

# Order of Constituents in the Ukrainian Imperfective Future Formation: Diachronic Analysis\*

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## Introduction

Contemporary Standard Ukrainian (CSU) exhibits a synthetic imperfective future<sup>1</sup> structurally similar to the Romance future in that both forms derived from two words: the infinitive of the main verb and present tense forms of ‘have’.

(1) a. Latin: (ego) *cantare habeo* ‘I have to sing’ >  
French: *je chanterai* ‘I will sing’  
(Fleischman 1982:113)

b. Old East Slavic (OES): vsi *imutъ tvoritъ* ‘everyone has to do’ >  
CSU: vsi *tvorytymut’* ‘everyone will do’

The Ukrainian construction is, however, a much more recent formation (first attested in the 16<sup>th</sup> century), with two modern dialectal forms corresponding to two stages of grammaticalization:

(2) Ja tebe *ljuby-ty-mu* j *šanuva-ty-mu* CSU  
I you.ACC love-INF-FUT.1SG and respect-INF-FUT.1SG<sup>2</sup>  
‘I will love and [will] respect you’ (Hrinčenko, 1900)

(3) U naš kraj prosymo, *šanuva-ty ta pleka-ty mem* vas, jak ridnoho bat’ka WU  
in our land ask.1PL respect-INF and cherish-INF FUT.1PL you.ACC as own father  
‘We ask you to our land, and we will respect and cherish you as our own father’  
(Vorob., in Šerex 1951:307)

(4) Čo *jmaš* ho *by-ty* WU  
why FUT CL.2SG CL.3SG.GEN beat-INF  
‘Why will you beat him?’ (Pura, 1958, I, 71)

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<sup>1</sup> Ukrainian has three other futures (i.e., a synthetic perfective form: *pročytaju* – ‘I will read’ and two analytic imperfective forms: *budu čytaty* ‘be-1SG read-INF’ and *budu čytav* – ‘be-1SG read-PARTICIPLE’), but they are not discussed in the paper.

<sup>2</sup> The abbreviations used in glosses are: INF-infinitive, FUT-future, SG-singular, PL-plural, REFL-reflexive, CL-clitic, GEN-genitive, ACC-accusative, DAT-dative, INSTR-instrumental, DISC.PART – discourse particle, CSU - Contemporary Standard Ukrainian, WU - Western Ukrainian. The list of other abbreviations and sources is given at the end of the paper.

The sentences above represent different 20<sup>th</sup> century Ukrainian dialects: (2) – Contemporary Standard Ukrainian (CSU) based on the Kyiv-Poltava dialect; and (3) and (4) – Western Ukrainian (WU) dialects spoken in the Pokuttja and Bukovyna regions. In (2) both verbs *ljubyty* ‘to love’ and *šanuvaty* ‘to respect’ have the suffixal future tense marker *mu*, while in (3) and (4) future meaning is encoded by clitics<sup>3</sup>. Contrary to (2), in (3) only one future marker is used, and its meaning affects the whole conjoint construction V+V, and both verbs refer to a future event, suggesting that *mem* is not a suffix in WU. The sentence in (4) illustrates another structure commonly used in WU with a future marker *jmaš* that takes an independent pre-verbal position and is separated from the infinitive *byty* ‘to beat’ by a pronominal clitic.

These structures exemplify two stages of grammaticalization that were achieved at different historical periods of the language development: Verb+Affix in (2); and VClitic and CliticV in (3) and (4), respectively. Given that the ‘**Diachronic Syntax Universal**’ stated by Givon (1971:413) predicts that: “Today’s morphology is yesterday’s syntax” (from a typological point of view), we would expect that the order of morphemes in a modern language corresponds to the order of syntactic units at some earlier stage of development. However, if this is the case, it is puzzling why Ukrainian, which has preverbal future clitics, marks the future tense by a suffix and not by a prefix.<sup>4</sup> Evidently, the Ukrainian data pose a challenge to Givon’s claim because they do not show a straightforward correlation between modern morphology and diachronic syntax. The goal of the present paper is to explore the Ukrainian synthetic imperfective future formation in order to argue that Givon’s position, interpreted strictly, is not universally acceptable.

The historical development of this form is analyzed in the grammaticalization framework, as presented in Heine & Kuteva (2002), and the analysis appeals to the relevant notions of the framework, such as semantic reinterpretation, phonetic erosion, and syntactic freedom. In particular, I concentrate on the state of syntax prior to the appearance of morphologically bound future forms. However, I do not make any attempt to define the conditions under which the future marker was grammaticalized.

The discussion is structured as follows: from the history of the problem of morpheme order and word order correlation in Section 1, I proceed to the identification of the main points of the grammaticalization approach in Section 2, and then to the investigation of the Ukrainian future development in Section 3. Section 4 argues against Givon’s hypothesis on the basis of facts from the history of Ukrainian, and provides clear counterexamples to his claim.

## 1. Morpheme Order and Word Order Correlation in the Linguistic Literature

“Historical linguists are familiar with numerous instances where what now appears as an affix derives historically from a separate word, through a gradual process of loss of

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<sup>3</sup> These forms are named *clitics* as opposed to affixes following Franks & King (2000), and this opposition is briefly described in 3.4. However, further categorization, as well as an extended discussion of their properties lies beyond the scope of this paper.

<sup>4</sup> Such forms do exist cross-linguistically. For example, Fleischman (1982:116) describes an example of the synthetic future paradigm developing in several varieties of Central American Spanish: *voy a dormir* -> *yo vadormir* ‘I’m going to/will sleep’. Another typological study also shows that there is a preference for subject agreement prefixes over suffixes in those North American languages that have a SOV or OSV word order (Siewierska & Bakker 1996:141).

independent word status” (Comrie 1980:83). The question is: Can we establish a direct correlation between modern morpheme order and the order of separate words from which they developed?

