Valeria V. Bondarenko
ORCID ID : 0009-0005-4020-9575

Andriy V. Botsman
ORCID ID : 0000-0003-3083-6637
Scopus ID: 57224465052

Kateryna S. Karpova
ORCID ID : 0000-0002-0024-940X
Scopus ID: 57258151800
Web of Science Researcher ID: AAC-6958-2020

DEVELOPMENT OF GERMANIC ANALYTICAL FUTURE TENSE FORMS: MECHANISM OF OSCILLATION ASYMPTOTE EQUILIBRIUM

Abstract. *The purpose of this article is to reveal the mechanism of the future tense formation in the Germanic languages starting from the Gothic language as the oldest source of the Common Germanic grammatical peculiarities. The understanding and revealing of this mechanism include the first stage in which the initial and final analytical formants of the future tense are identified and distinguished. This stage presupposes the description of formants according to their morphological features as separate morphological units.*

The second stage is connected with the semantic peculiarities when initial and final formants are understood as a common semantic unit that functions in a certain sentence context. Semantic properties and their variations are traces from one Germanic language to another and within one and the same Germanic language during its development – from the Old, Middle and to the New periods.

The subject of the research is peculiarities of the formation mechanism of temporal verb forms for projecting the action into the future. To describe the future action the Gothic language used analytical forms including initial formant containing inchoative or preterite-present verbs and final formant represented by the infinitive. Initial formants were the reflection of Greek or Latin lexical units with highly developed modal or inchoative meaning. It was the Gothic language that outlined the peculiarities of the analytical future tense formation, namely the process of oscillation within the initial formant between modal and inchoative lexical units. The oscillation could be recognized as unstable equilibrium taking into consideration the fading of Gothic which did not approach the stage of stable equilibrium between modal and inchoative lexical units.

If the Gothic language demonstrated only oscillation within the initial formant, other Germanic languages in the periods of Old and Middle developments demonstrated oscillation within the initial and final formants. There occurred the oscillation in Old High German and Middle High German in both formants in particular. Such oscillation disappeared in the 15th century. Another case of oscillation within the first formant was connected with two leading preterite-present (later modal) verbs with lexical meaning of obligation and volition. The New Frisian language demonstrates the extreme cases of the initial formant oscillation when only one modal verb is used excluding other modal and inchoative verbs. The detailed analysis of medieval Germanic texts demonstrated the facts of unstable equilibrium within the initial formant when modal verbs of obligation and volition were used. Such unstable equilibrium had the feature of asymptote indicating fluctuation, variation of modal verbs used for different persons. Asymptote demonstrates the fact of impossibility of getting stable equilibrium and modal verbs correlation within the initial formant. Instability of modal verbs makes the analytical future tense form more flexible and reliable for representing actions in future temporal projection. All these features make the analytical future tense form develop and be applied in different contextual cases of future temporal in all Germanic languages.

Key words: *analytical form, asymptote approach, equilibrium, formant, oscillation.*

Information about the authors: *Bondarenko Valeria Valeriivna – PhD in English Philology, Associate Professor; Associate Professor at the Department of English Philology and Intercultural Communication; Educational and Scientific Institute of Philology; Taras Shevchenko National University of Kyiv.*

Botsman Andriy Vasylovych – PhD in English Philology, Associate Professor; Associate Professor at the Department of English Philology and Intercultural Communication; Educational and Scientific Institute of Philology; Taras Shevchenko National University of Kyiv.

Karpova Kateryna Serhiivna – PhD in English Philology, Associate Professor; Associate Professor at the Department of English Philology and Intercultural Communication; Educational and Scientific Institute of Philology; Taras Shevchenko National University of Kyiv.

E-mail: v.bondarenko@knu.ua; a.botsman@knu.ua; karpova.k@ukr.net

Бондаренко В. В.
ORCID ID : 0009-0005-4020-9575

Боцман А. В.
ORCID ID : 0000-0003-3083-6637
Scopus ID: 57224465052

Карпова К. С.
ORCID ID : 0000-0002-0024-940X
Scopus ID: 57258151800
Web of Science Researcher ID: AAC-6958-2020

РОЗВИТОК ГЕРМАНСЬКИХ АНАЛІТИЧНИХ ФУТУРАЛЬНИХ ФОРМ: МЕХАНІЗМ ОСЦИЛЯЦІЙНОЇ АСИМПТОТИЧНОЇ РІВНОВАГИ

Анотація. *У статті з'ясовано механізм формування майбутнього часу в германських мовах, починаючи з готської мови як одного з найдавніших джерел спільногерманських граматичних особливостей. З'ясування і розуміння цього механізму включає першу, початкову, стадію, в якій виокремлюються та ідентифікуються ініціальний і фінальний аналітичні форманти майбутнього часу. Ця стадія також включає опис формантів як окремих морфологічних одиниць з огляду на їхні морфологічні особливості.*

Друга стадія пов'язана з семантичними особливостями, коли ініціальний і фінальний форманти розуміються як спільна семантична одиниця, що функціонує у певному реченнєвому контексті. Семантичні особливості та їхні варіанти прослідковуються від однієї германської мови до іншої, а також в межах однієї і тієї ж германської мови в рамках давнього, середнього і нового періодів мовного розвитку і трансформації.

Предметом дослідження є особливості формування темпоральних дієслівних форм, а саме механізм формування майбутнього часу. Для опису майбутньої дії готська мова використовувала аналітичні форми, що складалися з ініціального форманта, який містив інхоативні або претеріто-презентні дієслова, а також фінального форманта, репрезентованого інфінітивом. Ініціальні форманти були віддзеркаленням грецьких або латинських лексичних одиниць з добре розвинутою модальною або інхоативною семантикою. Саме готська мова окреслила особливості формування аналітичного майбутнього часу, а саме процес осциляції у межах ініціального форманту між модальними та інхоативними лексичними одиницями. Таку осциляцію можна було визначити як нестабільну рівновагу, беручи до уваги зникнення готської мови, що не досягла фази стабільної рівноваги між модальними та інхоативними лексичними одиницями.

