EduVision: Journal of Innovations in Pedagogy and Educational Advancements
Volume 2, Issue 6, June 2026
brightmindpublishing.com
ISSN (E): 3061-6972

NUMERALS IN CHINESE AND UZBEK: A STRUCTURAL-SEMANTIC AND LINGUOCULTURAL ANALYSIS

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Abstract
This article provides a comparative analysis of numerals in Chinese and Uzbek from structural, semantic, grammatical, and linguocultural perspectives. The study examines the hieroglyphic representation of Chinese numerals, their decimal-positional structure, and their use with classifiers, comparing them with the morphological formation of Uzbek numerals, including cardinal, ordinal, collective, and distributive forms. The article also discusses the role of numerals in everyday communication, education, trade, time expression, dates, monetary units, and cultural symbolism. Chinese numerical units such as "一, 二, 三, 十, 百, 千, 万" and Uzbek numerals such as "bir, ikki, uch, o'n, yuz, ming" are analyzed from a structural-semantic viewpoint. The findings show that Chinese numerals are mainly analytical and positionally organized, closely connected with classifiers, whereas Uzbek numerals reflect the agglutinative nature of the language through suffixation. The article has theoretical and practical significance for comparative linguistics, translation studies, foreign language teaching methodology, and linguocultural research.

Keywords: Chinese language, Uzbek language, numeral, cardinal number, ordinal number, classifier, comparative linguistics, linguoculture.

Introduction

Annotatsiya

Ushbu maqolada xitoy va o'zbek tillarida sonlarning tuzilishi, ma'no xususiyatlari, grammatik vazifalari hamda lingvomadaniy jihatlari qiyosiy tahlil qilinadi. Tadqiqot davomida xitoy tilidagi sonlarning iyeroglif asosidagi yozilishi, pozitsion-o'nlik tizimdagi ifodalanishi, sanoq birliklari va klassifikatorlar bilan qo'llanishi o'zbek tilidagi sonlarning morfologik yasalishi, tartib sonlar, jamlovchi va taqsim sonlar

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bilan solishtiriladi. Shuningdek, ikki tilda sonlarning kundalik muloqot, ta’lim, savdo, vaqt, sana, pul birligi hamda madaniy ramzlar tizimidagi o‘rni yoritiladi. Maqolada “一, 二, 三, 十, 百, 千, 万” kabi xitoy son birliklari hamda “bir, ikki, uch, o‘n, yuz, ming” kabi o‘zbek sonlari struktur-semantik jihatdan tahlil etiladi. Tadqiqot natijalari shuni ko‘rsatadiki, xitoy tilida sonlar analitik va pozitsion qurilishga ega bo‘lib, klassifikatorlar bilan bevosita bog‘liq holda ishlatiladi; o‘zbek tilida esa sonlar agglutinativ til xususiyatiga mos ravishda qo‘shimchalar orqali turli grammatik ma’nolar hosil qiladi. Mazkur maqola xitoy va o‘zbek tillarini qiyosiy o‘rganish, tarjima amaliyoti, chet tilini o‘qitish metodikasi hamda lingvomadaniyatshunoslik uchun ilmiy-amaliy ahamiyatga ega.

Kalit so‘zlar: xitoy tili, o‘zbek tili, son, numeral, sanoq son, tartib son, klassifikator, qiyosiy tilshunoslik, lingvomadaniyat.

Аннотация

В данной статье проводится сравнительный анализ числительных в китайском и узбекском языках с точки зрения их структурных, семантических, грамматических и лингвокультурных особенностей. В ходе исследования рассматриваются иероглифическое написание китайских числительных, их десятично-позиционная система, употребление с классификаторами, а также сопоставляются способы образования узбекских количественных, порядковых, собирательных и распределительных числительных. Особое внимание уделяется роли чисел в повседневной коммуникации, образовании, торговле, выражении времени, даты, денежных единиц и культурной символики. Китайские числительные “一, 二, 三, 十, 百, 千, 万” и узбекские числительные “bir, ikki, uch, o‘n, yuz, ming” анализируются в структурно-семантическом аспекте. Результаты исследования показывают, что китайские числительные имеют аналитический и позиционный характер и тесно связаны с классификаторами, тогда как в узбекском языке числительные, в соответствии с агглютинативной природой языка, образуют различные грамматические значения с помощью аффиксов. Статья имеет научно-практическое значение для сравнительного языкознания, переводоведения, методики преподавания иностранных языков и лингвокультурологии.