Givon (1971:344) explains the genesis of affixal morphology as having evolved from the corresponding syntactic order at some earlier stage of its historical development. He suggests that the synchronic affixal morphology of languages can be used in reconstructing earlier diachronic stages of their syntax. However, although Givon’s claim finds support in many cases from different languages, questions may be raised even about examples provided in Givon’s paper as evidence for his argumentation, if they are scrutinized to a greater extent. For instance, one example comes from Bantu verb affixes (namely, modal prefixes and derivational suffixes), which, according to Givon, originated as higher main verbs (Givon 1971:394). He argues that while prefixes are relatively recent, suffixes arose at a time when the word order was the opposite of the modern VO order in Bantu. As supportive “independent” evidence he mentions the fact that the object pronouns occur as prefixes in Swahili, and supposes that it shows that the word order must have been OV earlier at some stage of Proto-Proto-Bantu. However, Givon does not introduce any evidence truly independent of his hypothesis (such as some attested data from earlier historical stages) that would support his claim. Therefore, his argument is circular, since in reconstructing Proto-Proto-Bantu he assumes the truth of the hypothesis he is arguing for. In the Discussion part of the paper, Givon, however, mentions that “the syntax of the language, *at some point of derivation*, determines the order of the free ‘lexical’ morphemes” (Givon 1970:409) (*italics are mine*); thus he opens the door for a different interpretation of his hypothesis, namely that the morphology of a language represents an earlier syntactic order of constituents that could have existed at some stage of the historical development. Even so, this is such a wide-ranging claim that it may hold little meaning for the diachronic theory of reconstruction.

Comrie (1980: 84) shows that Givon’s claim can be interpreted in different ways. He elaborates the argumentation for the existing correlation between synchronic morpheme order and diachronic word order by stating two hypotheses:

Hypothesis 1: The order of morphemes in a word reflects, in so far as those morphemes derive etymologically from separate words, the order of those separate words at the time they started being fused together into a single word.

Hypothesis 2: The order of morphemes in a word reflects, in so far as those morphemes derive etymologically from separate words, the basic order of the language concerned at the time those separate words started being fused together into a single word.

While Hypothesis 2 is much closer to Givon’s proposal and, if true, could have a great impact on historical reconstruction of languages (since the position of an affix would mark the typological category of a language at the historical point of affixation), Hypothesis 1 carries a much weaker power. Under Hypothesis 1, the current morpheme order X-Y could derive from an atypical word order X-Y, where the typical word order was Y-X at an earlier stage of language development. That was the case for the subject agreement suffixes in Mongolian languages presented in Comrie’s paper. Although in

Classical Mongolian and in modern Mongolian languages, the basic order has been SV, the order VS was also possible for an unstressed subject. Examples from modern Khalkha illustrate these two possibilities: ‘I know’ could be expressed as *bi med-ne* (I know-Pres) or *med-ne bi* (know-Pres I). This second, atypical word order, and not the basic one, is the one represented in Buryat morphology: subject agreement on the verb is marked by suffixes derived from separate words following the verb. This example supports Hypothesis 1 and “runs directly counter to the hypothesis that morpheme order directly reflects earlier basic word order” (Comrie 1980:83).

Another interesting piece of evidence supporting Comrie’s Hypothesis 1 and undermining Givon’s argument comes from Adams’s (1991) paper on some neglected facts from Latin. In most Romance languages, the future is marked by suffixes which are reflexes of *habere* ‘to have’. For Givon this is convincing evidence that these verb affixes arose from main verbs at “a time when the verb-phrase syntax of Romance must have still been COMP:VERB” (Givon 1971:396), that is, the complement clause still preceded the clause-final main verb. However, there are some difficulties with this view. In particular, Adams (1991) provides interesting data from 5-6<sup>th</sup> century Latin sources showing that both orders *habere*+INF and INF+*habere* were used interchangeably, with the former far outnumbering the latter. A careful examination of the distribution between the two orders suggests that “while INF+habeo was not yet grammaticalized as an exponent of futurity, that order was already by the fifth or six centuries rather more closely associated with the idea of futurity than was the reverse order” (Adams 1991:161). Since by *the reverse order* Adams means *habere*+INF order, which was shown to be the prevailing unmarked (and thus, basic) order at the time of OV Latin, it allowed him to conclude that the Romance future originated from an atypically positioned constituent expressing ‘obligation/necessity’ with a further extension to futurity. This view contradicts Givon’s assumption about Romance future suffixes developing from the COMP:VERB construction, and, if accepted, undermines his argumentation.

In general, previous studies show the insufficiency of Givon’s claim, and this further suggests that the hypothesis of morphology/syntax correlation in terms of the order of constituents can be applied only with clearly defined restrictions. In view of this, I take Comrie’s Hypothesis 1 as a working hypothesis for the following discussion: *the current morpheme order X-Y could derive from an atypical word order X-Y, where the typical word order was Y-X at an earlier stage of language development.*

I argue that the history of the Ukrainian synthetic future provides evidence supporting this hypothesis since its investigation reveals various co-existing word orders at each stage of the word->affix change. The following discussion is a detailed examination of this change from an independent lexical word ‘have’ to a grammatical future morpheme carried out in a grammaticalization framework, the main concepts of which are introduced in the next section.