Якщо готська мова продемонструвала рівновагу лише у межах ініціального форманту, то інші германські мови у періоди їхнього давнього та середнього розвитку демонстрували осциляцію не лише у межах ініціального форманту, але й в межах фінального форманту, як, наприклад, у давньоверхньонімецькій та середньоверхньонімецькій мовах. Цей випадок осциляції зник у 15 столітті. Інший випадок осциляції у межах першого форманта був пов'язаний з двома провідними претеріто-презентними дієсловами (згодом модальними), що мали лексичне значення зобов'язання, волевиявлення. Сучасна фризька мова демонструє крайній випадок осциляції ініціального форманта, коли лише одне модальне дієслово використовувалося у межах цього форманта, виключаючи інші модальні або інхоативні дієслова. Детальний аналіз середньовічних германських текстів дозволив виявити факт нестабільної рівноваги у межах ініціального форманта з використанням саме модальних дієслів зобов'язання і волевиявлення. Ця нестабільна рівновага мала ознаки асимптотичності, що вказувало на флуктуацію, варіювання модальних дієслів, вжитих у кореляції з різними особами. Асимптотичність демонструє неможливість досягнення стабільної рівноваги і кореляції модальних дієслів у межах ініціального форманта. Нестабільність модальних дієслів робить аналітичну футуральну форму гнучкішою і надійнішою для репрезентації дії, спроектованої в майбутнє. Усі ці властивості змушують аналітичну темпоральну футуральну форму розвиватися і бути вживаною у різних контекстуальних випадках у всіх германських мовах.

Ключові слова: *аналітична форма, асимптотичне наближення, рівновага, формант, осциляція.*

Інформація про авторів: *Бондаренко Валерія Валеріївна – кандидат філологічних наук, доцент; доцент кафедри англійської філології та міжкультурної комунікації; Навчально-науковий інститут філології; Київський національний університет імені Тараса Шевченка.*

Боцман Андрій Васильович – кандидат філологічних наук, доцент; доцент кафедри англійської філології та міжкультурної комунікації; Навчально-науковий інститут філології; Київський національний університет імені Тараса Шевченка.

Карпова Катерина Сергіївна – кандидат філологічних наук, доцент; доцент кафедри англійської філології та міжкультурної комунікації; Навчально-науковий інститут філології; Київський національний університет імені Тараса Шевченка.

E-mail: v.bondarenko@knu.ua; a.botsman@knu.ua; karpova.k@ukr.net.

Problem statement and its connection with theoretical and practical tasks. The attempt to investigate the development and formation of analytical features in the Germanic future tense calls for

a neat and accurate selection of linguistic resources and examples using a triangular approximation-asymptote model. The general outline of the Pan Germanic language groups is considered as having a triangular shape. Corners of that linguistic triangular are East, West, and North Germanic (Scandinavian) languages. The middle triangular of the West Germanic languages, which forms the second level of comparison, includes the English, Low Saxon and Frisian (a so-called continental form) languages. The microtriangular outlines the Old English language dialects: Old Saxon, Jute and Angle. Such model of graduate comparison is approximal in its structure. Being a flexible construction, it approaches the effective level of comparison that enables making a verified reconstruction of some linguistic phenomena. The corner of the English language is the most informative source in view of its dialectical component and a huge corpus of old English and middle English texts compared with other West Germanic languages. Model asymptote specification means that a complete (essential) degree of process reconstruction in the model is impossible as it may lead to a conclusion without any background. On the other hand, it is asymptote itself that keeps the model in the frame where the reconstruction of the linguistic process is quite correct and clear, with a high level of accuracy. Selection of text examples gives the opportunity to better distinguish the recognative features of the Germanic future tense in different relative languages. It may enable finding out an individual analytical construction with future meaning. **The aim** of the article is the comparison of analytical future tense forms in New and Old Germanic languages. The degree of analytisation and depth of this process penetration in different Germanic languages is an essential task as well. **The topicality** of this research goes from the fact that distinguishing, identification, analytical feature description of verb tense forms remains a controversial and problematic issue. It has not yet got its final solution and clarification in the present-day linguistics of the Germanic languages. **The scientific novelty** of the represented data lies in the attempt to build up the model of the future tense development and establishment that would demonstrate general tendencies and consider peculiarities and differences that occur in separate Germanic languages. **The object** of the article is West Germanic texts from Old,

Middle and New periods. Some East and North Germanic sources are involved as well in order to confirm certain facts as for the contacts between East, North and West Germanic languages. **The subject** of the research is specific and common features of formation and development of analytical constructions with future meaning, the degree of their grammaticalization, in particular.

