Aspect and tense in counterfactual main clauses: Fake or real?

Abstract
The role of aspect and tense in counterfactual main clauses is discussed on the basis of both well-established and “new” data from the aspectual languages Russian and French. In the first part of the paper, I show that the predominant use of imperfective aspect in French counterfactuals is arguably “fake”, i.e. without semantic impact, while aspect in Russian is “real” and retains its normal meaning in the same counterfactual environment. In the second part of the paper, the focus is shifted to certain irrealis contexts where a fake imperfective aspect – without conditional/subjunctive morphology – is found both in Romance and Slavic. This surprising “counterfactual imperfective” in Russian is given a purely competition-based pragmatic explanation, and it is shown how pragmatic strengthening and the development of aspectual implicatures arises through associative learning in diachronic steps. Both in Romance and Slavic, past tense morphology in this construction is licensed by a real semantic past in the input context, reminiscent of past tense anaphora. This is different from ordinary counterfactuals where one layer of past tense is “fake” and the irrealis hypothesis can be non-past.

1. Introduction
The verbal categories tense, aspect and mood, often subsumed under the label TAM, interact in various ways in the morpho-syntax, semantics and pragmatics. An appropriate analysis will often have to go beyond straightforward compositionality where syntax and semantics go hand in hand. One important – and puzzling – correlation which poses serious challenges for a purely semantic analysis is the cross-linguistic dominant use of imperfective past tense morphology in counterfactual constructions. How do we explain the presence of these TAM features in counterfactuals?

The main focus of this paper will be on the aspectual languages Russian and French. In the first part of the paper I will present data from the parallel corpus RuN-OMC, developed at the University of Oslo, which clearly shows that the status of the imperfective in counterfactuals is different in Slavic and Romance. While it can be argued that the imperfective in several Romance languages is “fake” in counterfactuals (Iatridou 2000), this is apparently not so for the standard cases of the imperfective in Russian counterfactuals. However, the Russian imperfective is indeed “fake”, i.e. without its semantic core meaning of progressivity/habituality, in certain non-modal uses (the so-called “factual imperfective”, Grønn 2008b) – and, interestingly, I provide in this paper some new data which show that there is also a fake “counterfactual imperfective” in Russian. For this latter construction, I claim that a competition-based, non-compositional pragmatic account is called for. In the last section of the paper, I suggest how aspectual implicatures arise (diachronically) as a case of pragmatic strengthening.
I propose to start our discussion with a survey of authentic counterfactual constructions from the RuN-OMC corpus\(^1\). All the examples provided in this section are excerpted from the Norwegian novel “Dinas bok” (1989) by Herbjørg Wassmo and its authentic literary translations into four languages.

The examples below reveal the TAM systems of main clause counterfactuals in five Indo-European languages, but the main focus of the paper is restricted to aspect in Russian (Slavic) and French (Romance). The three other languages below are not aspectual in the same way. However, for ease of comparison with the Norwegian original, I provide also the German translation, since German in many ways comes close to the Norwegian original. The English translation is also added for obvious reasons.

\begin{enumerate}
\item \begin{quote}
(1a) “[…\] det burde kanskje vorre tukthus for å narre folk til å tru at du vil gifte dæ”, sa Dina. “Muligens. Men da \textit{ville} tukthusene \textit{blitt} fulle.” (colloquial dialect of Northern Norwegian)
\end{quote}
\item \begin{quote}
(1b) “[…\] man sollte sie mit Zuchthaus bestrafen, wenn sie ein Mädchen glauben machen, daß sie es heiraten wollen”, sagte Dina. “Vielleicht. Aber da \textit{würden} die Zuchthäuser voll \textit{warden}.” (German)
\end{quote}
\item \begin{quote}
(1c) “[…] maybe a man ought to go to prison if he deceives someone into believing he wants to get married,” said Dina. “Maybe. But the prisons \textit{would be} filled.” (English)
\end{quote}
\item \begin{quote}
(1d) “[…] on devrait peut-être punir de prison ce ux qui font croire qu’ils veulent se marier”, dit Dina. “Peut-être bien. Mais alors les prisons \textit{seraient} pleines.” (French)
\end{quote}
\item \begin{quote}
(1e) Po-moemu, v tjur’mu sleduet sazhat’ vsekh muzhin, kotorye podajut zhenshchinam lozhnye nadezhdy, – zametila Dina. – Vozmozhno. No togda tjur’my \textit{byli} imperfective+past by\text{subjunctive} particle perepolneny. (Russian)
\end{quote}
\end{enumerate}

With regard to these parallel translations, I would like to make the following general points: The main semantic functor in these sentences is an irrealis/counterfactual operator corresponding to the modal “would” in English (“ville” in Norwegian). In French, counterfactuality is expressed through the so-called “conditional mood”, which can be decomposed morphologically into an \textit{imperfective} past tense (“-aient”) and a future tense stem (“ser-”). In Russian, finally, the subjunctive particle “by” carries the burden of irrealis.

In all the languages in (1), the counterfactual markers echo past tense morphology in various ways, cf. “would” (Eng.) which is historically derived from “will + paste tense”. In French, “-aient” (Fr.) is the inflection of the past tense form \textit{imparfait}. In Russian, the subjunctive particle (irrealis marker) “by” – historically an aorist past tense form of “byt’ – to be” – requires past tense morphology, that is the suffix \textit{–l}, on the accompanying verb: “byli”.

The examples in (1) report a \textit{non-past} irrealis hypothesis. The situation referred to is considered highly unlikely by the speaker, but the hypothesis is not located in the past, hence not strictly contrary to the facts (by some researchers the alleged counterfactuality has been

\begin{footnotesize}
\begin{itemize}
\item \footnote{Oslo Multilingual Corpus (OMC) extended with Russian/Norwegian texts in the RuN project at the University of Oslo.}
\end{itemize}
\end{footnotesize}
argued to be merely an implicature in these cases). There is no real semantic past – at least in the English, French and Russian examples above. This cross-linguistic use of past tense in the absence of standard past time reference remains an intriguing and partly unresolved puzzle (extensively discussed in Grønn & von Stechow, 2009).

When the hypothesis is truly counterfactual and concerns hypothetical courses of events located in the past, Germanic and Romance languages must typically use a construction involving two layers of past tense morphology, reminiscent of past perfects. Although the context in (1) makes clear that the irreals hypothesis concerns the speaker’s present/future, it is still possible, although redundant, to use a construction with two layers of past tense, as in the Norwegian original with a modal past auxiliary + past participle “ville blitt”. The French and English translators have chosen the expected and more economic one-past counterfactual “seraient” and “would be”.

The next example illustrates the main point of departure for this article, viz. the difference between fake and real aspect.

