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THE SEMANTIC DEVELOPMENT OF OLD PRESENTS
NEW FUTURES AND SUBJUNCTIVES WITHOUT GRAMMATICALIZATION*

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1. *Some synchronic anomalies in verbal inflection*

In this paper I will discuss a pattern of change found in a variety of languages whereby present indicative forms of verbs develop into futures or subjunctives. I will present case studies from a dozen languages, formulate generalizations over the individual cases, and try to provide explanations for the observed tendencies of change and their effects. The phenomena dealt with here have been known to linguists since Kuryłowicz's (1953, 1964) and Rundgren's (1963) work, but they have not received much attention on the part of theorists. Work in the tradition of Bybee & Dahl (1989) especially has tended to emphasize the diachronic rise of tense-aspect-mood categories by grammaticalization. The type of change discussed here is of a very different kind, though also linked crucially to grammaticalization. In Bybee at al.'s (1994) comprehensive study, the cases of old presents turning into futures and subjunctives are treated for the first time in the typological and theoretical literature. My task here will be to provide a substantial body of additional and more detailed data and to discuss the consequences of this change more fully.

I will start by enumerating a number of seeming synchronic anomalies that can be found in a variety of languages. They concern markedness violations (§1.1), lexical irregularities in verb inflection (§1.2), unexpected polysemy of certain tense-aspect-mood forms (§1.3), and unexpected uses that occur in special contexts (§1.4). These anomalies will find a natural explanation in the pattern of change discussed here (see especially §5).

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1.1 *Markedness violations*

Theorists of markedness seem to be unanimous that the future tense is marked with respect to the present tense, and that the subjunctive mood is marked with respect to the indicative mood (Greenberg 1966:46-47; Mayerthaler 1981:14; Givón 1995:54). This should entail that futures and subjunctives are expressed by an additional morpheme, and Greenberg (p.47) notes that this is indeed true for futures: "The future is practically always marked overtly by an auxiliary or affix". However, in some languages the present tense is clearly more marked formally than the future:

(1)	present tense	future tense
a. Udmurt[1]	*myn-iśk-o* "I am going"	*myn-o* "I will go"
b. Tati	*mi-baf-tæn-und* "they are weaving"	*mi-baf-und* "they will (probably) weave"
c. Kannada	*maaḍ-utt-idd-aane* "he is doing"	*maaḍ-utt-aane* "he will do"

Similarly, in some languages the indicative is more marked formally than the subjunctive:

(2)	indicative	subjunctive
a. Tsakonian[2]	*eñ-i ften-u* "he is cooking"	*ften-i* "(that) he cook"
b. Cairene Arabic	*bi-yi-ktib* "he is writing"	*yi-ktib* "(that) he write"
c. Eastern Armenian	*gr-um es* "you are writing"	*gr-es* "(that) you write"

Furthermore, the anomalies extend to other criteria of markedness, such as the criterion of inflectional elaboration (cf. Croft 1990:77), according to which morphological syncretism and neutralization should occur in the marked member of an opposition. However, in Modern Hebrew, for instance, the morphological present-tense forms show neutralization of person marking, which is preserved in the future and past tenses. In order to distinguish the various persons, the free pronouns are used in the present tense (*ani* "I", *ata* "you", *hu* "he", etc.).

[1] Udmurt is a Finno-Ugrian language of Russia, and Tati is an Iranian language of the eastern Caucasus.

[2] Tsakonian is a divergent dialect (or perhaps rather a close relative) of Modern Greek, spoken on the Peloponnesus peninsula.

(3) Modern Hebrew	past tense	future tense	present tense
1SG	*katav-ti*	*ʔe-xtov*	*ani kotev*
2SG	*katav-ta*	*ti-xtov*	*ata kotev*
3SG	*katav*	*yi-xtov*	*hu kotev*
	"wrote"	"will write"	"am/are/is writing"

1.2 *Irregular verbs*

In a number of languages, some verbs are irregular in that their future-tense form denotes present tense. An alternative analysis would say that their present-tense form is shaped according to the morphological pattern of the regular future tense. In (4) and (5) below, only one verb is given as an example for each language.

(4)	present tense of regular verbs	future tense of regular verbs	present tense of irregular verbs
a. Lezgian[3]	*qaču-zwa* "takes"	*qaču-da* "will take"	*kič'eda* "is afraid"
b. Welsh	*mae i'n canu* "I sing"	*can-a i* "I will sing"	*gall-a i* "I can"
c. Kannada	*maaḍ-utt-idd-aane* "he does"	*maaḍ-utt-aane* "he will do"	*priitis-t-aane* "he loves"

Similarly, in a number of languages some verbs are irregular in that their subjunctive form is used for indicative (or again, alternatively, their indicative form is shaped according to the morphological pattern of the regular subjunctive).

(5)	indicative of regular verbs	subjunctive of regular verbs	indicative of irregular verbs
a. Cairene Arabic	*bi-yi-ktib* "he writes"	*yi-ktib* "(that) he write"	*yi-ʕrḍf* "he can"
b. Eastern Armenian	*gr-um em* "I write"	*gr-em* "(that) I write"	*git-em* "I know"

1.3 *Unexpected polysemy*

According to a widespread view of polysemy, it is not necessary that the different related meanings of a linguistic expression can all be subsumed under a single general meaning. Instead, they may show what is often called *family resemblances* or a *radial structure*, i.e., each meaning is linked by resemblance to some other meaning, but the network of meanings may be so large that meanings at different ends of it show no traces of similarities. Thus,

[3] Lezgian is a Nakh-Daghestanian language spoken in the eastern Caucasus.

while the different meanings of a polysemous expression need not conform to the hierarchical taxonomic model, they are at least constrained by the requirement of connexity (cf. Heine 1992, for some discussion of how such polysemy arises in grammaticalization).

Now in some languages there is a gram (i.e., a grammatical item) which expresses both future and habitual meaning, i.e., a temporal meaning and an aspectual meaning which share no obvious common traits. For instance, the Lezgian verbal suffix *-da* (called the Future)[4] may have both these meanings, and a sentence like *za ič-er qaču-da* [I.ERG apple-PL take-FUT] may be interpreted as "I will buy apples" or "I (usually) buy apples" (Haspelmath 1993: 141-142).[5] Similarly, in Turkish the verb form called Aorist (*-Ar/-Ir*) may have both these meanings: The sentence *Ahmet üç ders okut-ur* [Ahmet three lesson teach-AOR] may mean "Ahmet will teach three lessons" or "Ahmet (usually) teaches three lessons" (Yavaş 982).

A related anomaly is the blatant non-compositionality of the Udmurt Past Habitual, which is formed by combining the Future tense (see (1a) above) with the auxiliary *val* "was". Thus, while *myn-o* means "I will go", *myn-o val* means "I used to go" (Perevoščikov et al. 1962:207). Thus, although the Future does not have a habitual reading by itself, it is used in a larger construction where it clearly seems to convey habitual meaning.

1.4 *Unexpected special uses*

In some languages, the future tense gram may have non-future meaning in certain special contexts. For instance, the Lezgian Future is also used in stage directions (e.g., *perde agal že-da* [curtain fall become-FUT] "the curtain falls"). In Tati, the Potential Future is also used in narrative folklore texts (Grjunberg 1966:293). In Udmurt, the Future also occurs in proverbs with a generic meaning (Perevoščikov et al. 1962:202). In Modern Hebrew, the future form also occurs when a verb is used performatively. Such uses of future tense forms are quite unusual cross-linguistically.

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[4] I adopt Comrie's (1976) and Bybee et al.'s (1994) convention of capitalizing language-specific categories, e.g., the Lezgian Future. Thus there is no contradiction in saying that the Lezgian Future may mean future or habitual.

[5] Abbreviations of category labels employed here:

AOR	aorist	HAB	habitual	MASC	masculine
CONV	converb	IMPF	imperfective	PERFV	perfective
ERG	ergative	IMPFT	imperfect	PL	plural
FEM	feminine	IMPV	imperative	PTCP	participle
FUT	future	ITER	iterative	SG	singular

My hypothesis is that the four synchronic anomalies described in §1.1-4 can be explained diachronically. In all these languages, the normal future or subjunctive forms come from an earlier present-tense form, and the synchronic anomalies can be understood as residual properties reflecting this earlier stage. The pattern of change from present indicative to future or subjunctive and its motivation is discussed in the next section (§2). In §3–4 I examine eleven cases of the change from present to future and from present indicative to subjunctive in greater detail. In many cases, I have no direct diachronic evidence for the change, but the technique of internal reconstruction allows us to see fairly clearly what kind of change a language has undergone here. In §5 I show how the anomalies just mentioned can be derived from the pattern of change. I argue that the change starts with telic verbs and spreads from there to other verbs. This hypothesis allows a unified account of futures and subjunctives (here my approach differs somewhat from that of Bybee et al. 1994). Finally, I briefly describe two languages where the same change has occurred twice in succession in §7, and §8 concludes the paper.

2. *From present tense to future or subjunctive*

Cross-linguistic research on tense-aspect systems (e.g., Bybee & Dahl 1989, Bybee et al. 1994) has established the grammaticalization perspective as a very fruitful approach to the meanings and forms of verbal grams. In the large majority of cases, tense-aspect grams arise from lexical items by a gradual process of phonological erosion and semantic generalization (i.e., grammaticalization), and their synchronic properties are often illuminated by a consideration of their diachronic sources. With this background, Bybee et al. (1994:157-158) suggest that the case of the Udmurt Past Habitual (mentioned in §1.3), which consists of a future tense plus a past marker, is "the result of divergent paths of development", analogous to the grammaticalization of English *would*. In English, too, the auxiliary *will* has both a future use and a habitual use (the latter being restricted to the past tense, e.g., *He would tell me the same jokes over and over again*). In this well-documented case, it is clear that both the future use and the habitual use were grammaticalized from the original lexical meaning of desire, by different paths of semantic development (see the discussion in Bybee & Pagliuca 1987 and Bybee et al. 1994:156-158).

