİ**
– **ALİ ŞİR NEVÂİ MÜELLİFLİK DERLEMİNİN DİLBİLİMSEL ÖNEMİ**
– **ALİ ŞİR NEVÂİ MÜELLİFLİK DERLEMİNİN ÖĞRETİMSEL ÖNEMİ**
– **ALİ ŞİR NEVÂİ MÜELLİFLİK DERLEMİNİN SOSYAL ÖNEMİ**
– **ALİ ŞİR NEVÂİ MÜELLİFLİK DERLEMİNİN EĞİTİCİ ÖNEMİ**
– **KULLANILAN TEMEL SÖZLÜKLER**
– **ALİ ŞİR NEVÂİ MÜELLİFLİK DERLEMİ**

V. ARAMA İMKANLARI

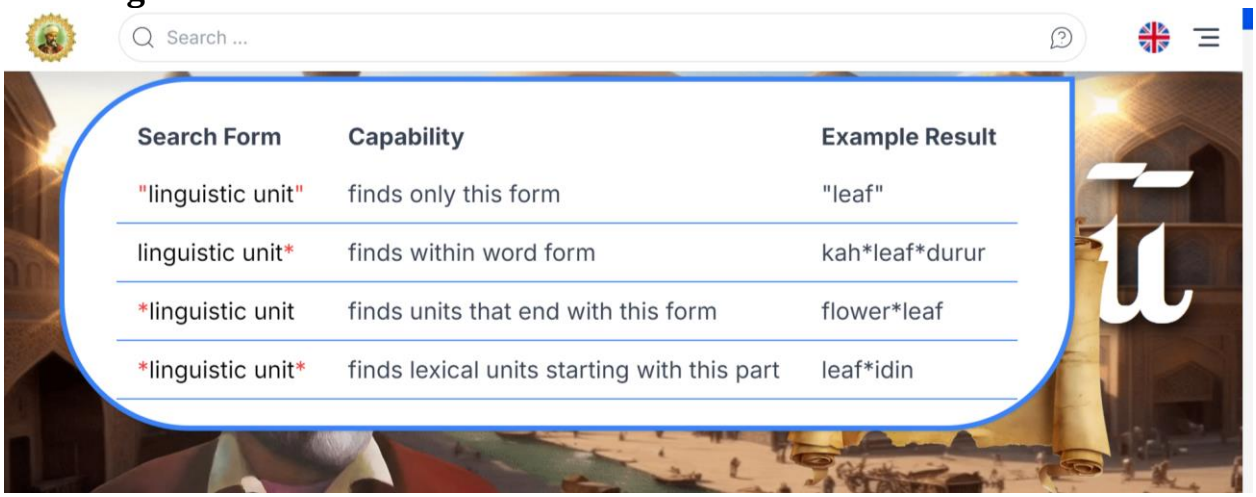
Derlemde özel arama imkanları bulunmaktadır. Kullanıcı, hatta ekleri de buradan arayarak bulabilir.



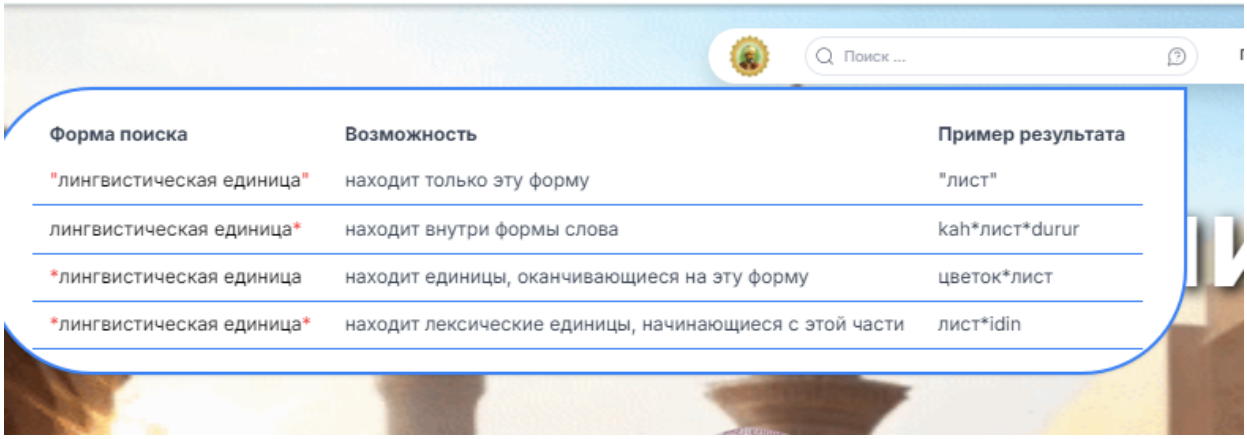
9.resim. Derlemde leksik birim (sözcük , sözcük şekli, ek)i arama imkanı.

Diller acısından arama imkanı aşağdaki açıklamalarla belirtilir:

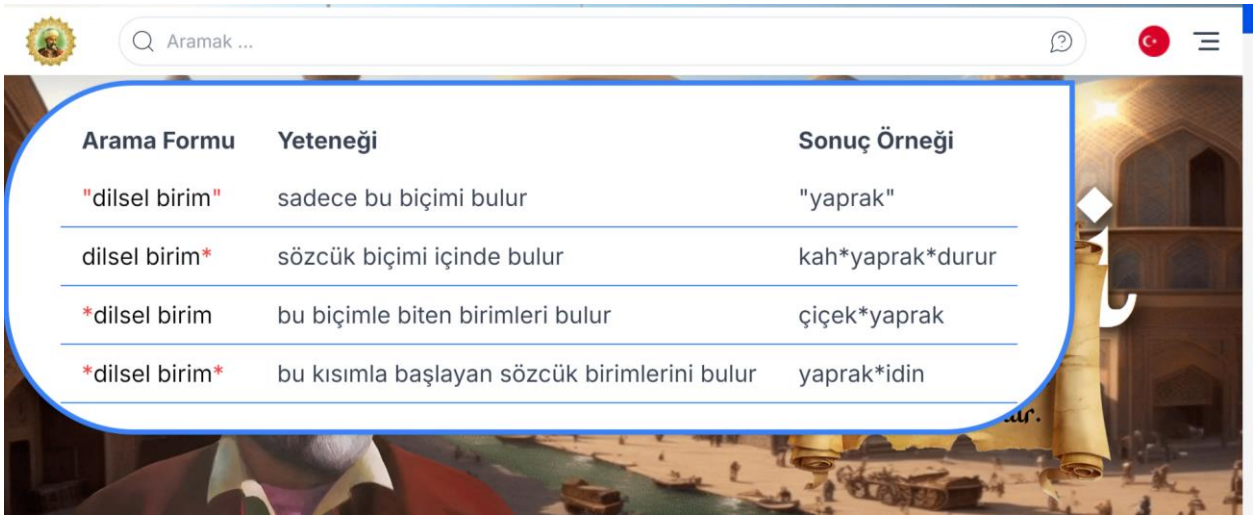
Eng


Search ...
Search Form
Capability
Example Result
"linguistic unit"
finds only this form
"leaf"
linguistic unit*
finds within word form
kah*leaf*durur
*linguistic unit
finds units that end with this form
flower*leaf
linguistic unit
finds lexical units starting with this part
leaf*idin

Rus


Поиск ...
Форма поиска
Возможность
Пример результата
"лингвистическая единица"
находит только эту форму
"лист"
лингвистическая единица*
находит внутри формы слова
kah*лист*durur
*лингвистическая единица
находит единицы, оканчивающиеся на эту форму
цветок*лист
лингвистическая единица
находит лексические единицы, начинающиеся с этой части
лист*idin

Türk

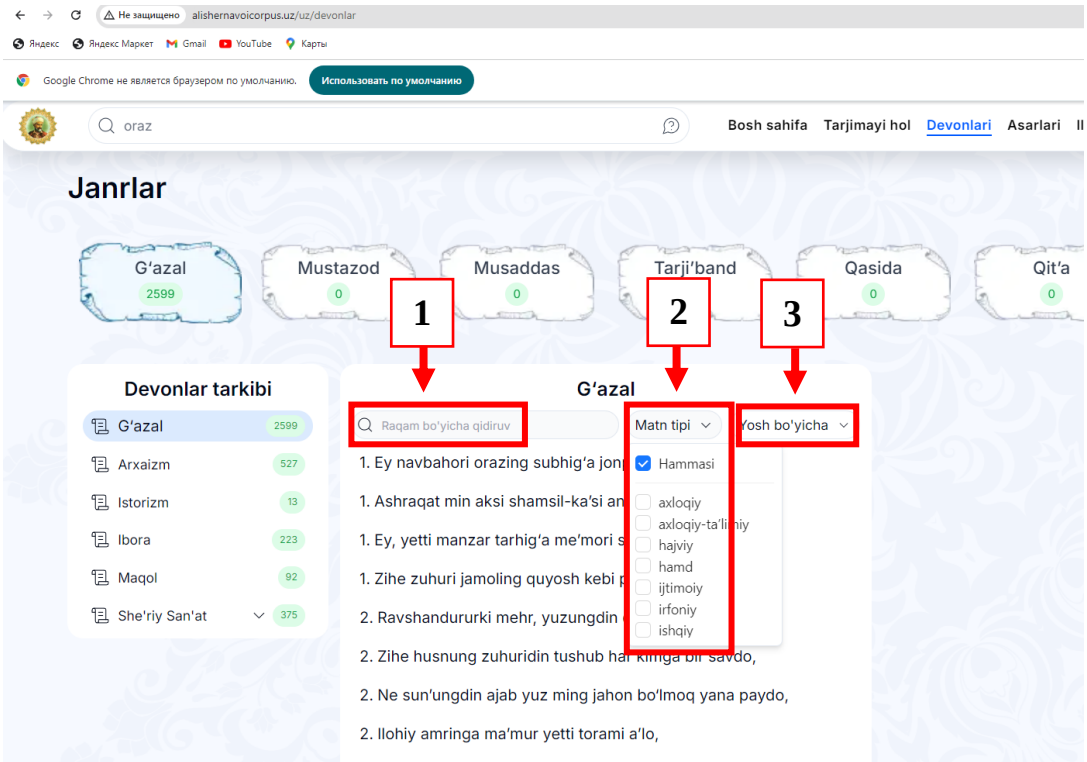

Aramak ...
Arama Formu
Yeteneği
Sonuç Örneği
"dilsel birim"
sadece bu biçimi bulur
"yaprak"
dilsel birim*
sözcük biçimi içinde bulur
kah*yaprak*durur
*dilsel birim
bu biçimle biten birimleri bulur
çiçek*yaprak
dilsel birim
bu kısımla başlayan sözcük birimlerini bulur
yaprak*idin

VI. DERLEM YÖNETİCİSİ

Derlemde derlem yöneticisi (ing. corpus manager) bulunmaktadır. Bu metin ve dilbilgisel verileri yönetim sistemini içerir. *Derlem yöneticisi* – derlemdeki bilgileri aramak, istetistik verileri elde etmek ve sonucları kullanıcıya uygun bir formatta sunmak için yazılım araçlarını içeren özel bir arama sistemi. Vurgulamak gerekirki, derlem yöneticisi dil derlemindeki birincil gereksinimlerden biri olarak sayılır.

Derlemler dil ve konuşma birimleri hakkında bilgiler ve istetistik göstergeleri elde etmek için kullanılabilir. Özellikle, derlemler temelinde kelime ve onun şekillerinin frekansı, leksik ve gramer kategorilerin kullanım kapsamı hakkında bilgi edinmek, farklı dönemlerde frekans ve bağlamların değişimini gözlemek, leksik birimlerin birlikte görülmesi veya bağıntılarını görmek gibi unsurları tespit edilebilecektir. Bu süreçte derlem yöneticisi çok önemli sayılır.

Ali Şir Nevâi derleminde de derlem yöneticisi bulunup, onun arama filtresi de mevcüttür. Özellikle, belirli bir leksik birimi gazelin numarasına (1), metin türüne (2) ve hedef kitle yaşına (3) göre aramak mümkindir.



Arama filtresinin avantajı, her divandaki 650 gazelden sayfalar arasında geçiş yapmadan istenilen numaralı gazeli hızlıca bulup okumak, aşıkane, rindane, hakimane, şuhane, sofüyane gibi metin türlerine ait gazelleri filtirleyerek belirlemek, 15+, 16+ gibi yaş katigorilerine uygun gazelleri sıralamak imkanı sunmasıdır.

Dolaysıyla, derlem yöneticisi:

– derlemin ayrı imkanlar üzerine istatistik veriler sunmaktadır;

– arama filtresine sahıp olarak, leksik birimi gazelin sıra numarası, metin türü, hedef kitle yaşı gibi kriterlere göre arama imkanı sunması mümkindir;

– bulunan sözcük biçimlerini sınırsız miktardaki bağlamlardan gösterme olanağı sağlar;

– sonuç listesini kullanıcı tarafından seçilen birden fazla kritere göre sıralar;

– sadece kelimeleri değil, aynı zamanda kelime gruplarını da arayabilir;

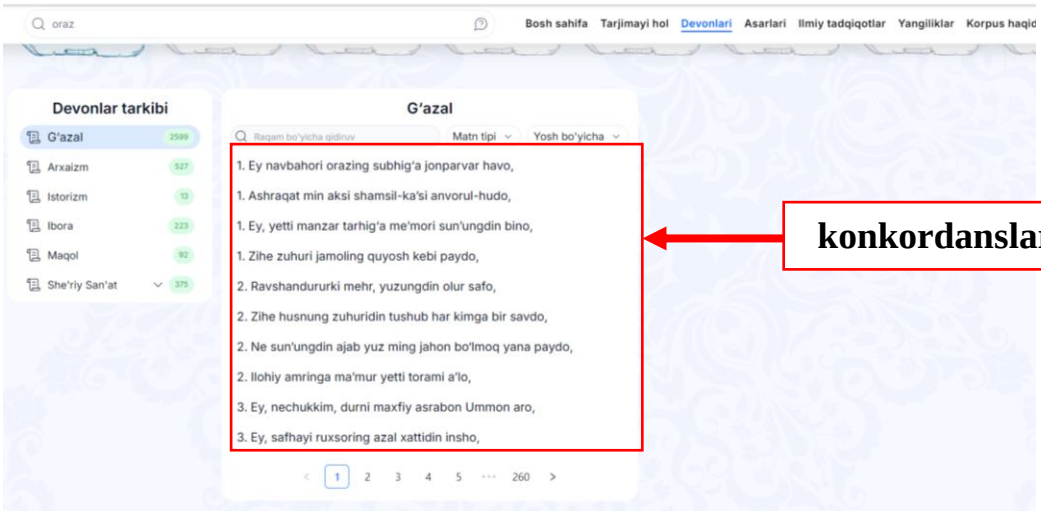
– şablon (karmaşık sorgular)lar aracılığıyla arama gerçekleştirir;

– metadata (bibliyografik, tipolojik)leri gösterir;

– sorguları hızlı bir şekilde yeniden işleyerek sonuçları çıkarıri;

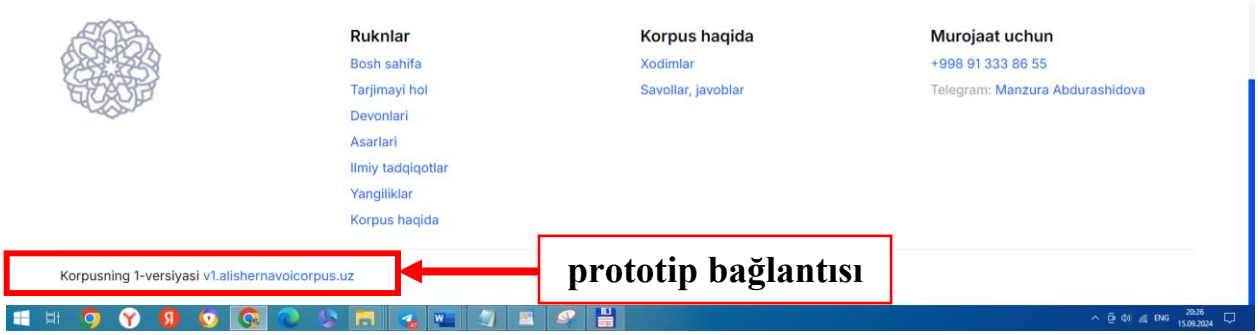
– hem deneyimli kullanıcılar için hem de derleme ilk kez giren öğrenciler için kullanım kolaylığı sağlar.

