

In search of (im)perfection: the illusion of counterfactual aspect

Puzzle: We examine the puzzle of “fake” imperfective aspect in counterfactual conditionals (CFs). “Fake” tense and aspect (Iatridou, 2000) – i.e. morphology that does not seem to make a temporal interpretive contribution – is used in many languages to mark CFs. The following example from Greek illustrates both past and imperfective morphology used to mark a future-less-vivid conditional:

- (1) [An **peθene** o arxivos] tha ton θavame stin korifi tu vunū
if die.PST.IMP the chief FUT him bury.PST.IMP on.the top the mountain

‘If the chief died, we would bury him on the top of the mountain.’ (Iatridou, 2000, ex. (14))

The use of “fake” past morphology associated with CF interpretations has been well-documented (Steele, 1975; James, 1982; Iatridou, 2000, a.o.). Several proposals analyze fake past as the locus of CF semantics, either by construing “past” as a marker of modal, rather than temporal, remoteness (Steele, 1975; Iatridou, 2000; Ritter and Wiltschko, 2010) or by deriving CF meaning from a purely temporal past (Ippolito, 2002; Arregui, 2009). It has been claimed that fake imperfective is also involved in the marking of counterfactuals, though its use is less well-understood: for Iatridou (2000, 2009) imperfective in CFs is a *default* aspect; Arregui (2004) claims that it reflects incompatibility between *perfective* and CFs; while Ippolito (2004) proposes that a “modal imperfective” reflects a speaker’s indirect evidence for a proposition. Iatridou (2009) proposes that imperfective-marked CFs occur in a subset of the languages with past-marked CFs, a generalization she based on the fact that Slavic languages have “fake” past but “real” aspect in CFs. We argue that a full typology includes languages with “fake” *perfective* aspect in CFs as well, to which we return below.

Proposal: We argue that the apparent requirement for imperfective in CFs in some languages is *illusory*, merely a morphological reflex of the need to realize a true PAST feature. We argue that “past imperfective” morphology in these languages actually expresses only PAST; it receives an imperfective interpretation due to contrast with a true PERFECTIVE morpheme. In CFs, this “past imperfective” morphology reflects only CF “past”; in other words, it does not reflect syntactic IMPERFECTIVE features. We illustrate this proposal with the morphological paradigm of three types of languages: (1) Greek, Romance, and Zulu, where imperfective is default and occurs in CFs; (2) Arabic, where *perfective* is default and occurs in CFs; and (3) Slavic, where PAST is specified independently of aspect, and CFs preserve full aspectual contrasts.

Pattern 1: The puzzle of fake imperfective has arisen in the context of Greek and Romance languages. In these languages, we find that CFs are always marked with past-imperfective morphology, while “real” tense and aspect is suppressed. This was illustrated in (1) for future-less-vivid conditionals in Greek, where we see imperfective morphology despite a clearly perfective (neither habitual nor generic) interpretation.

We argue that this arises because the “past imperfective” is the only true exponent of PAST features; “past perfective”, by contrast, expresses only perfective aspect, and receives a past interpretation by default, due to incompatibility between perfective and present tense (Dahl, 1985). The imperfective interpretation of the “past imperfective” arises due to the absence of a privative PERFECTIVE feature.

The absence of “real” aspect marking in CFs in these languages arises because PAST and PERFECTIVE morphemes compete for realization in a single position. Zulu is a language that appears to require past imperfective marking in CFs – the prefix *be-* – but which allows a perfective suffix *-ile* to co-occur with this “fake imperfective” in perfective CFs, though the two are normally incompatible (due to the redundancy of marking both PAST and PERFECTIVE when both are interpreted temporally):

- (2) a. [ukuba **be-** ngi- thimul- **ile**] be-ngi-zo-dinga ithishi
if PST.IMP- 1SG- sneeze- PFV IMP-1SG-FUT-need 5tissue

‘If I had sneezed, I would have needed a tissue.’

- b. *Be- ngi- thimul- ile izolo.

PST.IMP- 1SG- sneeze- PFV yesterday

(Halpert and Karawani, 2011, ex. (5))

We propose that the “past imperfective” morpheme in Zulu, as in Greek and Romance, is actually an exponent of PAST alone, and that its imperfective interpretation arises only in contrast to the true perfective.

What distinguishes Zulu, however, is that PAST and PERFECTIVE do not compete for a single morphological “slot”; as a result, real PERFECTIVE features and fake PAST features can both be realized on a single verb.