However, this kind of 'multiple grammaticalization' is not the diachronic mechanism responsible for the cases in §1, although it would explain the anomaly in §1.3 (future/habitual polysemy). A direct grammaticalization origin of this polysemy would lead us to expect that the forms show an overt

marker reflecting the earlier lexical item, but as we saw in (1), they are often characterized by the absence of a marker (this is true, in particular, of the Udmurt form). Such an approach would also fail to account for the anomalies of irregular verbs (§1.2) and special meanings (§1.4).

The correct explanation, I maintain, is that all the anomalous forms of §1 go back to old presents and have acquired their special properties as an indirect result of a different grammaticalization process: the one by which a new present tense form arises from an earlier progressive aspect form.[6] When such a new present arises, the old present form may simply disappear from the language, or (more interestingly) it may become restricted in its usage. Futures and subjunctives may be understood as more restricted semantically than the present tense because in many languages the ordinary present tense comprises these meanings. So if the old present gets restricted in this way, we may get new futures or subjunctives showing some unusual properties. The development is somewhat analogous to the semantic developments in old inflectional forms such as the old plural *brethren* in English, or the old comparative *elder*: In these cases, too, the older forms have survived with only a portion of their original meaning. This semantic and functional change of the old present is clearly not a grammaticalization change: There is no lexical item that is turned into a grammatical item, but a present-tense form which already has a strongly grammaticalized status changes its meaning as a side effect of another grammaticalization process.[7]

The development of futures from old presents is best explained along the lines of the account offered by Bybee (1994) for habituals deriving from old presents. Bybee explains the semantic development of habituals from old presents by inference: When a new progressive construction increases in frequency to the point of becoming obligatory, i.e., when speakers use the form in virtually all cases of ongoing situations, then in a case where the form is not used the hearer is entitled to infer that its meaning is not intended and that instead some other meaning is intended — in this case, the remainder of the aspectual domain of present tense, habitual aspect. Bybee (1994) does not

[6] A referee asks: What evidence is there that the formation of a new present must be through grammaticalization? The evidence is mainly that the rise of new presents through grammaticalization from a progressive aspect is amply attested (cf. Bybee et al. 1994, chap. 5), whereas I know of no case of a new present from a different source. I cannot exclude the possibility that such new presents exist, but they are certainly sufficiently marginal to be neglected here.

[7] A referee suggests that this change be described as 'refunctionalization' and compared to Lass's (1990) cases of 'exaptation'. I am not sure if this comparison is helpful, because in Lass' examples the new function is quite unrelated to the old function, whereas here the new function is just a specialization of the old one.

mention futures, but Bybee et al. (1994) cite two languages, Tigre (Semitic) and Kui (Dravidian), whose future also has a habitual use (besides other uses, such as narrative time in Tigre and intention in Kui). They note that "in such cases it may be that a newly developed present has taken over the early core uses of the present and left the old present to serve a miscellaneous set of functions" (Bybee et al. 1994:277). The authors seem to be sure only in the case of Kui, but the cases examined in this paper all show essentially the same diachronic development, demonstrating that this type of change is not uncommon. The change presupposes a situation in which a present tense is also commonly used with future meaning, e.g., a language lacking a special future tense. Now when a new progressive becomes obligatory, the old present is restricted to habitual and future uses. This situation still obtains in those languages that show a future/habitual polysemy (the anomaly in §1.3). As a next step, the progressive may also be extended to the habitual use and become obligatory there.[8] If that happens, the old present will become restricted to future use (e.g., in Modern Hebrew and Udmurt). A change of this kind seems to be going on at present in Lezgian. While in written Lezgian the Future still has future and habitual uses, in the colloquial language the Present Imperfective seems to have become obligatory in habitual contexts also, restricting the Future to future uses (Haspelmath 1993:141).

Now what happens to the old present if a separate future exists (or is developing simultaneously with the new progressive/present), and the new present already covers the habitual meaning? In this case the only remainder of the old present domain may be the use in certain non-assertive or non-realized subordinate clauses, i.e., in the core domain of typical subjunctives?[9] This is what happened in languages such as Tsakonian, Cairene Arabic and Modern Eastern Armenian, where the subjunctive is unmarked relative to the indicative (see (2) above), as discussed for the latter two languages in Bybee et al. (1994:230-236). These authors note that newly grammaticalized verbal

[8] It is also conceivable that a newly grammaticalized present starts out with the habitual use and from there generalizes to other present uses. This possibility is not considered by Bybee et al. (1994), but there are some arguments speaking in favor of such a possible pathway. In particular, some new presents clearly arise from a combination of a present participle plus copula (e.g., Modern Hebrew, Tsakonian, Hindi/Urdu). Such a source construction would seem to be more likely to yield habitual meaning than progressive meaning. However, this question is not directly relevant to the issues discussed here, so I will not pursue it further.

[9] I assume that non-assertive/non-realized subordinate clauses are the core domain of typical subjunctives. Of course, in many languages subjunctives can be used in main clauses, too, but these uses can probably be regarded as secondary (as is shown, for instance, by the use of the conjunction *que* in French main-clause subjunctives, e.g., *qu'il vienne* "let him come, may he come").

grams tend to be restricted to main asserted clauses at first, so that the old present may continue to be used in non-assertive subordinate clauses even as a new progressive has become obligatory in main clauses. Thus, in Tsakonian the participial construction *éñi éx-u* "has" (corresponding literally to Classical Greek *estì ékh-ōn* "is hav-ing") has taken over all main clause uses of the present. The old synthetic present has survived only in subordinate clauses, especially those introduced by the subjunctive complementizer *na* (e.g., *na éx-u* "that I have", *na éx-ere* "that you have", *na éx-i* "that he have", corresponding to Classical Greek *ékhō, ékheis, ékhei*). The old synthetic present is not used in the future, because Tsakonian also has a newly grammaticalized future formed by the particle *tha* (from *thélō* "want") plus the synthetic present/subjunctive. To the extent that the subjunctive form has its own meaning ("non-realized" or similar), it must have acquired it from the context, i.e., from the main-clause predicates with which it usually co-occurred (Bybee et al. 1994:231).

Let us now examine the individual cases (§3–4) in some detail before we come back to the general issues (§5–8).

3. *Futures from old presents: Case studies*

In this section, I will present diachronic data from six languages which exemplify the change from present to future as a side effect of the rise of a new present. For ease of reference, the descriptions will follow a common format, consisting of sections on (A) the forms of the new present, (B) the forms of the old present and its meaning, (C) lexical irregularities, and (D) special uses (the latter two sections may be lacking).

In some of the languages discussed in this and the next section, I have no direct diachronic evidence, and we must rely on internal reconstruction (e.g., Lezgian, Udmurt, Kannada). However, since the parallels with the other cases are so striking, I do not regard these cases as doubtful.

3.1 *Modern Welsh*

In Welsh the change can be observed in the contrast between the situation attested in Middle Welsh texts and in Modern Welsh, as described in Poppe (1996; see also Williams 1980, for literary Welsh, and King 1993, for colloquial Welsh).[10]

(A) The new present tense is a locative periphrasis of the standard type "be + in + verbal noun", e.g., *mae e'n prynu* [is he in buying] "he is buying,

[10] A very similar change has taken place in Scottish Gaelic, another Celtic language (cf. Gleasure 1990).

he buys". The preposition *yn* is synchronically different from locative *yn*, but it must have been originally identical with it. The periphrasis was originally progressive but has come to be used also in the habitual sense, and also with stative verbs (e.g., *mae hi'n hoffi coffi* "she likes coffee"; cf. Comrie 1976: 100).

(B) The old present tense goes back to the Proto-Indo-European present tense and shows inflections that can be traced back several millennia, e.g., *can-a (i)* "(I) will sing", *can-i (di)* "(you) will sing", *canith (o/hi)* "(he/she) will sing", etc. In Middle Welsh this form was used in all present senses (ongoing and habitual) as well as for future time reference. In the modern language, the main meaning is future tense.

(C) With a few stative verbs, the old present tense still has present meaning. This is the case with the copula *bod* "be", the verb *gwybod* "know (a fact)", and the modal verbs *gallu* "can" and *medru* "can", and with *gweld* "see" (King 1993: 146, 192, 196, 199). But even these latter verbs alternatively allow the new present (*mae hi'n gallu* "she can", etc.).

(D) The present sense of the Future tense survives in a fair number of fixed proverbial expressions with generic meaning, e.g *Dyval donc a dyrr y garreg* "Persistent hammering breaks the stone" (King 1993:140-141). In the literary language, the Future is also used as a historical present.

3.2 *Modern Hebrew*

In Hebrew, the change can be observed between the oldest attested form of the language, Biblical Hebrew, and later Mishnaic Hebrew, on which contemporary Hebrew is based. The main peculiarity of the Hebrew case is that the "old present" is in fact an imperfective form, which was not restricted to the present tense. See Rosén (1977:193ff.) for discussion of this development.

(A) The new present tense is a participial periphrasis of the type "(zero) copula + present participle", e.g., *ani kotev* [I write.PTCP] "I am writing, I write". This form is used both for ongoing and habitual situations.