(2a) Men hun kunne ikke jages fra gården lillejulaften, så mye var sikkert. Det ville i så fall kommer ut over hele soknet og ikke bringe Reinsnes mye ære. (Norwegian)

(2b) Aber man konnte das Mädchen einen Tag vor Weihnachten nicht vom Hof jagen, soviel war sicher. Es würde jedenfalls im ganzen Kirchspiel bekannt werden und Reinsnes nicht zur Ehre gereichen. (German)

(2c) But one thing was certain. They could not chase the girl from the estate the night before Christmas Eve. The news would spread throughout the parish and bring no honor to Reinsnes. (English)

(2d) Mais, ce qui était certain, c’est qu’on ne pouvait pas la chasser de la ferme l’avant-veille de Noël. Cela se saurait dans tout le pays et ne serait pas à l’honneur de Reinsnes. (French)

(2e) No jasno bylo odno: nel’zja vygonjat’ cheloveka iz usad’by pod Rozhdestvo. Eto stalo perfective+past by subjunctive particle izvestno vsemu prikhodu, i na Rejnsnes leg perfective+past by subjunctive particle pozor. (Russian)

The example shows a fundamental aspectual difference between Romance and Slavic counterfactuals: the imperfective morphology is still found in the French sentence (“se saurAIT” and “serAIT”), but Russian is free to use perfective aspect with a “real” aspectual meaning of result/complete event in combination with past tense and the subjunctive particle: “stalo by izvestno” (glossing: “became SUBJUNCTIVE-PARTICLE known”) and “leg by pozor” (glossing: “laid SUBJUNCTIVE-PARTICLE shame”).

While both French and Russian obligatorily mark verbs with aspectual morphology, there is a noteworthy difference in the morphological make-up of the verb. In Russian, aspect is morphologically independent of tense and mood markers, while in French the imperfective is a past tense form. Hence, only in Russian can the choice of aspect be truly independent of tense marking.

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2 Some of the claims concerning Romance in this paper are specific to French and Italian. In Spanish, for instance, counterfactuality can be expressed with ‘perfective’ morphology (Hacquard 2006: 99).
When the irrealis hypothesis belongs to the past and is thus truly counterfactual, two layers of past tense morphology must be used in Germanic and Romance. The second layer of past tense is provided by the perfect operator “have”.

(3a) I tukthuset kunne han ikkje vær. Ho Hjertrud ville ikkje ha tillatt. (colloquial dialect of Northern Norwegian)

(3b) Ins Zuchthaus hätte er nicht gehen können. Hjertrud hätte es nicht zugelassen. (German)

(3c) He couldn’t go to prison. Hjertrud would never have allowed. (English)

(3d) Il pouvait pas aller en prison. Hjertrud l’aurait pas permis ... (French)

(3e) Otpravit’sja v tjur’mu on tozhe ne mog. Ertrjud ne dopustila perfective+past by subjunctive particle etogo … (Russian)

In the examples above, the antecedent (protasis) is left implicit. For our discussion, it is not crucial whether the construction has the form of a standard conditional or not. Counterfactuals without an antecedent are semantically similar with the difference that the antecedent hypothesis is contextually given. It is still interesting to note that in a full-fledged counterfactual conditional, a bare imperfective past is used in the antecedent in French, cf. the auxiliary “avait” in (4c).

(4a) Hadde ikke Jacob vært så vakker, ville han nok ha vakt avsky både hos hjemmefolk og fremmede. (Norwegian)

(4b) Hätte Jacob nicht so gut ausgesehen, dann hätte er wohl zu Hause und bei Fremden Abscheu erregt. (German)

(4c) People both at home and abroad would surely have found Jacob disgusting had he not been such a handsome man. (English)

(4d) Si Jacob n’avait pas été aussi beau, il aurait probablement éveillé le dégoût chez tout le monde. (French)

(4e) Ne bud’ imperfective+imperative Iakov tak krasiv³, on vyzyval imperfective+past by subjunctive particle k sebe otvrashchenie i u domashnikh, i u postoronnikh. (Russian)

One way to look at the use of past perfect in counterfactuals is to say that one layer of past tense morphology is fake, and one layer of past tense morphology is real. On the contrary, the past tense in (1) above is only fake and the counterfactuality in (1) can in principle be cancelled because the non-past (future) is uncertain.

Russian differs crucially from Romance and Germanic inasmuch as a composite perfect, i.e. two layers of past tense morphology, is not available. From a synchronic point of view, there is no morphological perfect tense in Russian. Historically, though, “vyzyval by” (in 4e) is the

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³ The more common construction in the counterfactual antecedent in Russian is: “esli [if] by [SUB-PARTICLE] + verb in past tense”, cf. (4e”) in the next footnote.
combination of an aorist “by” – a past tense form of the auxiliary “byt’ – to be” – and the perfect l-participle.\(^4\)

Importantly, the aspectual facts remain the same in two-past counterfactuals: imperfective morphology in French vs. a genuine aspectual choice in Russian: a real perfective in (3e) – an accomplishment predicate under negation favours in this case the perfective – and a real imperfective in (4e), where the stative interpretation requires the imperfective.

So the facts appear to be clear enough: an aspectual distinction in Slavic, but not in French. Note that this need not have been the case, but is due to a more general decline of the aorist (passé simple) in French. We still find some occasional uses of an (obsolete) alternative form in French counterfactuals:

(5a) Regnet var ille nok for treverket. For silken ville det vært katastrofe. (Norwegian)

(5b) Der Regen war schon schlimm genug für das Holz. Für die Seide wäre er eine Katastrophe gewesen. (German)

(5c) The rain was hard enough on the wood. It would have been a catastrophe for the silk. (English)

(5d) La pluie n’était déjà pas bonne pour les boiseries. Pour la soie, cela eût été une catastrophe. (French)

(5e) Dozhd’ dostatochno poportil derevo. A dlja shelka on okazalsja perfective+past by-subjunctive_particle rokovym. (Russian)

Quite misleadingly, the form “eût été” in (5d) is referred to as “imparfait du subjonctif” (imperfective subjunctive tense) in traditional French grammars. However, the auxiliary form is clearly derived from an aorist (“perfective”) stem of the verb “avoir” (cf. the passé simple “eut”). The form “eût été”, like many other TAM forms in French, has practically disappeared in contemporary language although it still may occur with a stylistic effect in written texts. In the counterfactual environment, “imparfait du subjonctif” – or preferably “passé antérieur du subjonctif” – (“eût été”) has for most speakers been replaced by “le conditionel passé” (“aurait été”).

A reasonable hypothesis seems to be that the general decline of (composite) verb forms based on the aorist (“passé simple”) is in some way responsible for the dominant use of imperfective (and not “perfective”) morphology in French counterfactuals. The competition perspective, which has recently been worked out in Optimality Theory, plays a crucial role in this kind of reasoning. However, in the literature there are also arguments which point in a different

\(^4\) The Russian construction “by + verb with the suffix -l” in both the antecedent and consequent is thus reminiscent of the Norwegian “hadde + participle” (without an explicit modal “ville”), which is still an active and productive construction in Norwegian, cf. both the antecedent and consequent in (4a’) and (4e’):

(4a’) Hadde ikke Jacob vært så vakker, hadde han nok vakt avsky både hos hjemmefolk og fremmede. (Norwegian)

(4e’) Esli by_subjunctive_particle Iakov ne byl_imperfective+past tak krasiv, on vyzyval_imperfective+past by_subjunctive_particle k sebe otvraschchennie i u domashnikh, i u postoronnikh. (Russian)
direction, viz. that the imperfective in itself favours a counterfactual semantics. We will return
to this issue below.