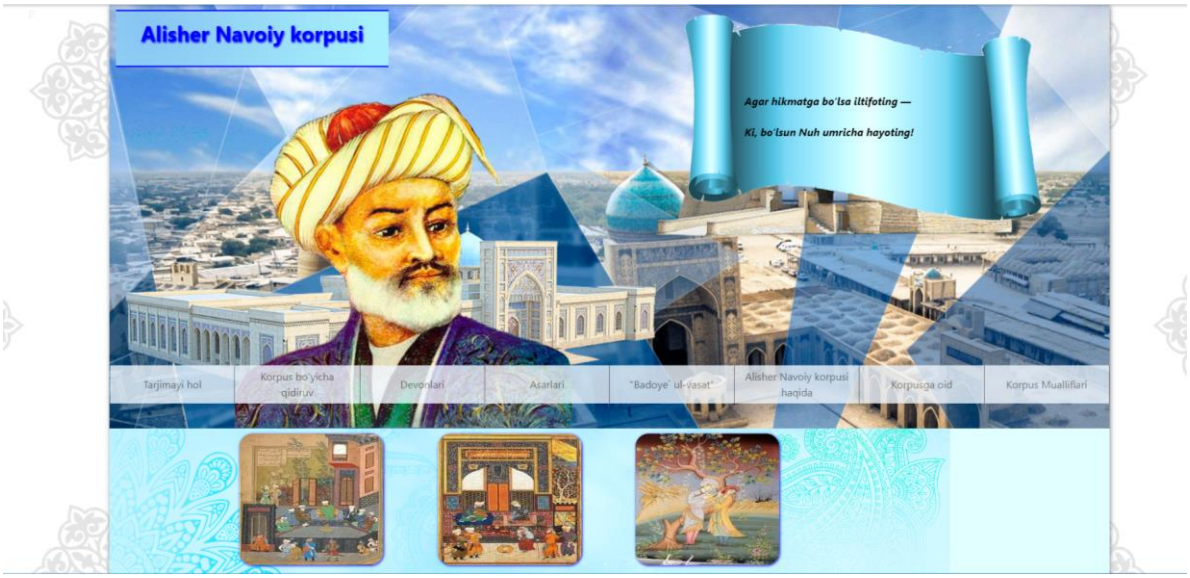
Derlemde her türlü kelime için konkordans oluşturma imkânı vardır. Konkordans, kaynağa bağlantı ile kayıt eden , bağlamda bu kelimenin tüm kullanımlarının listesini verir. İlk konkordans çalışmaları XIII. yüzyılın başlarından itibaren Kutsal İncil metinleriyle başlanmıştır.



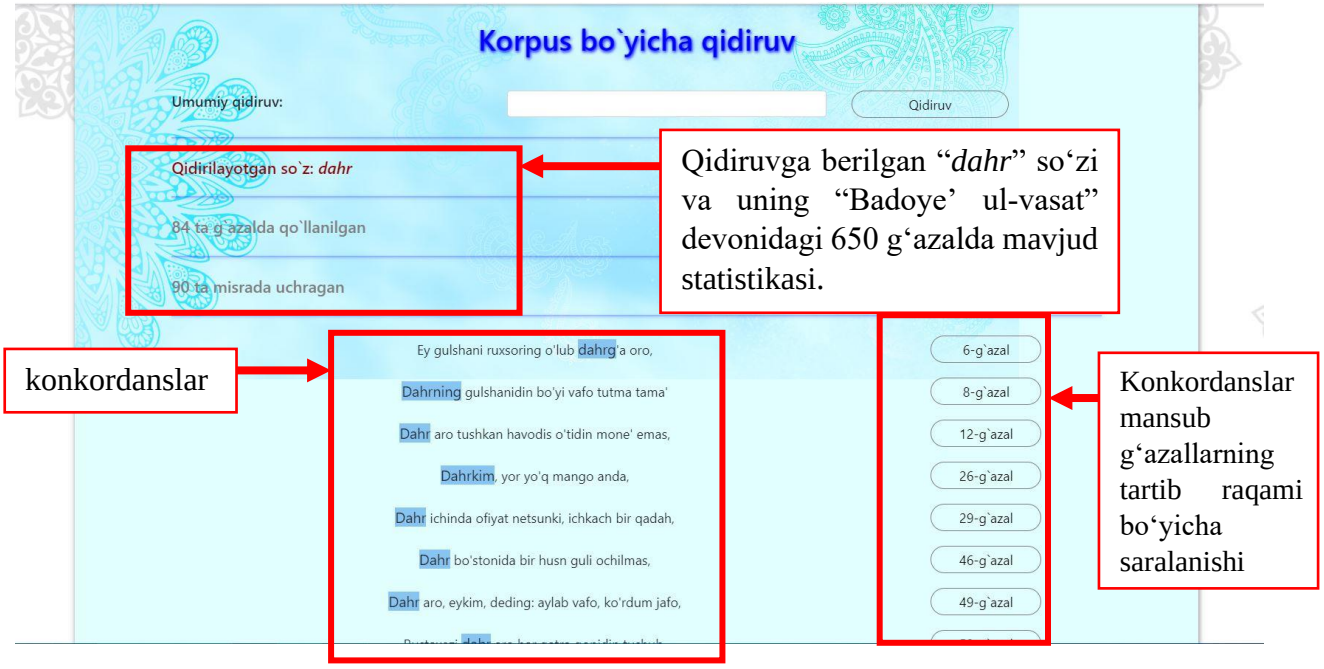
VII. DERLEM PROTOTIPI (ilk versiyonu)

2022 yılının 22 Nisan'ından Ali Şir Nevâi müelliflik derlemi prototipi yıllarca süren bir çalışma sonucunda, kullanım için açık bir internet kaynağı olarak devreye alındı. Yeni tip Nevâi derleminin en alt kısmında prototip (ilk versiyon) bağlantısı bulunmaktadır; bu bağlantıya (http://v1.alishernavoicorpus.uz/) tıklayarak prototipe geçilir.

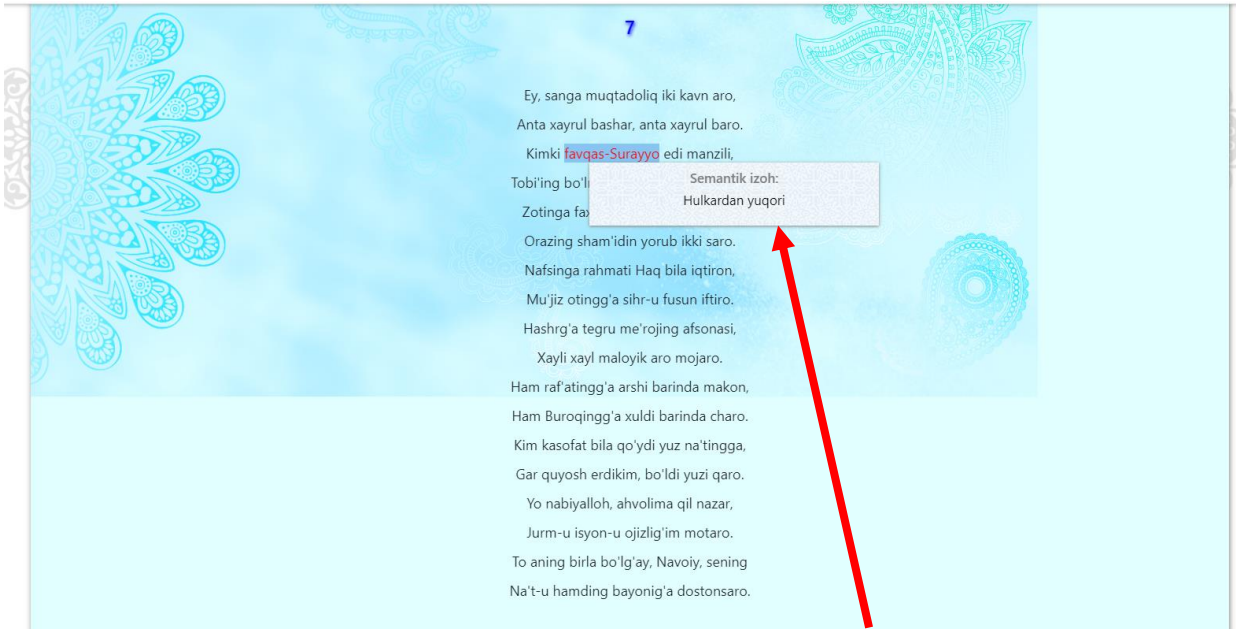




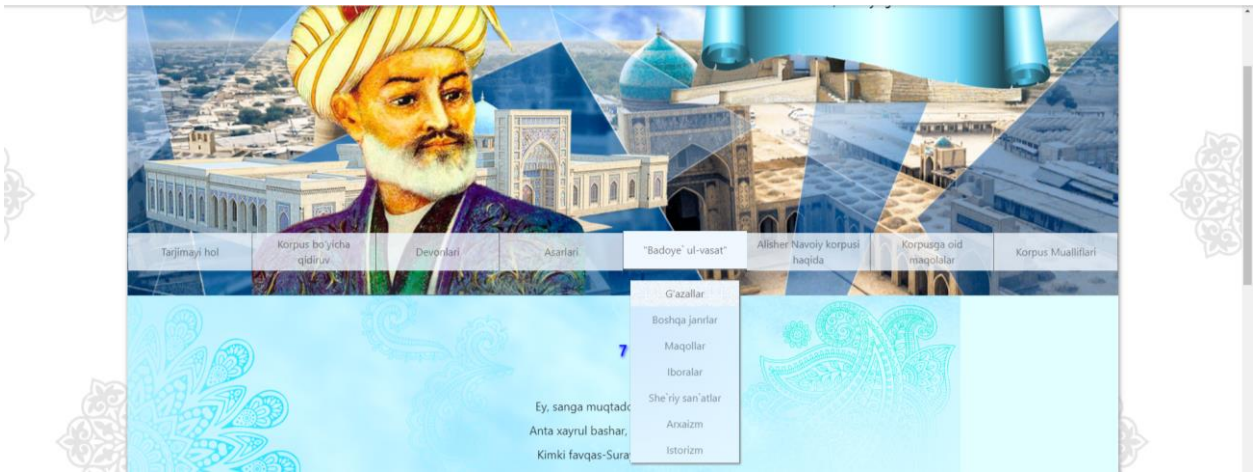
10.resim. Derlem prototipinin ana sayfası.



11.resim. Arama imkanı ve sonuçları.



12.resim. 7.gazelin tam metni ve içinde açıklama gerektiren leksik birimlerden “favqas-Surayyo”ya verilen anlamsal açıklama.



13.resim. 5.bölüm – “Bedâyiü’l-Vasat” divanında bilgiler veritabanı yansıması.



14.resim. “Bedâyiü’l-Vasat” divanındaki 650 gazelin sıralanması.

Diğer bölümlerde de farenin sol tarafı tıklanmasıyla giriş yapılır. Bu prototip olanakları ve kullanımına dair bilgileri bağlantıdaki video kılavuzuyla öğrenmek mümkindir: https://youtu.be/744o55Tqx9E

İlk adımda orta öğretim için yayımlanan eğitim materyallarının çoğunda Nevâi’nin “Hazâinül Maânî” külliyatındaki “Bedâyiü’l-Vasat” divanına ait eser örnekleri yer aldığından, öğrencilerin Ali Şir Nevâi’nin eserlerini okuyarak anlamak, Nevâi’yi tanıma ve öğrencileri Nevâi ile tanıştırma amacıyla **“Bedâyiü’l-Vasat” divanındaki 650 gazelin semantik etiketleri temelinde Ali Şir Nevâi müellifilik derlemi oluşturldu.**

Şu anda bu prototip 1.versiyonu adıyla, () adersinde çalışma durumda bulunmaktadır.

Ali Şir Nevâi müellifilik derlemi (MD) oluşturulmasında “Bedâyiü’l-Vasat” divanındaki 21226 açıklama gerektiren kelime, 5 binden fazla arkaizm 170 istorizm (tarihi kelimeler), 43 atasözü, 30 deyim, 236 telmih sanatına dair kelime, 164 zıt anlamlı kelime (tezat), 806 oran, 124 benzetme (teşbih) sanatına ait leksik birimlerin etiketlenmesi temel oldu.

“Bedâyiü’l-Vasat” divanında yer alan gazeller toplamda 5001 beyit – 10002 dize, toplam 66,539 kelime içeriyor. Her bir gazelin uzunluğu 6 beyitten 13 beyite kadar: 6 beyitli – 1 tane, 7 beyitli – 437 tane, 8 beyitli

– 8 tane, 9 beyitli – 187 tane, 10 beyitli – 1 tane, 11 beyitli – 14 tane, 12 beyitli – 1 tane, 13 beyitli – 1 taneden oluşmaktadır.

Ali Şir Nevâi MD'indeki bu gibi istatistik analizler, önemli bir şekilde, kullanıcıya kesin hesaplar sunar ve veritabanı üzerinde çalışma kapsamını gösterir.

"Bedâyiü'l-Vasat" divanındaki gazellere anlam olarak yerleştirilen 50'den fazla atasözü ve aynı sayıda durağan birleşim (deyim) içeren beyitler bilimsel olarak incelenerek, 5.bölüme dahil edildi.

Bu prototip oluşturulmasına temel olan bilimsel araştırma çalışması (Gulomova N. Ali Şir Nevâi Müelliflik Derlemi ve Onun Semantic Etiketler Veritabanını Oluşturmak ("Bedâyiü'l-Vasat" divanı temelinde). Filoloji Bilimler Doktoru (PhD) diss. – Toshkent, 2023. – 190 s.) başarıyla savunuldu.

Bir monografi ortaya çıktı:

Abcalova M., Gulomova N. Müelliflik Derlemi: Ali Şir Nevâi Müelliflik Derlemi. [Metin]: Monografi / M.A. Abcalova, N.S. Gulomova. – Navoiy, 2023. – 216 s.

5 telif hakkı belgesi alındı:

1. Ali Şir Nevâi Müelliflik Derlemi için Nevâi'nin "Bedâyiü'l-Vasat" Divanındaki Gazellerin Semantik Veritabanı. Tescil Belgesi № BGU 00583. – Taşkent, 2022. (telif hakkı belgesi). (Abcalova Manzura Abduraşetovna; Gulomova Nargiza Sadullayevna; Raşidov Husniddin Ahror oğlu)

2. Ali Şir Nevâi Müelliflik Derlemi. Tescil Belgesi № DGU 18544. – Taşkent, 2022. (telif hakkı belgesi). (Abcalova Manzura Abduraşetovna; Gulomova Nargiza Sadullayevna; Sadullayeva Şahrizoda)

En önemlisi, bu prototip 2023 yılında **AL-662205561** numaralı **"Ali Şir Nevâi Müelliflik Derlemini Oluşturmak ("Hazâinül Maânî" külliyatındaki gazelleri temelinde)**" adlı uygulamasının İnovasyonlar ajansı tarafından finanse edilerek, derlemin geliştirilmesine temel oldu.