(B) The old present is often called the Imperfect in Semitic linguistics. It is formed by person prefixes (*ʔe-xtov* "I'll write", *ti-xtov* "you'll write", *yi-xtov* "he'll write") and is the oldest tense form that can be reconstructed for Proto-Semitic (Brockelmann 1913; cf. its Arabic cognate in §4.4). In Biblical Hebrew, it is used for ongoing present, for habitual situations, and also for future situations (as well as to denote a general imperfective when occurring in a past context). In Modern Hebrew, the meaning of the Imperfect is restricted to that of future time reference.

(D) According to Rosén (1977:195), the Imperfect may be used with a present-tense value in certain performative verbs such as *ʔavaqeš* "I request", *ʔagid lxa* "I tell you".

3.3 *Lezgian*

The change from old present to future in Lezgian is not directly attested (Lezgian was first recorded in the second half of the 19th century), but all the available evidence strongly suggests that such a change has indeed taken place (see Haspelmath [1994:276] for an earlier discussion of this case).

(A) The new present is a converbal periphrasis of the type "be + simultaneous converb", e.g., *ʃi-z awa* [go-CONV be] "is, going", i.e., "is going" (see Haspelmath 1995, for Lezgian converbs and their use in periphrastic constructions, and Haspelmath & König 1995, for a general account of converbs). In Petr K. Uslar's 19th-century description of Lezgian, this form is still treated as periphrastic, but in the modern language it has undergone fusion and is clearly a synthetic verb form (*ʃi-zwa* "is going, goes"). The new present tense is used for ongoing situations (both dynamic and static), and increasingly (especially in colloquial Lezgian) for habitual situations.

(B) The old present, called Future in Haspelmath (1993), is formed by the suffix *-da*, whose etymology is uncertain[11] (e.g., *ʃi-da* "will go, goes"). It is used both for habitual and for future situations. However, since habitual is increasingly being expressed by the new present, *-da* tends to become restricted to the future use.

(C) With a few stative verbs, the Future still has present meaning. This is the case with *či-da* "know", *k'an-da* "want", *kič'e-da* "be afraid", *t'a-da* "hurt" (Haspelmath 1993:137-139). However, even these verbs can alternatively employ the new present (*či-zwa*, *k'an-zawa*, etc.), with no difference in meaning.

(D) In addition to the future and habitual senses, the Future is also used in stage directions (see §1.4 for an example).

Since Lezgian shows clear signs of influence from Turkic languages in various parts of its lexicon and grammar, it is possible that Turkic influence

[11] The suffix *-da* is similar to the copula *da* mentioned in Uslar's work (modern Lezgian only has a copula *ja*). However, Alekseev (1985:98) proposes a derivation of *-da* from an earlier participial suffix *-d* plus an earlier copula *-a*. Whatever the correct etymology, the form certainly looks more like an old present than an old future.

Still, without reliable diachronic evidence it cannot be excluded that the Future was originally grammaticalized as a future. But then the facts in (C) and (D) would be puzzling. Thus, Lezgian only indirectly supports the general argument of this paper, but it seems to me that this example is no less convincing.

(from Azerbaijani or Kumyk, two languages closely related to Turkish) also played a role here. Thus, the Lezgian and Turkish cases are the only ones among those examined here that are perhaps not only typologically, but also historically, related. We now turn to the discussion of Turkish.

3.4 *Turkish*

Turkish is here taken as representative of the majority of modern Turkic languages, which have undergone a change from present to future or future/habitual (cf. Tenišev 1988:404).

(A) The new present tense in Turkish is structured like the new present in Lezgian, i.e., "auxiliary + simultaneous converb". It is not quite clear which particular lexical root the auxiliary in the original construction was, *yor-* "run" or *dur-* "stand" (Johanson 1971:133), but comparative considerations leave little room for doubt concerning the general structure of the source construction. Thus, *geli-yor-um* [come-IMPF-1SG] "I am coming, I come" is from **gel-e yor-ur-um* [come-CONV run-AOR-1SG] or from **gel-e dur-ur-um* [come-CONV stand-AOR-1SG]. Most modern Turkic languages exhibit renewed presents of this type, though they differ markedly in the choice of auxiliary and in phonological developments. In Turkish, the *-yor* form is used for ongoing situations, and it has also extended to habitual and generic contexts (Johanson 1971:120).

(B) The old present tense, called Aorist by Turcologists, is formed by a suffix *-Vr* and can be securely reconstructed for Proto-Turkic. Its meaning was that of a present tense (or more generally an imperfective, as it can be combined with the past tense suffix *-dI*). It could fulfill the function of ongoing present in older Ottoman Turkish, as in (6) from Johanson (1971:132-133).

(6) a. *niyä ayla-r-sïn?*
why cry-AOR-2SG
"Why are you crying?"

b. *ištä gäl-ür, baq-ïnïz* (18th century)
there come-AOR(3SG) look-2PL(IMPV)
"Look, there he's coming!"

In modern Turkish, the Aorist has the meaning of disposition, habituality and probable future (cf. Yavaş 1982). In other modern Turkic languages, it seems to be restricted to the expression of future tense (e.g., in Chuvash, according to Johanson 1974/75).

(D) The Aorist is also used as a historical present in certain kinds of vivid narrative texts (especially in traditional styles) as well as in stage directions (Johanson 1971:81).

3.5 *Udmurt*

Udmurt lacks a written tradition, like Lezgian, so we must rely on internal and comparative reconstruction. The general picture is quite clear, though the precise origin of the new present is somewhat unclear.

(A) The new present tense in Udmurt is characterized by a suffix *-iśk*, which distinguishes it from the future, i.e., the old present. In (7), the inflection of both tenses is shown for *myn-yny* "go" (cf. Perevoščikov et al. 1962).

(7)		Present tense	Future tense
Sg	1	*myn-iśk-o*	*myn-o*
	2	*myn-iśk-o-d*	*myn-o-d*
	3	*myn-e*	*myn-o-z*
Pl	1	*myn-iśk-o-m(y)*	*myn-o-m(y)*
	2	*myn-iśk-o-dy*	*myn-o-dy*
	3	*myn-o*	*myn-o-zy*

As these paradigms show, the first and second person forms are quite transparent, but the relation between the third person forms of the two tenses is quite obscure. Whatever the origin of the new present third person suffixes *-e/-o*, it seems clear that the suffix *-iśk* is originally an iterative or general imperfective suffix related to the reflexive suffix *-śk*, which has imperfectivizing antipassive uses, e.g., *vur-yny* "to sew", *vur-śk-yny* "to be occupied with sewing" (Serebrennikov 1963:238-239).

(B) The old present tense, characterized by *-o*, is now the future tense. According to Serebrennikov (1963:274), Proto-Permian had no distinct future, and the form in *-o* did double duty for present and future.

(D) The isolated past-tense copula *val* may be combined with the new present, yielding a past imperfective (e.g., *myn-iśk-o val* "I was going"), but also with the future, yielding a past habitual (e.g., *myn-o-z val* "s/he used to go"). The only conceivable explanation of this situation, which is consistent with the other facts, is that the old present not too long ago was also used as a present habitual. In contemporary Udmurt it may have generic meaning in proverbs (Perevoščikov et al. 1962:202), but normal habitual situations are expressed by the new present. In the closely related Komi language, which presents an analogous situation, the old present is also used in narratives as a historical present ("futurum historicum", Serebrennikov 1963:273).

3.6 *Kannada*

Kannada has a fairly long literary tradition. The contemporary written language shows conservative traits and diverges in important respects from the colloquial language. In principle, plenty of information is available, but it is not sufficiently accessible to the non-specialist. My data are based on the somewhat sketchy treatments of Schiffman (1983) and Sridhar (1990), which do not explicitly discuss diachrony.

(A) Like Lezgian and Turkish, Kannada has a new present formed from the simultaneous converb (*-uttaa*) plus the present tense form of "be" (e.g., *idd-aane* "he is" — see Schiffman 1983:88-89), e.g., *huṭṭ-uttaa idd-aane*, reduced to *huṭṭ-utta-idd-aane* [rise-CONV-BE-3SG.M] "he is rising" (Sridhar 1990:236). It is used for progressive situations.

(B) The old present, called Nonpast in Sridhar (p.223), is marked by the suffix *-utt* (e.g., *huṭṭ-utta-aane* "he rises, he will rise"). It seems to be restricted to future and habitual uses.

(C) The old present still expresses ongoing present meaning with certain verbs of sensation, thought, or emotion (Sridhar, p.224), e.g., *nooyatte* "it hurts", *priitistaane* "he loves".

Interestingly, there is evidence that the old present is itself fairly young, and that it represents the new present of an earlier state of the language. First, it is not zero-marked like the most typical old presents. Second, the future (marked by a suffix *-uv*), which is restricted to the literary language, also has habitual meaning, and, most tellingly, it is used in stage directions (Sridhar, p.222). Thus, one gets the impression that the *-uv*-Future of literary Kannada is the original present tense, which was later ousted by *-utt*, which again is being replaced by *-utt-idd-*.[12] (See §7 for further evidence of repetition of one and the same change within the same language.)

4. *Subjunctives from old presents: Case studies*

Having seen six examples of the change from old presents to futures in unrelated language families, let us now examine five cases of changes from an old present indicative to a subjunctive. Four of my five cases here are from Indo-European languages, and in the case of Armenian/Persian and Persian/Hindi, it is not inconceivable that language contact played a role in creating the similarities. However, we will see presently that the three languages show very different present tense renewals, so a historical connection seems unlikely. More probable is a typological explanation of the parallels between these languages: Indo-European languages are particularly prone to develop subjunctives because they tend to make extensive use of finite subordination where languages such as Turkic, Uralic and Dravidian would use non-finite infinitives or converbs. Thus, the fact that Turkish, Udmurt and Kannada de-

[12] Note also that the verb *iru* "be" is the only verb of the colloquial language that has a simple ongoing present (*iddaane* "he is"), which occurs side by side with the future/habitual form *iruttaane*. Again, this suggests that the *-utt*-forms were new presents at some time.

veloped futures rather than subjunctives may be due to their subordination type.