Publication analysis. In the first part of the 20th century there were some attempts to connect the introduction of the future tense category with the language transition from the syntactical to analytical structure. The future tense was recognized as a form that appeared and developed in the medieval period. This phenomenon is represented as a competition between two different tendencies. The old one stressed that Germanic languages (the Proto-Germanic language, in particular) lost their archaic forms. The other proclaims that Germanic languages, not having a differential system of verb tenses, were on the earlier stage of their development and were on their way to descriptive constructions in the medieval period. Those constructions were equivalents to the corresponding forms in the Greek and Sanskrit languages [5, p. 16]. As for Verbum Finitum, it is known that there were two tenses (present and past) in the gothic language. The category of future in Gothic is less represented than in Anglo-Saxon or Old High German where the tendency of transition to the descriptive forms is evident in representing new established concepts. The Old High German language demonstrates different situations in different text sources. The manuscript *Tatian* does not contain any descriptive forms. *Otfrid* uses two forms simultaneously: the future tense is represented by the present tense forms and some descriptive forms with modal verbs (*sculan, mugan*) appear sporadically. In *Heliand and Isidor* the descriptive forms with *sculan* prevail [3, p. 130–137]. Old Germanic manuscripts demonstrate a variable system of verb tense forms and, in particular, some dispergation of word forms. Coexistence of several morphological types of verbs was reflected in different structures of tense stems. It influenced the creation of paradigmatic chains. The system of word forms was very primitive (simple). It caused the complexity of its semantic structure and, in the end, there happened obscure correlation between semantic variations, lexical meaning of words and common and particular context. In the process of further

development within the Germanic languages two features of the Old Germanic verbs changed immensely. On the one hand, both a tendency to maximal unification of the morphological types and a tendency to their reduction were observed in Germanic languages, the degree of these tendencies being different in different Germanic languages.

On the other hand, the system of word derivation forms, on the contrary, becomes more variable and involving, including different types of auxiliary and notional word combinations. Some of them in the process of their separation were involved into the paradigmatic relations with synthetic verb forms having transformed into the analytical components of the word changing system. In the Germanic languages markers of word changing are outer flexion, stems with different types of sound interchange, stress. In some cases, they are combinations of auxiliary and notional verbs and sporadical lexical groups [12, p. 26]. One of the obligatory conditions of involving these combinations into the word changing oppositions or morphological paradigms is the definite change of the semantic structure of these new units because grammatical categories tend to generalization. Variability of different features of meaning is very prominent too. It is reflected in the variability independence of a certain context and the meaning of separate lexical units. One more obligatory condition is the regularity of formation of a unit of the given lexico-grammatical class from any lexical unit. Parallel to the system of certain grammatical categories of Germanic verbs there are some generalized oppositions which occur on the boundary of grammar and lexis. These oppositions are recognized as lexico-grammatical categories. These categories are realized in word-creating forms and they don't have obligatory regularity, whereas grammatical categories are realized in word-changing forms and have features of obligatory regularity. Realization of lexico-grammatical categories is closely connected with the lexical nature of verb units [1, p. 243–244].

Speaking about the specification of temporal system development in the sphere of Germanic languages, it is reasonable to take into account the fact that in the Old Germanic languages the future tense did not have any formal representation, its meaning being represented by the present tense forms. The futurity was realized in a lexical way using constructions with a conjugated changeable element (a modal or

inchoative verb) and the infinitive of the notional verb. In the process of the Germanic language development the temporal verb system changed immensely. The future tense was paradigmatized. In the New Germanic languages, the verb temporal system consists of the present, past, perfect, past perfect, future I, II, future-in-the-past I, II (for example, in Norwegian, Faroese, Frisian). There are two different ways of developing the Germanic aspect – tense verb system. The first way is movement towards system simplification (Africaans). The other one is system complication (German) and gradual grammaticalization of tense forms together with creation new analytical constructions [10, p. 33–34]. There is a controversial interpretation of the future forms in English where the analytical form is distinguished as a combination of verbs *shall, will* with the infinitive of the notional verb. The verbs *shall, will* belong to the modal ones, and always preserve their modal meaning, that is why Germanic linguists refuse to recognize such constructions as a form of a future tense and look at it at the syntactical level as a type of the modal predicate.

According to this interpretation the future tense meaning may be represented in three different ways. The first way is the usage of the verb-predicate in the Simple Present tense form if the future action correlates with the context. The second way involves the usage of the verb-predicate in the Present Continuous tense form (in the same conditions). The third way is a lexical one when phrases *to be going to, to be about to*, etc. connect the action with the future [2, p. 64].

The German language operates different analytical forms with future meaning. The primary function of the present, past, future I tenses is to indicate the time of action absolutely according to the moment of action. The present tense indicates the present, past, and future times. Future I indicates only future time. Sentences with the verb in future I and future II are used to represent modal suppositional meaning. The phrase *werden + infinitive I, II* in its modal meaning is recognized as the homonym of future I, II by some philologists [12, p. 117]. In the Netherlandish language, future I, II and future-in-the-past are recognized as analytical forms [9, p. 285]. The Dutch future tense is formed with the combination of the verb *zullen* in the present tense with infinitive I (for future I) or infinitive II (for future II). To create analytical future-in-the-past form there is a combination of *zullen* in the

past form with a corresponding infinitive. Conditional forms and future-in-the-past forms are homonyms [9, p. 290]. The Frisian language has the same rules for analytical form creation as there are in the Netherlandish language [8, p. 87]. The Swedish analytical form bears some resemblance with the Frisian and Netherlandish ones. In the Swedish language there is the verb *skall*, which has the meaning of external obligation, followed by the infinitive. This word combination represents the set of modal future meanings connected with the context (modal future): *Jag skall resa imong on (I am going / intend / have to go tomorrow)* [11, p. 218].

Summarizing the views on the analytical future formation, it is reasonable to account for the tendency to analytization which occurs in the Gothic language. The Gothic present tense had very vast meaning and could represent actions correlating with the plan of present or future tenses, and actions which were not connected with the temporal axis. The lack of the future forms was compensated by verb combinations where the first position belonged to *duginnan (to begin), haban (to have), skullan (to be obliged to)*, and the second position was occupied by the infinitive or the notional verb [4, p. 172]. In the system of related (Germanic) languages the reconstruction of the archetype or the system of archetypes of the Proto-Germanic language is the secondary task. The more significant and essential task is to reveal inner tendencies of development which were reflected in the differences and resemblances between those related languages [6, p. 174].

