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Editors/Éditrices

Leslie Blair
Christine Burns
Lorna Rowsell

Appendix B

Percentages of correct responses for every subject and every phonological variable in every style:

Subj./Style		FS	S1	S2	WL	MP
S1	(CC)	30	71	75	80	100
	(v)	20	100	100	100	75
	(i)	0	17	33	75	75
	(C#)	0	20	40	33	66
	(dh)	17	25	0	33	100
	Means	13	47	50	64	83
S2	(CC)	0	78	80	100	100
	(v)	0	0	60	100	100
	(i)	0	27	43	40	0
	(C#)	0	6	0	17	50
	(dh)	0	0	0	0	17
	Means	0	22.5	37	51	53
S3	(CC)	20	40	50	40	75
	(v)	0	33	33	100	100
	(i)	0	40	33	80	75
	(C#)	0	0	0	33	33
	(dh)	0	20	0	100	83
	Means	4	27	23	71	73
S4	(CC)	14	56	75	75	100
	(v)	0	0	33	8	25
	(i)	0	0	0	10	12.5
	(C#)	0	11	25	17	17
	(dh)	0	0	0	17	66
	Means	3	13	30	25	41
S5	(CC)	20	43	50	30	100
	(v)	90	85	66	100	100
	(i)	0	9	20	30	75
	(C#)	0	18	33	50	50
	(dh)	0	0	0	33	17
	Means	22	31	34	49	68

IRREALIS IN ENGLISH*

Elizabeth A. Cowper
University of Toronto

Assumptions

This paper is set within a broadly-defined minimalist framework. Specifically, I assume that much of what used to be called licensing takes the form of feature checking. Uninterpretable (i.e. formal) features must be eliminated before the derivation is submitted to LF interpretation, or else the derivation will crash. Uninterpretable features are eliminated by being checked against corresponding interpretable features. Strong features must be checked overtly, while weak features are checked covertly. I further assume, uncontroversially I believe, that feature checking, as part of the computational system of language, has access only to those features which are grammatical in the language.

What is a grammatical feature? I assume that in general, category features are inherently grammatical, while other features may or may not be grammatical. For example, it is generally assumed that gender is a grammatical feature in French, but not in English. While both languages have pronouns that are specified for gender, only French has agreement phenomena that are sensitive to gender, and only in French must all noun phrases be specified for gender. Gender exists in English, but its status is semantic rather than grammatical. Another example of a feature that may or may not be grammatical is tense. In English, finite verbs are necessarily either present or past, and it has been argued that tense projects its own functional head. In contrast, there is no evidence for tense as a grammatical category in Chinese (Zhang 1997). The distinction expressed in English by present versus past inflectional marking is expressed in Chinese by means of temporal adverbials.

Most grammaticalized features have some semantic content. For example, tense encodes temporal semantics, grammatical gender corresponds in many languages to natural gender, and grammatical number corresponds to the meaning expressed by numerals. An interesting question, and one that I shall not address in this paper, is what makes a semantic feature grammaticalizable. I am concerned here with the question of how one can tell if a feature is grammatical in a language. I shall be looking specifically at the realis/irrealis opposition in English.

Realis/Irrealis

Comrie (1985:45) describes this opposition as follows: "[R]ealis refers to situations that have actually taken place or are actually taking place, while irrealis

is used for more hypothetical situations, including situations that represent inductive generalizations, and also predictions, including also predictions about the future."

Thus the embedded clauses in (1) receive a realis interpretation, while those in (2) receive an irrealis interpretation.

(1) a. Mary knew that the movie was cancelled.
    b. Anna believes the situation to be unstable.

(2) a. Mary pretended that the movie was cancelled.
    b. Anna wants the situation to be unstable.

Let us assume that, if the realis/irrealis distinction is grammatical in English, realis will be the unmarked value, and irrealis the marked value. Taking a unary view of formal features, this means that elements bearing an interpretive irrealis feature will always receive an irrealis interpretation, while elements lacking the irrealis feature will be interpreted according to the linguistic context. For example, the finite present indicative in English is not inherently marked for either realis or irrealis. In a sentence like (3), the TP receives a realis interpretation, while the TP in (4) receives an irrealis interpretation triggered by the temporal adverb.

(3) The passengers are leaving.
(4) The passengers are leaving tomorrow.

The question being asked is thus not whether the semantic property of irrealisness is present in English, since this semantic property is present in all languages. What I would like to explore is whether there is a formal feature, active in the computational system of English, which corresponds to this semantic property.