4.1 *Tsakonian (Greek)*

Tsakonian is a divergent dialect of Modern Greek (a daughter language of a non-koiné dialect of Classical Greek, which can now be regarded as a separate language). In this language, the old present tense of Classical Greek survives only in subjunctive contexts (Pernot 1934, Mirambel 1954).

(A) The new present tense is a participial periphrasis of the type "be + present participle", e.g., *émi ftén-u* (I.am arriv-ing.M), *émi ftén-a* (I.am arriving.F) "I arrive". This form is quite unique to Tsakonian — it is entirely absent from (koiné-based) Modern Greek, where even the present participle has disappeared.

(B) The old present (= modern subjunctive) goes back to the present of late-antiquity Greek, where the Classical indicative and subjunctive forms had merged into a single form.[13] The modern Tsakonian subjunctive in (8a) thus goes back to forms like those in (8b) from Classical Greek (the particular forms of (8b) are from the koiné dialect, but the dialect that underlies Tsakonian must have been very similar).

(8) a. Tsakonian	b. Classical Greek
na ftén-u	*(hína) phthaín-ō*
na ftén-ere	*(hína) phthaín-īs*
na ftén-i	*(hína) phthaín-ī*

In the modern language, there do not appear to be any traces of the old indicative use, to judge by Pernot's (1934) description.

(C) The only verb that preserved its present tense is "be" (*émi* "I am", *ési* "you are", *éñi* "s/he is", etc.).

4.2 *Modern Indic (Hindi/Urdu)*

The Old Indic present indicative does not continue in this sense into modern Indic and is replaced by various periphrastic constructions. However, it survives in most modern languages with a different meaning (cf. Beames 1879:101-107). Here I will focus on Hindi/Urdu, the best-known modern Indic language.

[13] Older forms of Tsakonian are not attested in late antiquity – all our texts from that time are from the koiné dialect. Theoretically, it could be that the indicative and the subjunctive never merged in Tsakonian, so that the indicative disappeared entirely, and only the subjunctive was preserved. The change would then have been somewhat different from the way it is described here, but the underlying motivation would be the same.

(A) The new present tense is a participial periphrasis of the type "be + present participle", e.g., *māi bac-taa hū̃* (I escape-PTCP be.1SG) "I am escaping, I escape". It has both ongoing and habitual present meaning, although the progressive meaning is also often expressed by yet another, newer periphrasis, based on *rahnaa* "to remain" (e.g., *māi bac rah-aa hū̃* [I escape remained be.1SG] "I am escaping").

(B) The old present tense, called Subjunctive or Conditional in Hindi/Urdu grammar, goes back to the Old Indic (Sanskrit) present tense (Beames 1879:101ff., Bloch 1970[1914]:247). It has the suffixes Sg 1 *hū̃*, 2 *-e*, 3 *-e*, Pl 1 *-ẽ*, 2 *-o*, 3 *-ẽ*, from Sanskrit *-āmi/-asi/-ati*, *-āmaḥ/-atta/-anti*. In Old Indic this was used in all present tenses, but in Hindi/Urdu it became restricted to various subordinate-clause uses (i.e., subjunctive).

(C) There are just two verbs whose old present tense has preserved this meaning. The first is, again, the copula *ho-naa* "be" (Sg 1 *hū̃*, 2 *hai*, 3 *hai*, Pl 1 *hãi*, 2 *ho*, 3 *hãi*). The second is *caahiye* "want, need". This verb is only used impersonally now, so *caahiye* (originally the 3rd person singular form) is its only form.

(D) While in modern Hindi/Urdu the old present has subjunctive uses, other modern Indic languages show other functions that are interesting in this context. Thus, in Bengali it is used as a historical present (Beames 1879:107), and in Marathi as a past habitual (as well as a present habitual in proverbs, Bloch 1970[1914]:245).

4.3 *Persian*

In Persian, the renewal of the present tense was achieved by very different means: not an auxiliary verb, but an aspectual adverb. This change was described from a theoretical perspective in Kuryłowicz (1953).

(A) The new present tense consists of the old present tense combined with the imperfectivizing prefix *mi-*, e.g., *mi-rav-am* [IMPF-go-1SG] "I am going, I go", *mi-rav-ad* [IMPF-go-3SG] "s/he is going, s/he goes". The prefix *mi-* goes back to the adverb *hamē* "always, continually" (Lazard 1963).

(B) The old present tense (*rav-am* [go-1SG], *rav-i* [go-2SG], *rav-ad* [go-3SG], etc.) continues the Old Iranian present tense, which itself is a continuation of the Proto-Indo-European present tense. This form was used in subordinate-clause contexts and in a habitual sense in older Persian (Lazard 1963). In modern Persian, the old present tense no longer exists as such. Habitual senses have been taken over by the new present, and in subjunctive uses the prefix *be-* added to the old present has become obligatory (*be-rav-am* "[that] I go", *be-rav-ad* "[that] s/he go", etc.). However, *be-* is not used in negative forms and when there is a preverb or a function verb. In these cases, the older

situation is preserved, i.e., the subjunctive is identical to the old present (indicative *na-mi-rav-am* "I am not going", subjunctive *na-rav-am* "[that] I not go"; indicative *kâr mi-kon-am* "I am working", subjunctive *kâr kon-am* "[that] I work")

(C) The verb *budan* "be" has a zero present tense, so unlike Tsakonian and Hindi/Urdu, it does not preserve the original meaning of the old present. However, the verb *dāštan* "have" still has a present indicative without *mi-* (*dār-am* "I have", *dār-i* "you have", etc.); cf. Comrie (1976:121).

4.4 *Cairene Arabic*

The situation in Classical Arabic, which may be taken as the ancestor of modern spoken Arabic, is much like that of Biblical Hebrew (cf. §3.2). The Imperfect covers both present and future and is also used in subordinate clauses. However, in Cairene Arabic (on which I will focus here), there is a newly grammaticalized future, so that the old present becomes restricted to the subjunctive.

(A) The new present is formed by adding the prefix *bi-* to the old present,[14] e.g., *bi-yi-ktib* [IMPF-3SG-write.IMPFT] "he is writing, he writes", *bi-ti-ktib* [IMPF-2SG-write.IMPFT] "you are writing, you write", etc. This form has both ongoing and habitual present meaning.

(B) The old present, the Semitic Imperfect, is now restricted to the typical subjunctive uses (in complement clauses to verbs like "want", "intend", "must", "be possible", "be able", "try", "prefer", "begin", in adverbial clauses with conjunctions like "before", "when", "in order to", and in main clauses with a hortative or jussive sense; Mitchell 1962:82-86).

(C) In a few verbs, the Imperfect retains its present indicative sense, especially modal verbs like *yilzam* "it is needed", *yimkin* "it is possible", *yiguuz* "it is allowed", *yiʔdâr* "he is able", *yiʕrâf* "he knows how to", but also *yiftikir* "he thinks" (Mitchell, 83-85). The prefix *bi-* is not impossible on these forms, however. The verb *yikuun* "be" seems to use its Imperfect in a future indicative sense when used as an auxiliary (e.g., *yi-kuun bi-yi-ʕmil* [3SG-be.IMPFT IMPF-3SG-do.IMPFT] "he will be doing", Mitchell, p.87).

[14] The prefix *bi-* is similar to Persian *mi-* of §4.3 in that it combines with a finite form, and one might again suspect an adverbial origin. However, Nöldeke (1904) argues that it goes back to the locative preposition *bi-*, which could be used as a subordinating conjunction ("while"), e.g., *kaan bi-yi-ktib* lit. "he was while he writes" > "he was writing". If Nöldeke is right, this new imperfective has arisen in past contexts, and it must have been transferred to non-past contexts by a kind of back-formation.

4.5 *Modern Eastern Armenian*

Although Armenian is geographically close to Persian, it is typologically closer to modern Indic in those respects that interest us here. The Armenian case (as well as the Cairene Arabic one) is also discussed in some detail in Bybee et al. (1994:230-234). For discussion of the change from Old Armenian to Modern Armenian, see Karst (1901:299-312).

(A) The new present tense is a converbal periphrasis of the type "imperfective converb + be", e.g., *gr-um em* [write-CONV be.1SG] "I am writing, I write", *gr-um es* [write-CONV be.2SG] "you are writing, you write", etc. It has both ongoing and habitual meaning.

(B) The old present tense of Old Armenian (person/number suffixes Sg *-em/-es/-i*, Pl *-enk'/-ek'/-en*) survives as a subjunctive in Modern East Armenian (Minassian 1980:190-191). It is used in complements to verbs like "want", "wish", in adverbial clauses with conjunctions like "if", "whether ... or", "when", and in main clauses in a hortative, optative or jussive sense (Minassian, 278-280).

(C) With a number of verbs, the old present is still used in the indicative sense, in particular the copula "be", as well as other stative verbs such as *arži* "is worth, costs", *gitem* "I know", *kam* "I exist", *unem* "I have", *husam* "I hope" (Minassian, 210-217).

The cases of old presents that I have discussed in this and the previous section are summarized in Table 1 (overleaf).