Results of the research. The term *analytical construction* and the notion *analytical structure of the language* were used in Academic Linguistics connecting them with the New Indo-European languages of such a type as English and Danish [4, p. p. 82]. Analytical constructions are recognized as a combination of auxiliary and notional verbs where the auxiliary verb on its own or together with the notional word affix represent(s) grammatical meaning of the notional verb and, consequently, the whole construction [4, p. 84]. It was the Gothic language that used three types of word combinations to render the future action [23]. The first one was a combination of the verb *duginnan (to begin)* in the present tense with the infinitive form of the conjugated verb: *Wai izwis, jus hlahjandans nu, unte gaunon jah gretan dugnnid*

[L. VI, 25]. – *Woe unto you laugh now, for ye shall mourn and weep.* The second one was a combination of the verb *haban (to have)* in the present tense with the infinitive form of the conjugated verb: *iþ þatei tauja jah taujan haba* [K. XI, 12] – *but what I do, that I will do; sa auk habaida ina galewjan* [J. VI, 71] – *for he it was that should betray him.* The third one was a combination of the verb *skulan (to be obliged to)* in the present tense with the infinitive form of the conjugated verb: *ƕa skuli þata barn wairþan* [L. I, 66] – *whom shall that child be; Sa ist Helias sa ei skulda gimen* [Mt. XI, 14] – *This is Elias which was for to come.* The lexical meaning of the word was mostly preserved. In the first construction, the future action projection was connected with the inchoative meaning of the verb *duginnan*. In the second and especially third constructions the future was connected with the meaning of obligation which was introduced by the verbs *haban* and *skulan.* These constructions may have been replicas of Late Latin and Greek. In the Latin language the construction included verbs *habere (to have), incipere (to begin)*. In Greek, the verb *μέλλείν (to be obliged to)* was used [4, p. 172–173]. Evidently, the introduction of the analytical forms where the first component was an auxiliary verb was caused by the fact that the present tense with the future meaning had lost its property to be a colony-forming archi-unit and pluripotential precursor. It happened in the translations of the Biblical texts, and later the same losing occurred in sacral texts and sacramental speeches, prophecies, previsions, foretokens (anything bearing a primary epistemic shade).

Table 1 demonstrates the development of analytical form variations to represent futurity in the Old and Middle Germanic languages. Temporal analytical form included an initial formant (a preterite-present or inchoative verb) and a final formant (an infinitive or participle). As for the other Old Indo-European languages that lacked a developed system of active tenses in their old periods, the Germanic future tense as a temporal category developed from the aspective relations The Future Perfect, the Future Inchoative) or the modal relations (future as necessary; future as desirable) [10, p. 68]. In this case the Old German language (in the High German and Low German (Sacson) variants) may be the pattern of variation. In the Old High German language the modal (Subjunctive) future prevails. The future tense is indicated by the verbs *sollen, wollen (necessary* or *desirable).*

Table 1

**Development of grammatical structures
with the future tense meaning**

Subbranches of the Germanic language branch	Separate Germanic languages	Synthetic forms	Analytical forms
East Germanic	Gothic	Vpraes.ind ga + Vpraes Vopt.praes	duginnan / habban / skalan → + Vinf
West Germanic	Old / Middle → High German		ein + Vinf werden + Vp ; sollen / wollen → + Vinf → werden → + Vinf / + Vp → complex object → + Vp
West Germanic	Old Saxon		sculan / willan / motan → + Vinf
West Germanic	Old / Middle → Low German		werden → + Vinf / + Vp ; sollen / wollen → + Vinf
West Germanic	Old / Middle → English		sculan / willan → + Vinf ; complex object → + Vp ; be + Ving
North Germanic	Old Icelandic		munu / sculu → + Vinf
North Germanic	Old → Swedish / Danish		skal / wil → + Vinf ; wil + Vinf

The first type occurs rather frequently: *thu sealt beran einan allawaltendan* (Otfrid) – *you shall bring one mighty;* literally: *you should bring…*; *he will captivate Satain* – literally: *he wishes to captivate …* [19, p. 116, p. 121]. Word combinations with the infinitive + verbs *sculan, wellen, mugan, muozen* are recognized as a compound verbal predicate. They have modal meaning and in some cases they transfer future meaning that is closely connected with the semantics of these verbs which are used to denote actions with a future perspective. The most frequent future shade occurs with the verb *sculan*. This verb

became an auxiliary one to introduce the analytical form of the future tense in many Germanic languages (English, Danish, Swedish): *Sagên ih iu, wio ir nan sculut findan.* (Otfrid) – *I shall say (to) you how to find him; Berga sculun suînan.* (Otfrid) – *Mountains shall disappear* [21, p. 78–80]; *Ih scal iu sagên imbot, gibôt ther himilisga got.* (Tatian) – *I shall say you a commandment, desired God* [24, p. 109]. Periphrastic (descriptive constructions with the future meaning with other verbs occur more rarely: *Wil thū thaz richi irsezzen?* (Otfrid) – *Will you change this kingdom?*; *Er scal sînen drūton thrâto gimuntôn, then altan Satanasan wilit er gifahan* (Otfrid) – *He shall defend his friend, and he will take old Satain prisoner.; War mugan wir nû biginnan, mit koufubrôt giwinna. – Where now we shall begin to earn our daily bread with selling* [24, p. 36, p. 47]. The descriptive future form appears comparatively late. Nevertheless, from the earliest period of the German language development, word combinations with the modal verbs *sculan (soln), wellen* + the infinitive were able to indicate the action connected with future. German translators used them rather often to represent Latin future. The preterite-present verbs mentioned above always preserved their primary lexical meaning though in the Middle High German period the lexical meaning faded in some cases, especially with the verb wellen: *Dîn jâmertac wil schiere komen.* (Walter von der Vogelweide) [19, p. 236]. *Dîn were wil ich bedân.* (Nibelungenlied) – *I will manage affairs.*