## **2. Grammaticalization Framework**

The grammaticalization framework is used for the analysis of the Ukrainian synthetic imperfective future formation because it provides a particularly insightful tool in handling variations in a language’s history and across its dialects. The stages of change from the independent lexical element ‘have’ to a future morpheme are best accounted for by using parameters of the grammaticalization described below.

The term *grammaticalization* was first introduced by Meillet (1912), who defined it as “the attribution of a grammatical character to a formerly independent word” in the progression: *mot autonome* -> *mot accessoire* -> *élément grammatical*. That is, an independent word becomes an auxiliary word and then further develops into a grammatical element – a bound morpheme. Heine and Kuteva (2005:15) propose the following parameters of grammaticalization (which do not always correspond to the chronological stages of the process):

- (5) a. extension (context-induced reinterpretation)
- b. desemanticization (or “semantic bleaching”)
- c. decategorialization (loss in morphosyntactic properties)
- d. erosion (or phonetic reduction).

A classic example of such a development is the Latin verb *habere* ‘to have’ which together with the infinitival lexical word, gave rise to the modern Romance future, e.g., Latin (ego) *cantare habeo* ‘I have to sing’ > French *je chanterai* ‘I will sing’ (Fleischman 1982:115). This is a standard case of grammaticalization in that the full Latin verb *habere* has been (a) formally reduced to an affix and (b) semantically reduced to being a marker of future time in some contexts (Roberts 1993:231). First, *habere* lost its original possessive meaning in specific constructions with the infinitive and developed ‘obligation’ semantics, which was later extended to the future meaning. Next, systematic phonetic reduction of the future *habere* forms made it distinct from the possessive *habere*, since the future forms lost their roots and were phonetically reduced to a set of endings (Modern French: *-ai, -as, -a, -ons, -ez, -ont*). Finally, loss of syntactic properties characteristic of an autonomous word (involving first cliticization and then affixation of the abbreviated reflexes of *habere*) completed the process of decategorialization and gave rise to fully grammaticalized future forms in modern Romance languages.

The Ukrainian imperfective future (although not listed among the 400 examples of grammaticalization in Heine and Kuteva 2002) has a development similar to the Romance future. In the next section I examine this neglected example and explore its main properties: semantic reinterpretation, phonetic erosion, and loss of syntactic freedom.

### **3. The History of Ukrainian Imperfective Future**

#### **3.1. On the Origin of the Future Marker**

Most studies on the history of Slavic languages define the origin of the synthetic future tense marker as a morphosyntactically unbounded element with the meaning ‘to have’ (see Dahl 2000, Franks & King 2000, and Danylenko 2003 *i.a.* on the Old East Slavic (OES)<sup>5</sup> and Old Ukrainian (OU) future). However, there was more than one form depicting this meaning. In fact, three forms marking the future tense are considered in the literature: the imperfective *imati* ‘to have as result of having taken’, the perfective *jeti* (later *jati*) ‘to take’ and the athematic *iměti* ‘to have’. These seemingly contradictory

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<sup>5</sup> I use the following periodization based on (Nimčuk 1997): Old East Slavic or Old Russian - language used in manuscripts written before 14<sup>th</sup> century and reflecting Russian – Kyiv-Halyč-Novgorod dialects; Old Ukrainian– 14<sup>th</sup>-16<sup>th</sup>; Middle Ukrainian – 17<sup>th</sup>-18<sup>th</sup>; Modern Ukrainian - since 19<sup>th</sup>.

views can be explained by the actual similarity in the semantics of *iměti*, *imati*, and *jati* and by homophony in their present tense paradigms. For instance, in Old Church Slavonic (OCS), the athematic verb *iměti* was conjugated as an /a/ paradigm, and thus its forms were homophonous with the *imati* forms (Huntley 1993:161). The same paradigm with some phonetic changes was used in OES texts<sup>6</sup>:

(6)	1sg. <i>imatъ</i>	1pl. <i>imatъ</i>
	2sg. <i>imaši</i>	2pl. <i>imate</i>
	3sg. <i>imatъ</i>	3pl. <i>imutъ</i>

The perfective form of *imati*, *jati* ‘take’ had different paradigms in OES and in OU (Žovtobrjux 1980:329):

(7)	1sg. <i>imu</i>	1pl. <i>imemъ</i>
	2sg. <i>imeši</i>	2pl. <i>imete</i>
	3sg. <i>imetъ</i>	3pl. <i>imutъ</i>

Apparently, three forms *iměti*, *imati* and *jati*, which arose from the same Proto-Slavic *\*ьm*, with similar semantics (‘to have as result of having taken’) and different aspectual meanings contributed to the formation of the future marker in Ukrainian (see Danylenko 2003 for further discussion). Although it is not clear which of these forms was a starting point in the grammaticalization process, I follow the Ukrainian philological tradition (Nimčuk 1978, Bevzenko 1997, Žovtobrjux 1980) and use the forms of the imperfective *imati* and especially perfective *jati* (i.e., its paradigm exemplified in (7)) to represent all stages of the future tense development.

### 3.2. Semantic Reinterpretation

By the 9<sup>th</sup> century, when Late Common Slavic was separating into what eventually became three distinct dialects, South Slavic, East Slavic, and West Slavic, its verbal morphology underwent several changes, particularly in the system of auxiliaries expressing different accounts of the events or speaker’s attitude towards those events.