Pattern 2: Further evidence for our approach comes from CF marking in Arabic, a language in which *perfective*, rather than *imperfective*, is the default aspect with PAST (on the defaultness of perfective in Arabic, we observe that simple past-tense verbs in Arabic receive a perfective interpretation, while the past *imperfective* requires an auxiliary-participle construction; this is the *reverse* of the situation in the imperfective-default Romance languages). Our account predicts that past perfective (*not* imperfective) should thus be required in CFs – a prediction borne out by (3), from Palestinian Arabic:

- (3) [iza **ʔileʃ** halaʔ,] kaan b-iwsal ʃal waʔt la l-muħaadara
if leave.PST.PFV now, be.PST B-arrive.IMP on the-time for the-lecture

‘If he left now, he would arrive on time for the lecture.’ (Halpert and Karawani, 2011, ex. (6a))

Like Zulu, Arabic expresses real tense and aspect in CFs via an auxiliary in a separate position from fake past. Auxiliary *kaan* marks past tense alone, while real temporal morphology occurs on the main verb:

- (4) [iza **kanno** b-yitlaʃ bakkeer kul yom,] **kaan b-iwsal** ʃa l-waʔt la l-muħadaraat
if be.PST B-leave.IMP early every day, be.PST B-arrive.IMP on the-time to the-lectures

‘If he were in the habit of leaving early, he would arrive to the lectures on time.’

(Halpert and Karawani, 2011, ex. (19a))

This ability of the past auxiliary *kaan* alone to mark CFs supports the view that the “past perfective” CF marking in (3) is the exponent of PAST features only.

Pattern 3: Finally Slavic, where full aspectual contrasts are available in CFs. In (5) from Russian:

- (5) a. Esli by Dzon umer, my poxoroni-l-i by ego na gor-e.
if SUBJ J. die.PFV.PST we bury.PFV-PST-PL SUBJ he.ACC on mountain-LOC

‘If John died, we would bury him on the mountain.’

- b. Esli by Dzon umira-l, s nim by-l by doktor.
if SUBJ J. die.IMP-PST with he.INSTR be-PST SUBJ doctor

‘If John were dying, the doctor would be with him.’

We propose that in these languages, unlike in Patterns 1 and 2, PAST, PERFECTIVE, and IMPERFECTIVE all have separate morphological exponents. Evidence for this can be found in the existence of morphological past and present forms for imperfective and perfective verbs in Slavic (though a morphological “present” perfective receives a future interpretation). As a result, real aspectual features PERFECTIVE and IMPERFECTIVE can both be realized in addition to the fake PAST marking required by CFs.

Implications: The claim that “past imperfective” morphology expresses only PAST features, and that “imperfective” in past-marked CFs is illusory, has implications for the analysis of fake temporal morphology in CFs more broadly. We argue that perfective morphology cannot mark CFs in Pattern 1 because “past perfective” does not express PAST features in these languages. Given that past perfectives have past interpretations, we argue that it is past tense *features*, rather than past tense *interpretations*, that result in CF interpretations. If true, this proposal is an argument in favor of analyses in which PAST features represent a broader temporal or modal “exclusion” (Iatridou, 2000) or [-coincidence] (Ritter and Wiltschko, 2010) feature, and against the view that the past marking of CFs reflects the contribution of past tense interpretation (Arregui, 2009; Ippolito, 2002). Finally, our analysis shows that Iatridou’s (2009) subset generalization (imperfective CFs \subseteq past CFs) holds only across Patterns 1 and 3; Pattern 2 shows that the true generalization concerns the morphological relationship of tense and aspect marking in a given language.

Arregui, A. 2004. On the accessibility of possible worlds: the role of tense and aspect. PhD Diss., UMass-Amherst.; — 2009. On similarity in counterfactuals. *L&P* 32.; Dahl, Ö. 1985. *Tense and aspect systems*. Oxford: Basil Blackwell.; Halpert, C., & H. Karawani. 2011. Aspect in counterfactuals from A(rabic) to Z(ulu). *WCCFL* 29.; Iatridou, S. 2000. The grammatical ingredients of counterfactuality. *LI* 31.; — 2010. Some thoughts about the imperfective in counterfactuals. Handout.; Ippolito, M. 2002. On the Semantic Composition of Subjunctive Conditionals. Ms. MIT/Tübingen.; — 2004. Imperfect modality. In *The syntax of time*. MIT Press.; James, D. 1982. Past tense and the hypothetical: A cross-linguistic study. *SiL* 6.; Ritter, E., & M. Wiltschko. 2010. The composition of INFL. *LingBuzz*/001078.; Steele, S. 1975. Past and irrealis: Just what does it all mean? *IJAL* 41.