The interaction of modality, tense and aspect can be very intricate as witnessed by the
following example:

(6a) Men de hadde hvert sitt værelse. Han tenkte på om han skulle ta sitt gamle værelse i
bruk. Men slo det bort. Dina kom til å ta en fryktelig hevn. *(Norwegian)*

(6b) Aber jeder hatte sein eigenes Zimmer gehabt. Er überlegte, ob er wieder in sein altes
Zimmer ziehen sollte. Aber nahm Abstand von dem Gedanken. Dina würde sich fürchterlich
rächen. *(German)*

(6c) But they had slept in separate rooms. He wondered if he should start using his old room
again. But rejected the idea. Dina would take some terrible revenge. *(English)*

(6d) Mais ils avaient chacun leur chambre. Il pensa à réintêgrer son ancienne chambre. Mais
chassa cette idée. La vengeance de Dina pouvait être terrible. *(French)*

(6e) Pravda, u nikh byli raznye komnaty. Emu prishlo v golovu zanjat’ svoju prezhnjuju. No
on tut zhe otkazalsja ot etoj mysli. Dina zhestoko ćotomstilaperfective+past bysubjunctive_particle emu
za eto. *(Russian)*

The German, English and Russian counterfactuals display the usual morphology (“würde”,
“would”, “by”, respectively). The Norwegian and French examples, however, deserve special
mention. Although the context clearly forces a counterfactual interpretation, the authors use a
simple preterite (“kom”, “pouvait”). This points to a general tendency cross-linguistically:
When the context unambiguously requires a counterfactual interpretation, the past tense itself
can be a sufficient marker.

The use of “pure” past morphology without explicit modals is even more striking in certain
Norwegian two-past counterfactuals as we saw above in (4a’ – footnote 4). Also in example
(6a), an alternative two-past counterfactual with ordinary past perfect morphology would be
perfectly natural:

(6a’) Dina hadde tatt en fryktelig hevn. *(Norwegian)*

Returning to (6a) and (6d), could it be that the counterfactuality in these cases is lexically
expressed through the meaning of the “prospective” construction “komme til å + infinitive” in
Norwegian and the modal verb “pouvoir” in French, thus making counterfactual morphology
redundant? Perhaps, but this is not end of story. Note that English represents the exceptional
picture where past modals cannot receive further morphological marking: “would” and
“could”. In German, French and other languages, the past modal itself can typically cooccur
with conditional/subjunctive mood, so it remains to be explained why this is not the case in
(6a), i.e. “ville komme til å ta”, or (6d). In the last example which we will provide from RuN-
OMC, the French modal “pouvoir” appears as the past participle in a two past counterfactual
with conditional morphology on the auxiliary (“aurait pu”):

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The Norwegian expression is similar to the composite French future “aller + infinitive”. The semantic
differences, if any, between “kom til å” and the ordinary modal auxiliary “ville” are certainly quite subtle.
(7a) Det kunne ha gått verre, hadde ikke han vært. (colloquial dialect of Northern Norwegian)

(7b) Es hätte schlimmer ausgehen können, wenn er nicht gewesen wäre. (German)

(7c) Were it not for him, things could have been much worse. (English)

(7d) Cela aurait pu être bien pire s’il n’avait pas été là. (French)

(7e) Esli b ne on, vse konchilos’ perfective+past by subjunctive_particle kuda khuzhe. (Russian)

The use of the bare imperfective past as a marker of counterfactuality is the concern of the rest of the paper.

3. Two different fake imperfectives

The general picture seems to be clear enough both for Russian and French. Counterfactual conditionals in French are characterised by imperfective morphology (on the auxiliary in two past counterfactuals) – both in the antecedent (normal imparfait) and consequent (imparfait plus future verb stem).

Unlike Russian, the viewpoint aspect (here: the imperfective) seems to lose its normal imperfective (stative/progressive/habitual) meaning in French counterfactuals. This difference in the aspectual system of Russian and French is most transparent when the verbal predicate is telic and the speaker refers to a complete event. In this case, the French imperfective in a counterfactual context is obviously “perfective” or fake. Some data from RuN-OMC and the Norwegian novel “Kvinnen som kledte seg naken for sin elskede” (1990) by Jan Wiese illustrate this point, cf. examples (8) and (9):

(8a) Vatikanets mening med gaven var at maleriet skulle tjene som kirkens altertavle, men arkitekten protesterte. Den gamle tavlen ville bryte med kirkens stil. (Norwegian)

(8b) Im Vatikan hatte man die Auffassung vertreten, das Gemälde solle in der Kirche als Altarbild dienen, doch der Architekt hatte protestiert. Das alte Bild passe nicht zum Stil der Kirche. (German)

(8c) The Vatican’s intention was for the painting to serve as the altarpiece for the church, but the architect protested. The venerable painting would clash with the modernity of the church. (English)

(8d) En offrant ce tableau, le Vatican avait exprimé le voeu qu’il servît de retable. Mais l’architecte avait vêhémentement protesté. Le vieux tableau romprait avec le style de l’église. (French)

(8e) Vatikan zhelal videt’ svoj podarok v kachestve altarnoj kartiny v novoj cerkvi, no arkhitektor kategoricheski vosprotivilsja etomu. Starinnaja kartina, po ego mneniju, narushila perfective+past by subjunctive_particle sovremennyj stil’ cerkvi. (Russian)
The predicate “bryte – clash” is telic with a resultative interpretation in this context, hence the perfective aspect in Russian: “narushila”. In French, on the contrary, the conditional mood with its imperfective morphology is still used to convey the same meaning: “rompraAIT”. A similar pattern is observed in two past counterfactuals, cf. the telic predicate “revolusjonere – revolutionise” in example (9) and its translations into French (aurAIT – auxiliary with imperfective morphology) and Russian (perfective):

(9a) Hadde bildet vært kjent fra det tidspunkt det ble malt, **ville det ha revolusjonert** malerkunsten […] (Norwegian)

(9b) Wäre das Bild bekannt gewesen seit der Zeit, in der es gemalt wurde, **hätte es die Kunst revolutioniert** […] (German)

(9c) If the picture had been known from the time when it was completed, it **would have revolutionised** the art of painting […] (English)

(9d) Si l’œuvre avait été connue de ses contemporains, elle **aurait provoqué** dans l’art pictural une révolution […] (French)

(9e) Esli by o kartine bylo izvestno v periode e sozdaniia, ona **proizvela** perfective+past subjunctive_particle revoljuciju v zhivopisi […] (Russian)

I will next introduce data which are challenging in several respects. We have already seen some indications of what there is to come in example (6) with the “bare” imperfective “pouvait” in French and also the simple preterite “kom” in Norwegian, despite the counterfactual context.

Consider now the following puzzling examples from Russian without explicit markers of subjunctive/conditional mood in main clause counterfactuals:

(10) (Zdes’ i dalee, v otvetakh kniazja Andreja, rech’ idet o plane voennoj kampanii 1805 g. […] Po planu, odobrennomu Aleksandrom I, predpologalos’ nanesti udary Francii s raznykh storon. […]  Udar s vostoka **nanosili** imperfective+past avstriycy i russkie; Rossija – cherez Pol’shu, stremjas’ vovlech’ Prussiju v vojnu, i v Galicii dlja operacij po Dunaju; Avstrija takzhe **vydeljala** imperfective+past dve armii: bavarskiju i ital’janskuju. … Plan etot ne byl osushchestvlen. (Russian; from editorial notes on Tolstoj’s “War and Peace”)

**(Here and further, in the answers of Prince Andrej, the topic of conversation concerns the war campaign in 1805. […] According to the plan approved by Alexander I, the idea was to attack France from different sides. […]**)

From the east the Austrians and Russians were to attack (literally: “The Austrians and Russians **attacked**”); Russia through Poland thereby trying to involve Prussia in the war, and in Galicia by preparing an operation on Danube; Austria would also put forward (literally: “Austria **put forward**”) two armies: the Bavarian and the Italian. … This plan was not executed.