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Ключевые слова: китайский язык, узбекский язык, числительное, количественное числительное, порядковое числительное, классификатор, сравнительное языкознание, лингвокультура.

Introduction

Numerals are among the universal linguistic units that occupy an important place in human thinking, communication, and cultural life. In every language, numerals serve to express the quantity, order, proportion, distribution, date, time, and quantitative relations of objects and phenomena. However, the structure, formation, grammatical functions, and cultural interpretations of numerals differ according to the internal laws of each language. In this regard, a comparative study of numerals in Chinese and Uzbek is important for revealing the grammatical system, cognitive model, and cultural characteristics of the two languages.

Chinese belongs to the Sino-Tibetan language family and is mainly characterized as an analytical language. In Chinese, grammatical meanings are often expressed through word order, function words, and context. Numerals in Chinese function as independent lexical units; however, when they appear before nouns, they are usually used together with classifiers. For example, in the phrase “三本书” — “three books”, “三” denotes the numeral, “本” functions as the classifier, and “书” denotes the object. Thus, in Chinese, the grammatical relationship between a numeral and a noun is realized through special measure words.

Uzbek, on the other hand, belongs to the Turkic language family and has an agglutinative structure. In Uzbek, grammatical meanings are mainly formed by means of suffixes. Numerals are an independent part of speech and indicate the quantity, order, collectiveness, or distribution of objects. For example, in such forms as “uch kitob” — three books, “uchinchi kitob” — the third book, “uchtadan kitob” — three books each, and “ikkovimiz” — the two of us, various grammatical and semantic meanings are formed by adding suffixes to the numeral base.

The main purpose of this article is to conduct a comparative analysis of numerals in Chinese and Uzbek from structural-semantic, grammatical, and linguocultural perspectives. The objectives of the study are as follows: first, to identify the structure of basic cardinal numerals in the two languages; second, to analyze the formation of ordinal numerals and other types of numerals; third, to compare Chinese classifiers

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brightmindpublishing.com
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with Uzbek numeral-noun combinations; and fourth, to examine the cultural and symbolic meanings of numerals.

Research Methodology

The article employs comparative-typological, structural-semantic, descriptive, and linguocultural methods of analysis. The comparative-typological method makes it possible to identify the common and distinctive features of numerals in Chinese and Uzbek. The structural-semantic method is used to analyze the internal structure, formation, and semantic layers of numerals. The descriptive method explains the grammatical functions of numerals in the two languages through examples. The linguocultural approach serves to reveal the relationship between numerals and national worldview, customs, traditions, and symbolic meanings. The research material consists of basic cardinal numerals, ordinal numerals, numeral expressions used in everyday communication, phraseological units, and cultural symbols in Chinese and Uzbek. Examples are presented in Chinese characters, pinyin transcription, and Uzbek translation.

The Structure of Numerals in Chinese

The basic numeral units in Chinese are as follows: 一 yī — one, 二 èr — two, 三 sān — three, 四 sì — four, 五 wǔ — five, 六 liù — six, 七 qī — seven, 八 bā — eight, 九 jiǔ — nine, 十 shí — ten, 百 bǎi — hundred, 千 qiān — thousand, 万 wàn — ten thousand, and 亿 yì — hundred million. One of the important features of the Chinese numeral system is that the unit “万” has a special place in the expression of large numbers. While in Uzbek the concept of “ten thousand” is expressed by two words, in Chinese it is expressed by a single special unit — “万”.

For example:

一 yī — one

十 shí — ten

十一 shí yī — eleven

二十 èr shí — twenty

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二十一 èr shí yī — twenty-one

一百 yī bǎi — one hundred

一千 yī qiān — one thousand

一万 yī wàn — ten thousand

The formation of numerals in Chinese is highly logical and positional. The numeral “二十三” is structured as “two tens and three”, that is, 2 × 10 + 3. Similarly, “五十八” is understood as “five tens and eight”, that is, 5 × 10 + 8. This system makes it easier for learners to acquire numerals on the basis of mathematical logic.

In Chinese, zero is expressed by the character “零” líng. When zero appears within large numbers, it is pronounced separately. For example, “一百零五” yī bǎi líng wǔ means one hundred and five, while “一千零八” yī qiān líng bā means one thousand and eight. This feature demonstrates the positional accuracy of the Chinese numeral system.