Bugüne kadar bu derlem ve onun veritabanlarına 5 adet telif hakkı belgesi alındı. Proje sürecinde alınan 3 adet belge şunlardır:

1. Abcalova M. ve diğerleri. Ali Şir Nevâi'nin "Nevadirü'ş Şebab" Divanındaki 650 Gazelin Semantik Veritabanı. Telif hakkı belgesi, №. BGU 20240164. – Taşkent, 2024.
2. Abcalova M. ve diğerleri. Ali Şir Nevâi'nin " "Fevaidü'l-Kiber"" Divanındaki 650 Gazelin Semantik Veritabanı. Telif hakkı belgesi, № BGU 20240217. – Taşkent, 2024.
3. Abcalova M. ve diğerleri. Ali Şir Nevâi'nin "Garâibüs-Sağır" Divanındaki 650 Gazelin Semantik Veritabanı. Telif hakkı belgesi, № BGU 20240165. – Taşkent, 2024.



РЕСПУБЛИКА УЗБЕКИСТАН
МИНИСТЕРСТВО ВЫСШЕГО ОБРАЗОВАНИЯ, НАУКИ И ИННОВАЦИЙ
ТАШКЕНТСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ УЗБЕКСКОГО ЯЗЫКА И ЛИТЕРАТУРЫ



АЛИШЕР НАВОИ
АВТОРСКИЙ КОРПУС

ИНСТРУКЦИЯ ПО ПРИМЕНЕНИЮ

Ташкент – 2024

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I. ВВЕДЕНИЕ

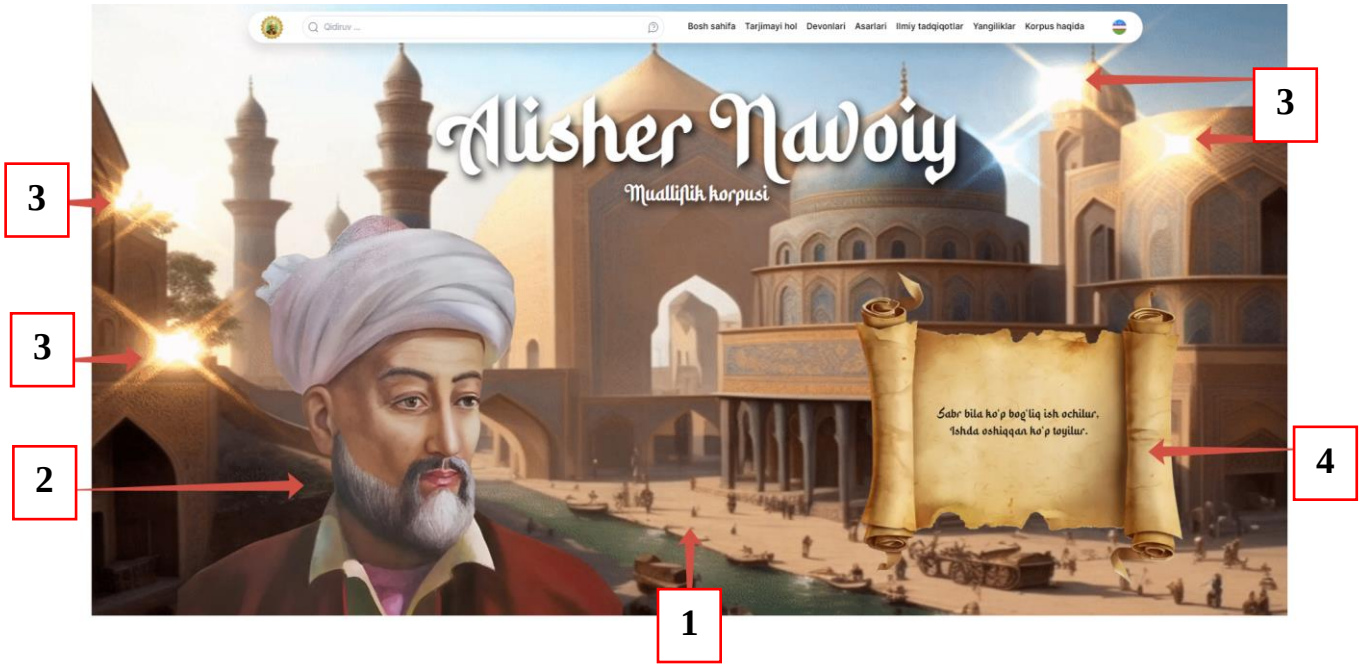
Доступ к авторскому корпусу Алишера Навои

1. Откроется Интернет-браузер.
2. В URL-строке браузера указывается имя хостинга alishernavoicorpus.uz, далее нажимается кнопка Интер и вводится авторский корпус Алишера Навои (далее: корпус) (http://alishernavoicorpus.uz/uz).



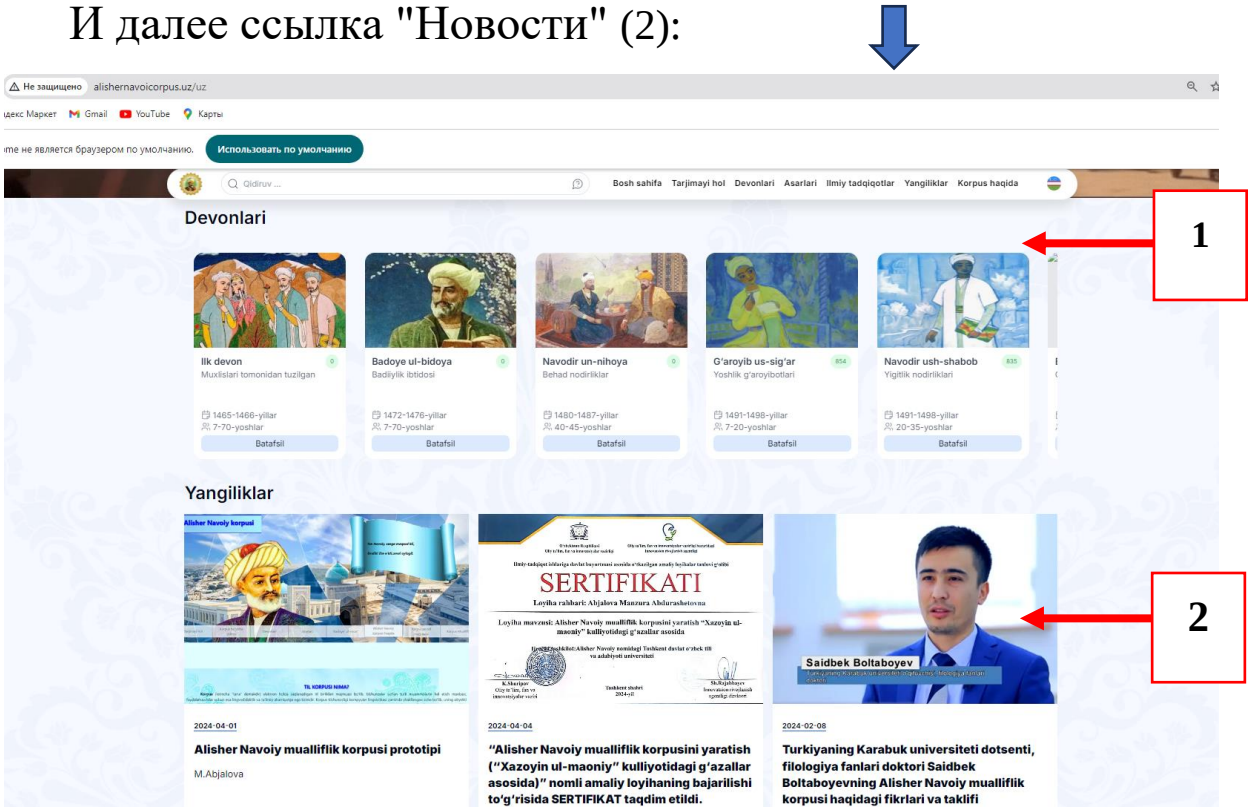
II. ОСНОВНАЯ ЧАСТЬ

Сначала откроется главная страница. В нём изображён Фон с видом на Герат, где жил Алишер Навои (1), фигура Алишера Навои (2), 3D-эффект лучей восходящего солнца (3), надпись, отображающая фрагменты мудрости Навои (4). Все это вместе послужило иллюстрацией эпохи Алишера Навои и величия его творчества.

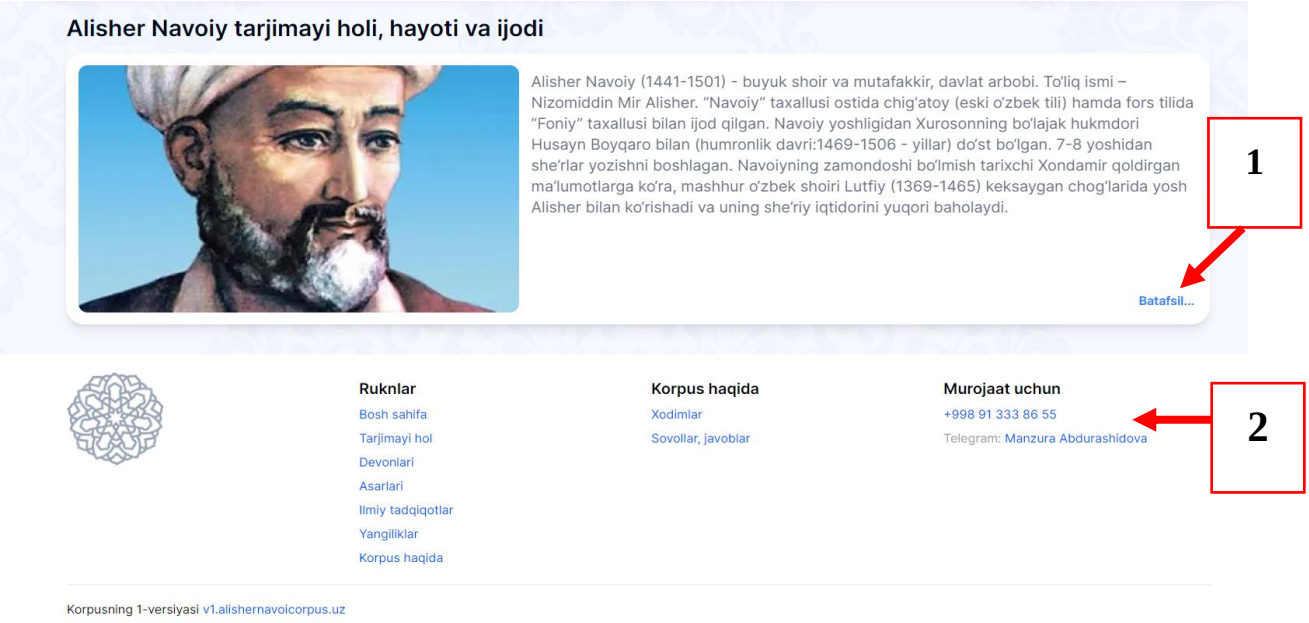


Под этим главным фоном находится ссылка на диваны Алишера Навои (1).

И далее ссылка "Новости" (2):



В конце основной части находится ссылка на страницу жизни и творчества Навои (1) и предусмотрено поле с информацией «Разделы корпуса», «О корпусе» и «Для сравки» (2).



III. ИНТЕРФЕЙС

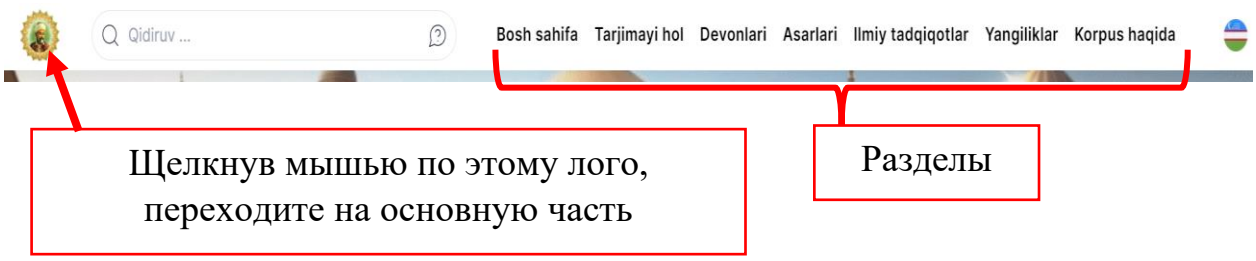
Для удобства использования иностранными посетителями интерфейс корпуса доступен на 4 языках (узбекском, английском, русском и турецком). Также мудрые слова, приведенные в надписи на главной части представлены на 4 языках в зависимости от языка интерфейса.



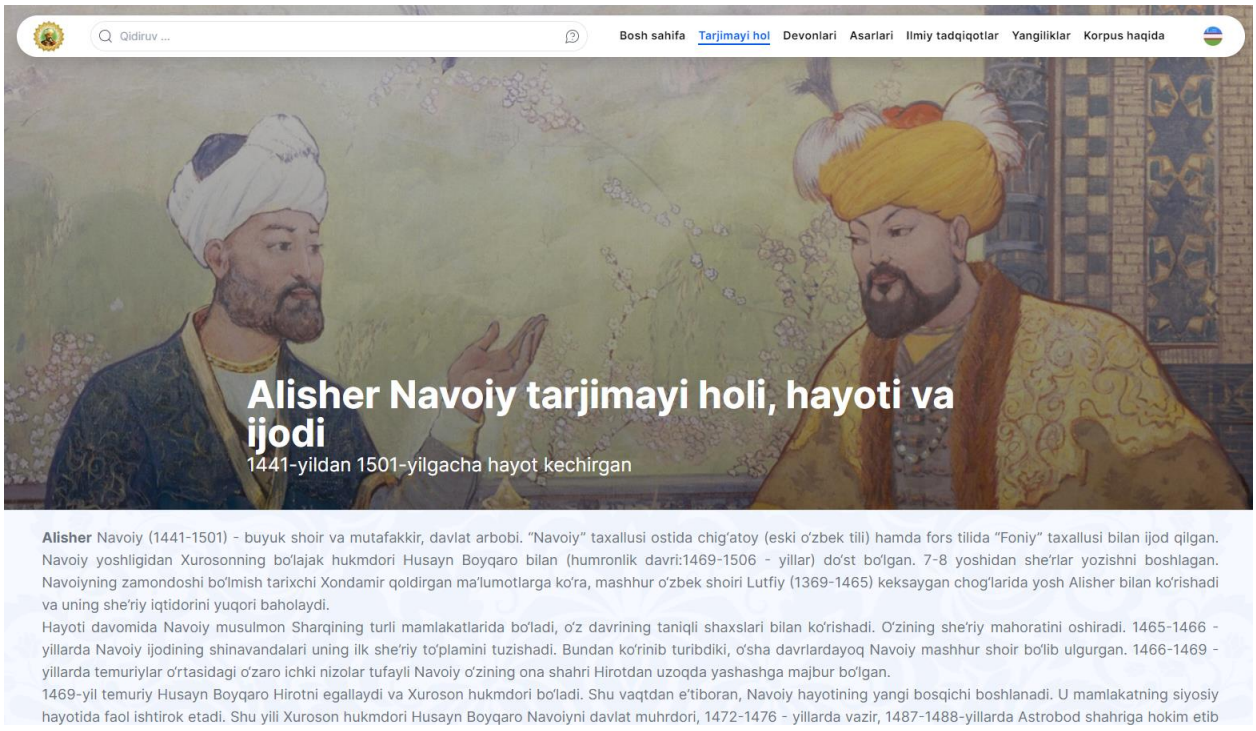
IV. РАЗДЕЛЫ

Корпус состоит из следующих 8 разделов.