The next example was found in a report from a chess tournament (team championship for women). This topic is not quite accidental, as we will see below.
The beautiful Ukrainian girls were unfortunate with the tie-break scores. […] For instance, [Kosinceva from Russian] should have lost an endgame with a piece down. But she saved the game. If she had lost after all, Ukraine would have taken (literally: “took the gold”) the gold medal …

There is no subjunctive particle “by” in the main clause of (11). Hence, it turns out that Russian in fact allows for a bare imperfective past with a counterfactual complete event interpretation given the right context. These facts have been overlooked in the vast literature on Slavic aspect. What are the implications of these data for our understanding of aspectual choice in counterfactuals?

4. In mood for chess: the counterfactual imperfective

The notion of “fake imperfective” (Iatridou 2000) has been used to capture aspectual properties of counterfactual constructions cross-linguistically, but Iatridou considered the past imperfective as merely one of several ingredients making up counterfactuals. What we observe in (10) and (11), is that the imperfective past in Russian can be sufficient on its own to convey the counterfactual interpretation.

From examples (1)-(9) we know that the fake imperfective, just as pointed out by Iatridou, is characteristic of Romance, but not Slavic. However, examples like (10) and (11) blur this picture. In fact, if we look closer at the specific genre of chess annotations – discussion of hypothetical possibilities in a finished game, an apparently similar “main clause fake imperfective” is found both in Slavic and Romance:

(12) Vmesto 35…Qc7 35…Rg8 davalo imperfective+past pobedu […] (Russian)
Instead of 35…Qc7 [actual move played in the game] 35…Rg8 [hypothetical move] would have won (literally: “won”) […]

(13) 21… Rb5. V variante 21…Nh5 22.Bxd6 […] chernye terjali imperfective+past peshku bez vsjakoj kompensacii. (Russian)
21… Rb5. [actual move played in the game] In the line 21…Nh5 22.Bxd6 […] black would have lost a pawn (literally: “lost a pawn”) without any compensation.

The next example from a book by the great Russian chess champion Mikhail Botvinnik found its way into a Bulgarian translation:

(14a) Krasivo vyigryvali imperfective+past belye v sluchae 28.h4 (Russian, adapted from Restan 1989: 206).
White would have won (literally: “won”) neatly in case of 28.h4.

(14b) Belite pechelekha imperfective_stem+imperfect_past_tense krasivo v sluchaj na 28.h4 (Bulgarian, adapted from Restan 1989: 206)
White would have won (literally: “won”) neatly in case of 28.h4.

* All the examples below from chess annotations are authentic, mostly found on the internet.
For more Russian examples see (Grønn 2008a). Bulgarian provides an interesting case since
the verbal paradigms combine properties of both the Slavic and Romance TAM systems.
Thus, the verb form “poluchavakha” in (15), just as in (14b), is something like an
“imperfective past imperfect tense”:

(15) [S]led Nd3 chernite poluchavakha imperfective_stem+imperfect_past_tense izvestni kontrashansove.
(Bulgarian)
[A]fter Nd3 black would have obtained (literally: “obtained”) some counter play.

Here are a few examples from Romance along similar lines:

(16) 59.Rb2. Il Bianco vinceva imperfect_past_tense forzatamente con 59.Rg8, ad esempio: 59...Ra1
60.Bd5+. (Italian)
59.Rb2. [actual move played in the game] White would have won (literally: “won”) forcefully
by playing 59.Rg8, for instance 59...Ra1 60.Bd5+.


(18) 12.Bxc7. Virtual accepte les complications, car après le retrait du Fou en h4, les
Noirs jouaient imperfect_past_tense f6 avec une position préférable.
12.Bxc7. [actual move played in the game] Virtual accepts complications, since after the
retreat of the bishop to h4, black would have played (literally: “played”) f6 with an advantage.

The important point for the understanding of all these examples is that the author discusses
hypothetical possibilities in an already finished chess game. Thus, the chess moves 21…Nh5
(ex. 13 Russian), Nd3 (ex. 15 Bulgarian) 59.Tg8 (ex. 16 Italian) and 19.Nxh5 (ex. 17 French)
were not actually played. The annotator claims, however, that if the alternative chess move
under consideration had been played, the game would have developed in a certain direction.
For all the languages above, this irrealis or counterfactual interpretation in the apodosis is not
conveyed by the canonical subjunctive or conditional mood but by simple combination of
imperfective aspect and past tense.

For Russian, the counterfactual interpretation in (13) arises in contrast to the perfective
indicative past in (19), which in absence of the subjunctive particle “by” can only mean that
the move Nxa5 was actually played and black actually lost a pawn:

(19) Nxa5, i chernye poterjali perfective+past peshku ... (Russian)
Nxa5, and black lost a pawn.

In (Grønn 2008a), I show why this counterfactual imperfective in Russian is restricted to
specific contexts, notably chess annotations. In French – and even more so in Italian – the
bare imperfective has a more productive counterfactual meaning in main clauses. For
instance, in (20) from Italian, not only the antecedent, but also the consequent contains pure
imperfective morphology.7

7 The translation of many examples from French or Italian into Russian requires a completely different
distribution of TAM morphology:

(20’) Esli bysubjunctive_particle on vchera prishel perfective+past, to on bysubjunctive_particle vstrelil perfective+past Mashu.
Se Bingley arrivava e contrava Marie. (Italian, from Ippolito 2004)
If Bingley had arrived (literally: “arrived”) last night, he would have met (literally: “met”) Marie.

According to Patard (2008: 323), there has not been done much work on this construction in French, despite the enormous amount of literature devoted to the French imparfait. The exceptions consist basically of a couple of papers by Berthonneau and Kleiber, as well as Bres (2006).

For Berthonneau & Kleiber (2006), “the counterfactual reading of the “imparfait” is crucially dependent on the interaction between the “imparfait” and the fronted adjunct”, since the latter is the counterfactual element responsible for the branching into irrealis worlds. A characteristic example is given below:

Un pas de plus et cette voiture m’écrasait. (French, Patard 2008: 275)
One more step and this car would have crushed me (literally: “crushed me”).

The alternative chess move is obviously a good candidate for a fronted adjunct licensing this usage of the imperfective past. Note, however, that the adjunct – pace the authors mentioned above – need not be fronted, as witnessed by the French example in (17) above.

5. The anaphoric past

I will later propose a purely pragmatic analysis of the Russian counterfactual imperfective, but it is conceivable that an account of the French imparfait requires quite a different machinery. One persistent complication in the analysis of the French imperfective is the somewhat artificial semantic distinction between tense and aspect in relation to a verb form which incorporates both components in one single morpheme.