In Chinese, the numeral “two” appears in two forms: “二” èr and “两” liǎng. “二” is usually used in counting, ordinal sequences, or as a digit: 一, 二, 三 — one, two, three. “两” is often used before nouns to indicate quantity: 两个人 liǎng ge rén — two people, 两本书 liǎng běn shū — two books. This distinction does not exist in Uzbek, where the numeral “ikki” is used in all such contexts.

The Structure of Numerals in Uzbek

In Uzbek, numerals form an independent part of speech and indicate the quantity or order of objects. The basic cardinal numerals are: bir, ikki, uch, to‘rt, besh, olti, yetti, sakkiz, to‘qqiz, o‘n, yigirma, o‘ttiz, qirq, ellik, oltmish, yetmish, sakson, to‘qson, yuz, ming, million, and milliard. Compound numerals in Uzbek are formed through the sequential use of words: o‘n bir — eleven, yigirma besh — twenty-five, qirq uch — forty-three, yuz yigirma — one hundred and twenty, ikki ming besh yuz — two thousand five hundred. In such constructions, numerals usually proceed from the larger unit to the smaller unit. For example, in “ikki ming uch yuz qirq besh” — two

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thousand three hundred and forty-five, the thousands are expressed first, followed by hundreds, tens, and units.

In Uzbek, numerals may acquire different grammatical forms. For example, ordinal numerals are formed by means of the suffix "-inchi/-nchi": birinchi — first, ikkinchi — second, uchinchi — third, to'rtinchi — fourth. Collective numerals are formed with such suffixes as "-ov" and "-ala": ikkov, uchov, ikkala, uchala. Distributive numerals are formed with the suffix "-tadan": bittadan, ikkitadan, uchtadan. Approximate numerals are formed by means of suffixes such as "-tacha" and "-lab": o'ntacha, yuzlab, minglab.

When numerals combine with nouns in Uzbek, the noun usually remains in the singular form: uch kitob — three books, besh talaba — five students, o'n daftar — ten notebooks. This differs from the Chinese numeral-classifier-noun model. In Uzbek, the form "uch kitoblar" is not considered standard in a simple quantitative meaning, because the numeral itself already conveys plurality. In Chinese, however, since nouns do not have a grammatical plural form in the same way, quantity is mainly expressed through a numeral and a classifier.

Numeral-Noun Combinations in Chinese and Uzbek

One of the most important differences between Chinese and Uzbek appears in numeral-noun combinations. In Chinese, a numeral cannot usually combine directly with a noun; a classifier is generally required between them. A classifier is a special measure word corresponding to the type, shape, function, or semantic group of the object being counted.

For example:

一个人 yí ge rén — one person

一本书 yì běn shū — one book

三张纸 sān zhāng zhǐ — three sheets of paper

两杯茶 liǎng bēi chá — two cups of tea

五辆车 wǔ liàng chē — five cars

In these examples, "个, 本, 张, 杯, 辆" function as classifiers. In Uzbek, they are often translated by such units as "ta", "dona", "piyola", "varaq", or "bosh". However, the use of such units in Uzbek is not obligatory. For example, saying "uch kitob" — three

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books is sufficient, while “uch dona kitob” — three pieces of books adds extra precision or stylistic emphasis.

In Uzbek, “ta” is widely used as a counting unit: bitta daftar — one notebook, ikkita ruchka — two pens, uchta talaba — three students. However, “ta” is not always obligatory: “uch talaba” and “uchta talaba” are close in meaning. In Chinese, however, the form “三书” without a classifier is grammatically incorrect; the correct form is “三本书”.

This difference is of great importance in foreign language teaching. Uzbek-speaking learners of Chinese need to acquire classifiers separately. Conversely, Chinese-speaking learners of Uzbek should understand that a permanent classifier between numerals and nouns is not required in Uzbek.

A Comparative Analysis of Ordinal Numerals

In Chinese, ordinal numerals are formed with the prefix “第” dì. This prefix is placed before the numeral and creates an ordinal meaning:

第一 dì yī — first

第二 dì èr — second

第三 dì sān — third

第十 dì shí — tenth

第二十五 dì èr shí wǔ — twenty-fifth

In Uzbek, ordinal numerals are formed by adding the suffix “-inchi/-nchi” to the numeral base: birinchi — first, ikkinchi — second, uchinchi — third, o‘ninchi — tenth, yigirma beshinchi — twenty-fifth. Thus, in Chinese ordinal meaning is expressed by a prefix, whereas in Uzbek it is expressed by a suffix. This clearly demonstrates the typological difference between the two languages: Chinese is analytical, while Uzbek is agglutinative.