5. *Explaining the anomalies*

Now it is time to go back to the synchronic anomalies observed at the outset (§1) and to provide diachronic explanations for them. After the discussion of §2, the explanations are mostly quite straightforward (except for the explanation of the anomaly in §1.2, which will be deferred until the next section). In general, the synchronically unexpected structures are remnants of the earlier situation in which the old present was still a real present.

5.1 *Markedness violations*

The reversal of the usual markedness pattern is evidently due to the fact that the new future/subjunctive is materially older than the new present, which still shows clear signs of deriving from a young periphrasis. It is apparently much more common for futures and subjunctives to arise from specialized periphrases, so that in the majority of cases the present indicative is the older form and is therefore formally simpler. However, when the present is based on a fairly young periphrasis itself, a markedness violation may result. Already Comrie (1976:111) noted that "in general, the morphological

language	new present construction	old present	irregular verbs with old meaning	meanings of old present
Welsh	"be" + "in" + verbal noun *mae e'n prynu* "he is in buying"	"Future" *pryna (i)* "I'll buy"	*bod* "be", *gallu, medru* "can" *gwybod* "know", etc.	future + proverbs, narrative tense
Modern Hebrew	copula + pres. part. *ani kotev* "I writing"	"Imperfect" *yi-xtov* "he'll write"		future + imp., hortative, performative
Lezgian	converb + "be" *qačuz awa* "is taking"	"Future" *qaču-da* "will take"	*či-da* "know" *k'an-da* "want" *kič'e-da* "fear", etc.	future + habitual, stage directions
Turkish	converb + "go" **gel-e yor-ur-um* "I go coming"	"Aorist" *gel-ir-im* "I('ll) come"		future + habit., narrative stage directions
Udmurt	stem + iterative suffix *myn-iśk-o* go-ITER-1SG	"Future" *myn-o* go-1SG "I'll go"		future + habitual (in past proverbs
Kannada	nonpast + "be" *maaḍ-utt-idd-aane* "he is doing"	"Nonpast" *maaḍ-utt-aane* "he will do/does"	*priitistaane* "loves" *noyatte* "hurts", etc.	future + habitual
Tsakonian	"be" + present participle *éñi éx-u* "he is hav-ing"	"Subjunctive" *(na) éx-i* "(that) he have"	*émi* "I am"	subjunctive
Hindi/U.	pres. participle + "be" *bac-taa hū* "(I) am com-ing"	"Subjunctive" *bac-ū* "(that) I come"	*hū* "I am" *caahiye* "one wants"	subjunctive Bengali: narrat. Marathi: habit.
Persian	*mi* + old present *mi-rav-am* "I am going, I go"	"Aorist" (=Subj.) *(be-)rav-am* "(that) I go"	*dâram* "I have"	subjunctive (+ older Pers.: habitual)
Cairene Arabic	*bi* + old present *bi-yi-ktib* "he is writing"	"Imperfect" *yi-ktib* "(that) he write"	*yi-ʔdar* "can" *yi-ʕrᾱf* "knows" *yiftikir* "believes", etc.	subjunctive
Eastern Armenian	converb + "be" *gr-um em* "(I) am writ-ing"	"Subjunctive" *gr-em* "(that) I write"	*em* "be", *kam* "exist", *gitem* "know", *unem* "have", etc.	subjunctive

Table 1: *Summary of old and new presents discussed in §§3–4*

criteria [of markedness] are the least telling, since the morphology often reflects systematic correspondences of an earlier period in the history of the language".

From the point of view of Natural Morphology (Mayerthaler 1981, Dressler et al. 1987), these patterns are fairly unnatural because they violate the naturalness parameter of constructional iconicity. The theory predicts that morphological change should soon set in and restore naturalness. However, there is very little evidence for such a tendency, a fact which suggests that speakers' desire to redress this kind of unnaturalness is less strong than assumed in Natural Morphology.[15]

A related supposed universal of future marking is formulated by Ultan (1978:31): "Future tense markers may be less bound than present or past but never more so". Again, the futures of §3 consistently violate this generalization, which is evidently based solely on newly grammaticalized futures. These appear to be much more common than futures deriving from an old present,[16] so Ultan's generalization is certainly correct as a tendency – but it is not more than that.

Finally, the lack of person/number marking in Modern Hebrew (cf. (3) in §1.1) is also explained by the diachronic scenario: The new present of Hebrew is based on a copulaless participial periphrasis, where person/number marking had no place originally.

5.2 *Irregular verbs*

The exceptional verbs whose future and subjunctive forms have present indicative meaning are of course explained as residual cases which have preserved the earlier situation. Given that frequent items often resist change, we expect that particularly high-frequency verbs will be the ones to fail to undergo the change if any do, and this is largely borne out. However, not all kinds of high-frequency verbs are represented among those retaining the old present meaning. For instance, no language has "go" or "eat" among these conservative irregulars, although verbs with these meanings often show inflectional idiosyncrasies. Another crucial property that all the irregular verbs share is that they are stative (e.g., "have", "know", "be able", and other modals). The explanation of this actional restriction is given in §6 below.

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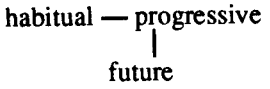
15 It is possible that the use of the prefix *be-* in Persian subjunctives (cf. §4.2) is due to the tendency for unnatural structures to be replaced, because it turns an anti-iconic relationship into a non-iconic one. I know too little about the distribution of this prefix in the history of Persian to be able to judge whether this is plausible.

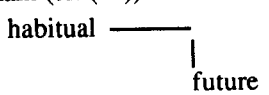
16 Bybee et al. (1994) cite 46 future grams (from their sample of 76 languages) whose sources are more or less transparent synchronically. In contrast, they mention only two languages which seem to have undergone the present > future shift. (But of course, there are many futures whose sources are not transparent synchronically, and about whose origin we know nothing.)

5.3 *Unexpected polysemy*

The future/habitual polysemy is easily explained diachronically if the gram used to be a present tense: A typical present has both progressive and habitual uses, and very often it can also be used for future time reference. If there is no separate future in the language, then this extension seems to be universal. These three uses are linked in a chain of family resemblances, as shown in (9). The structure in (9) is justified by the fact that we find diachronic changes along the paths indicated, i.e., progressive constructions may be extended to future meaning or to habitual meaning, whereas we do not find habituals extending to future meaning or vice versa (cf. Bybee et al. 1994, chap.5).

(9)


When the progressive use disappears from the language as a result of the rise of the new progressive construction, only the two peripheral uses habitual and future remain (cf. (10)).[17]

(10)


My explanation contrasts with an alternative according to which future and habitual are not as different semantically as it appears, and that habitual meaning may give rise to future meaning somehow. Thus, Fife (1990:178), in his discussion of Welsh verbal grams, suggests that a habitual may develop into a more general irrealis category, which includes future time reference (see also Poppe 1996:153). And Dahl (1985:111) believes that in Azerbaijani and Turkish "habitual categories [i.e., the Aorist: MH] may be used secondarily in predictive contexts". However, Bybee et al. (1994) argue that such an all-inclusive irrealis category is neither semantically coherent nor cross-linguistically consistent. The scenario proposed here does not require the dubious assumption of a change from future to habitual (or vice versa).

5.4 *Special contextual meanings*

The special meanings found in old presents can all be explained as archaisms that have been preserved in special contexts. The historical present is often used conventionally in certain narrative genres, and this convention

[17] In the Udmurt past habitual mentioned in §1.3, the habitual meaning is only preserved in past contexts. This development is not at all unexpected given the general preference for marking habituals in the past tense but not elsewhere, cf. Bybee et al. (1994:151).

may remain in place even after a new construction has ousted the old present tense from its central functions. Particularly folklore genres appear to be generally conservative, so it is here that we tend to find old presents as narrative tenses. Similarly, proverbs show a strong tendency to be conservative in various ways, so it is not surprising to see them retain the old present tense even in languages where it no longer has habitual meaning.

The exceptional character of stage directions appears somewhat mysterious initially, but we have to recall that there are two special contexts in which the ongoing present tense can have perfective meaning and is thus not likely to be replaced by a progressive periphrasis: One of them is the narration of successive ongoing events, such as in sports commentary (cf. Bybee 1994: 236): "Baggio kicks the ball, it misses the goal". Stage directions too can be thought of as a kind of report of ongoing successive events and are treated like sports commentary in some languages.

The other context in which a present perfective is possible is the present-tense performative use of performative verbs (cf. Dahl 1985:81). This explains the retention of present meaning of performative verbs in Modern Hebrew (§3.2, (D)). Note that English, too, requires the simple present for stage directions and performatives.

These last two cases already showed the importance of aspect for understanding the change under discussion. In the next section I will discuss the role of actionality and aspect more fully.

6. *The role of actional and aspectual distinctions*

6.1 *Telic/perfective futures*

It is well-known that actionality and aspect interact to a considerable extent with tense, and in order to understand the change from old presents to futures and subjunctives we also have to take into account actional and aspectual distinctions, in particular lexical/syntactic differences in actionality (or 'inherent aspect'/'aktionsart'). We need to distinguish at least stative and dynamic situations, and among the latter, atelic (non-bounded) and telic (bounded) situations. Presents of different actional classes show different propensities to be used for future time reference.

This can be illustrated by German, a language whose old present still has all typical present senses, and whose future tense is not obligatory (in fact, it mostly occurs in formal styles). Thus, the present tense is often used with future time reference, especially in the colloquial language. But different verbs show different tendencies to be interpreted as future, as discussed in detail in Leiss (1992:191ff.). It is primarily telic verbs, especially punctual telic verbs (i.e., achievement verbs), whose present tense will strongly prefer

a future interpretation. The examples in (11) thus show a perfective use of the present tense.