The Romance data in general, and more specifically the use of (bare) imperfectives in counterfactual main clauses, invite explanations along different lines:

(a) the imperfective core meaning in Romance is compatible with, or even favour, counterfactuality.

(b) counterfactuals require past tense morphology and the imparfait is the “default past tense” in Romance. The aspectual component of imparfait is “fake” in this environment.
(c) competition between different grams in the TAM system leads to the decline or reinterpretation of certain grams and pragmatic strengthening of others. The profile of the *imparfait* in contemporary French should be considered in this competition perspective.

Possibly the ultimate explanation could be sought in some combination of these factors. Let us consider them in turn.

Concerning the first strategy listed above – to capture the counterfactual imperfective in purely semantic terms, most researchers pursuing this line (with respect to ordinary counterfactuals) have focused on the alleged *anaphoric* component in the meaning of *imparfait*.

Main clause counterfactuals indeed contain temporal anaphora of the sort “then / at that time”, either overtly or covertly. 10 Recall the following example from section 2:

(1d) Mais alors les prisons *seraient* pleines. (*French*)
But then the prisons would be filled.

Given a standard possible worlds semantics for counterfactuals, the observed temporal binding patterns represent a version of so-called “donkey-sentences”. 11 Consider example (22) and the semantic representation/paraphrase in (22’):

(22) Si les blancs jouaient imperfect_past_tense simplement au premier coup Cc3 suivi de Cb1, les blancs se retrouveraient conditional_mood_(future+imparfait) alors dans la position initiale.
If white in the first move simply played Nc3 followed by Nb1, then white would be back in the initial position.

(22’) For every world w such that there is a time t and white plays Nc3-Nb1 at t in w and w is maximally similar to our world w0 (modulo white playing Nc3-Nb1), white is back in the initial position in w at the time t’ immediately following t.

Compare this to the quantificational structure of “donkey sentences”:

(23) Every farmer who owns a donkey beats it.

(23’) For every farmer x such that there is a donkey y and x possesses y, x beats y.

The problem in both cases for a truth-conditional account is that the time t in (22’) and the donkey y in (23’) are both existentially bound ∃t / ∃y in the restrictor of the universal quantifier ∀w / ∀x – for every world w in (22’) and for every farmer x in (23’), respectively. The discourse referents t and y are therefore not accessible in the second part of formula, i.e. the nucleus, according to the standard logical machinery of truth-conditional semantics. 12

So, temporal anaphora indeed plays a non-trivial role in counterfactual conditionals. The same effect of temporal anaphora is clearly present in our examples with a bare *imparfait* in the main clause:

10 The argument for covert temporal anaphora in the antecedent – characterised by pure *imparfait* – is less obvious, but see below for some discussion of requirements on the input context.

11 Thanks to Arnim von Stechow (p.c.) for pointing out this parallel.

12 A solution to this problem requires a so-called dynamic semantic framework.
(24) Après l’acceptation du pion, les Blancs gagnaient une pièce: 16… Cxa4 17.b5 Fxb5.

(After accepting the pawn (i.e. if black had accepted the pawn), white would have won a piece: 16…Nxa4 17.b5 Bxb5.

(24’) For every world w such that there is a time t and black takes the pawn at t in w and w is maximally similar to our world w0 (modulo black’s taking the pawn), white wins a piece in w at the time t’ following t.

In fact, neither in French nor in Russian, is it possible for the counterfactual imperfective to occur in the main clause without a contextually salient past time in the input context from which the branching into alternative possible worlds takes place. The branching point can be given explicitly for instance by a fronted prepositional phrase or if-clause. Typically, however, the antecedent in turn refers to some salient real past time in our world, e.g. the actual chess move played in the game, from which it departs into the realm of irrealis. Hence, the anaphoric link from the main clause to the input context may be rather indirect, mediated by the protasis.

Most researchers in the French grammar tradition insist on the real past tense component: “l’imparfait a ici comme ailleurs un sens temporel passé” (Patard, 2008: 323). However, this is not very precise or illuminating. Arguably, the past tense component in the counterfactual imperfective – be it morphologically independent of aspect (Russian) or not (French) – is not “fake” in the sense of being semantically “unmotivated” since it is somehow controlled or licensed by a real past in the input context. Hence, the requirement that there be a contextually salient past time remains real. However, in semantic terms, the past tense morphology in the main clause is still a “zero” tense (or bound tense), similar to embedded tenses in sequence of tense languages.

Valentine Hacquard makes an interesting claim that “when the temporal coordinates of an eventuality are not set with respect to the utterance time, the morphology is always imperfective”, and relates this to a possibly inherent anaphoricity of the imperfective in French/Italian (Hacquard 2006: 99). She thus argues for a possible combination of approaches (a) and (b):

“English only has one past morpheme. Hence, a zero past will have to be spelled out as past. But in French and Italian, this zero past will be spelled out as the imparfait. This is in line with the intuition that the imparfait is ‘anaphoric’ in nature, and is very much in the spirit of Giorgi and Pianesi (2004), for whom the imparfait is a present in the past. Notably, having the imparfait be the spell out of a bound past will account for the fact that the imparfait is required in sequence of tense environments (the quintessential zero past environment), even when the complement’s event is taken to be completed” (Hacquard 2006: 101).

We now have an explanation for the use of past tense in the “counterfactual imperfective” – both in Romance and Slavic. The temporal argument of the verb is dynamically bound, i.e. temporal anaphora, by a past time in the antecedent or implicit context. Note, however, that this reasoning does not necessarily transpose to ordinary counterfactual conditionals. There is

13 A plea for the anaphoric nature of l’imparfait du contrefactuel in French is given by Berthonneau & Kleiber (2006), for whom the frontal adjunct makes salient a past situation to which the counterfactual imperfective relates anaphorically.
a clear difference between standard counterfactual conditionals and the counterfactual imperfective since the former, apparently, need not be anchored to a past branching point (cf. irrealis hypotheses in the present/future, as in examples such as (1d) and (2d) above).

6. The competition perspective

Since aspect and tense are independent grams in Russian, strategy (b’) – the counterpart of (b) in the previous section – is not available for Russian:

(b’) counterfactuals require past tense morphology and the imperfective past is the “default past tense” in Russian.

Unlike the French case above, the strategy in (b’) applied to the Russian data completely lacks explanatory power, since it does not bring us closer to the central issue raised by the counterfactual imperfective, viz. why the imperfective and not the perfective aspect is used in combination with past tense morphology.

Concerning strategy (a) – the idea of seeking an invariant meaning for the imperfective – I refer the reader to (Grønn 2008a) for arguments against reducing the counterfactual imperfective in Russian to imperfective core meanings such as progressive or habitual interpretations.

Finally, the Russian counterpart of strategy (c) can arguably explain the Russian data and will be explored in the next section:

(c’) competition between different grams in the TAM system leads to the decline or reinterpretation of certain grams and pragmatic strengthening of others. The profile of the imperfective aspect in contemporary Russian should be considered in this competition perspective.

To my knowledge a competition-based approach has not been properly explored in the literature with respect to the French TAM system. One reason might be the amalgam of tense/aspect morphemes in French which makes the competition less transparent than in Russian. There is also an open question which grams should be considered competitors at different levels of analysis. The competition between the imparfait, passé simple and passé composé is blurred by the unclear synchronic status of passé simple (the “perfective” aorist past tense) and the different morphological make up of the passé composé (a composite perfect) compared to the other forms.