In the majority of the New Germanic languages (English, Danish, Swedish, Low German dialects) the modal future with *sollen, wollen* was transformed into the objective future. In the German literary language these forms are not grammaticalized and even now preserve modal meaning [1, p. 293]. These are the modal constructions that are recognized as contradictory discrepant cases in the aspect of their analytical nature. The descriptive feature refers to the question about the analytical property of the constructions which include different modal verbs + the infinitive as in German: *ich will (willte) schreiben, ich soll (solte) schreiben, ich kann (könnte) schreiben. – I want (wanted) to write, I should (should) write, I can (could) write.* German linguists deny the belonging of these word combinations to analytical forms. They are not likely to be analytical because their meaning is equal to the sum of meanings of their components and thus is not

idiomatic. The word combination of a modal verb + the infinitive is believed to be a special type of a compound verbal predicate where both components are meaningful words [3, p. 360]. Predicate function is believed to be represented by the modal verbs that express the doer's attitude to the action, the doer's ability, desire or necessity to produce the action. Consequently, such type of word combinations has a functional resemblance to one of the moods. It is necessary to emphasize that these word combinations are not seen as verb complex forms because modal verbs preserve their lexical meanings [5, p. 202]. Such interpretation looks erroneous, mistaken and flat as it does not take into consideration the first component of the analytical construction, it being a modal verb. Modal verbs differ from ordinary notional verbs in their meaning, grammatical structure and usage. According to their function they are equivalent of the moods but have more definite meanings. In the process of historical development modal verbs exclude and supplant the moods differentiating their meanings. As for their meaning in the combinations with notional verbs, modal verbs are not independent, they give a modal shade to the action performed by a notional verb. Generally, modal verbs are not used without the infinitive. It can happen when a modal verb substitutes a whole sentence; *Willst du mit mir gehen? – Ja, ich will. – Do you want to go with me? – Yes, I do.* German modal verbs create a special group on the ground of their grammatical form. They have their specific conjugation. Historically, this group originates from the category of preterite-present verbs. During their long historical development these verbs were involved into the chain of formal transformations. In German the Umlaut as a feature of modality occurs in the infinitive and in the present tense, plural. This morphological type was broadened with the modal verbs of resembling function: *wollen* (compare: *wollen – wollte* as *sollen – sollte*); in English *would, could* follow *should*. There happened the opposite process of separation with the following unification by the common pattern of weak conjugation. Those separated verbs had no modal meaning: *taugen, gönen.*

Modal verbs have infinitive and participle II forms, but these forms are rarely used, as their analytical verb forms are problemetic: *ich habe gesollt, ich hatte gesollt, ich werde sollen – I should, I had should, I will should*. Connection of modal verbs with following

infinitives of notional verbs is realized without particle *zu*: *ich will schreiben, ich muß schreiben – I want to write, I must write*. This fact indicates the existance of stronger connection between these formants. Absence of the so-called idiomaticity and sense segmentation of formants *(ich will – schreiben)* are not arguments against the analytical property of such word combinations. German modal verbs preserve their primary lexical modal meaning. Their common tendency to grammaticalization can be found in many cases when the meaning of modality shifts or approaches the synthetic oblique mood. This approach of different verbs in indirect usage witnesses the development of abstract modal meaning variants. In the process of historical development, at the very beginning of the New German period, German modal verbs changed their primary meaning completely as compared with more concrete meaning in the Middle German period. For instance, *darf* had the meaning *I have the need: ich be darf*; *kann (I know); mag (I have strength); skall (*German *soll) (I am obliged to; muos (*German *muß) (I have opportunity).* If we compare Gothic *mōtjan,* English *to meet* with the common meaning *to come somebody's way*, the common lexical meaning *to meet* is clear and evident.

Development of analytical forms of modality was historically possible due to the development of the grammaticalized modal meaning. Differences between auxiliary modal verbs and notional verbs with modal lexical meaning are illustrated by such pairs as *wollen, wünschen*, and English *to wish*. They preserve complete lexical meaning, and have no feature of auxiliary verbs of modality which were mentioned above. In particular, both verbs are used with corresponding particles – German *zu*, English *to* [1, p. 89] – in corresponding constructions. It happened that the modal future was denied or recognized as a controversial case because the complex verb form with the auxiliary verb *werden* was undoubtedly regarded as a very analytical variant [3, p. 184]. This periphrastic construction used present participle as a final formant. In the Old German period this construction was used with a future meaning. In the Middle High German period it functioned till the 15th century. *Und werdent mir dann alle gebende die schulde*. (Gotfr.v.Strassb.) – *Then everyone will repay me debts* [16, p. 39]. However, in the Middle High German period one more construction appeared, and two different