(11) a. *In wenigen Minuten erreichen wir Hildesheim.*
"In a few minutes we will arrive at Hildesheim."
b. *Sie finden die Lösung bestimmt.*
"They will definitely find the solution."

In these cases, an ongoing present interpretation would be as unusual as a progressive construction in English ("we are arriving", "they are finding"). But a more important class of verbs are non-punctual telic verbs (shown in (12)), which can easily be given an ongoing present reading, i.e., they can be either imperfective or perfective.

(12) a. *Ich koche uns eine leckere Suppe.*
"I'll cook a nice soup for us."
Or: "I am cooking a nice soup for us."
b. *Sie schreibt sich deine Telefonnummer auf.*
"She'll take down your phone number."
Or: "She is taking down your phone number."

It seems that in general the shift from present to future starts with telic verbs and only later spreads to atelic verbs. The extension of the future tense to stative verbs is the last stage of the change. I have no direct evidence for this sequence from attested changes, but indirect evidence strongly suggests that this is the correct sequence. That high-frequency stative verbs still resist the change in quite a few of the languages discussed above has already been observed in §5.2.

The reason why telic verbs are the first to undergo the change is that they are often perfective, and a perfective interpretation is generally incompatible with an ongoing present interpretation (but see §5.4 for two exceptions).[18] By contrast, future time reference is not only compatible with a perfective interpretation, it even seems to favor perfective aspect.

The development from present to future seems to begin with non-punctual telic verbs as in (12), because it is here that progressive periphrases are the most common when an ongoing present is intended. Progressives are not likely to be used with punctual verbs as in (11), nor can they be used with stative verbs. And atelic presents are not very likely to be interpreted as future (German *Sie spielt Tennis* "She is playing tennis"; less likely: "She will play tennis"), because they cannot easily be construed as perfective, and future time reference prefers perfectivity.

[18] A referee asks: If a perfective interpretation is generally incompatible with an ongoing present interpretation, why would perfective (forms of) verbs ever be in the present? The answer is that they may be in the present if the present-tense form of a language is so strongly grammaticalized and generalized that it is no longer restricted to ongoing uses of the present. I must admit that the details of how this happens are not yet clear to me.

A scenario of this type for the development from old presents to futures is proposed by Poppe (1996:141-142) for Welsh. Poppe claims that Middle Welsh had basically the same system as modern German. For languages like Turkish and Udmurt, where virtually all verbs have future meaning when used in the old present tense, we must assume that the atelic and stative verbs followed the pattern of the telic verbs when the new present became predominant in these verb classes, too.

6.2 *Telic/perfective subjunctives*

Aspectual/actional differences are likewise relevant for the change from an old present to a subjunctive. We saw above that an established present tense form may have a perfective sense when it is used for future time reference. The same is true of certain subordinate clauses, especially ones with non-realized meaning. This time we can illustrate the general point by examples from English, where the present tense usually denotes a state or habitual event, but may denote an event viewed in its totality (i.e., a perfective event) in certain subordinate clauses, e.g., conditionals (cf. 13a) and non-realized complements (cf. 13b).

(13) a. *If we reach Hildesheim on time, we can attend the first paper.*
b. *Our regulations require that we take down your phone number.*

If the English progressive came to be used regularly for habitual situations ("Jan is visiting his grandmother every week") and with ongoing states ("You are knowing the answer"), the simple present tense would be restricted to these subordinate clause uses and would probably be described as a subjunctive.

Bybee et al. (1994), discussing subjunctives that come from old present indicatives, emphasize the fact that non-assertive subordinate clauses are affected later by grammaticalization because they do not allow focusing and topicalization and thus tend to be conservative grammatically. Their explanation thus differs somewhat from mine. Both explanations seem to make more or less the same predictions for the core cases of subjunctives. Only detailed further study can tell us whether my aspectual hypothesis or the non-assertive hypothesis is to be preferred, or whether perhaps both play a role in the change in question. I refrain from presenting a definite conclusion here, but I would like to bring up some new evidence that may prove helpful in resolving the issue: the case of the Imperfect in Amharic, a Semitic language of Ethiopia.

Amharic has an Imperfect tense which originally expressed present and future tense, much as in its Semitic relatives Hebrew and Arabic (see Leslau 1995:301ff., Rundgren 1963:69).[19] The new present (called Compound Imperfect) is a periphrasis of the serial-verb type "finite old present + be", e.g., Imperfect (= old present) *yə-säbr* [3sg-break], Compound Imperfect (= new present) *yə-säbr-all* [3sg-break-be.3sg]; old present *tə-säbr* [2sg-break], new present *tə-säbr-all-äh* [2sg-break-be-2sg]. Now the distribution of these two forms is somewhat unusual: The new present (Compound Imperfect) expresses present (and future) meaning in main affirmative clauses, whereas the old present (the Simple Imperfect) expresses present (and future) meaning in main negative clauses as well as in all subordinate clauses, including relative clauses, whether affirmative or negative. In addition, the old present is used in some typical residual cases such as fossilized irregular stative verbs and proverbs. There is no doubt that Amharic underwent an expansion of a new present recently, like the other languages mentioned in this study, but the old present does not particularly look like a subjunctive (normal subjunctives do not occur in main negative clauses or in ordinary relative clauses). Instead, main negative and subordinate clauses seem to have in common precisely the feature of general resistance to grammaticalization (due to the lack of assertion) that is identified by Bybee et al. (1994) as the causal factor. Thus, their non-assertive hypothesis accounts well for the Amharic case,[20] whereas my aspectual hypothesis seems to fit better with the cases of §4. But until the diachronic changes in individual languages are traced in detail, it remains unclear whether the two hypotheses are not perhaps compatible after all.

6.3 *Perfective presents in Slavic*

In the light of the foregoing discussion, the behavior of perfective presents in the Slavic languages appears quite analogous to the cases of old presents in §§3–4, as was noted by Kuryłowicz (1953:538-539, 1964:99-101). It is a well-known fact that the formal present tense of perfective verbs in West and East Slavic languages has future meaning. This is sometimes presented as an automatic consequence of the interaction between perfective aspect and the non-past tense meaning, but Kuryłowicz proposes to view it as the result

[19] Rundgren (1963) also discusses Tigre, an Ethiopian language closely related to Amharic. Tigre is mentioned in Bybee et al. (1994:277) as a language which possibly shows the effect of a newly developed present (though apparently no diachronic data were available to these authors), and Rundgren's report confirms this hypothesis.

[20] Olga Kapeliuk (p.c.) informs me that a distinction between subordinate and main-clause verbs also exists in neighboring Cushitic languages, which have otherwise strongly influenced Amharic. This is thus a further complicating factor.

of an earlier shift from an old present to future meaning after the introduction of a new present. Thus, the Russian perfective verb *na-gruž-u* "I'll load (on)" (perfectivized by the preverb *na-* "on") acquired its future meaning only after the new present (the "secondary imperfective") *nagruž-aj-u* "I am loading (on)" (originally an iterative derivational form) was created and became common — in fact, obligatory in the ongoing present sense.[21] Thus, the simple (imperfective) verb *gruž-u* "I am loading" still has its present meaning, because no secondary imperfective was created here to push it into the future domain. The main difference between the situation in Russian and that in the languages of §3 is that while in those languages only a few frequent stative verbs escaped the general shift from present to future, in Russian almost all preverbless old presents still have the old present meaning. One might say that the Russian situation represents an intermediate stage where only the inherently telic verbs, i.e., those most likely to be used in a progressive periphrasis, have undergone the change.

One might argue that Kuryłowicz's diachronic explanation is not really different from the traditional explanation, because he, too, needs to appeal to perfectivity in order to explain why a secondary imperfective was created for *nagružu* (perfective), but not for *gružu*. However, Kuryłowicz's explanation nicely accounts for two facts that are difficult to integrate into the traditional account: Russian perfective present verbs may have a habitual interpretation in certain special environments (cf. (14)), as well as a narrative tense use (cf. (15)).

(14) *Tol'ko jastreb inogda* ***proletit*** *nad odinokoj mogiloj.*
only hawk sometimes flies.PERFV over lonely grave
"Only a hawk sometimes flies over the lonely grave."

(15) ***Sjadet,*** *byvalo, Var'ka i, tixo plača, glotaet* ***slëzy.***
sits.down.PERFV was.HAB Varka and quietly crying swallows tears
"Varka sat down and swallowed his tears, crying softly."

These two special uses are of course no longer surprising in the present context, because we saw similar special uses of old presents repeatedly in §§3–4. However, it is difficult if not impossible to fit them into a "non-past perfective" *Gesamtbedeutung*.

The parallel between Slavic perfective verbs and old presents applies not only to the new future meaning, but extends to the subjunctive meaning as well. I proposed in §2 that subjunctives arise from old presents mostly when there is a separate future tense in the language. Russian does not have a sepa-

[21] See Maslov (1959) for a similar account of the origin of the Slavic tense-aspect system. However, Maslov does not draw the parallel to any of the other languages discussed here.

rate perfective future tense, so its old perfective present becomes a future. However, Bulgarian, a South Slavic language with a very similar aspectual system, does have a well-established future tense, based on a periphrasis with "want" (*šte*). Its perfective present forms therefore do not function as future tense, but are restricted to subordinate contexts like those in (16) which are typical of subjunctives (from Comrie 1976:68).

(16) a. *Iskam da* ***kupja*** *kniga.*
I.want that I.buy.PERFV book
"I want to buy a book."

b. *Sled kato svârša tazi rabota, šte otida na selo.*
after how I.finish.PERFV this job FUT I.go on village
"When I finish this job, I'll go to the country."