Concerning the counterfactual imperfective in French, one competitor should be given special mention: le conditionel (passé). Are there any interpretational differences between main clauses with conditional morphology and bare imperfectives in counterfactual contexts? Both Berthonneau & Kleiber (2006) and Bres (2006) acknowledge that this crucial issue is not yet properly understood in the literature. What are the proper restrictions on the counterfactual imperfective? Why isn’t it always possible to replace a conditional past with a counterfactual imperfective? And why should it be possible at all?

However, one difference which emerges under scrutiny of the data is the following: Although the reason for the use of the imperfective – the morphology of imparfait – may be similar in both cases, ultimately related to the anaphoric component “then”, it seems that only
in the counterfactual imperfective is the past tense component of *imparfait* by necessity dependent on a real semantic past in the input context. Of course, it remains to spell out the precise conditions under which an anaphoric zero tense surfaces as a past due to a past time antecedent.

In fact, it seems that the bare imperfective in many respects patterns with counterfactuals displaying two layers of past morphology: The hypothesis in both cases concerns truly counterfactual and irreversible courses of events in the past. In one past counterfactuals (with simple past conditional morphology), on the other hand, the falsity of the antecedent is merely an implicature which might be cancellable in certain contexts.

Accordingly, when the protasis is spelled out as a full-fledged if-clause adjoined to the counterfactual imperfective in the apodosis, the former exhibits past perfect morphology:

\[(25) \text{Si je n’\textsc{étai} pas inter\textsc{venu}, ça se finissait } (\text{alternatively: } \text{se serait fini}) \text{ au couteau.} \]

*(French, Patard, 2008: 273)*

If I hadn’t intervened, it would have ended with a knife.

This correlation between true past tense reference in the antecedent and the anaphoric past of the counterfactual imperfective has to my knowledge passed unnoticed in the literature on the French construction. The observation does not, however, explain why “se finissait” can replace the expected *conditionel passé* (“se serait fini”) in the consequent of (25). It might be conjectured that this has to do with the morphological complexity of the latter. All the same, under which circumstances *l’imparfait du contrefactuel* is interchangeable with *le conditionel passé* remains to be investigated in more detail. Furthermore, as we will see in the next section, such a situation with two apparently synonymous forms is from an evolutionary perspective not pragmatically stable and invites pragmatic strengthening of the two competitors.

7. From the factual to the counterfactual imperfective in Russian

The “fake imperfective” – in the sense of the imperfective having a “perfective” complete event interpretation – is more common in Russian than in Romance, notwithstanding counterfactual contexts.

While I remain agnostic about the exact nature of the “fake imperfective” in Romance counterfactuals – it may partly be explained in terms of the anaphoric properties of the imperfective past tense, the claim defended here is that the fake imperfective in Russian is truly a pragmatic phenomenon. The aspectual system of Russian is cleaner than in Romance since it is separated from tense morphology. The existence of two aspects in Russian, with the perfective (Pf) having an invariant meaning, suggests a competition perspective. The general story is well-known: Pf denotes a complete event, and the imperfective (Ipf) is strengthened to the opposite incomplete event interpretation. However, this is only the tip of the iceberg. When the context is specific enough to rule out a progressive/processual/habitual-iterative interpretation, interesting things happen to the imperfective.

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14 The requirement that the antecedent must contain two layers of past tense morphology (presumably one fake and one real), seems to hold for the French counterfactual imperfective, but not for its Italian cousin, cf. example (20) above.
The phenomenon whereby the imperfective acquires context-sensitive implicatures is well-known from non-modal, indicative contexts (see Grønn 2008b and references therein). In a nutshell, we observe the following: Given a certain (strengthened) stereotypical interpretation of Pf, the underspecified Ipf is pragmatically strengthened to the opposite interpretation. Let us illustrate this phenomenon with one characteristic and well-known example of the “factual imperfective”, the implicature known as “cancellation of result”, an imperfective reading which is unattested in Romance.

(26) Vanja priekhal\textsubscript{perfective+past}\textsuperscript{,} Vanja has arrived (literally: “Vanja arrived”) > current result, i.e. Vanja is currently present.

(27) Vanja priezzhal\textsubscript{imperfective+past}\textsuperscript{,} Vanja has been here (literally: “Vanja arrived”) > cancellation of result, i.e. Vanja has left again and is currently absent.

In the minimal pair above, both aspects denote complete events. In the context of (26), Ipf is blocked, but in (27) the “fake” aspect is deblocked with the additional implicature of cancellation of result. The point is that in deictic contexts, Pf is typically interpreted as denoting a complete event whose result holds at the utterance time, cf. example (26). Accordingly, Ipf is pragmatically strengthened to the opposite meaning, giving rise to the implicature of annulled result with predicates containing a reversible target state, as in (27).

Importantly, the imperfective complete event interpretation in Russian should be characterised in “negative terms”, as cancellation of result, temporal indefiniteness etc. However, these characteristics of the imperfective should not enter the semantic component of the analysis, but are due to pragmatic strengthening from the non-use of the perfective. When neither cancellation of result nor temporal indefiniteness are contextually available implicatures, Pf is expected to be used with a complete event interpretation … unless the context suggests yet another possible pragmatic strengthening of Ipf. This is precisely what happens in the minimal pair below:

(28) Srazu reshilo\textsubscript{perfective+past partiju 22.Qb3. (constructed example)} 22.Qb3 immediately decided the outcome of the game.

(28’) Srazu reshalo\textsubscript{imperfective+past partiju 22.Qb3. (internet)} 22.Qb3 would immediately have decided the outcome of the game.

The use of Pf in (28) produces a purely indicative interpretation: “After the move 22.Qb3 (which was actually played), white won immediately”. The pragmatically enriched proposition in the minimally different example (28’) is more complex, but the aspectual complete event configuration remains the same: “In all stereotypical (normal) continuations of games which are identical with the actual chess game up to move 22, but in which white plays 22.Qb3 instead, there exists a complete event of white winning the game within the time interval starting with the chess move 22.Qb3 being played (left boundary) and ending in the infinite future.”

This minimal pair shows why the environment of chess annotations is ideal for aspectual competition along the lines of factual (Pf) and counterfactual (Ipf) moves/outcomes of chess
games: there are only two candidate interpretations to consider – did the move x occur in the

game (factual) or did x remain an unrealized possibility (counterfactual)?; did white win after

certain move x (factual) or was the win only the natural outcome given the hypothetical

move x (counterfactual)? … etc. The context clearly tells us which two candidate

interpretations are at stake, and, importantly, progressive or habitual-iterative interpretations

normally associated with Ipf are not available. The speaker’s aspectual choice is thus

sufficient in itself for the hearer to arrive at the correct interpretation even without the

subjunctive particle “by”.15

While the counterfactual interpretation of the imperfective in the examples above is purely

pragmatic, the past tense morphology has a semantic motivation. Unlike standard

counterfactuals, past tense does not enter an agreement or checking relation with a

counterfactual operator “by”. But this means that the counterfactual imperfective – just like

the apparently similar construction in Romance – can only be used when the counterfactuality

concerns a disclosed possibility in the past.