constructions functioned simultaneously, the second one being *werden* + the infinitive. In the 14–15th centuries prose texts, the second construction was becoming more and more popular, and in the 15–16th it supplanted the first construction, *werden* + participle I. The traditional form of the future tense appeared in the New German period. It was then that the infinitive substituted participle I in the constructions with the inchoative meaning. In the 15–17th centuries this construction was grammaticalized completely. It lost all remnants of inchoativity and got purely grammatical future meaning [1, p. 305]. In the north of Germany modal future construction with *wollen* was used in Low dialects and it competed in usage with the verb *werden* [5, p. 96]. It indicated the relations of the Low Saxon dialect with Frisian, Dutch and Anglo-Saxon forms. Linguists-Anglicists are more "flexible and liberal" in classifying modal verbs as auxiliary ones, but their "flexibility and liberalism" has shades and degrees. Analytical nature of modal forms with *should, would* is recognized without any doubt. In connection with the rebuilding of the Old English flection forms of the Oblique Mood there occurred the clutch of the verb forms *should, would* (past tense forms of *sculan, willan*), and the formation of new analytical forms to function in the Oblique (Conditional) Mood [2, p. 96]. From the historical point of view, *should, would* in this construction are the optative past (as in German *sollte, wollte*). Some linguists-Anglicists broadened the group of verbs which are involved in the analytical modal construction, adding *may* and *might* to it. Analytical constructions in the Oblique Mood are formed with *should, would, may* and *might* + the infinitive of notional verbs. Obligatory condition to create these constructions is losing the independent meaning of modality. These verbs were able to take part in the creation of analytical form conjugation if they lost the independent meaning; they were persistently and steadily used in certain types of sentences. There is direct and strict historical concession concerning syntactical and analytical forms in their usage in the same constructions with the same meaning [6, p. 211]. Some European linguists-Anglicists have very radical attitudes to the formation of analytical constructions. In particular, A. Kruisinga, a Dutch linguist, distinguishes a group of auxiliary verbs with modal meaning that includes *shall, should, will, would, may might, can, could, must, ought to, dare, need, let* [7, p. 236]. In this case there happens the process of

grammaticalization when the latter verbs in the chain have far narrower and more concrete meaning and correspondingly more restricted in the lexical aspect form of usage. By the example of the verb *will* there were some attempts to formulate general characteristics of this verb and some other related auxiliary verbs. In English they were described as "empty verbs" in contrast with "full verbs". Empty verbs were found to have no infinitive and participle. They are not able to connect with the auxiliary verbs *to do* and *to have* and create Past, Perfect and Past Perfect forms. They are connected with bare infinitives. These verbs are in the weak position and form weak (reduced) forms: *I'll, I'd.* The meaning of these reduced forms is more indefinite than the meaning of corresponding full forms as seen from their extensive usage in the meanings that are represented by the synthetical modal forms of the full verbs in other languages. These features coincide with those distinguished for the German language [6, p. 205]. German analytical constructions with modal verbs may be less grammaticalized as compared with English ones because the German language preserves synthetic (flexion) forms of Conjunctive, whereas English does not have these forms. Anyway, in German these constructions bare some analytical feature, and they function as more definite, concrete, detailed, differentiated expressions of modal verb relations.

The Old English analytical future tense formation has some common features with the Old German forms on the early stages. In the Anglo-Saxon period Latin future tense forms were translated descriptively using combinations of the simple infinitive with *sceal (to be obliged); will (to want)*. Primary (independent) meanings of these verbs – *sceal (obligation), will (volition)* – were very evident, definite in the Anglo-Saxon period: *Wē ēom þe nū hlehhað, forðæm ʒē sculon elf wēpan* (Lat.: *Vae vobis qui ridetis mune, quoniam flebitis.* [Lk. VI, 25] (Cura Pastoralis). – *Woe unto you that laugh now! For ye shall mourn and weep; Æle trēow man sceal ceorfan, þe dōde wæ estmas ne birð ond weorpan on fyr ond forbænan.* (Lat.: *Omnis arbor, quae non facit fructum bonum, excidetur et in grem mitfetur* (Cura Pastoralis). – *Every tree that does not bear good fruit is cut down and thrown into the fire; Ic wille wyrcean mīn setl on sorðdæle ond wille bīon ʒelic ðæmhīe stan.* (Lat.: *Ponam seden meam ad aquilonem et ero similis altissimo* (Cura

Pastoralis). – *I shall erect my throne in the North part, and I will be equal to the superior* [18].

In the Middle English period the number of these descriptive constructions grows. Independent meaning of the verb *shall* strengthens earlier than that of the verb *will*. That is why *shall* is used more frequently for the future action rendering but *will* preserves its additional meaning of volition, desire, wish. Geoffrey Chauser in his translations of *Amicius Manlius Severinus Boethius* renders Latin future forms with the help of constructions with *shall*: *Heer shal ben the reste of your labours* (Lat.: *Haec erit vobis reguies laborum.* (III, M. 10) – *Here you shall have a rest after your great labours* [14, p. 136]. In the Early New English period the primary meaning of *will* faded out. In particular, W. Shakespeare uses *will* in the future meaning without any additional connotation: *I will sooner a beard grown in the palm of my hand then he shall get one his cheek* (Shakespeare, Henry IV, B. 1, 2, 19) [22]. In the 17th century the functions and usage of *shall, will* came to the New English standards. Grammars of the 16th century, and even Alexander Gil in his *Logonomia Anglica*, *1619, 1621* indicated two future forms: the infinitive construction with *shall, will*, and the Present Simple tense. The difference between *shall, will* was not underlined. Only John Wallis in his *Grammatica Linguae Anglianae* (which was first published in 1653, reprinted ten times, the last edition was in 1765) indicated the difference between *shall, will*, in particular, for the first person. Samuel Johnson supported this rule in his *Grammar* which is a preface for his *Dictionary of the English Language*. Periphrastic constructions with *shall, will* became the source for the development of other meanings. The first is the Modal Future with *will* with the additional meaning of volition. As everything which is done gladly is transformed into ordinary, habitual action. These examples with frequent: Than wol I stinge him my tongue smerte (Chauser, Canterbury Tales, Pardoner's Prologue, 411) [14]. – Then I will have a custom to sting him *with my tongue*. The additional meaning of volition was rendered definitely with the second person. The same construction was used for the third person: *Many will swoon when they do look on blood* (Shakespeare, As You Like It, IV, 3, 159) [22]. Another meaning that is recognized as future is the emphasizing of a

special event. It demonstrated the readiness to perform the action not only at present but in the future too.