Common usage of *iměti* / *imati* as a lexical word and as an auxiliary with different modal (including future) meanings has been recorded throughout the history of Ukrainian and is attested even in the earliest Kievan Chronicles:

(8)	Сѹ	<b>imutъ</b>	<b>ima-ti</b>	i	na	nas	danъ	i	na	iněxъ	stranaxъ
	These	have.3PL	have-INF	and	on	us	tribute	and	on	other	countries
	‘They have to /will have tribute from us and other countries’ (LL before 852; M:80) <sup>7</sup>										

<sup>6</sup> Later variations of the *imati* and *iměti* forms diverge, though. Their paradigms gave rise to the lexical verb ‘to have’ in modern Ukrainian and modern Russian, respectively. They are not directly relevant to my discussion of the future development, but in earlier OU texts they could also be used in modal/future constructions.

<sup>7</sup> All examples are cited from Marčylo 1999 (henceforth M with a page number following), unless specified.

The above sentence clearly illustrates the distinction between two ‘have’ forms: infinitive *imati* is a lexical word with possessive meaning, while the present tense of the same verb *imutъ* is an auxiliary with modal meaning of obligation or inevitability of the event that can be also understood as a reference to a future event.

At the beginning stages of the future tense development, in these types of constructions different nuances of modality prevailed over future meaning. The auxiliary *iměti / imati* could denote obligation (9), possibility (10), or inevitability (11):

(9) Ašče ty krstiši-sja vsi **imu(t)** to že **tvori(t)**  
 if you christen-self all have.3PL that same do.INF  
 ‘If you christen yourself everybody is obliged to do so’ (LL 955; M:81)

(10) Ašče toho pustiši **ne imaši by-ti** drugъ kesarevi  
 if that allow not have.2SG be.INF friend tsar.DAT  
 ‘If you allow that, you can/will not be a friend to the tsar’ (LL 986; M:79)

(11) Ašče ne pristupite utro podъ gorod, **preda-ti-se imutъ** ljude Pečenegom  
 if not come morning near city surrender-INF-REFL have.3PL people Pečenegs.DAT  
 ‘If you do not come to the city in the morning, people have to/will surrender themselves to the Pečenegs’ (LL 1097; M:81)

It should be noted that present tense forms of ‘have’ could occur before the infinitive of the main verb (9, 10) as well as after it (11) without a noticeable change in their semantic function. But, even at this early period in the history of East Slavic, some constructions already have a clear future orientation:

(12) Ašče ne ideši to že **imutъ tvori-ti** namъ  
 if not go.2SG that same have.3PL do-INF us  
 ‘If you do not go, they will do the same to us’ (LL 988; M:81)

More and more often the auxiliary ‘have’ forms expressed emphasis that the event is inevitable, that is, the event will come to pass in the future:

(13) Nyně kļętvoju klenou ti jako nikoli vraždy s toboju **ne imamъ imě-ti**  
 now vow.INST vow.1SG you.DAT that never enmity with you not have.1SG have-INF  
 ‘Now I vow to you that I will never have enmity with you’ (HVL 1238; M:83)

Therefore, it can be stated that by 15<sup>th</sup> century the next macro-change in the grammaticalization of the verb *imati* was achieved: its semantic meaning was downgraded from one of general modal denotation to that of pure futurity in some contexts (see Marčylo 1999:118 for six types of such contexts). This change is a clear instance of semantic extension, which is a property of grammaticalization according to Heine and Kuteva (2002).

### 3.3. Phonetic Erosion

Grammaticalization is also associated with phonetic erosion and a loss of lexical stress on one or more segments. Phonetic deformation of *imati* involved two main changes: word-initial loss of [i] and reduction of final jers (short vowels ь and ъ) with following changes in the phonetic material of person/number forms.

Loss of initial [i] in *imati* forms happened not only in those words that became future markers, but also in the lexical word ‘to have’ and the auxiliary ‘have to’ (compare to modern Russian *im’et’* ‘to have’). This change was attested as early as in the 12<sup>th</sup> century: *iz’ědaty matъ* ‘to eat up have.3SG’ (Černihivs’ka Listvyčja, 12<sup>th</sup>c. cited from Bevzenko 1997:214) with an increasing number of recorded examples in the 14<sup>th</sup> -15<sup>th</sup> centuries, and further prevailing use in the following centuries. Shevelov (1979) maintains that [i] in an unstressed position was reduced long before the consistent use of inflectional future tense and the historical development went mainly as follows:

- (14) *imutъ xodi-ti* -> *mutъ xodi-ti* -> *xodi-ti-mutъ*  
 have.3PL go-INF -> have.3PL go-INF -> go-INF-FUT.3PL

Modern Ukrainian dialect forms with mostly [i]-less clitics (*mut’ xodyty* ‘FUT CL to go’) support the chronology in (14) (see AUM II (1988: 244) for more data on WU dialects).

Other phonetic changes are not limited only to the ‘have’ paradigm and involve the loss of weak jers (ъ and ѣ) in general in a syllable/word final position.

- (15) 1sg (*i*)*mu* > *mu*                      1pl (*i*)*memъ* > *mem* / *memo*  
 2sg (*i*)*mešĭ* > *meš*                      2pl (*i*)*mete* > *mete*  
 3sg (*i*)*metъ* > *me*                      3pl (*i*)*mutъ* > *mut’*

Therefore, on the phonological level the change from an auxiliary ‘have’ to a future marker was accompanied by phonetic weakening, often termed ‘erosion’, which was fully achieved by the 18<sup>th</sup> century.

### 3.4. Syntactic Freedom

In the course of its development from an auxiliary to a grammatical item with future meaning, *imati* changed its function in sentence structure and achieved varying degrees of syntactic freedom in different dialects of Modern Ukrainian. In some dialects (namely, Western Ukrainian) future markers still keep separate positions in the sentence, while in others (Northern, Eastern, and Southern dialects), as well as in a standard form of the language, they completely lost their syntactic freedom.