The following examples illustrate the difference between the counterfactual imperfective

(only past time reference) and standard counterfactuals (possible future time reference):

(29) K schas’tu ja ne provalilsja na ekzamene. V sluchae provala menja

vygonjali imperfective+past iz universiteta. (constructed example)

Luckily, I did not fail the exam. In case of failure I would have been thrown out of the

university. (literally: “they threw me out”)

Example (29) is admittedly marginal since the convention of the counterfactual imperfective

in Russian is not well-established outside the jargon of chess annotations. However, the hearer

is forced to make sense of the speaker’s choice of Ipf in (29), and the counterfactual

interpretation is indeed the only available option for the hearer due to the very explicit

counterfactuality conveyed by elements independent of the verbal predicate itself.

The contrast is striking with (29’) which is simply ungrammatical due to the non-past

hypothesis:

(29’) A: Ekzamen otmenen!
B: Kakoe oblegchenie! #V sluchae provala menja vygonjali imperfective+past by subjunctive_particle iz universiteta.

(constructed example)
A: The exam is cancelled!
B: What a relief! In case of failure I would have been thrown out of the university.

The grammatically correct form in (29’) is clearly “vygnali perfective+past by subjunctive_particle”. As

shown in (Gronn 2008a), a further division of pragmatic labour is observed in Russian chess

annotations, where a bare imperfective past is used in discussion of disclosed hypotheses in

the past, while the combination of perfective past and the subjunctive particle is required

when the hypothesis concerns unlikely future continuations of the chess game (e.g. in live

annotations on the internet).

15 Observe that in standard counterfactual contexts outside the sphere of chess annotations, if we replace

default ”by subjunctive particle + verb perfective+past” with a bare imperfective, we risk getting a counterfactual, yet

incomplete event interpretation, e.g. through accommodation of a small reference time: “at that time an event

would have been unfolding…”.
8. Towards a principled explanation for the emergence of the fake imperfective

I believe the observations above concerning the counterfactual imperfective in Russian are basically correct, but why do we get this pragmatic strengthening of Ipf? The question goes beyond the data discussed in this paper since the counterfactual imperfective in Russian (e.g. in chess annotations) is merely a special case of pragmatic strengthening. In this final section, I will make some suggestions as to how the emergence of the fake or (counter-)factual Ipf in Russian could be captured in a theory of grammaticalisation.

Recall that the counterfactual imperfective in Russian is a productive and frequent construction mainly in the specific genre of chess annotations. In fact, in this environment it typically blocks the alternative construction with the subjunctive particle and perfective aspect. For Russian chess players the counterfactual interpretation of Ipf therefore comes completely naturally.

The counterfactual imperfective thus provides an interesting case for studying grammaticalisation or conventionalisation of implicatures in contemporary language. The question, which obviously has a diachronic dimension, is then how these aspectual implicatures arise and become conventionalised.

As I said above, I will argue that the emerging polarisation of the complete event readings associated with the perfective and imperfective aspects is due to a general phenomenon of pragmatic strengthening in natural language. Interestingly, there exist tools for analysing such phenomena. In earlier work, I have analysed the conventionalisation of context-sensitive aspectual implicatures in Bidirectional Optimality Theory, see (Grønn 2008a) and references therein. Here I will informally sketch a different, game theoretical approach, which ultimately might be closely related to the optimality theoretic reasoning.

The goal of game theoretical and optimality theoretic reasoning at the pragmatics-semantics interface is to capture the process whereby the speaker (S) and hearer (H) arrive at the optimal form-meaning pairs. Anton Benz proposes a formal framework which divides diachronic processes into a sequence of synchronic stages (Benz 2006: 604) thereby capturing the principle of associative learning. Let us first illustrate this approach through the minimal pair in (26) and (27) above, where Pf is pragmatically interpreted as “Vanja’s being present”, while Ipf receives the opposite implicature of cancellation of result: “Vanja’s being absent”.

8.1. Case 1: “came” vs. “came and left”

Recall examples (26) and (27), repeated below:

(26) Vanja priekhal\textsuperscript{perfective+past}. Vanja has arrived (literally: “Vanja arrived”) > current result, i.e. Vanja is currently present.

(27) Vanja priezzhal\textsuperscript{imperfective+past}. Vanja has been here (literally: “Vanja arrived”) > cancellation of result, i.e. Vanja has left again and is currently absent.

In the initial situation, we make the following assumptions:
Pf (+ past tense) has a wide but unambiguous, invariant meaning being compatible with all kinds of complete event interpretations (including, among others, “current result” and “cancellation of result”).

Ipf (+ past tense) is truly underspecified, semantically denoting a superset of Pf, including both complete (“current result”, “cancellation of result” etc.) and incomplete event interpretations.

Stage 1: In deictic contexts, complete “coming” events prototypically leave a result at the utterance time, but in Russian there is no “cheap” expression to convey this information (cf. the composite present perfect in Germanic/Romance). The only way to express the content corresponding to the paraphrase “Vanja came and is still present” is to use a similar kind of heavy paraphrase, e.g. “Vanja prishel i ostalsja”, but this expression is clearly penalised due to its complexity. Since Pf is consistently used with a complete event interpretation in deictic contexts – and the hearer learns that Vanja is stereotypically present at the utterance time following the past coming event, the complete event interpretation of Pf is strengthened through associative learning to carry the implicature of “current result”.16

Stage 2: Pf is conventionalised in deictic contexts as a carrier of the implicature of “current result”. The alternative situation where Vanja has already left at the utterance time must be designated explicitly: “Vanja prishel i opjat’ ushel – Vanja came and left again”.

Ipf is underspecified and compatible with both Vanja’s being present and absent, but remains unused since a one-to-one match is established through the pairing <Pf, current result> and <“prishel i opjat’ ushel”, cancellation of result>.

From the speaker’s economy perspective, Ipf is clearly preferred to the more complex “prishel i opjat’ ushel”, however S cannot use Ipf to convey cancellation of result since there is no guarantee that Ipf would be interpreted correctly by H.

Stage 3: We assume that S knows whether Vanja is present or absent at the utterance time, but in some situations S does not care how to classify Vanja’s coming event; the situation at the utterance time might not be relevant in the actual discourse.17 S could in principle utter something like “libo Vanja prishel i on tut sejchas, libo Vanja prishel i opjat’ ushel” – “either Vanja came and is here now, or Vanja came and left again”, but such a cumbersome expression clearly leads to an unacceptable violation of speaker’s economy.

If Vanja is present at the utterance time – although S does not care about this fact, S will still use Pf since there is no lighter form available and no misunderstanding will arise.

But what if Vanja is absent at the utterance time? If S does not care to convey this information, she is free to choose the underspecified Ipf (but not Pf, since Pf is already conventionalised with the implicature of “current result”). Indeed, if S does not care about the present/absent distinction, she has good reasons to choose the lighter form Ipf in favour of the complex expression “prishel i opjat’ ushel”.

16 This implicature is associated with Pf and not Ipf since the latter denotes a superset of the former, and the risk of miscommunication would be greater if S had chosen Ipf for the frequent situation of the complete event giving rise to a current result.