Independently from the grammatical tense usage, constructions with *shall, will* are used to indicate the suppositional meaning which has no connection with temporal indication. Particularly, *will* has stronger certainty than *shall*, as in the examples: *A covetous man will call himself poor, that you may sooth his vanity contradicting him* (Spectator, № 2224); *A shilling shall be honoured up with care, whilst that which is above the price of an estate is flying away* (Spectator, № 316).

In the Middle English period infinitive structures *to be about, for to* + the infinitive rendered future meaning: *Satan is ʒeorne abuten uor to ridlen þe ut of mine corne* (Aneren Riwle) [15]. – *Satain is going to fall out you from my corn; Thou woldest falsy ben about to love my lady* (Chaucer, Canterbury Tales, Knight's Tale, 284) [14]. – *You would like to betray my ldy's trust with your false love.* The New English infinitive phrase with a future temporal shade *to be going to*, which is widely spread now, evidently, appeared later. It was first recorded in 1482: *Thys onhappy soule ... was goyong to be brought in to helle* (Monk of Evesham) [15] – *This unhappy soul ... was going to be brought into hell.* The Frisian language did not have a special syntactical future form. The present tense was used simultaneously with the analytical constructions of the verb *skela (sela) (to be obliged to)* + the infinitive [8, p. 35].

In the New Frisian period this construction with *selle* was widly spread to indicate one moment or periodical actions in the future: *Myn broer sil trouwe. – My brother will marry off; Ik sil jo yntiids warskôdje. – I shall let you know in time.* This form has some modal meaning (supposition, suggestion, opportunity): *Sille wy hjir efkes sitte? – Shall we sit here for a while?; Mei koarten sille wy ferhûzje ... – We shall have to move to a new house ...* [8, p. 76]. The Frisian language does not have analytical forms with inchoative verbs as instial formants and the infinitive as a final formant.

The usage of preterite-present / modal verbs as the initial formant of the future tense analytical form in the Middle West Germanic languages was very unstable, variable from dialect to dialect according to the variability of the grammatical category of person. These correlations are illustrated in **Table 2** and need further interpretation.

Conclusion and further investigation. The diachronic aspect comparison of the linguistic sources has demonstrated a set of common tendencies, and at the same time there have been revealed some specifications. All of them are connected with the formation of analytical future tense forms mainly in the West Germanic languages. The German language developed analytical future forms with the help of the verb *werden* as an initial formant. It happened earlier than in other West Germanic languages. The verb *werden* got its highest possibility to be grammaticalized in the cause of braking, inhibition of the verbs *sculan, wellen*, and as a result these two preterite-present verbs were not able to create future forms with the infinitive having universal temporal properties. In German that form remained partly undeveloped. Primary meaning of those preterite-present (later modal) verbs stayed mostly unchangeable even when the general context of their usage had a shade of futurity. The English language created a similar form with initial formants *sceal, will* which wereable to get the higher degree of grammaticalization because the construction *V inch + V inf* came to mean future tense far later. The English language did not have any precondition for breaking the development of the forms of futurity with modal verbs as initial formants. A very interesting and evident form functions in the Low German dialect where the future tense was created with the initial formant *wollen*. There is no breaking with *V inch* formant. The Frisian language used *sille* to create a single analytical form of futurity. The Swedesh language has two different analytical forms. The first one is a highly grammaticalized form with *V mod shall*, the other used *V inch komma att + V inf*. It is the evidence of the close contact reciprocity of the West Germanic and North Germanic (Scandinavian) dialects. The whole process of creating the analytical future tense forms can be described as a flexible structure in which *V mod* (modal verbs) have a very narrow space to render future meaning periodically rendering epistemic and deontic semantic shades. The breadth of this space is different in different languages, it is connected with the level of grammaticalization (desemantization) of the corresponding modal verbs. The future tense form demonstrates some features of equilibrium between modal and inchoative verbs: *V mod ⇆ V inch.* The involvement of inchoative verbs narrows the functional sphere

and space of modal verbs. Absence of inchoative verbs, vice versa, broadens the functional possibilities of modal verbs.

The description of the development of the analytical forms of futurity in the Germanic languages can be done in the frame of two simultaneous, related and dynamic processes: oscillation and equilibrium. Both processes are closely interconnected on the basis of reciprocity and cannot be separated. They are characterized by a set of parametres or recognative features, some of these features being individual, others being common for both processes indicating their mutual relation and connection. From the formal point of view, oscillations are frequent changes between two extreme amounts or limits; oscillations are frequent changes between two feelings or attitudes. From the technical point of view, it is a regular movement of something from side to side, or it is a regular change in direction of a lectical current [25, p. 1164].

Equilibrium is a balance between different people, groups or forces that compete with each other so that none is stronger than the other, and a situation is not likely to change suddenly [25, p. 528]. Balance is a state in which all your weight is evenly spread so that you do not fall. It is a state in which opposite forces or influences exist in equal or correct amounts in a way that is sufficient [25, p. 98].

The notions of oscillation and equilibrium can be applied to the description of the processes that occur in the field of analytical future tense formation. From the quantitative point of view stable equilibrium occurs when the usage of modal verbs *shall / will* estimates *50% / 50%* in the same conditions. When it is impossible, equilibrium is described as semi-, quasi- or imbalanced. It approaches the balance asymptotically never reaching it.