- Основная часть
- Автобиография
- Диваны
- Произведения
- Мудрые слова
- Научные исследования
- Новости
- О корпусе



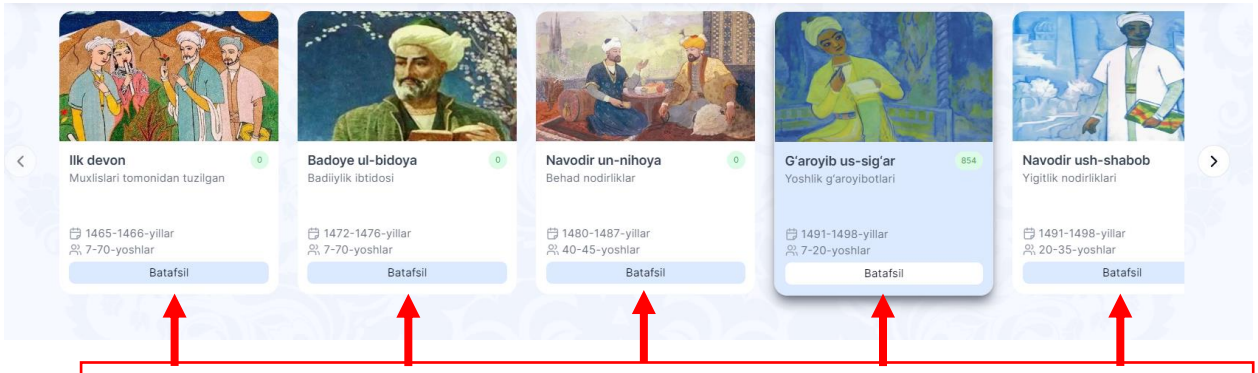
В рубрике «Биография» корпуса представлены важные сведения о жизни и деятельности Алишера Навои, известные факты жизни и творчества, основанные на основных научных источниках. Указаны наставники.



4.1. ДИВАНЫ

В рубрике «Диваны» вмещены «Илк девон» (1465-1466), составленные его учениками, 8 диванов, созданных самим Алишером Навои, а позднее «Оқ қўйинли мухлислари» (1471), составленные поклонниками великого мыслителя. При нажатии на кнопку «*Подробнее*» под названием каждого дивана и его кратким описанием откроется полная *pdf-форма* дивана названием «Полное

собрание сочинений». Пользователь сможет прочитать диван целиком и скачать его.

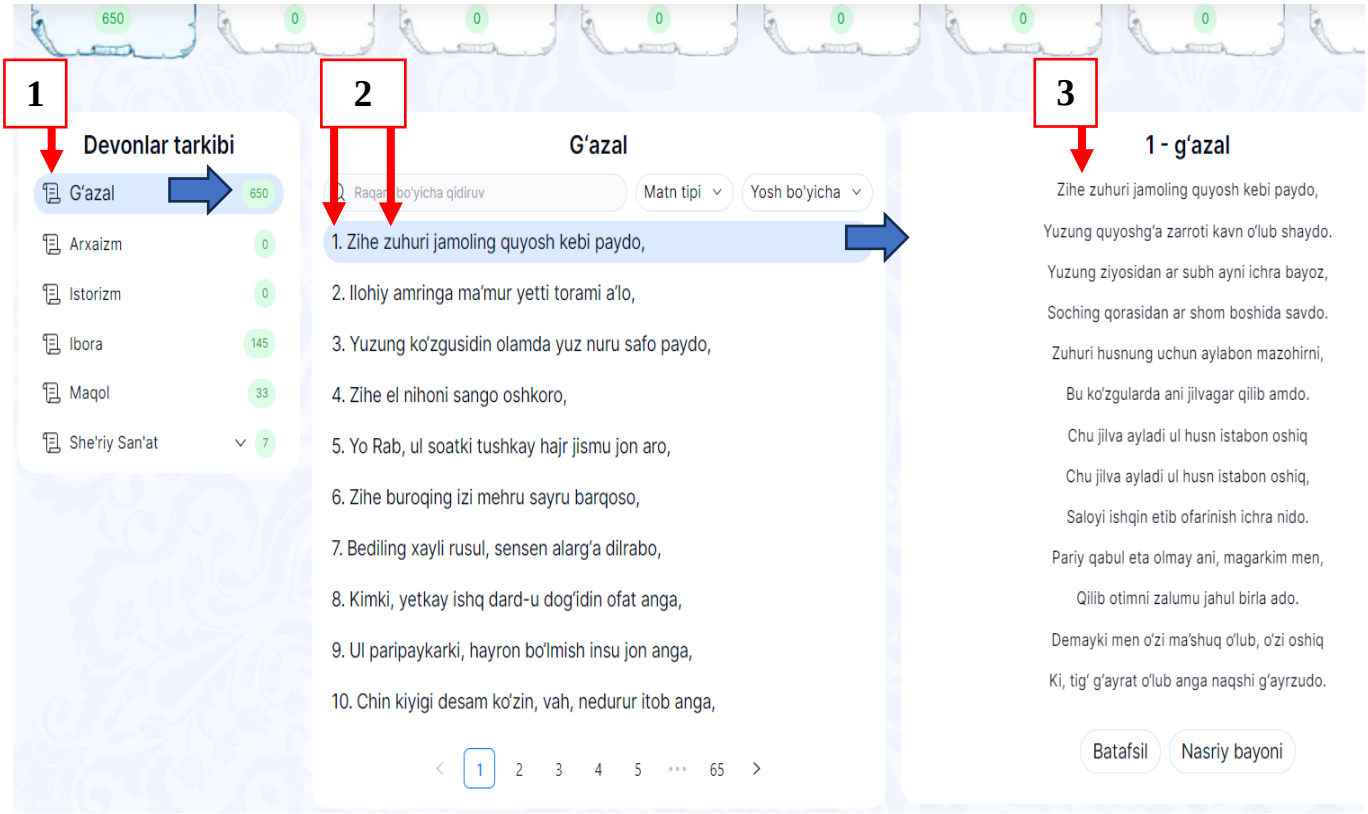


При нажатии кнопки «*Подробнее*» откроется полная *pdf-версия* книги «Полное собрание сочинений»).

Стоит отметить, что данный раздел связан с базой данных специально обработанных текстов корпуса, и возможен поиск диванов, тексты которых были обработаны**.** Статистическая информация в корпусе также представлена на основе этой базы данных. На данный момент сформированы информации в следующих книгах: в «G‘aroyib us-sig‘ar» 650 газелей + 63 фразы + 121 образец поэтического искусства – всего 854 примера творчества; в «Navodir ush-shabob» 650 газелей + 145 словосочетаний + 33 пословицы + 7 примеров поэтического творчества – всего 835 примеров творчества; в « Badoye ul-vasat» 650 газелей + 527 архаизмов + 13 историзмов + 15 словосочетаний + 39 пословиц + 247 примеров поэтического искусства – всего 1491 примера творчества; в разделе «Favoyid ul-kibar» сформирована информация из 650 газелевых текстов.



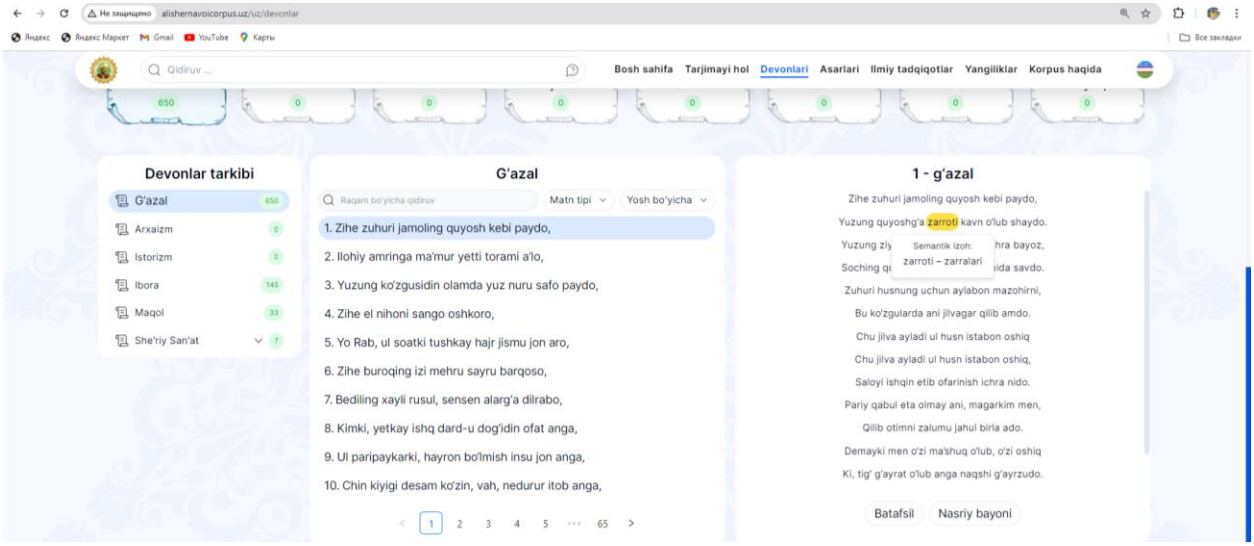
В разделе «Диваны» представлены все базы данных, созданные в рамках практического проекта **«Создание авторского корпуса Алишера Навои (на основе газелей из собрания «Xazoyin ul-maoniy» (далее: практический проект) под номером АЛ-662205561.** Например, когда вы заходите в кабинет «G‘aroyib us-sig‘ar», общая база данных в нем видна в «Составе дивана». В частности, при нажатии на строку "G‘azal" (1) открывается 650 газелей по номеру заказа, при этом в окне (2) открывается 1-я строка газели (это удобство служит для определения того, какая газель ставится под определенным номером). При нажатии на конкретную газель рядом с ней в другом окне (3) открывается полный текст выбранной газели.



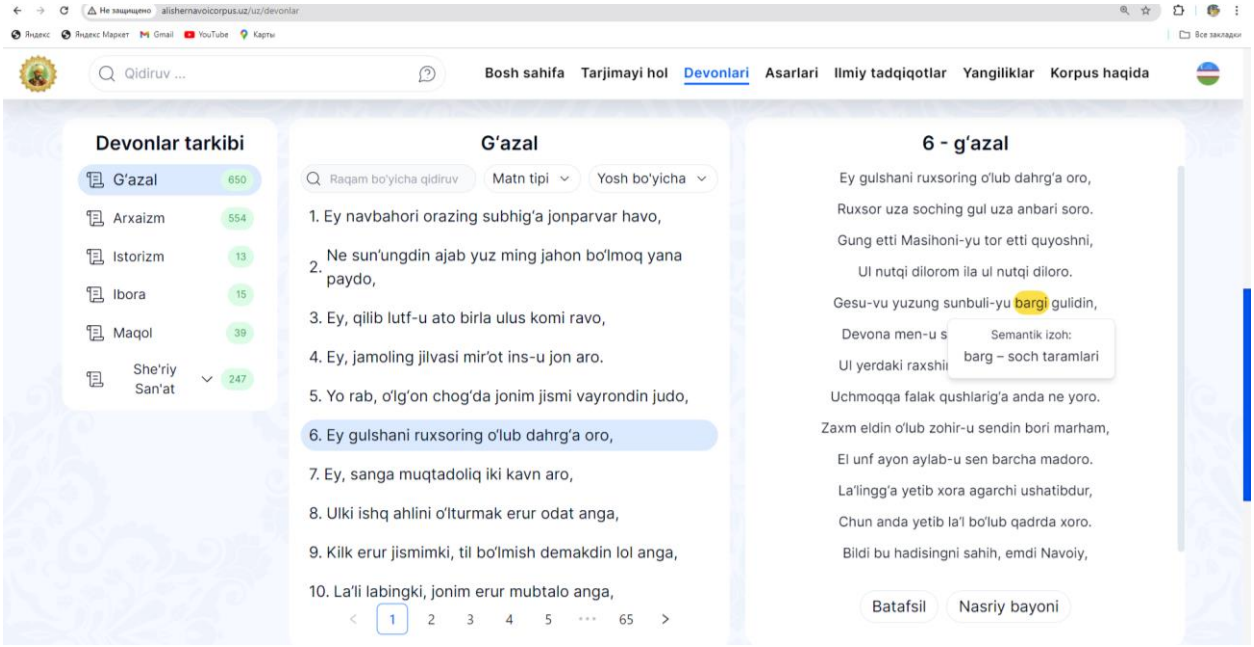
СЕМАНТИЧЕСКОЕ ОПИСАНИЕ

В качестве основной цели практического проекта была подготовлена база данных семантических описаний лексических единиц газели путем комментирования в общей сложности 2600 (в каждом диване 650*4 дивана = 2600) пояснительных лексических единиц в газели (слова, непонятные современному читателю: архаизмы и историзмы; персидский - база семантических описаний идиом, комментаторы, известная личность и место, исторические имена, художественные выражения в виде фразы, контекстуальные

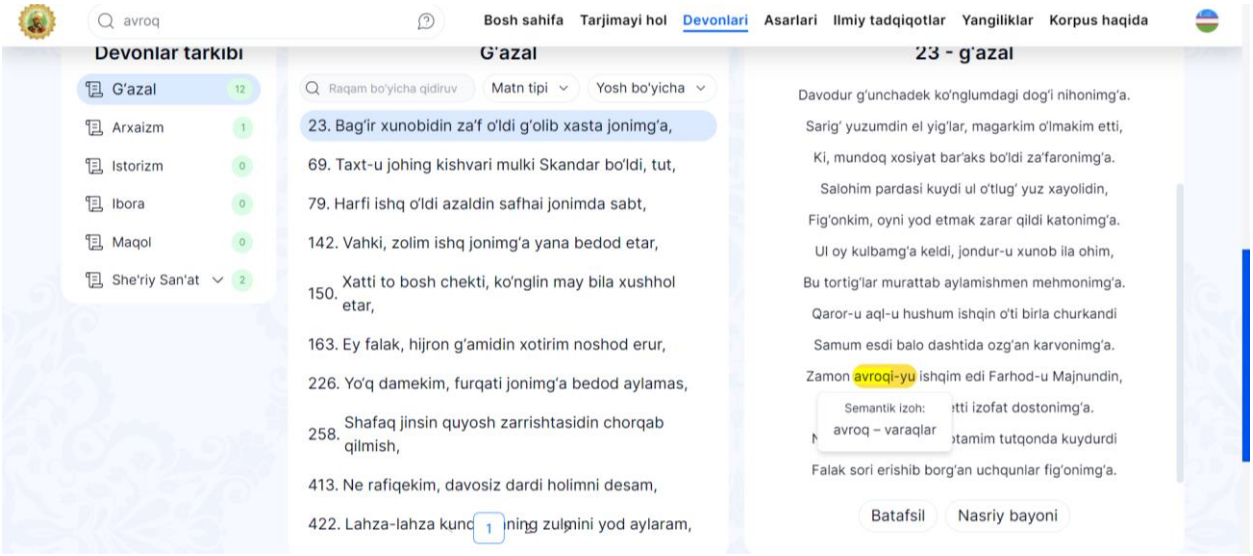
переносные значения) в сборнике «Xazoyin ul-maoniy», в результате, когда пользователь, читающий газели в корпусе, наводит указатель мыши на лексическую единицу, которую он не понимает или не знает вообще, отображается ее контекстно-семантическое описание.