#### 3.4.1. Western Dialects

Western Ukrainian dialects exhibit interesting structures with reflexes of ‘have’, as grammatical elements with future meaning, preceding the infinitive:

- (16) Lyxo    **meš**                      **hosty-ty**                                      WU  
 trouble FUT CL.2SG host-INF  
 ‘You will have trouble’ (Dej & Hryca 1972 from Franks & King 2000:197)<sup>8</sup>
- (17) Biljavka koho                      xoče,    toho’                      **me**                      **ljuby-ty**                                      WU

<sup>8</sup> The details of their glossing have been corrected here.

Blond who.ACC want that.ACC FUT CL.3SG love-INF  
 'A blond girl will love who she wants' (Folk song <http://www.zakarpattia.rv.ua>)

Although Franks and King (2000) ascribe clitic status to these future markers, they acknowledge lack of data to test this claim in all instances. In principle, reflexes of 'have' in WU could be identified as affixes (especially if they immediately follow the infinitive, e.g. in (3)), clitics, or free words with modal meaning of obligation and/or futurity. The following discussion is an attempt to confirm their clitic properties.

This issue of clitic status is important here because clitics stand between independent words and affixes, and it is widely assumed that they are also diachronically a possible stage between an expression consisting of two words and one composed of a single word with an affix (Comrie 1980:86). Thus, I am less concerned with the word/clitic distinction than I am with the clitic/affix opposition since even if reflexes of *imati* are free auxiliary words and not clitics, they still share the same property that is essential for my analysis – morphosyntactic unboundness, which implies that they are not bound to a certain morphological category and take a separate position in the syntactic structure.

As to the affix/clitic distinction, some tests suggest that future markers have clitic properties in Western Ukrainian. The first test is based on Zwicky and Pullum's (1983:503) Criterion A: Clitics can exhibit a low degree of selection with respect to their hosts while affixes exhibit a high degree of selection with respect to their stems. Because the future marker clearly follows the verb in some examples (e.g., in (18)), it is assumed here that it consistently follows its host. In (16) it follows a noun and in (17) to a pronoun (see also examples in (3) and (4) for other categories of hosts). Thus, it can have at least three kinds of hosts, verbs, nouns and pronouns, and exhibits a low degree of selection.

The following evidence sustains this position. According to Kahr (1976: 111), if in a conjoined phrase the tense-marking (in her case it was case-marking) morpheme is not repeated on each word, that is, if it occurs only once, then the morpheme should not be considered an affix. An affix is typically required on each word in the conjoined phrase. An example that was brought up earlier, in (3), *šanuvaty ta plekaty mem* (respect-INF and cherish-INF FUT.1PL - 'we will respect and cherish') shows the future marker *mem* attached to the compound V+V and influencing the meaning of the whole. This corresponds to Kahr's (1976) criterion and provides evidence for defining the future marker as a clitic, and not an affix.

Another example given in (18) falls under Criterion F established for clitics by Zwicky and Pullum (1983: 503): Clitics can attach to material already containing clitics, but affixes cannot.

(18) **Tuly-ty-s'-mu** do vas vsijeju samotoju [...] čornyx dum WU  
 nestle-INF-REFLCL-FUTCL.1SG to you all.INST loneliness.INST dark thoughts.GEN  
 'I will nestle close to you with all loneliness of my dark thoughts'  
 (Karm. from Šerex 1951:314)

As shown in (18), the future marker *mu* is attached to the reflexive *s'* (reduced form of *sjalsy/se/si* – which are variants of the reflexive clitic (*sja*) in WU dialects (Budzhak-Jones 1997, Franks & King 2000), and the whole string has the infinitive *tulyty* as a host. Hence, this structure indicates that the future marker *mu* is a clitic, and not an affix.

Three arguments presented above attest to the following: a low degree of selection for future markers, a single occurrence of the tense marker in a conjoined phrase, and a possibility of its attachment to a clitic. Consequently, it is concluded that Western Ukrainian employs syntactically free elements with clitic properties that mark imperfective future and can appear in before or after the verb.

### 3.4.2. Contemporary Standard Ukrainian and Other Ukrainian Dialects

The status of *imati* reflexes in other Ukrainian dialects as well as in CSU differs from their position in WU. They show a different degree of morphosyntactic boundness, which suggests that in these dialects reflexes of *imati* can be classified as affixes.

For instance, syntactic structure in (19) with the future tense marker *memo* (a variant of *mem*) that represents WU would be considered ungrammatical or even completely incomprehensible for speakers of other non-western dialects:

- (19) Oj            de            **memo**            **nočuva-ty**,            moja            myla divčyno?    WU  
 DISC.PART where    FUT.CL.1PL spend the night-INF my            dear girl  
 ‘Where will we spend the night, my dear girl?’  
 (Hol, I, 200 from Danylenko 2003:403)

In CSU, the corresponding sentence (20) would have a different structure with the morpheme *memo* bounded to the infinitive:

- (20) Oj            de            my            **nočuva-ty-memo**,            moja myla divčyno?    CSU  
 DISC.PART where we spend the night-INF-FUT.1PL my            dear girl  
 ‘Where will we spend the night, my dear girl?’

In fact, in CSU, imperfective future markers exhibit a high degree of selection with respect to their stem which can only be a verb in the infinitive. According to Criterion A (Zwicky and Pullum 1983), this signifies that they are affixes.