Table 2 demonstrates different degrees of imbalances equilibrium. Only in the text of *Trier Psalter* [19] can we find absolute domination of *soll* for the second and third persons – 100%. The balanced equilibrium occurred in the *Canterbury Tales* [14] for the first person – 40% / 60%, and in the Low German dialect texts for the second and third persons – 66% / 34% [19], The same figures are true for the Bavarian dialect texts for the third person. The stable equilibrium was not approached in the Middle English and German languages. Even if the balance had ever existed, it was lost or maybe

the Middle Germanic languages were not able to keep that balance. Stable equilibrium could be disturbed by different causes. Only some remnants of stable equilibrium could be found in the Middle period texts in form of approximate equilibrium.

Table 2

Correlation (%) of infinitive phrases with *sculan* and *willan*

Person	Middle English				Middle German					
	The vision of Piers the Plowman [17]		Geoffrey Chaucer The Canterbury Tales [14]		Trier Psalter (Middle German dialect) [19]		Berthold von Regensburg (Bavarian dialect) [13]		Reinke de Vos (Low German dialect) [19]	
	shall	*will*	*shall*	*will*	*soll*	*will*	*soll*	*will*	*soll*	*will*
1	43	57	40	60	76	24	19	81	4	96
2	78	22	86	14	100	-	-	-	66	34
3	89	11	86	14	100	-	33	64	66	34

Oscillation is a phenomenon when equilibrium is disturbed. It reflects the instability of equilibrium showing the constant change of formants from the morphological point of view. The final formant could be either participle I or the infinitive *(V part I ⇆ V inf)*, and finally all analytical future tense forms came to use only the infinitive in the New Germanic languages. Oscillation occurred within the initial formant too. At first the initial formant was represented by preterite-present / modal verbs or inchoative verbs *(V mod ⇆ V inch)*. In the New German language *V inch* gained its leading position. In the New Frisian language *V mod* became the only possible initial formant. Other New Germanic languages had the integrated set including *V mod* and *Vinch* at the same time used in special contexts. This case of oscillation is found between two different groups of verbs. Another case occurs within the group of modal verbs *(V mod ⇆ V mod)*. New English is a pattern of this phenomenon *(shall ⇆ will)*. The New Frisian language is an example when only one verb *solle* was possible in the analytical form as an initial formant.

Table 3 shows the development of the future tense analytical form indicating the initial and final formants and the variations within each formant individually. Absence of equilibrium and oscillation (the New Frisian language) provides for the usage of the forms of futurity in different contexts.

Table 3

Development of the Future Tense form as the oscillation of its formants

Language	Initial formant		Final formant	
	with oscillation	without oscillation	with oscillation	without oscillation
Gothic	V inch (duginnan) ⇵ V mod (haban skulan)			V inf
Old High German	V mod (sollen) ⇵ V mod (wollen)	V inch (werden)	V part I ⇵ V inf	
New German		V inch (werden)		V inf
Old English		V mod (sceal) ⇵ V mod (will)		V inf
New English	V inch (be about be going to) ⇵ V mod (shall, will) V mod (shall) ⇵ V mod (will)			V inf
New Frisian		V mod (skela)		V inf
Middle Low German		V mod (wollen)		V inf

Oscillation in the initial formant created a set of related sub-forms that could be used in different dialects and languages. Correlation and cooperation between two different processes (equilibrium and oscillation) ensures the flexibility of analytical forms consisting of

two formants. This flexibility of functioning is reflected in all Germanic languages. The construction with two formants is able to adjust to any Germanic language by changing its initial formant using inner- or between-group oscillation. The final formant oscillation became marginal and disappeared at the very end of the 16th century.

Fig. 1 depicts the flexibility as the main feature of analytical forms used to render future tense in the Germanic languages. Analytical character of this form is reflected in its twofold structure of the initial and final formants. Both formants are closely connected creating the indivisible morphological unit connected with the verb and revealing its category of tense. The initial formant correlates with the function of the future tense auxiliary verb, the final formant correlates with the notional verb. Oscillation is a motive force making this construction flexible for its further adjusting to all Germanic languages. Oscillation in the final formant disappeared and only *V inf* was used everywhere after the 16th century. Oscillation within the initial formant has not approached a stable equilibrium yet and this stability seems very problematic and obscure. Leading position of *V inch* in the German language suppressed the transformation of *V mod* into *V auxil*. The involvement of German modal verbs into the process of complete grammaticalization did not happen. In English the leading position was occupied by *V mod*. The initial formant with *V inch* appeared later. English modal verbs were deeper involved into the process of grammaticalization comparing with the German language.
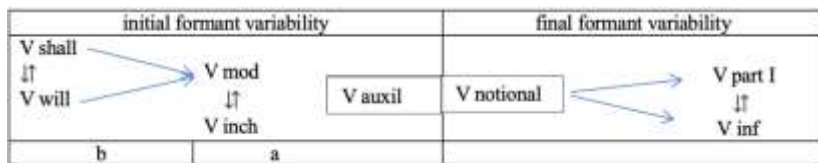

Fig. 1. Scheme of the analytical form
of the future tense and ways of its flexibility

Being one of the main features of the analytical temporal form of futurity, flexibility may be associated with a set of causes: low variability of the final formant, high variability of the initial formant, oscillation between different groups of verbs, oscillation within the

group of modal verbs, changes in the lexical meaning, its gradual fading, further grammaticalization of the initial formant. All these caused create conditions for flex joint of formants; coexistence of oscillation and equilibrium creates a common feature called flexibilizer. It can be described as a flexible form in a very common and general sense.

Usage of flexibilizer as a pattern of analytical grammatical form may be the aim of further research.

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