1-рисунок. Изображено контекстуально-семантическое описание в корпусе слову “zarroti”, существующий во 2-ой строке 1-ой газели “zarralari” дивана “G‘aroyib us-sig‘ar”.



2-рисунок. Изображено контекстуально-семантическое описание в корпусе слову “*barg”*, существующий во 5-ой строке 6-ой газели “soch taramlari” дивана “Badoye’ ul-vasat”.

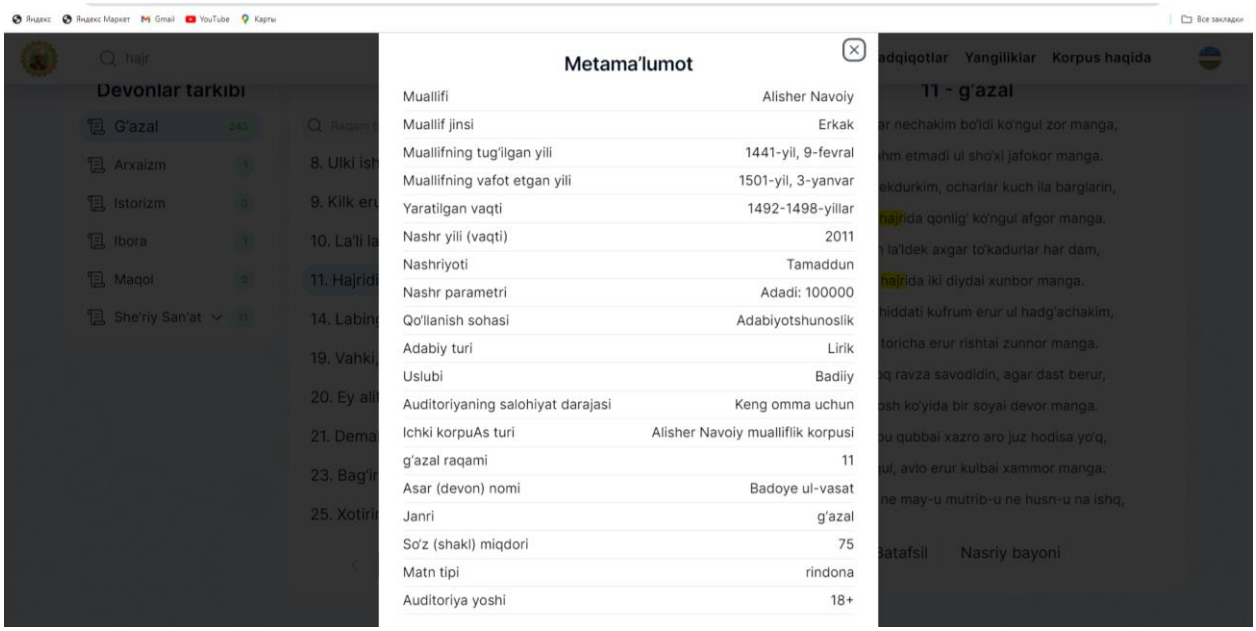


3-рисунок. Изображено контекстуально-семантическое описание в корпусе слову “avroq”, существующий во 10-ой строке 23-ой газели “ varaqlar” дивана “Badoye’ ul-vasat

МЕТАИНФОРМАЦИЯ

Одним из требований к языковым корпусам является наличие в них метаданных текстов, то есть такой информации, как автор текста, пол автора, время издания, год издания, область применения, необходимо указать возраст аудитории и стиль текста. С одной стороны, он предоставляет базовую информацию о тексте, а с другой – служит для формирования менеджера корпуса. Для каждой диван газели в авторском корпусе Алишера Навои было разработано 2600 различных метаданных с целью удовлетворения требований корпуса и создания упомянутых двух возможностей. Для ознакомления с метаданными внизу окна с полным текстом газели нажимается кнопка «Подробнее», в результате откроется окно «Метаданные».

На изображении (скриншот/фрагмент), взятом из приведенного ниже корпуса, вы можете ознакомиться с метаданными 11-й газели дивана «Badoye’ ul-vasat». Из него можно узнать, что газель состоит из 75 слов, что текст газели относится к типу риндона, что газель хорошо понятна пользователям в возрасте 18+ (возраст аудитории).



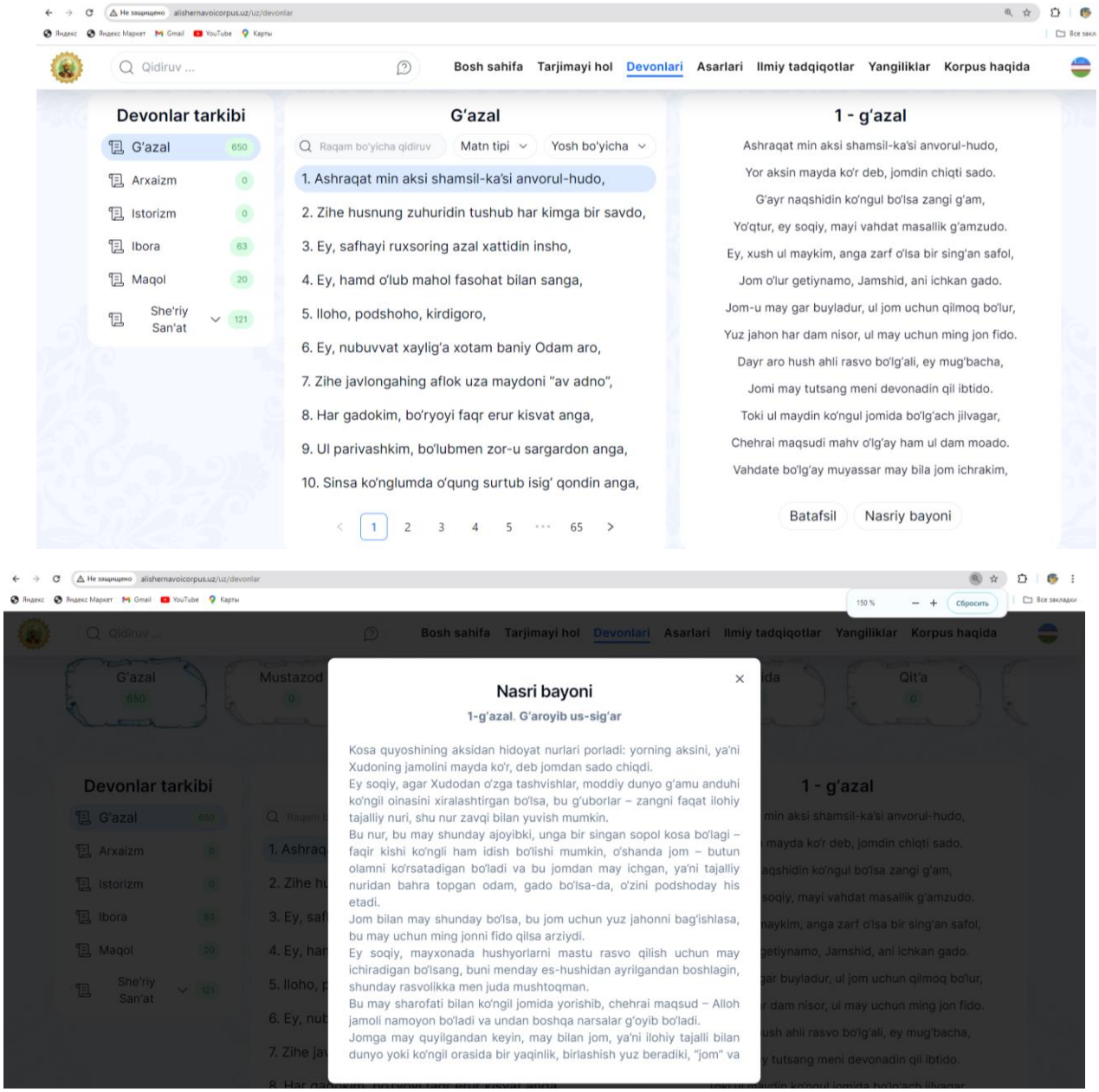
4-рисунок. Представление метаданных 11-й газели в книге «Badoye’ ul-vasat».

Общие метаданные. Здесь дается общая информация, касающаяся дивана. Например, общие метаданные, охватывающие газели дивана «Badoye’ ul-vasat» Алишера Навои, включают:

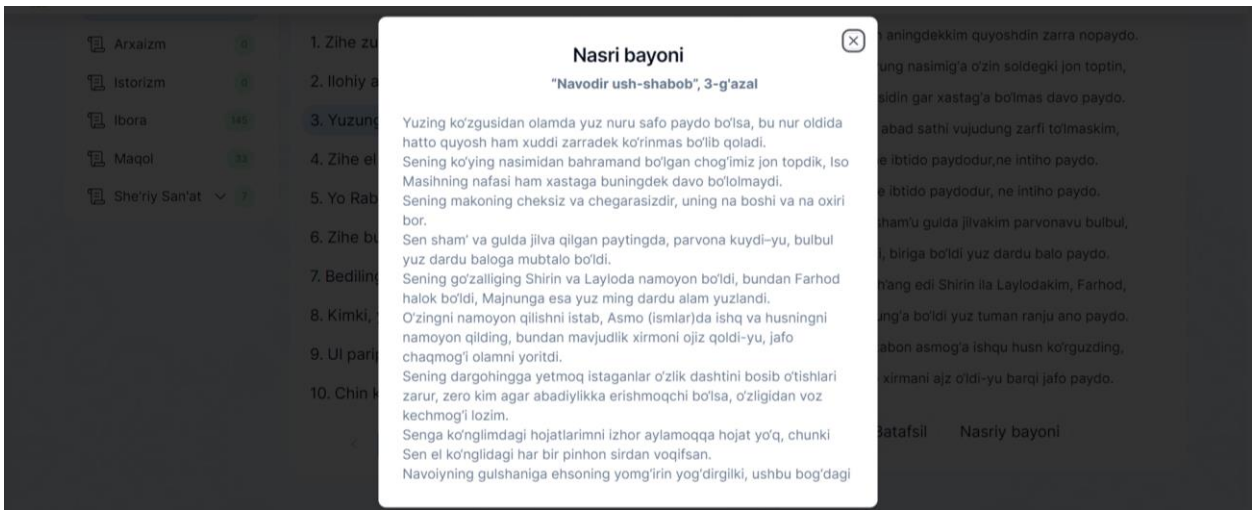
38) название произведения (“Badoye’ ul-vasat”);
39) автор (Алишер Навоий)
40) пол автора (мужчина);
41) год рождения (9 февраля1441 года);
42) дата смерти (3 января1501 года);
43) время создания дивана (1492-1498 годы)
44) год публикации (2011 год);
45) параметр публикации (adadi);
46) издательство (издателство ООО “Tamaddun”);
47) область применения (литератураведение);
48) литературный тип (лирический);
49) жанр (газель);
50) время и место события (Герат);
51) стиль текста (художественный);
52) возраст аудитории (15+, 18+ лет);
53) потенциал аудитории (для широкой публики);
54) вид внутреннего корпуса (авторство);
18) количество формы слов (66 539).

ПРОЗАИЧЕСКОЕ ЗАЯВЛЕНИЕ

В целях прочтения и понимания творчества Алишера Навои, поиска махзана (клада) смыслов и популяризации творчества Навои была создана база данных контекстуально-семантических аннотаций, а также их прозаические описания (не научные обзоры) составлялись как отдельная база для полного текста газелей, и к каждой газели прилагалось прозаическое описание. Чтобы ознакомиться с описанием прозы, нажимается мышкой кнопка «Описание прозы» внизу окна, где дан полный текст газели и полученное изложение открывается в отдельном окне (рисунки 5, 6).

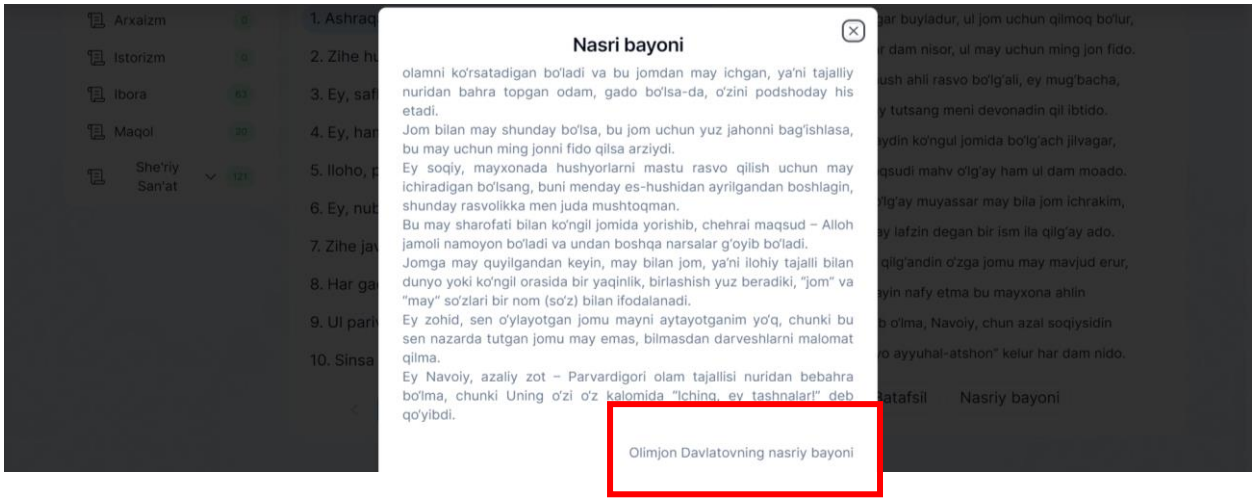


5-рисунок. Прозаическое описание 1-й газели дивана «G‘aroyib us-sig‘ar».



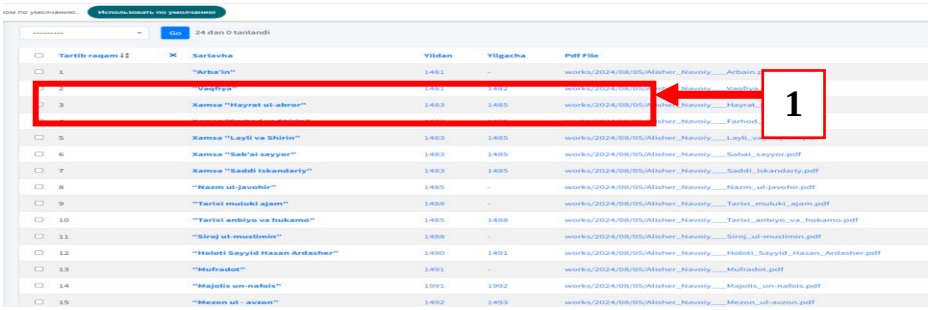
6-рисунок. Прозаическое описание 3-й газели дивана «Navodir ush-shabob».