When expressing dates in Chinese, the order of month and day differs from some Uzbek spoken patterns. For example, “2026年5月15日” èr líng èr liù nián wǔ yuè shí wǔ rì means May 15, 2026. In Chinese, the order is generally “year — month — day”. In official Uzbek writing, the form “2026-yil 15-may” is also used, but in oral speech “15-may, 2026-yil” may also occur.

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Semantic Types of Numerals

In Uzbek, numerals are divided into several semantic types: cardinal numerals, ordinal numerals, collective numerals, unit numerals, distributive numerals, approximate numerals, and fractional numerals. For example:

cardinal numerals: besh, o‘n, yigirma;

ordinal numerals: beshinchi, o‘ninchi;

collective numerals: ikkov, uchov, beshov;

distributive numerals: ikkitadan, beshtadan;

approximate numerals: o‘ntacha, yuzlab;

fractional numerals: yarim, uchdan bir, to‘rtdan uch.

In Chinese, numerals also perform various semantic functions, but the ways in which they are expressed differ from Uzbek. For example, fractional numerals are expressed through the “分之” fēn zhī model: 三分之一 sān fēn zhī yī — one third, 四分之三 sì fēn zhī sān — three fourths. Percentages are expressed through “百分之” bǎi fēn zhī: 百分之五十 bǎi fēn zhī wǔ shí — fifty percent.

The distributive meaning in Chinese is often expressed through context, repetition, or auxiliary constructions. For example, “每人两个” měi rén liǎng ge means “two for each person”. In Uzbek, this meaning is expressed more compactly by the suffix “-tadan”: “har bir kishiga ikkitadan”.

Approximate numerals in Chinese are expressed by means of words such as “左右” zuǒyòu, “大约” dàyuē, and “大概” dàgài: 十个人左右 — about ten people. In Uzbek, forms such as “o‘ntacha”, “taxminan o‘n”, and “o‘nlar atrofida” are used.

Cultural and Symbolic Meanings of Numerals

Numerals are not only grammatical units but also important cultural symbols. In Chinese culture, certain numerals are associated with positive or negative meanings. For example, “八” bā — the number eight is considered a symbol of luck and wealth because its pronunciation is phonetically close to “发财” fācái, meaning “to become rich” or “to prosper”. Therefore, in China, special attention is often given to the number 8 in phone numbers, car plates, and business dates.

“六” liù — the number six also has a positive meaning and is associated with smooth

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progress, convenience, and success. “九” jiǔ — the number nine is connected with longevity, continuity, and eternity. On the contrary, “四” sì — the number four is sometimes perceived negatively because its pronunciation is similar to “死” sǐ, meaning “death”. For this reason, in some buildings, the fourth floor number may be avoided.

In Uzbek culture, numerals also have symbolic significance. For example, the number “yetti” — seven frequently appears in folklore and customs: yetti xazina — seven treasures, yetti kun — seven days, yetti avlod — seven generations, and yetti iqlim — seven climates or regions. The number “qirq” — forty also occupies an important place in Uzbek culture: qirq kunlik marosimlar — forty-day ceremonies, qirq chilla, and qirq qiz are deeply rooted in the national worldview. The number “bir” — one symbolizes unity, wholeness, and beginning, while “ming” — thousand is often used to express multiplicity and exaggeration: ming rahmat — a thousand thanks, ming bor uzr — a thousand apologies, ming xil fikr — a thousand kinds of thoughts.

Thus, the cultural interpretation of numerals reflects the historical experience, beliefs, customs, and linguistic consciousness of the two peoples. In Chinese, the symbolic meaning of numerals is often based on phonetic associations, whereas in Uzbek it is more closely connected with folklore, religious-ritual traditions, and folk thinking.

Importance in Translation and Language Teaching

The study of numerals in Chinese and Uzbek is highly important in translation practice. Accuracy is especially required when translating dates, time, money, age, phone numbers, addresses, statistical data, and units of measurement. For instance, translating the Chinese word “一万” into Uzbek as “one thousand” would be incorrect; it means “ten thousand”. Similarly, the unit “亿” means “one hundred million”. If such units are translated incorrectly, serious semantic errors may occur.