The next evidence comes from the structure exemplified in (2): *ljuby-ty-mu j šanuva-ty-mu* - love-INF-FUT.1SG and respect-INF-FUT.1SG - ‘I will love and will respect’. Contrary to the conjoined phrase from WU *šanuvaty ta plekaty mem* – ‘we will respect and cherish’ which has only one future marker, in CSU, a verbal conjoined phrase should have a tense marker morpheme repeated on each word. The structures as *\*ljuby-ty j šanuva-ty-mu* - love-INF and respect-INF-FUT.1SG and *\*ljuby-ty-mu j šanuva-ty* - love-INF-FUT.1SG and respect-INF - are ungrammatical in CSU. Therefore, by the criterion postulated by Kahr (1976) - an affix is typically required on each word in the conjoined phrase - the future marker is classified as an affix in CSU and other dialects.

Another supporting argument for distinguishing CSU affixes from WU clitics future markers is built on the contrast with the example in (18). The form *tuly-ty-s'-mu* (nestle-INF-REFLCL-FUTCL.1SG – ‘I will nestle’) is ungrammatical in CSU. The only possible morpheme order is the following: *tuly-ty-mu-s'* ‘nestle-INF-FUT.1SG-REFL’, with

the future marker attached directly to the verbal stem and preceding the reflexive postfix *-sja*. This shows that *mu* is an affix.

All three examples above from CSU contrast with the use of future markers in WU and clearly correspond to established criteria for affixes. Therefore, the modern language structures reflect two forms, and possibly stages, in the development of the synthetic future and provide evidence supporting my argument that the Ukrainian imperfective future is a result of grammaticalization. In CSU, the process of decategorialization has been completed, and reflexes of *imati* lost their original syntactic properties of lexical words. In WU, the less grammaticalized forms with future meaning still keep their syntactic freedom as autonomous elements in sentence structure.

### 3.5. Towards the Last Stage of Grammaticalization

According to the grammaticalization approach, the changes in semantics and phonology of the auxiliary are conducive to its further development “from grammatical to even more grammatical forms” (Heine & Kuteva 2002:2). The following sentences from Middle Ukrainian contain phonetically reduced reflexes of *imati/jati* that clearly express the future:

- (21) *Možete lipiti čašu, ktoruju ja pi-ti ima(m)*  
 can.2PL mold cup which I drink-INF FUT.CL.1SG  
 ‘*You can mold a cup from which I will drink*’ (PE 1556-1561; M:96)
- (22) *A v nebě mě-ti meš koronu*  
 and in heaven have-INF FUT CL.2SG crown  
 ‘*And you will have a crown in heaven*’ (UP 16<sup>th</sup>c; M:99)
- (23) *Oni umrutъ u hrěxoxъ, ta potymъ mutъ bažě-ty vudъ nasъ dušě ixъ*  
 they die.FUT in sins and then FUT CL.3SG wish-INF from us souls their  
 ‘*They will die in sin and then will want their souls back*’  
 (16<sup>th</sup> c.; SUM 16-17<sup>th</sup> c., 2:10)
- (24) *Jak tja jmu oberъta-ty tym cěpom, nebože!*  
 how CL.2SG.ACC FUT CL.1SG turn-around-INF that beater-INSTR nephew  
 ‘*How I will turn you around with this beater, my nephew!*’ (Int. 17<sup>th</sup>-18<sup>th</sup> c.; M:108)

The sentences in (21) and (22) show future markers *ima(m)* and *meš* following the lexical verbs, which should lead to the next change on the cline of grammaticalization, namely their affixation. That is what occurred in Ukrainian in the 16<sup>th</sup> century – the first attested synthetic future in (25) (as well as a new form of *budu* ‘be’ future) is dated from about the same time as the form in (21):

- (25) *Ne tol’ko tyx, ale druhix ljudej ima-ti-mu, bi-ti-mu i věšati ix budu*  
 not only those but other people take-INF-FUT beat-INF-FUT and hang them be-FUT  
 ‘*Not only those people, but also others I will take and beat, and I will hang them*’  
 (Luc.kn.1561; M:27)

To summarize this section, numerous recorded materials from the history of Ukrainian exemplify the development of the Ukrainian synthetic imperfective future from the infinitive of a lexical word and present forms of ‘have’ with different modal meanings. As a result of semantic, phonological and syntactic changes, ‘have’ became a fully grammaticalized form (in Standard Ukrainian) whose only function is to serve as the future tense marker.

#### 4. The Ukrainian Synthetic Future and Givon’s Hypothesis

The diachronic universal proposed by Givon (1971), that *the order of affixes reflects the order of words in a language*, implies a specific syntax for the stage of Ukrainian that preceded grammaticalization of the future morpheme. The following discussion argues that Givon’s claim is too strong and that Comrie’s (1980) Hypothesis I, that *the morpheme order X-Y could derive from word order X-Y, where the typical word order was Y-X*, gives a better account of the Ukrainian future formation.

CSU has the future marker as a suffix, and thus exhibits the Verb+Affix order of constituents. Accepting Givon’s claim would relate the order of morphemes in the modern imperfective future to the analogical basic order of constituents in Old Ukrainian, which is predicted to be VAux. Although it is true that Old Ukrainian and OES, from which it descends, had this word order, it was not the only order used in the languages. Examination of Ukrainian future formation suggests that there is no clear evidence that Ukrainian had a basic VAux order at any time prior to the consistent use of morphosyntactically bound imperfective future in the 17<sup>th</sup> century.