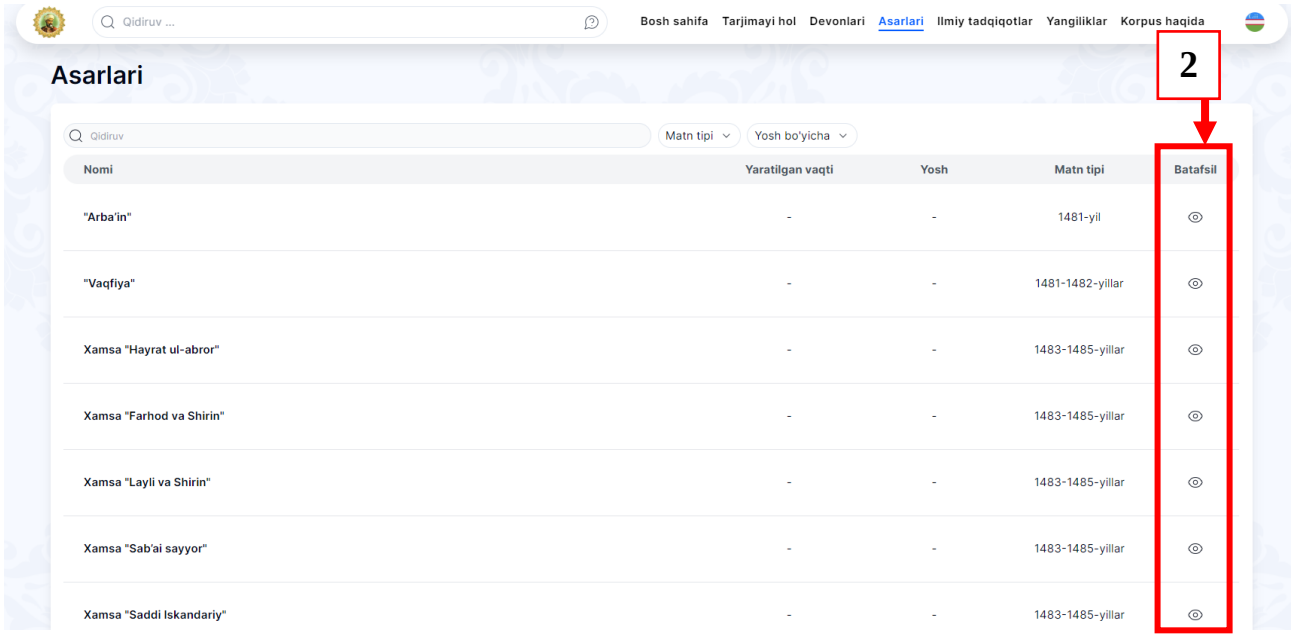
Примечание: в целях защиты авторских прав также были указаны авторы прозаических высказываний:



4.2. ПРОИЗВЕДЕНИЯ

В этом разделе представлены 24 произведения Алишера Навои. Произведения расположены в хронологическом порядке по годам написания (1), нажав на значок мышкой (просмотр) в графе с названием «Подробно», вы перейдете к полному тексту работы (взято из «Полного собрания сочинений»).





4.3. МУДРЫЕ СЛОВА

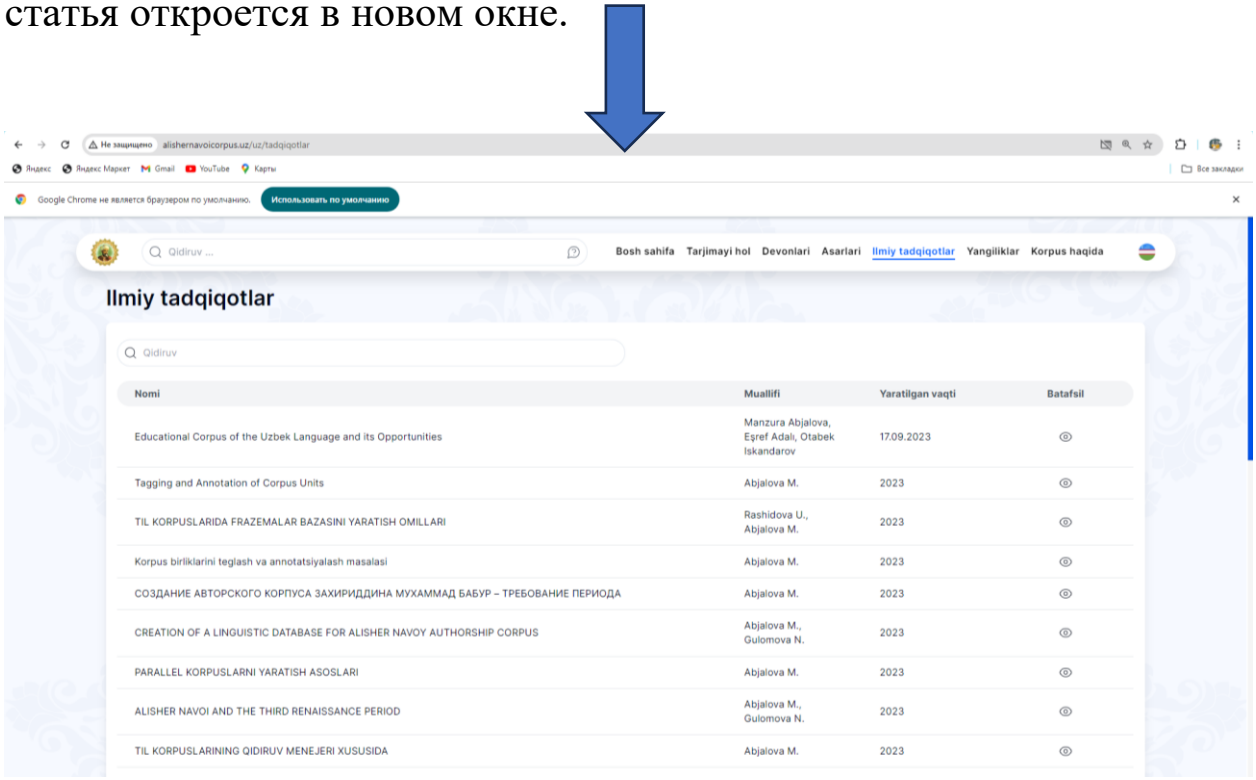
В этом разделе в рамках следующих 9 тем отражены собранные мудрости из произведений Алишера Навои:

	Ordering number	Name
☐	1	Ilm haqida
☐	2	Odob haqida
☐	3	Odamiylik haqida
☐	4	So‘z qudrati haqida
☐	5	Kamtarlik haqida
☐	6	Hunar haqida
☐	7	Vafo-sadoqat haqida
☐	8	Donishmandlik haqida
☐	9	Tarbiya haqida

7-рисунок. Категории в разделе «Мудрые слова».

4.4. НАУЧНЫЕ ИССЛЕДОВАНИЯ

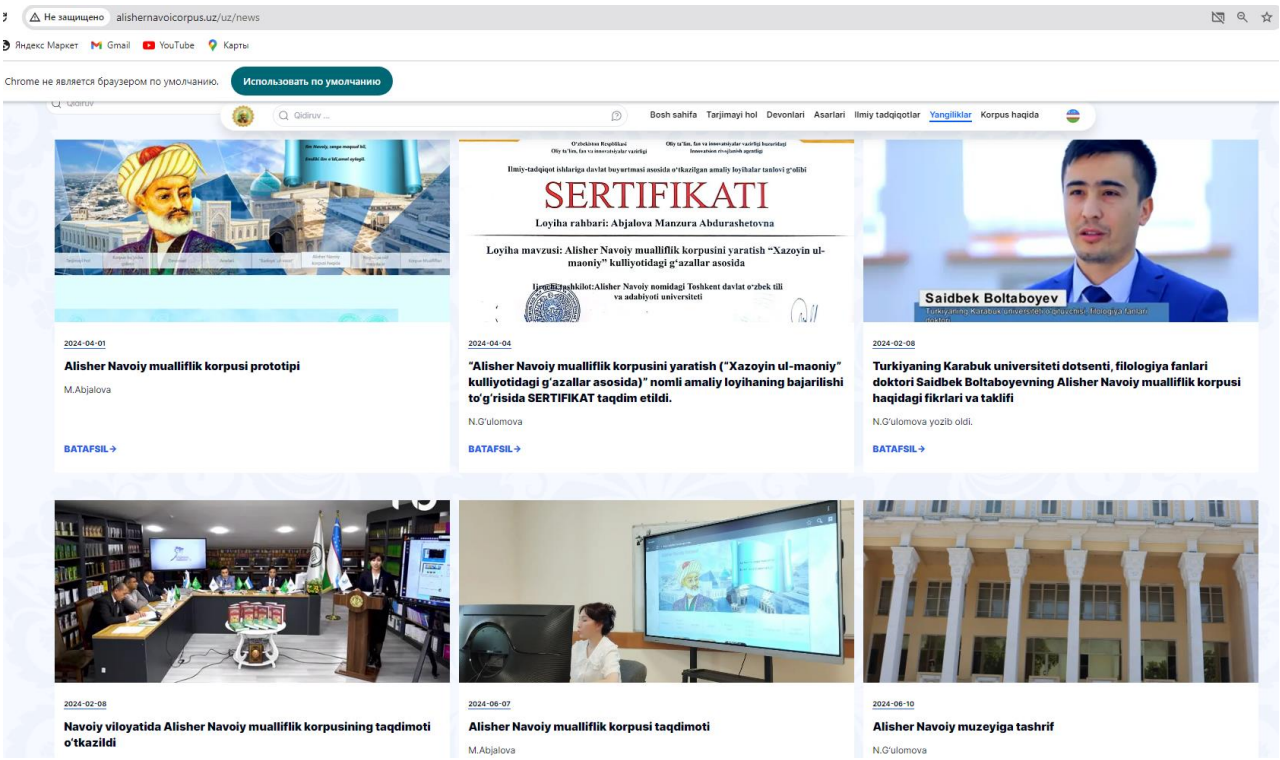
В данной рубрике представлены результаты корпусных лингвистических исследований, проведенных авторами корпуса. Можно прочитать и скачивать научные труды. Для этого нажимается мышкой на кнопку (просмотреть) в графе «Подробно» и научная статья откроется в новом окне.



4.5. НОВОСТИ

В данном разделе собраны новости по следующим темам, касающимся создания авторского корпуса Алишера Навои и его презентации:

– Прототип авторского корпуса Алишера Навои
– Вручен Сертификат о реализации практического проекта под названием «Создание авторского корпуса Алишера Навои (на основе газелей из собрания “Xazoyin ul-maoniy”)»
– мысли и предложения «Об авторском корпусе Алишера Навои» доцента, доктора филологических наук, университета Карабук Турции
– В Навоийской области прошла презентация авторского корпуса Алишера Навои
– Посещение музея Алишера Навои.



8-rasm. Korpusning “Yangiliklar” rukni

4.6. О КОРПУСЕ

В этом разделе представлена информация о корпусе в рамках следующих тем:

- **ЧТО ТАКОЕ ЯЗЫКОВЫЙ КОРПУС?**
- **АКТУАЛЬНОСТЬ АВТОРСКОГО КОРПУСА АЛИШЕРА НАВОИ?**
- **НЕОБХОДИМОСТЬ СОЗДАНИЯ ЭТОГО КОРПУСА**
- **СЕМАНТИЧЕСКАЯ БАЗА АВТОРСКОГО КОРПУСА АЛИШЕРА НАВОИ**
- **СОСТАВ КОРПУСА**
- **ИСТОРИЧЕСКОЕ ЗНАЧЕНИЕ АВТОРСКОГО КОРПУСА АЛИШЕРА НАВОИ**
- **ЯЗЫКОВОЕ ЗНАЧЕНИЕ АВТОРСКОГО КОРПУСА АЛИШЕРА НАВОИ**
- **ПРОСВЕТИТЕЛЬСКОЕ ЗНАЧЕНИЕ АВТОРСКОГО КОРПУСА АЛИШЕРА НАВОИ**
- **СОЦИАЛЬНАЯ ЗНАЧИМОСТЬ АВТОРСКОГО КОРПУСА АЛИШЕРА НАВОИ**
- **ВОСПИТАТЕЛЬНОЕ ЗНАЧЕНИЕ АВТОРСКОГО КОРПУСА АЛИШЕРА НАВОИ**
- **ИСПОЛЬЗОВАННЫЕ ОСНОВНЫЕ СЛОВАРИ**
- **ПРЕЗЕНТАЦИЯ АВТОРСКОГО КОРПУСА АЛИШЕРА НАВОИ**

V. ВОЗМОЖНОСТИ ПОИСКА

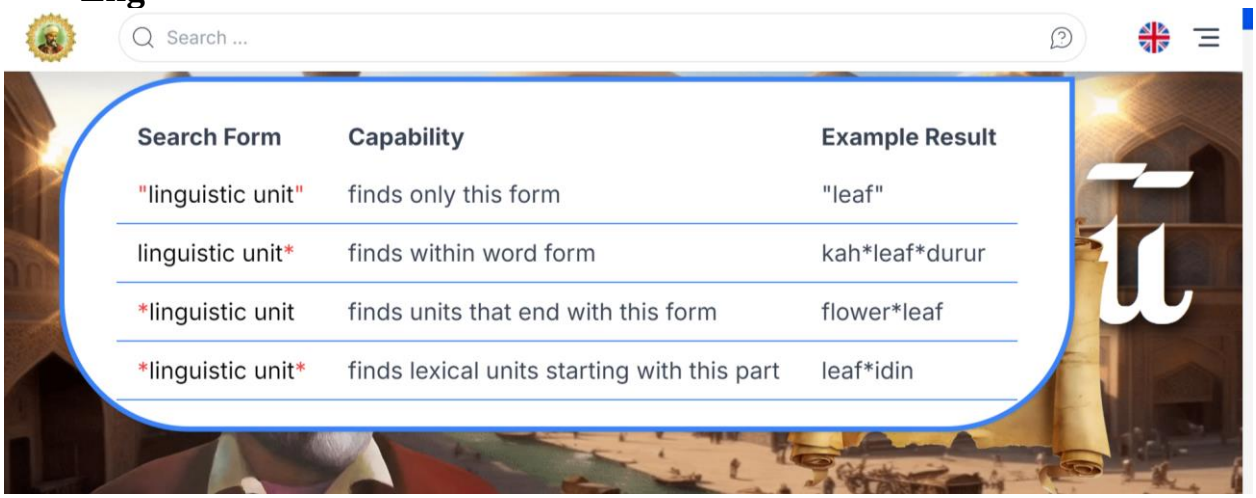
Корпус имеет специальные возможности поиска, и пользователь может даже искать в нем аффиксы.



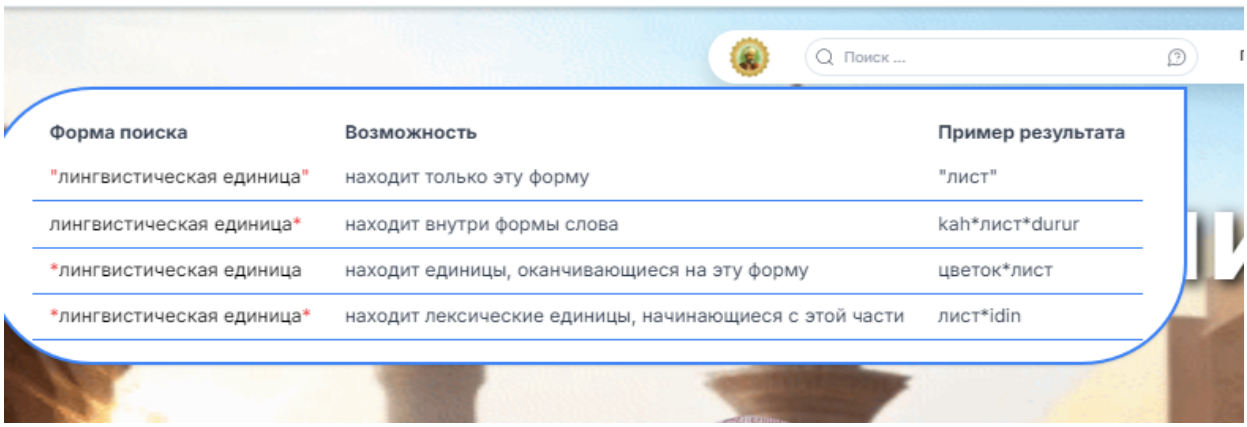
9-рисунок. Возможность поиска лексической единицы (слова, словосочетания, аффиксы) в корпусе.