This form is never called a subjunctive in Bulgarian grammar, but its typical uses might well justify such a nomenclature.[22]

7. *Starting over again: A second cycle*

Grammaticalization is known to occur in cycles which may follow so closely upon each other that various layers of grammaticalization can still be discerned synchronically. This may also happen in the case of new presents which lead to changes in the semantics of old presents. Every new present is potentially an old present, because a new progressive periphrasis may be waiting just around the corner. In this section I will briefly describe two cases of languages where a second cycle of the same change has occurred. The cases are Syrian Arabic and Tati.

Syrian Arabic, described in Cowell (1964), shares with Cairene Arabic (§4.4) the old Imperfect with subjunctive functions (e.g., *y-aakol* "(that) he eat"), and the *b*-Imperfect with the additional prefix *b-* (corresponding to Cairene *bi-*) (e.g., *b-y-aakol* "he eats"). But Syrian Arabic has gone one step further, creating a new ongoing present with the "particle of actuality" *ʕam* (e.g., *ʕam-y-aakol* "he is eating"). This *ʕam*-Imperfect is not only used for typical progressives, but is already combined with stative verbs (e.g., *ʕam-ʔaʕref* "I know"). As a result, the *b*-Imperfect, which was the earlier new present, is now also an old present and occurs mainly with future and habitual uses (Cowell 1964:324-326). In addition, it is used with some performative verbs (*buuʕdak* "I promise you", *bənṣaħak* "I advise you"), which is a conservative context, as we saw in §5.4. The old simple Imperfect was not affected by the change — it continues to be used in subjunctive contexts. Thus, Syrian Arabic created both a subjunctive and a future/habitual in much the same way, and each time without direct grammaticalization.

The second example is from Tati, an Iranian language related fairly closely to Persian (cf. Grjunberg 1966, for a description). The oldest present tense, called Aorist, is zero-marked and occurs in all the typical subjunctive contexts, i.e., non-realized adverbial and complement clauses and certain modal main clauses (e.g., *baf-um* "[that] I weave"). This form closely corresponds to the Persian *be*-subjunctive and differs from it mainly in lacking the prefix *be-*. Tati also has a "*mi*-Aorist", formed by adding this prefix to the Aorist (e.g., *mi-baf-um* "I will weave"). But unlike in Persian, this is not the normal present tense, because the ongoing-present sense has been usurped by an even newer periphrasis, formed from the infinitive plus person/number suffixes (e.g., *mi-baf-tæn-üm* "I am weaving"). Thus, the "*mi*-Aorist" has been restricted to marginal uses such as future ('potential future', contrasting with a new periphrastic 'categorical future'), habitual, and folklore narrative tense. Tati is thus completely parallel to Syrian Arabic in employing an old present first for subjunctive uses, and then shifting its successor to future/habitual uses. Since Syrian Arabic and Tati are neither genetically nor areally related, the parallelism is quite striking.

8. *Conclusion*

In this paper I have identified a type of change in tense-aspect-mood systems by which an old present tense turns into a future tense or a subjunctive mood. This change was found to occur in a number of unrelated languages in a surprisingly similar fashion. It is a side effect of a grammaticalization change from a progressive construction to a more general present tense, which pushes the old present to a more marginal position, leaving it to express only notions like future tense, habitual aspect and subjunctive mood.[23] The change thus constitutes one of the few ways in which a tense-aspect-mood form may arise in a language by a process other than grammaticalization, although indirectly, this change, too, is the consequence of a grammaticalization. I have argued that the tendency for future and subjunctive to be perfective explains why grammaticalizing progressives do not (at least initially) extend to these domains, so that the old present can survive with a new, narrower meaning. An old present that has undergone such a shift typi-

[22] The Bulgarian perfective old present also expresses narrative tense and may be used with habitual meaning (Comrie 1976:69). Again, these uses are surprising from a synchronic point of view, but when we look at the subjunctives of §4, the parallels are quite striking.

[23] Incidentally, this change once again illustrates the futility of structuralist attempts to divide tense-aspect-mood grams neatly into 'the category of tense', 'the category of aspect', etc.

cally shows a number of peculiarities when compared to futures and subjunctives that have come into existence by a standard grammaticalization process. While their meanings are not appreciably different (as emphasized in Bybee 1994), they sometimes show unexpected polysemy patterns and special meanings in certain contexts (cf. §1.3-4 and §5.3-4), and their formal properties are sometimes surprising until one becomes aware of their history (especially formal unmarkedness and lexical irregularities, cf. §1.1-2 and §5.1-2).

In the older literature, the motivation of this change is sometimes portrayed differently: Instead of a new progressive pushing the old present aside (as I conceive of the change, in much the same way as Bybee et al. 1994), earlier authors sometimes see a kind of 'drag chain', where a weakening old present invites the creation of a new present to renew it. For instance, Beames (1871:101) describes the change from old present to subjunctive, future or habitual in modern Indo-Aryan in the following terms: "The old Sanskrit present indicative[...], as in its abraded condition it now no longer indicates with sufficient clearness present time, it has wandered away into all sorts of meanings". Similarly, Kuryłowicz (1953:538) writes with respect to the development of Persian: "Le renouvellement de [la catégorie du présent duratif] est motivé par le fait bien connu de la perte de la valeur durative, perte due aux restrictions du contexte (préverbe, adverbe, régime direct)"; cf. also Johanson (1971:136) on the "deprogressivization" (*Entkursivierung*) and "actional depletion" (*aktionale Entleerung*) of the old present). The main argument in favor of the alternative 'push chain' account is that new progressives may arise at a point where the old present shows no signs of losing the ability to express the ongoing sense (e.g., French *être en train de V*, German *am V-en sein*, and other young progressives).

Finally, I would like to consider briefly the relation between futures and subjunctives. I proposed in §2 that futures arise when the language has no established future tense that would preempt the future use of the old present, and that subjunctives arise when there is such a future.[24] This correlation seems to be borne out by the majority of the languages considered here, but it is less strong than I may have implied. We know that many languages have two or more futures, and many languages get by without a future, so synchronic systematicity is not a very strong determinant of language change.

[24] In addition, subjunctives presuppose the existence of finite non-realized clauses, as mentioned in §4. Thus in a language with only non-finite subordination and an established obligatory future tense, we would expect the old present to disappear completely if a new present enters the scene. I know of no case exemplifying this scenario, but my account in this paper predicts its possibility.

For instance, Modern Welsh has two other future tenses (King 1993: 189, 171), but still the old present came to have future meaning. Similarly, Turkish has another future meaning. Similarly, Turkish haw another future gram, the suffix *-AcAk*, yet the old present acquires a type of future meaning (though semantically somewhat different, see Yavaş 1982). And conversely, in Modern Persian the periphrastic future with the auxiliary "want" is not obligatory (the *mi*-present commonly denotes future time reference), but the old present is restricted to subjunctive uses and cannot be employed as indicative future.

In Bybee et al. (1994) and Bybee (1994), two rather different accounts are proposed for habituals/futures deriving from old presents and for subjunctives deriving from old presents. In Bybee's view, the habitual sense (and presumably the future sense too; cf. Bybee et al. 1994:277) arises by conventionalizing the pragmatic inference that this meaning must be intended because the obligatory progressive is not used. By contrast, the subjunctive sense is attributed to the gram from the context (specifically, modal complement-taking verbs). My perspective here is somewhat different in that I see futures and subjunctives as quite parallel. In many subordinate contexts, there is no meaning difference at all between them. Thus, calling the cases of §3 future and those of §4 subjunctive is a simplification. Part of the futures of §3 do the job of subjunctives as well. In Modern Hebrew, for instance, the Imperfect is regularly used in non-realized subordinate clauses such as (17a–b), as well as in certain kinds of imperatives (cf. 17c); cf. Glinert (1991).

(17) a. *Heʕedafti* *še-hu* *yištoq.*
I.preferred that-he he.keep.quiet
"I preferred that he keep quiet."

b. *Biqašti* *še-tešev.*
I.asked that-you.sit.down
"I asked that you sit down."

c. *Tafsiq!* (formal: *hafseq!*)
"Stop!" "stop!"

Similarly, in Welsh the Future (= old present) is used in the protasis of conditional clauses and in future "when" clauses (King 1993:191-192), which are fairly typical subjunctive environments.

But even outside subordinate, non-realized contexts futures and subjunctives may overlap in their distribution. Bybee et al. (1994:232) discuss modal main-clause uses of old presents such as hortative ("let's go there"), dubitative ("where shall I go?") and jussive ("let Anna go there") and conclude that they "can only develop as a result of the association of the [old] present forms with subordinate clause functions of obligation and purpose". This is

not so obvious to me. Futures deriving from old presents are in several instances described as 'potential' futures or uncertain futures. For instance, the Turkish Aorist's future use expresses a lower degree of certainty than the other future gram (*-AcAk*). Grjunberg (1964:327) calls the Tati simple future a 'potential future' (*budušče e potencial'noe*) and describes its uses as expressing nuances of possibility, doubt, uncertainty. And Cowell (1964:327) mentions a 'potential' use of the Syrian Arabic *b*-Imperfect (e.g., *hal ʔaʔmaaš byənġəsel?* "Is this material washable?"). The latter two cases of modal uses are particularly interesting because the Syrian Arabic and Tati futures are not commonly used in subordinate clauses. As we saw in §7, both these languages have subjunctives for this purpose, going back to the old present of the first cycle of the development.

Thus, I suggest that various modal uses can come to be associated with old presents even when not occurring in subordinate clauses. I propose that they may be contributed by the extralinguistic context, and that they are favored by the perfective reading that old presents are given preferentially after the introduction of the new present: A perfective "we go" is quite likely to be meant as "let's go", because it cannot mean "we are going" — and although the hortative meaning component is not originally part of the gram.