First of all, even the oldest OES manuscripts do not show a consistent VAux order (examples in 9-11). Considering Lunt’s (2001:4) belief that the classical OES manuscripts are “close to the theoretical ideal” of OCS, some interesting facts from OCS can be relevant here. Pancheva’s (2006) quantitative examination of *Codex Marianus* (11<sup>th</sup> century) reveals that both orders TP VP and VP TP (where TP is a tense auxiliary) were roughly equally distributed in OCS. This suggests that periphrastic tenses in OES texts written at the same period of time probably followed a similar distribution.

Furthermore, AuxV constituents with possibility, obligation, inevitability, and future event meaning have been commonly used throughout the history of Ukrainian hand in hand with VAux:

(26) *какъ издвна у лѣсѣ ходили такъ і нинѣ xodi-ti imějutъ*  
 as earlier in forest go.PAST so and now go-INF have.3PL  
 ‘As earlier they used to go to the forest, so now also they can/will go’ (R.1433; M:92)

(27) *і потомъ хто не imetъ xodi-ti, тотъ imetъ dava-ti svjatomu Nikole vesъ doxodъ*  
 and later who not have.3SG go-INF that have.3SG give-INF St Nikola all income  
 ‘And later, the one who will not go, [he] has to give to St Nikolas all his income’  
 (P.1362-1392; M:92)

And most important, at the time of the fusion of the future marker with the lexical word in one morphological unit, both orders AuxV and VAux were available in the language (examples in 21-24). Moreover, Marčylo’s (1999) examination of historical sources from the 15<sup>th</sup> century reveals that right before the appearance of the first written

examples with the synthetic future, the majority of the forms with future meaning in texts from this period had the auxiliary preceding the lexical word.<sup>9</sup> This suggests that the morpheme order V+Affix could derive from the word order VAux, even where the typical word order was AuxV (although it would require additional analysis of the data in order to prove which order was more marked at that time).

Likewise, in modern Western Ukrainian dialects where the process of grammaticalization remains at its clitic stage, the word order of clitics relative to the verb has two possibilities: CliticV or VClitic, although clitic placement before the verb prevails. Pre-verbal future markers attesting CliticV order are still well represented in written sources (such as literary prose and folklore) from Western Ukraine, and can be considered an archaic feature representing an older stage of the development of Standard Ukrainian and other dialects.

Consequently, Givon's hypothesis that 'today's morphology is yesterday's syntax' can be quite misleading if used for reconstruction. For instance, such morphological forms from Standard Ukrainian as *xodyty-mu* 'go-FUT1SG' would lead to the claim that old word order was VAux, which would leave Western Ukrainian forms *mu xodyty* 'FUT CL go' unexplained. On the other hand, if the last form is accepted as an unfulfilled grammaticalization, should we expect that AuxV syntactic order will produce the morphological order AffixV? Thus far, forms like *mu-xodyty* 'FUT.1SG-go' have not been attested in any of the Ukrainian dialects.

Therefore, predictions based on Givon's hypothesis are not supported by the facts from Ukrainian imperfective future development: attested syntactic structures from various diachronic stages of Ukrainian do not show a preference for VAux order. Comrie, on the other hand, provides a better explanation of the phenomenon since he limits his hypothesis to only one possible word order (and not necessarily the most common) from which, at a particular historical stage, morphological constituent was developed.

## Conclusion

Despite the widely accepted claim that there is a direct correlation between morpheme order and the basic order of the words from which these morphemes derived, some well recorded phenomena in the history of various languages suggest that this is not correct. As has been shown on the analysis of Ukrainian imperfective future formation, there is no clearly defined period in the history of Ukrainian when the basic word order was VAux and yet, in the modern language, the future morphology is Verb+Affix. The grammaticalization which was completed relatively recently in Standard Ukrainian and is still uncompleted in Western Ukrainian allowed us to trace all stages of the process and to find attested examples of various syntactic constituents with futural meaning. Their variety (particularly at the stage preceding full grammaticalization) suggests that Givon's hypothesis is an overgeneralization that cannot be used as a reliable tool for historical reconstruction.

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<sup>9</sup> A similar phenomenon was observed in Latin (Adams 1991), discussed above in Section 1.

### List of Abbreviations and Sources

- AUM - Atlas Ukraïns'koï Movy. 1988. Compiled by D.G. Bandrivs'kyj et al. Volume II. Kyiv: Naukova Dumka.
- HVL – Halyc'ko-Volyns'kyj litopys. *From Polnoje sobranije russkix letopisej. Ipat'jevskaja letopis'*. 1962. Moscow: Izd. vost. lit.
- Hol – Holovatskij Ja. F. 1878. *Narodnyje pesni Galitskoj and Ugorskoj Rusi*. Moscow: Universitetskaja tipografija.
- Hrinčenko - Hrinčenko, B. 1900. *Sered temnoi noči*. <http://www.ukrlib.com.ua/>
- Int – Ukraïns'ki intermedii XVII-XVIII st. *Pamjatky davnjoï ukraïns'koï literatury*. 1960. Kyiv: Vyd-vo AN URSSR.
- Karm - Karmans'kyj, P. *Tvory*. 19<sup>th</sup> c. *From Šerex, J. 1951*.
- LL – Lavrent'jevskaja letopis'. *Povest' Vremennyx Let. From Polnoje sobranije russkix letopisej. Lavrent'jevskaja letopis'*. 1962. Moscow: Izd. vost. lit.
- Luc.kn. – Lucka kniga. 1561. *From Žytec'kyj, P.G. 1987*.
- P – Hramoty XIV st. 1974. Ed by M.M. Peščak. Kyiv: Naukova dumka.
- PE – Peresopnyts'ke Evangelije 1556-1561. *Manuskript. CNB NAN of Ukraine, #15512*.
- R – Rozov B. 1965. *Ukraïns'ki hramoty XV st*. Ed. V. M. Rusanivs'kyj. Kyiv: Naukova dumka.
- SUM - *Slovyk ukraïns'koï movy XVI – peršoï polovyny XVII st. 1994-1996*. Ed. by D. Hrynčyšyn. Volume 1-3. Lviv: Instytut Ukraïnoznavstva.
- UP – Ukraïns'ka poezija. *Kinec' XVI – počatok XVII st. 1978*. Ed. by V.P.Kolosova & V.I. Krekoten'. Kyiv: Naukova Dumka.
- Vorob– Vorobkevyč, S. *Poezii*. 19<sup>th</sup> c. *From Šerex, J. 1951*.