Возможность поиска по языку отображается со следующими аннотациями:

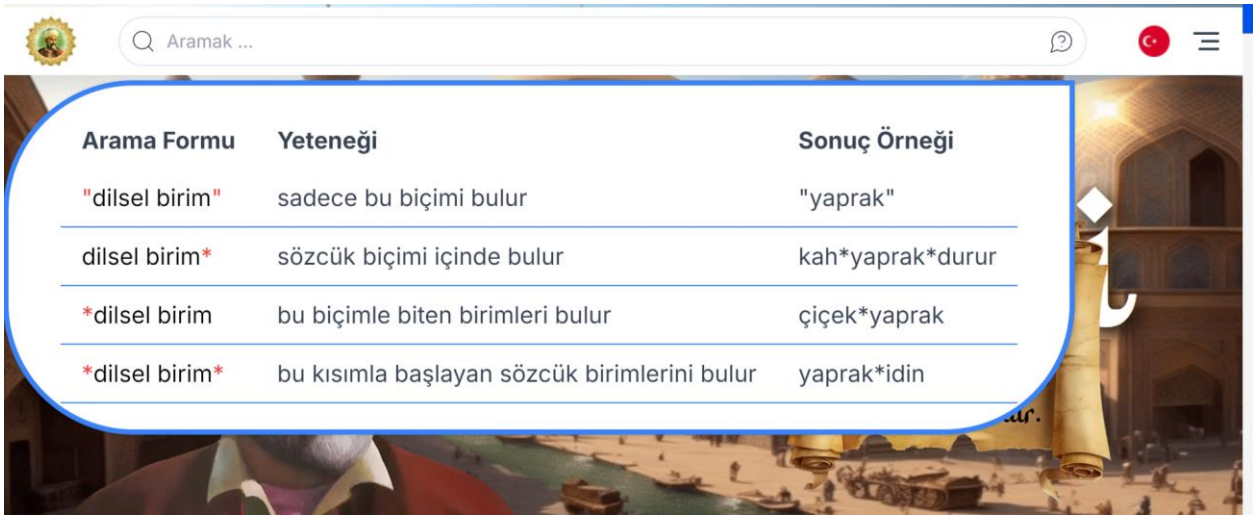
Eng



Rus



Turk

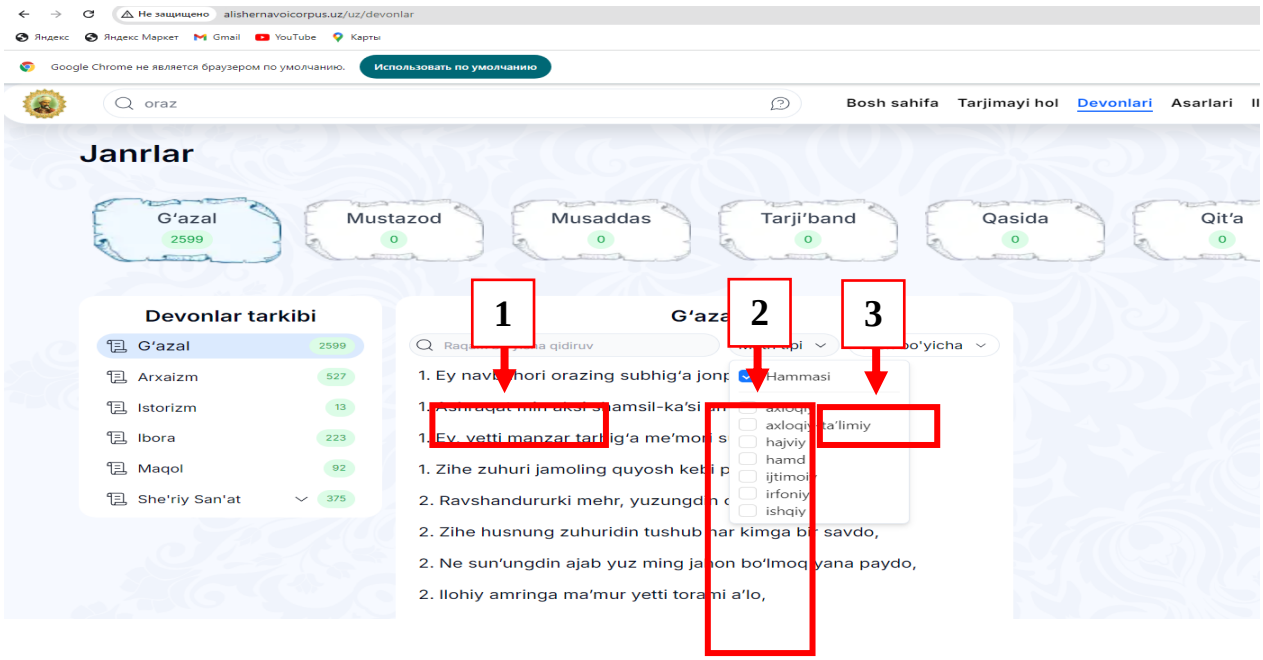


VI. МЕНЕДЖЕР КОРПУСА

В корпусе имеется корпус-менеджер, включающий в себя систему управления текстовыми и лингвистическими данными. *Corpus Manager* — специальная поисковая система, включающая в себя программные средства для поиска информации в корпусе, получения статистической информации и представления результатов пользователю в удобном виде. Следует отметить, что менеджер корпуса является одним из основных требований к языковому корпусу.

Корпусы можно использовать для получения различной информации и статистики о языке и речевых единицах. В частности, на основе корпусов можно получить информацию о частотности слов и их форм, сфере употребления лексем и грамматических категорий, наблюдать изменения частотности и контекстов в разные периоды, видеть совместное употребление или валентность лексических единиц и т. д. В этом процессе очень важен менеджер корпуса.

В корпусе Алишера Навои также создан менеджер корпуса, в котором также есть поисковый фильтр. В частности, конкретную лексическую единицу можно искать по количеству газелей (1), типу текста (2) и возрасту аудитории (3).



Преимущество поискового фильтра в том, что можно быстро найти и прочитать любое количество 650 газелей в каждом диване, фильтровать газели по типам текста, таким как нравственные, образовательные, романтические, а возраст 15+, 16+ позволяет сортировать газели. согласно категории.

Итак, менеджер корпуса:

– предоставляет статистическую информацию по отдельным элементам корпуса;

– имеет поисковый фильтр, в котором лексическую единицу можно искать по порядковому номеру газели, типу текста, возрасту аудитории;

– предоставляет возможность отображать найденные словоформы из неограниченного количества контекстов;

– сортирует список результатов по нескольким критериям, выбранным пользователем;

– ищет не только слова, но и словосочетания;

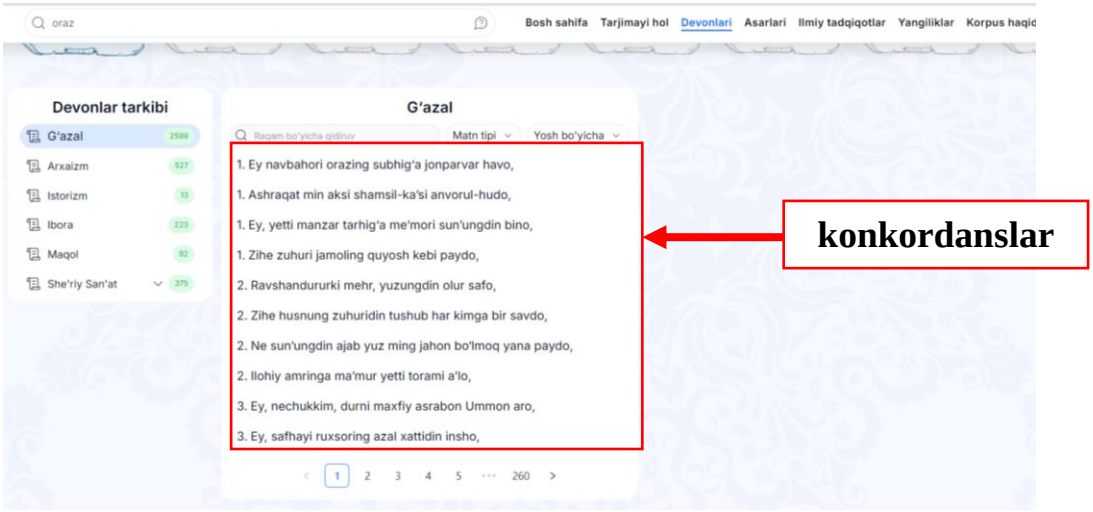
– шаблон осуществляет поиск по (сложным запросам);

– показывает метаданные (библиографические, типологические);

– быстро обрабатывает запросы и выдаёт результаты;

– упрощает использование как опытному пользователю, так и студенту, впервые зашедшему в корпус.

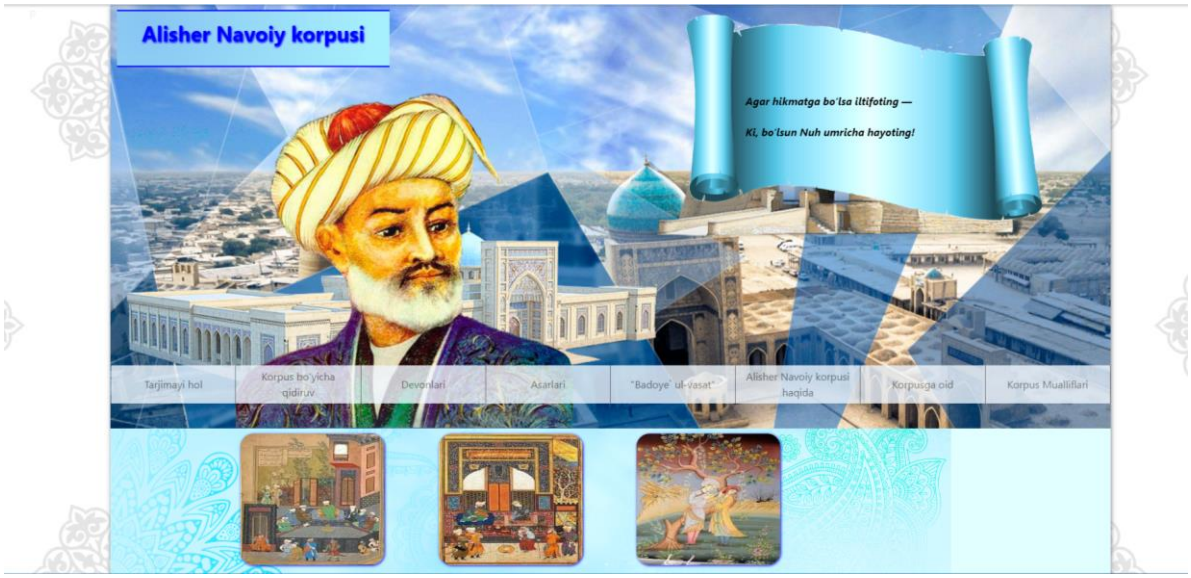
Корпусный поиск позволяет создать Конкорданс любому слову. Конкорданс – это список всех использований слова в контексте со ссылкой на источник. Впервые конкорданс начался в XIII веке по источникам священной Библии.



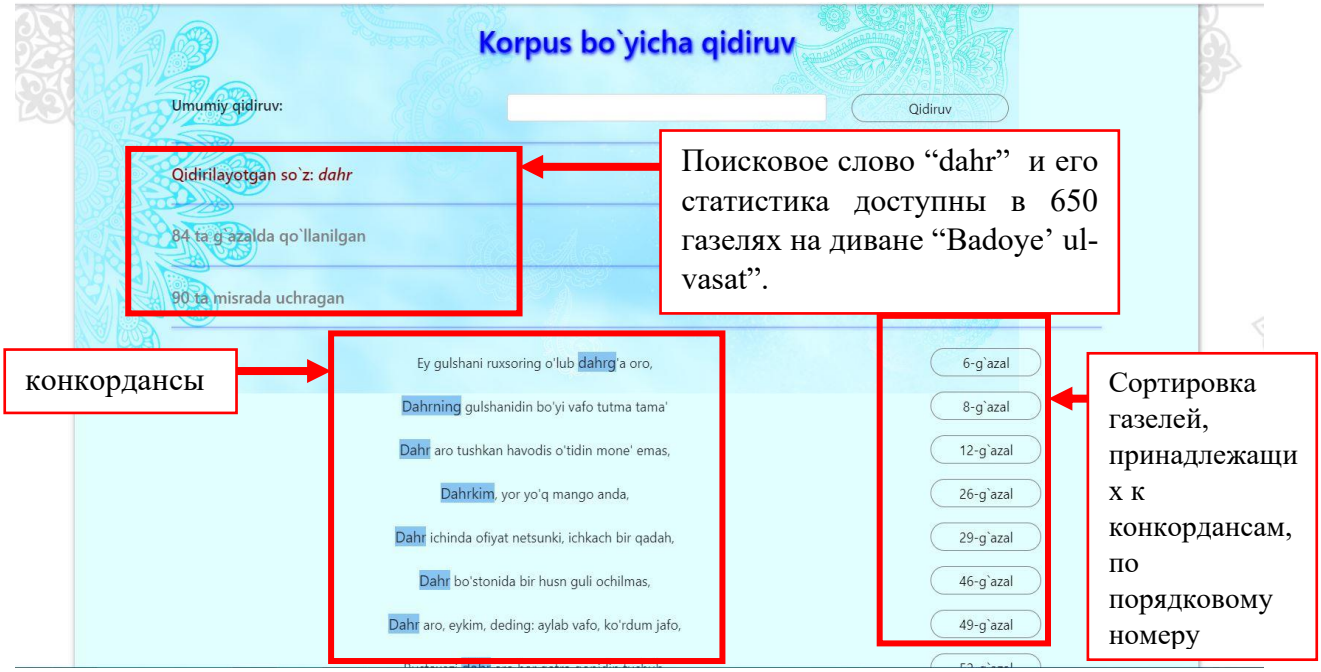
VII. ПРОТОТИП КОРПУСА (ранняя версия)

С 22 апреля 2022 года прототип авторского корпуса Алишера Навои был запущен в виде открытого интернет-ресурса для использования после нескольких лет работы. В самом низу нового типа корпуса Алишера Навои есть ссылка на прототип (первую версию), нажмите на нее (http://v1.alishernavoicorpus.uz/), чтобы перейти к прототипу.