In order to solve the remaining puzzles concerning the kind of change discussed here, one would have to look in greater detail at the individual languages whose earlier stages are attested and see whether the historical record contains any hints. My task here has been to point out the striking parallels in the semantic development of old presents in diverse languages. The cross-linguistic similarities are impressive not only among the new futures and among the new progressives of different languages, but also between the futures and the subjunctives developing from old presents. I hope to have shown that these two developments can also be explained in very similar terms.

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REFERENCES

Alekseev, Mixail E. 1985. *Voprosy sravnitel'no-istoričeskoj grammatiki lezginskix jazykov*. Moscow: Izd. "Nauka".
Beames, John. 1879. *A Comparative Grammar of the Modern Aryan Languages of India*. Vol. III: *The Verb*. London: N. Trübner.
Bloch, Jules. 1970[1913]. *The Formation of the Marathi Language*. Delhi: Motilal Banarsidass. [French original: *La formation de la langue marathe*, Paris, 1913.]
Brockelmann, Carl. 1908, 1913. *Grundriss der vergleichenden Grammatik der semitischen Sprachen*. 2 Bände. Berlin: Reuther & Reichard; New York: Lemcke & Buechner. (Repr., Hildesheim: Georg Olms, 1982.)
Bybee, Joan. 1994. "The Grammaticization of Zero". *Perspectives on Grammaticalization* ed. by William Pagliuca, 235-254. Amsterdam & Philadelphia: John Benjamins.
---------- & Östen Dahl. 1989. "The Creation of Tense and Aspect Systems in the Languages of the World". *Studies in Language* 13.51-103.
---------- & William Pagliuca. 1987. "The Evolution of Future Meaning". *Papers from the 7th International Congress on Historical Linguistics* ed. by Anna Giacalone Ramat et al., 109-122. Amsterdam & Philadelphia: John Benjamins.
----------, Revere Perkins & William Pagliuca. 1994. *The Evolution of Grammar: Tense, aspect, and modality in the languages of the world*. Chicago: Univ. of Chicago Press.
Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge Univ. Press.
Cowell, Mark W. 1964. *A Reference Grammar of Syrian Arabic*. Washington, D.C.: Georgetown Univ. Press.
Croft, William. 1990. *Typology and Universals*. Cambridge: Cambridge Univ. Press.
Dahl, Östen. 1985. *Tense and Aspect Systems*. Oxford: Blackwell.
Dressler, Wolfgang U., Willi Mayerthaler, Oswald Panagl & Wolfgang U. Wurzel. 1987. *Leitmotifs in Natural Morphology*. Amsterdam & Philadelphia: John Benjamins.
Fife, James. 1990. *The Semantics of the Welsh Verb: A cognitive approach*. Cardiff: Univ. of Wales Press.
Givón, T[almy]. 1995. *Functionalism and Grammar*. Amsterdam & Philadelphia: John Benjamins.
Gleasure, James. 1990. "The Evolution of the Present/Future Tense in Scottish Gaelic". *Scottish Gaelic Studies* 16.181-189.
Glinert, Lewis. 1991. *The Grammar of Modern Hebrew*. Cambridge: Cambridge Univ. Press.
Greenberg, Joseph H. 1966. *Language Universals; with special reference to feature hierarchies*. The Hague: Mouton.
Grjunberg, A. L. 1966. "Tatskij jazyk". *Jazyki narodov SSSR*. Tom I: *Indoevropejskie jazyki* ed. by V[iktor] V. Vinogradov, 281-301. Moscow: Izd. "Nauka".

Haspelmath, Martin. 1993. *A Grammar of Lezgian.* Berlin: Mouton de Gruyter.
----------. 1994. "The Tense System of Lezgian". *Tense Systems in European Languages* ed. by Rolf Thieroff & Joachim Ballweg, 267-277. Tübingen: Max Niemeyer.
Haspelmath, Martin. 1995. "Contextual and Specialized Converbs in Lezgian". Haspelmath & König 1995.415-440.
---------- & Ekkehard König, eds. 1995. *Converbs in Cross-Linguistic Perspective: Structural and semantic aspects of adverbial verb forms.* Berlin: Mouton de Gruyter.
Heine, Bernd. 1992. "Grammaticalization Chains". *Studies in Language* 16. 335-338.
Johanson, Lars. 1971. *Aspekt im Türkischen: Vorstudien zu einer Beschreibung des türkeitürkischen Aspektsystems.* Uppsala: Univ. Uppsala.
----------. 1974/75. "Das tschuwaschische Aoristthema". *Orientalia Suecana* 23/24.106-158. (Repr. in L. Johanson, *Linguistische Beiträge zur Gesamttürkologie*, 117-169. Budapest: Akadémiai Kiadó, 1991.)
Karst, Josef. 1901. *Historische Grammatik des Kilikisch-Armenischen.* Strassburg: Karl J. Trübner. (Repr., Berlin: Walter de Gruyter, 1970.)
King, Gareth. 1993. *Modern Welsh: A comprehensive grammar.* London: Routledge.
Kuryłowicz, Jerzy. 1953[1950]. "Aspect et temps dans l'histoire du persan". *Rocznik Orientalistyczny* 16.531-542.
----------. 1964. *The Inflectional Categories of Indo-European.* Heidelberg: Carl Winter.
Lass, Roger. 1990. "How to Do Things with Junk: Exaptation in language evolution". *Journal of Linguistics* 26.79-102.
Lazard, Gilbert. 1963. *La langue des plus anciens monuments de la prose persane.* Paris: Klincksieck.
Leiss, Elisabeth. 1992. *Die Verbalkategorien des Deutschen: Ein Beitrag zur Theorie der sprachlichen Kategorisierung.* Berlin: Walter de Gruyter.
Leslau, Wolf. 1995. *Reference Grammar of Amharic.* Wiesbaden: Otto Harrassowitz.
Maslov, Jurij S. 1959. "Zur Entstehungsgeschichte des slavischen Verbalaspekts". *Zeitschrift für Slawistik* 1959:4.560-568.
Mayerthaler, Willi. 1981. *Morphologische Natürlichkeit.* Wiesbaden: Athenaion.
Minassian, Martiros. 1980. *Grammaire d'arménien oriental.* Delmar, N.Y.: Caravan.
Mirambel, André. 1954. "Opposition modale en tsakonien". *Bulletin de la Société de linguistique de Paris* 54.79-94.
Mitchell, T. F. 1962. *Colloquial Arabic.* Sevenoaks, Kent: Hodder & Stoughton.
Nöldeke, Theodor. 1904. "Über einige arabische Verbalpräfixe". *Beiträge zur semitischen Sprachwissenschaft* by Th. Nöldeke, 63-68. Strassburg: Karl J. Trübner. (Repr., Amsterdam: ApaPhilo-Press, 1982.)

Perevoščikov, P. N. et al. 1962. *Grammatika sovremennogo udmurtskogo jazyka: Fonetika i morfologija.* Iževsk: Udmurtskoe knižnoe izdatel'stvo.
Pernot, Hubert. 1934. *Introduction à l'étude du dialecte tsakonien.* Paris: Éditions "Les Belles Lettres".
Poppe, Erich. 1996. "Convergence and Divergence: The emergence of a 'future' in the British languages". *Transactions of the Philological Society* 94. 119-160.
Rosén, Haiim B. 1977. *Contemporary Hebrew.* The Hague: Mouton.
Rundgren, Frithiof. 1963. *Erneuerung des Verbalaspekts im Semitischen: Funktionell-diachronische Studien zur semitischen Verblehre.* (= *Acta Societatis Linguisticae Upsaliensis*, n. s., 1:3.49-108.) Stockholm: Almqvist & Wiksell.
Schiffman, Harold F. 1983. *A Reference Grammar of Spoken Kannada.* Seattle: Univ. of Washington Press.
Serebrennikov, Boris A. 1963. *Istoričeskaja morfologija permskix jazykov.* Moscow: Izd. "Nauka".
Sridhar, S. N. 1990. *Kannada.* London: Routledge.
Tenišev, È. R., ed. 1988. *Sravnitel'no-istoriičeskaja grammatika jurkskix jazykov: Morfologija.* Moscow: Izd. "Nauka".
Ultan, Russell. 1978. "The Nature of Future Tenses". *Universals of Human Language* ed. by Joseph H. Greenberg et al., vol.III: *Word Structure*, 83-123. Stanford, Calif.: Stanford Univ. Press.
Williams, Stephen J. 1980. *A Welsh Grammar.* Cardiff: Univ. of Wales Press.
Yavaş, Feryal. 1982. "The Turkish Aorist". *Glossa* 16.40-53.

SUMMARY

This paper discusses a pattern of change whereby present indicative forms of verbs develop into futures and subjunctives as a side effect of a grammaticalization change consisting in the creation of a new present indicative form from a looser progressive (or other aspectual) construction. It is shown that this change is attested in a wide variety of languages from different families, and that it often results in synchronically anomalous behavior of the resulting futures/subjunctives. What is particularly striking is the degree of similarity between the results of the change in languages as diverse as Kannada, Modern Hebrew, Lezgian and Welsh.

RÉSUMÉ

Dans cet article l'auteur traite d'un type de changement où les formes de l'indicatif présent des verbes en viennent à être utilisées comme futurs et comme subjonctifs. Selon l'auteur, ce serait là un effet secondaire que provoquerait la création d'une nouvelle forme de l'indicatif présent par la grammaticalicalisation d'une ancienne tournure, moins liée, marquant l'aspect pro-