### References

- Adams, J. N. 1991. Some Neglected Evidence for Latin HABEO with Infinitive: The Order of the Constituents. *Transactions of the Philological Society*. Volume 89; 2:131-196.
- Bevzenko, S. 1997. *Formy Vyjavu Majbutn'oï Diï v Ukraïns'kyx Dialektax*. In. *Ukraïns'kyj Dialektolohičnyj Zbirnyk*. Ed. by P. Hrycenko. Kyiv: Dovira. 213-217.
- Budzhak-Jones, S. 1997. Wackernagel Phrase Conditioning of Long Head Movement in Hutsul. In M. Lindseth and S. Franks (Eds.), *Formal Approaches to Slavic Linguistics: The Indiana Meeting 1996*, 108-127. Ann Arbor: Michigan Slavic Publications.
- Comrie, B. 1980. Morphology and Word Order Reconstruction: Problems and Prospects. In *Historical Morphology*. Ed. by J. Fisiak. The Hague/ Paris/ New York: Mouton. 83-95.
- Dahl, Ö. 2000. The Grammar of Future Time Reference in European Languages. In. *Tense and Aspect in the Languages of Europe*. Ed. by Ö. Dahl. Berlin/ New York: Mouton de Gruyter. 309-328
- Danylenko, A. 2003. *Predykaty, Vidminky i Diatezy v Ukraïns'kij Movi: Istoryčnyj i Typolohičnyj Aspekty*. Xarkiv: Oke.
- Fleischman, S. 1982. *The Future in Thought and Language: Diachronic Evidence from Romance*. Cambridge University Press.
- Franks S. & T. H. King. 2000. *A Handbook of Slavic Clitics*. New York/Oxford: Oxford University Press.

- Givon, T. 1971. Historical Syntax and Synchronic Morphology: An Archaeologist's Field Trip. *Chicago Linguistic Society* 7, 394-415.
- Heine, B. & T. Kuteva. 2002. *Word Lexicon of Grammaticalization*. Cambridge: Cambridge University Press.
- Heine, B. & T. Kuteva. 2005. *Language Contact and Grammatical Change*. Cambridge: Cambridge University Press.
- Huntley, D. 1993. Old Church Slavonic. In *The Slavonic languages*. Ed. by B. Comrie and G. G. Corbet. London / New York: Routledge.125-188
- Kahr, J. C. 1976. The Renewal of Case Morphology; Sources and Constraints. *Working Papers on Language Universals*. 20: 107-151.
- Lunt, H. G. 2001. *Old Church Slavonic Grammar*. Berlin/New York: Mouton de Gruyter.
- Marčylo, L. 1999. *Istorija Form Majbutn'oho Času Dijeslova v Ukraïns'kij Movi*. PhD dissertation. Kyiv. Ms. CNB NAN of Ukraine.
- Meillet, A.. 1912. *L'évolution des Formes Grammaticales*. Scientia, 12/26. Milan.
- Nimčuk, V. (Ed). 1978. *Istorija Ukraïns'koï Movy. Morphologija*. Kyiv: Naukova Dumka.
- Nimčuk, V. 1997. Periodyzacija Jak Naprjamok Doslidžennja Genezy ta Istorii Ukraïns'koï Movy. *Movoznavstvo*. 6: 3-14.
- Pancheva, R. 2006. *The Position of Tense in the Old Church Slavonic Clause*. Presentation at 1<sup>st</sup> Meeting of Slavic Linguistics Society. Indiana University. September 8<sup>th</sup> 2006.
- Pura, Ja. O. 1958. *Hovory Zaxidnoï Drohobyččyny*. Volume 1. Lviv: L'viv. obl. upr. kul'tyry.
- Roberts, I. 1993. A Formal Account of Grammaticalization in the History of Romance Futures. *Folia Linguistica Historica* 13.1-2: 219-258.
- Schenker, A. M. 1993. Proto-Slavonic. In *The Slavonic languages*. Ed. by B. Comrie and G. G. Corbet. London / New York: Routledge.60-125
- Šerex, Ju. 1951. *Narys Sučasnojï Ukraïns'koï Literaturnoï Movy*. Munich: "Molode Žyttja" Publishing CO.
- Shevelov, G. Y. 1979 *A Historical Phonology of the Ukrainian Language*. Heidelberg: Winter.
- Shevelov, G. Y. 1993. Ukrainian. In *The Slavonic languages*. Ed. by B. Comrie and G. G. Corbet. London / New York: Routledge.947-999.
- Siewierska, A. & D. Bakker. 1996. The distribution of Subject and Object Agreement and Word Order Type. *Studies in Language*. 20:1. 115-161.
- Žovtobrjux, M. A. et al. 1980. *Istoryčna Hramatyka Ukraïns'koi movy*. Kyiv: Vyšča Škola.
- Zwicky, A. and G. Pullum. 1983. Cliticization vs. Inflection: English n't. *Language* 59:502-513.