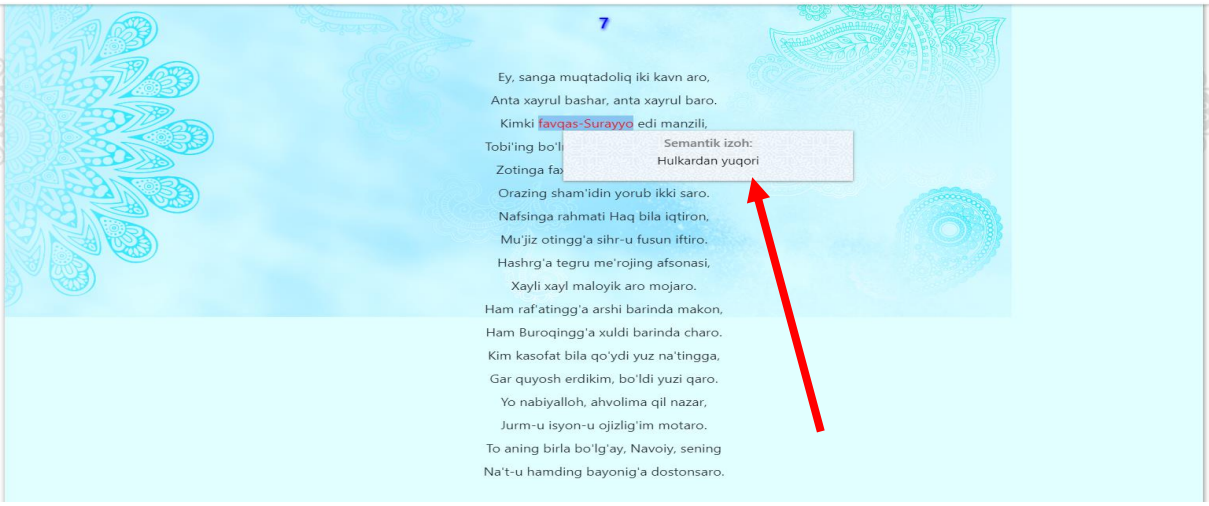




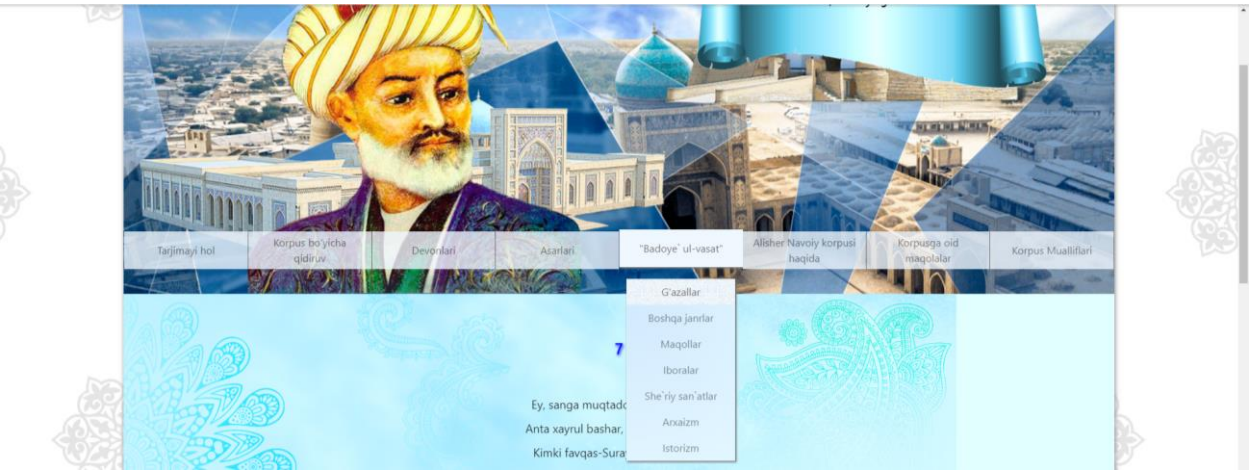
10-рисунок. Главная страница прототипа корпуса.



11-рисунок. Возможность поиска и результаты.



12-рисунок. Полный текст 7-й газели и семантическое объяснение, данное “favqas-Surayyo” из объясненных в ней лексических единиц.



13-рисунок. Пятый раздел – отражение базы данных в офисе «Бадое ул-васат».



14-рисунок. Сортировка 650 газелей в библиотеке “Бадое ул-васат”.

Доступ и к остальным столбцам осуществляется щелчком левой кнопки мыши. Ознакомиться с возможностями данного прототипа и его использованием можно через видеоинструкцию по ссылке:https://youtu.be/744o55Tqx9E

На первом этапе большая часть учебной литературы, выпускаемой для среднего образования, состоит из образцов творчества Навои диване “Badoye’ ul-vasat” раздела “Xazoyin ul-ma’oniy”, чтобы учащиеся могли прочитать и понять произведения Алишера Навои. **Авторский корпус Алишера Навои создан на основе смысловых меток 650 газелей дивана** «Бадое ул-васат» в

целях изучения и осмысления творчества Алишера Навои, а также ознакомления читателей с Навои.

В настоящее время этот прототип работает под названием версии 1, по адресу ().

Основой для создания авторского корпуса Алишера Навои стали 21 226 пояснительных слов, более 5 000 архаизмов, 170 историзмов, 43 пословицы, 30 выражений, 236 слов, относящихся к искусству тальмех, 164 слов противоречий, 806 соотношений и 124 лексических единиц, относящихся к поэтическому искусству ташбиха в диване «Бадое ул-васат».

Газели в диване «Бадое ул-васат» состоят из 5001 байтов – 10002 строфы, всего 66539 слов, каждая газель от 6 байт до 13 байт: 6 байт – 1, 7 байт – 437, 8 байт – 8, 9 байт – 187, 10 байт – 1, 11 байт – 14, 12 байт – 1, 13 байт – 1.

Подобный статистический анализ в авторском корпусе Алишера Навои считается важным, он дает пользователю четкую отчетность и показывает объем работы над базой данных.

Научно проанализированы и включены в 5-й столбец более 50 пословиц и стихов с таким же количеством постоянных сочетаний (фразы), вошедших в газели дивана «Бадое ул-васат».

Научно-исследовательская работа, послужившая основой для создания данного прототипа (создание авторского корпуса Алишера Навои и базы данных его смысловых тегов (на основе дивана «Бадое ул-васат») Гуломовой Н. Доктор фил. по филологическим наукам (PhD) дисс. – Ташкент, 2023. – 190 с.).

Появилась монография:

Абжалова М., Гулямова Н. Авторский корпус: Авторский корпус Алишера Навои. [Текст]: Монография / М.А. Абжалова, Н.С. Гулямова. – Навои, 2023. – 216 с.

Получено 5 авторских свидетельств:

1. Alisher Navoiy mualliflik korpusi uchun Navoiyning “Badoe’ ul-vasat” devonidagi g‘azallarning semantik bazasi. Guvohnoma № BGU 00583. – Toshkent, 2022. (mualliflik guvohnomasi). (Abjalova Manzura

Abdurashetovna; G‘ulomova Nargiza Sa’dullayevna; Rashidov Husniddin Axror o‘g‘li)

2. Alisher Navoiy mualliflik korpusi. Guvohnoma № DGU 18544. – Toshkent, 2022. (mualliflik guvohnomasi). (Abjalova Manzura Abdurashetovna; G‘ulomova Nargiza Sa’dullayevna, Sadullayeva Shahrizoda)

Главное, что в 2023 году этот прототип был профинансирован Агентством инноваций практического проекта «Создание авторского корпуса Алишера Навои (на основе газелей из собрания Хазаина ул-Маони)» под номером АЛ-662205561 и стал основой для совершенствования корпуса. На данный момент на этот корпус и его базы получено 5 авторских свидетельств. Ниже приведены 3 отзыва, полученные в ходе проекта:

1.Абжалова М. и др. Смысловая база 650 газелей в книге Алишера Навои “Navodir ush-shabob”. Авторское свидетельство № БГУ 20240164. – Ташкент, 2024.

2. Абжалова М. и др. Смысловая база 650 газелей в книге Алишера Навои “Favoyid ul-kibar”. Авторское свидетельство № БГУ 20240217. – Ташкент, 2024.

3. Абжалова М. и др. Смысловая база 650 газелей в книге Алишера Навои “G‘aroyib us-sig‘ar”. Авторское свидетельство № БГУ 20240165. – Ташкент, 2024.



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ILOVALAR

MA’LUMOTLAR BAZASINING RASMIY RO‘YXATDAN O‘TKAZILGANLIGI TO‘G‘RISIDAGI

GUVOHNOMA

O'ZBEKISTON RESPUBLIKASI ADLIYA VAZIRLIGI

№ BGU 1407

Ushbu guvohnoma O‘zbekiston Respublikasining «Elektron hisoblash mashinalari uchun yaratilgan dasturlar va ma‘lumotlar bazalarining huquqiy himoyasi to‘g‘risida»gi Qonuniga asosan quyidagi ma‘lumotlar bazasiga berildi:

Alisher Navoiyning “G'aroyib us-sig'ar” devonidagi 650 g‘azalning semantik bazasi

(Ma‘lumotlar bazasining nomi)

Talabnoma kelib tushgan sana: **22.04.2024** (210) Talabnoma raqami: **BGU 20240165**

Huquq egasi(lari): **ABJALOVA MANZURA ABDURASHETOVNA, UZ; G‘ULOMOVA NARGIZA SA’DULLAYEVNA, UZ**

Ma'lumotlar bazasi muallif(lari): **ABJALOVA MANZURA ABDURASHETOVNA, UZ; G‘ULOMOVA NARGIZA SA’DULLAYEVNA, UZ; ADIZOVA IKBALOY ISTAMOVNA, UZ; YUSUPOVA DILNOVOZ RAXMONOVNA, UZ; MULLAXODJAYEVA KARAMAT TASHXODJAYEVNA, UZ; TUXLIYEVA DILFUZA BOQIJON QIZI, UZ; RIZVANOV QODIR QAXRAMON O‘G‘LI, UZ**

O‘zbekiston Respublikasining Ma‘lumotlar bazasi davlat reestrida 06.05.2024 y. ro‘yxatdan o‘tkazilgan.

MA’LUMOTLAR BAZASINING RASMIY RO‘YXATDAN O‘TKAZILGANLIGI TO‘G‘RISIDAGI

GUVOHNOMA

O‘ZBEKISTON RESPUBLIKASI ADLIYA VAZIRLIGI

№ BGU 1408

Ushbu guvohnoma O‘zbekiston Respublikasining «Elektron hisoblash mashinalari uchun yaratilgan dasturlar va ma‘lumotlar bazalarining huquqiy himoyasi to‘g‘risida»gi Qonuniga asosan quyidagi ma‘lumotlar bazasiga berildi:

Alisher Navoiyning "Navodir ush-shabob" devonidagi 650 g'azalning semantik bazasi

(Ma‘lumotlar bazasining nomi)

Talabnoma kelib tushgan sana: **22.04.2024** (210) Talabnoma raqami: **BGU 20240164**

Huquq egasi(lari): **ABJALOVA MANZURA ABDURASHETOVNA, UZ; G‘ULOMOVA NARGIZA SA’DULLAYEVNA, UZ**

Ma'lumotlar bazasi muallif(lari): **ABJALOVA MANZURA ABDURASHETOVNA, UZ; G‘ULOMOVA NARGIZA SA’DULLAYEVNA, UZ; TOJIBOYEVA OZODA TOXIROVNA, UZ; RIZVANOV QODIR QAXRAMON O‘G‘LI, UZ**

O‘zbekiston Respublikasining Ma‘lumotlar bazasi davlat reestrida 06.05.2024 y. ro‘yxatdan o‘tkazilgan.

MA'LUMOTLAR BAZASINING RASMIY RO'YXATDAN O'TKAZILGANLIGI TO'G'RISIDAGI

GUVOHNOMA

O'ZBEKISTON RESPUBLIKASI ADLIYA VAZIRLIGI

№ BGU 1434

Ushbu guvohnoma O'zbekiston Respublikasining «Elektron hisoblash mashinalari uchun yaratilgan dasturlar va ma'lumotlar bazalarining huquqiy himoyasi to'g'risida»gi Qonuniga asosan quyidagi ma'lumotlar bazasiga berildi:

"Alisher Navoiyning "Favoyid ul-kibar" devonidagi 650 g'azalning semantik bazasi"

(Ma'lumotlar bazasining nomi)

Talabnoma kelib tushgan sana: **18.05.2024** (210) Talabnoma raqami: **BGU 20240217**

Huquq egasi(lari): **ABJALOVA MANZURA ABDURASHETOVNA, UZ; G'ULOMOVA NARGIZA SA'DULLAYEVNA, UZ**

Ma'lumotlar bazasi muallif(lari): **ABJALOVA MANZURA ABDURASHETOVNA, UZ; G'ULOMOVA NARGIZA SA'DULLAYEVNA, UZ; YUSUPOVA DILNOVOZ RAXMONOVNA, UZ; ADIZOVA IKBALOY ISTAMOVNA, UZ; TOJIBOYEVA OZODA TOXIROVNA, UZ; HAMROYEVA ORZIGUL JALOLOVNA, UZ; MADIRIMOVA SOXIBA MAXMUDOVNA, UZ**

O'zbekiston Respublikasining Ma'lumotlar bazasi davlat reestrida 26.05.2024 y. ro'yxatdan o'tkazilgan.

MA’LUMOTLAR BAZASINING RASMIY RO‘YXATDAN O‘TKAZILGANLIGI TO‘G‘RISIDAGI

GUVOHNOMA

O'ZBEKISTON RESPUBLIKASI ADLIYA VAZIRLIGI

№ BGU 1458

Ushbu guvohnoma O‘zbekiston Respublikasining «Elektron hisoblash mashinalari uchun yaratilgan dasturlar va ma‘lumotlar bazalarining huquqiy himoyasi to‘g‘risida»gi Qonuniga asosan quyidagi ma‘lumotlar bazasiga berildi:

“O‘zbek tilidagi o‘zlashma va zamonaviy so‘zlar bazasi”

(Ma‘lumotlar bazasining nomi)

Talabnoma kelib tushgan sana: **26.05.2024** (210) Talabnoma raqami: **BGU 20240237**

Huquq egasi(lari): **ABJALOVA MANZURA ABDURASHETOVNA, UZ**

Ma'lumotlar bazasi muallif(lari): **ABJALOVA MANZURA ABDURASHETOVNA, UZ; RASHIDOVA UMIDA MANSUROVNA, UZ; SAFAROVA GULSHODA SHUHRAT QIZI, UZ; RAVSHANOVA NOZIMA AXTAM QIZI, UZ; ADILOVA MUNOJOT ASRO ROVNA, UZ; RIZVANOV QODIR QAXRAMON O‘G‘LI, UZ**

O'zbekiston Respublikasining Ma‘lumotlar bazasi davlat reestrida 30.05.2024 y. ro'yxatdan o'tkazilgan.

ELEKTRON HISOBLASH MASHINALARI UCHUN YARATILGAN
DASTURNING RASMIY RO‘YXATDAN O‘TKAZILGANLIGI TO‘G‘RISIDAGI

GUVOHNOMA

O‘ZBEKISTON RESPUBLIKASI ADLIYA VAZIRLIGI

№ DGU 18544

Ushbu guvohnoma O‘zbekiston Respublikasining «Elektron hisoblash mashinalari uchun yaratilgan dasturlar va ma‘lumotlar bazalarining huquqiy himoyasi to‘g‘risida»gi Qonuniga asosan quyidagi elektron hisoblash mashinalari uchun yaratilgan dasturga berildi:

Alisher Navoiy mualliflik korpusi

Talabnoma kelib tushgan sana: **19.07.2022** Talabnoma raqami: **DGU 2022 4060**

Huquq egasi(lari): **ABJALOVA MANZURA ABDURASHETOVNA UZ; G'ulomova Nargiza Sa'dullayevna UZ**

Dastur muallifi(lari): **G'ulomova Nargiza Sa'dullayevna UZ; Abjalova Manzura Abdurashetovna UZ; Sadullayeva Shahrizoda UZ**

O‘zbekiston Respublikasining Dasturiy mahsulotlar davlat reyestrida 17.09.2022 y. ro‘yxatdan o‘tkazilgan.

MUNDARIJA

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