17 The analysis of Benz (2006) rests upon the assumption that S does sometimes not care how she classifies the object.
From H’s perspective, when interpreting Ipf, she can exclude the meaning of “current result” since this situation would always correspond to the light form Pf, whether S cares about this inference or not. But then, assuming speaker expertise, H can infer that Ipf implies the only other conceivable situation, i.e. the opposite of “current result”, viz. “cancellation of result”.

**Stage 4:** Through associative learning Ipf is conventionalised – in deictic contexts with predicates having a reversible target state – as a carrier of the implicature of “cancellation of result”. End of pragmatic strengthening.

### 8.2. Case 2: factual vs. counterfactual outcome

The same basic procedure as above can explain the emergence of the counterfactual imperfective in Russian chess annotations. The preliminary assumptions remain the same: Pf denotes complete events, while Ipf is underspecified and is compatible with both complete and incomplete event interpretations.

**Stage 1&2:** Pf denotes complete events, e.g. factual chess moves in the actual game. No further implicatures associated with complete, factual chess moves can arise in this specific environment. The complex expression “Pf + by_subjunctive_particle” is used for counterfactual events. Ipf is truly underspecified and compatible with the two disjunct interpretations, but remains unused due to the established one-to-one match between forms and meanings.

**Stage 3:** We assume speaker expertise, hence S knows whether or not the chess moves under discussion were played in the actual game. However, there are cases where S does not care about the factual/counterfactual distinction, and “accidentally” uses Ipf. There is no reason to prefer Ipf to Pf (the two forms are approximately of equal complexity), thus even a sloppy speaker would stick to Pf when referring to factual events. But this means that H can infer that Ipf is counterfactual and that this form is chosen by S instead of the complex expression “Pf + by_subjunctive_particle”.

**Stage 4:** Accordingly, through associative learning, Ipf becomes conventionalised in this environment as a carrier of the implicature of counterfactual outcome. End of pragmatic strengthening of Ipf.

**Stage 5:** The losing candidate “Pf + by” finds a new job and is eventually strengthened to referring to future hypothetical chess moves. End of division of pragmatic labour.

Benz shows in his paper in what kind of situations pragmatic strengthening can occur, and how the speaker and hearer learn to mutually exploit this situation (Benz, 2006: 603). Crucially, in both case 1 and 2 considered above, the context excludes a progressive or habitual-iterative interpretation, hence the competition is reduced to a limited set of complete event interpretations.

The emerging division of pragmatic labour between Pf and Ipf can also be accounted for in (context-sensitive versions of) Bidirectional Optimality Theory, where the phenomenon is known as partial blocking. Pf blocks Ipf from having a stereotypical complete event interpretation, but with the anti-stereotypical interpretation Ipf is still viable, hence only partially blocked. This is also frequently referred to as the Horn strategy, or “what is said (ab)normally is (ab)normal”. In the case of Russian aspect, the imperfective form is not
“abnormal” in terms of complexity but in terms of informativity – it makes interpretation more difficult due to its inherent ambiguity, see (Grønn 2008a).

9. Conclusion

The corpus data in the first part of the paper confirmed the distribution of TAM morphology already known from the literature on counterfactuals: aspect is “real” in Slavic (Russian), but “fake” in Romance (French), while (one layer of) past tense morphology is “fake” in both. The second part of the paper, dealing with the puzzling “counterfactual imperfective”, established the following: The counterfactual imperfective is similar in Russian and French, inasmuch as aspect is “fake” and the past tense component is neither fake nor real. The past tense is a “zero past” semantically, but its presence is motivated by a real past time in the input context. The consequences of this pattern are different, however, for the languages in question. For Russian, the data invite a semantic approach to tense and a pragmatic, competition based analysis of aspect, while for French these two categories are conflated in the morphology of *imparfait*. Hence, if this picture is correct, there cannot be a uniform answer to the question as to whether the French *imparfait* is fake or not. It depends on whether we consider the aspectual or temporal (here: anaphoric past) component.

In the paper, I have presented a pragmatic *explanation* for the diachronic development of context-sensitive implicatures associated with the imperfective in Russian. While the perfective gets associated with the stereotypical complete event interpretation, the imperfective develops into the opposite, anti-stereotypical meaning. In chess annotations, the semantic contribution of the perfective amounts to being merely “factual”, reporting actual chess moves. Obviously, the opposite of factual is *counterfactual*, hence the emergence of the “counterfactual imperfective”. The division of pragmatic labour observed in the data from chess annotations is summed up in table 1.

Table 1: Division of pragmatic labour in Russian chess annotations

<table>
<thead>
<tr>
<th>Linear ranking on forms and meanings ≤</th>
<th>actual outcome</th>
<th>hypothetical outcome in the past</th>
<th>hypothetical outcome in the future</th>
<th>hypothetical “progressive” interpretation …</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pf + past</td>
<td>OK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ipfp + past</td>
<td></td>
<td>OK</td>
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<tr>
<td>Pf + past + subjunctive</td>
<td></td>
<td></td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td>Ipfp + past + subjunctive</td>
<td></td>
<td></td>
<td></td>
<td>OK</td>
</tr>
</tbody>
</table>

What we see in table 1 is reminiscent of Bidirectional OT. The black cells are ruled out by the grammar – the rest is up to pragmatics. The optimisation procedure makes sure that the “best” form is matched with the “best” meaning, the second “best” form is matched with the second “best” meaning etc. What counts as “best” is decided by conditional informativity which penalises ambiguous and/or complex forms (cf. Grønn 2008a). The resulting picture is here identical to what we obtained above applying the principle of associative learning.
The pragmatic explanation offered by diachronic optimisation in Bidirectional OT or through the principle of associative learning is related to semantics through conventionalisation. So, although the emergence of the counterfactual Ipf is a case of pragmatic strengthening, we predict the phenomenon to be conventionalised (in specific contexts). Due to the particular context-sensitivity of the counterfactual Ipf, this reading is (only) conventionalised among chess players. Of course, any Russian who understands the setting of chess annotations – but is unfamiliar with the chess jargon – will correctly interpret the past imperfective as counterfactual (since there are no other options available), but tests with informants show that this processing requires a certain amount of effort in the beginning. Through iterative learning, the association between the past imperfective and counterfactuality will become stronger and will eventually end up being conventionalised for individual speakers who become familiarised with the chess jargon.

Future work will show whether the competition perspective, which seems important for the Russian data, also plays a similar role in French. Presumably, an analysis of data from Bulgarian can shed some light on this issue. As shown with authentic examples from Bulgarian above, this language displays a similar counterfactual imperfective, making simultaneous use of both imperfective aspect (as in Russian) and imperfect tense (as in French). It seems reasonable to assume that the choice of imperfective aspect has a purely pragmatic explanation, while the imperfect tense is a “default” past tense being responsible for the anaphoric past interpretation.

When Iatridou (2000) asks “whether [the] fake imperfective is a quirk or whether there is a principled way to account for its presence”, our answer is that since language is characterised by a systematic relationship between form and meaning there must be a principled explanation for the presence of the imperfective. In light of the analysis proposed here, a new set of tools becomes available in exploring TAM categories cross-linguistically. In line with a slogan proposed by Henk Zeevat – everything can mark everything! – a past indicative imperfective form can acquire a counterfactual interpretation when this outcome is favoured by the evolution towards more efficient form-meaning pairs.

References