In the process of language teaching, a comparative approach is effective in explaining Chinese numerals to Uzbek learners. For example, if the teacher explains “二十” as “two tens” and “三十” as “three tens”, students can more quickly understand the internal logic of the Chinese numeral system. In addition, the difference between “两” and “二” should be explained through numerous examples.

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For Uzbek learners, one of the most difficult aspects of Chinese is the system of classifiers. Therefore, in the classroom, it is advisable to teach classifiers by associating them with groups of objects: 本 for books, notebooks, and printed materials; 张 for paper, tables, pictures, and flat objects; 杯 for drinks in cups; 辆 for vehicles; and 个 as a general classifier. Such an approach helps learners construct correct numeral-noun combinations in Chinese.

Comparative Results

There are several similarities between numerals in Chinese and Uzbek. In both languages, numerals express the quantity, order, date, time, and measurement of objects. The decimal numeral system plays a central role in both languages. Numerals are also actively used in everyday communication, education, trade, calculation, and cultural ceremonies.

However, the differences are also significant. First, Chinese numerals are mainly analytical and positional in structure, whereas in Uzbek new grammatical meanings are formed through suffixation. Second, in Chinese, a classifier is required between a numeral and a noun, while in Uzbek such a requirement is not obligatory. Third, large numerical units such as “万” and “亿” are used in Chinese in a way that differs from the Uzbek numeral system. Fourth, ordinal numerals are formed with the prefix “第” in Chinese, while they are formed with the suffix “-inchi/-nchi” in Uzbek. Fifth, from a cultural point of view, numerals in Chinese often acquire symbolic meaning through phonetic associations, while in Uzbek they are shaped through folklore and ceremonial traditions.

Conclusion

Although numerals in Chinese and Uzbek represent a universal linguistic phenomenon, their structure, usage, and cultural interpretation reflect the typological and national characteristics of each language. In Chinese, numerals are constructed on the basis of a positional-decimal system and are closely connected with classifiers that indicate the semantic group of objects. In Uzbek, numerals form various grammatical and semantic meanings through suffixes in accordance with the agglutinative nature of the language.

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brightmindpublishing.com
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The comparative analysis shows that numerals in both languages are not only units expressing quantity but also important linguistic means that reflect the language system, thinking, and culture of a nation. The symbolic interpretation of Chinese numerals such as “八”, “六”, “九”, and “四”, as well as the cultural and folkloric functions of Uzbek numerals such as “yetti”, “qirq”, and “ming”, clearly demonstrate the linguocultural value of numerals.

Further study of this topic may make it possible to examine the role of numerals in phraseological units, proverbs, advertising texts, the educational process, and translation theory in Chinese and Uzbek. In particular, teaching numerals and classifiers on the basis of a comparative method can produce effective results in teaching Chinese to Uzbek learners.

References

1. Chao, Y. R. A Grammar of Spoken Chinese. Berkeley: University of California Press, 1968.
1. Li, C. N., Thompson, S. A. Mandarin Chinese: A Functional Reference Grammar. Berkeley: University of California Press, 1981.
2. Norman, J. Chinese. Cambridge: Cambridge University Press, 1988.
3. Peyraube, A. “Classifiers in Chinese.” In: The Oxford Handbook of Chinese Linguistics. Oxford University Press, 2015.
4. Sun, C. Chinese: A Linguistic Introduction. Cambridge: Cambridge University Press, 2006.
5. Abdurahmonov, G‘., Shukurov, Sh., Mahmudov, Q. O‘zbek tilining grammatikasi. Toshkent: Fan, 1975.
6. Hojiyev, A. O‘zbek tili grammatikasi. Toshkent: O‘qituvchi, 1995.
7. Sayfullayeva, R., Mengliyev, B., Boqiyeva, G. va boshqalar. Hozirgi o‘zbek adabiy tili. Toshkent: Fan va texnologiya, 2009.
8. Kononov, A. N. Грамматика современного узбекского литературного языка. Москва–Ленинград: Издательство АН СССР, 1960.
9. Bodrogligeti, A. J. E. An Academic Reference Grammar of Modern Literary Uzbek. München: Lincom Europa, 2003.
10. Johanson, L. Turkic. Cambridge: Cambridge University Press, 2021.
11. Kramsch, C. Language and Culture. Oxford: Oxford University Press, 1998.