If irrealis is a grammatical feature, then we will expect to find it operating in the inflectional system of the language. Specifically, we may expect to find irrealis verb forms. We may also find it participating in feature checking, although the checking could be overt or covert and might therefore not be entirely obvious.

On the other hand, if irrealis is not a grammatical feature in English, then irrealis meaning should be triggered only by lexical elements such as the temporal adverb in (4), or the matrix verbs in (2). However, even if irrealis is a grammatical feature of English, we will expect to find lexical elements carrying irrealis meaning. Similarly, the presence of tense as a grammatical feature does not rule out the existence of temporal adverbs in the same language.

Irrealis in English Inflection

We now turn to the first empirical question: Does the feature irrealis play a role in the inflectional system of English?

English verbal inflection is impoverished, but the inflected forms in (5) can nonetheless be identified. (I ignore phi-features for the moment)

(5) a. Finite present indicative
    b. Finite past indicative
    c. Present participle
    d. Past/passive participle
    e. Verbal noun
    f. to-infinitival
    g. bare infinitival
    h. finite present subjunctive
    i. finite past subjunctive

With the exception of the last two, all of these forms can appear in realis TP's as shown in (6). They can also appear in irrealis TP's, as shown in (7).

(6) a. Susan **has** a cold.
    b. Anna **was** an administrator.
    c. Allan is **driving** the car.
    d. Sam has **seen** the film.
    e. Molly enjoyed **seeing** the play.
    f. Bonnie is known **to be** interested.
    g. They watched the children **paint** pictures.

(7) a. The students **write** their exams next week.
    b. Kate wishes she **was** taller.
    c. We will eat while **watching** the movie.
    d. Sam will have **seen** the film by next week.
    e. Molly plans on **seeing** the play.
    f. Bonnie tried **to appear** interested.
    g. They plan to watch the children **paint** pictures.

Under the assumptions being made here, a verb form that appears in both realis and irrealis TP's must be inherently unmarked for realisness. I therefore conclude that none of the verb forms in (5a)-(5g) bear a grammaticalized irrealis feature. The forms in (5h) and (5i) are another matter, however. Subjunctive verb forms seem to appear only in irrealis TP's, as shown in (8) and (9).

(8) a. We insist that the car **is** in the garage.
    b. We insist that the car **be** in the garage.

(9) a. If the car **was** in the garage, it was safe from the hailstorm.
    b. If the car **were** in the garage, it would be safe from the hailstorm.
    c. *If the car **were** in the garage, it was safe from the hailstorm.

If there are any verb forms in English that bear a grammatical irrealis feature, it is the subjunctive forms. However, the existence of obligatorily irrealis verb forms does not, in and of itself, prove that irrealis is a grammaticalized feature in English syntax. Irrealis could simply be an essentially free-standing interpretable (i.e. semantic) feature of subjunctive forms, with no grammatical effects whatsoever.

Another construction which invariably has irrealis meaning is the complement of a modal, illustrated in (10).

(10) Sue can [drive a bus].

Clearly, modals, like temporal adverbs and verbs like *wish* and *demand*, select for, or impose, the semantic property of irrealisness on their complements. However, modals, like adverbs and verbs, do not need a grammaticalized irrealis feature in order to do this. As is well known, semantic selection involves any number of purely semantic properties with no grammatical import.

The other logical place to look for an inflectional feature of irrealisness is in the complementizer system. In Latin, French and German, for example, certain complementizers obligatorily govern subjunctive TP's, while others govern the indicative.

English seems to have no overt complementizers which obligatorily take irrealis complements, as illustrated in (11) and (12).

(11) a. Anna said **that** Bill was at home.
     b. **If** the car is in the garage, then Anna is at home.
     c. Bill left **before** we arrived.
     d. **For** Kate to take that last piece of cake was very selfish.

(12) a. Anna wishes **that** Bill was at home.
     b. **If** the car starts, then we will leave.
     c. Bill plans to leave **before** we arrive.
     d. **For** Kate to take the last piece of cake would be very selfish.

Since all of these complementizers head both realis (11) and irrealis (12) clauses, we must conclude that none of them bears a grammatical irrealis feature. Null complementizers are left aside for the moment.

We are thus left with the subjunctive verb forms as the only overt inflectional reflex of irrealisness in English. In the absence of further evidence, we could conclude that even with the subjunctive, irrealis is simply an interpretable semantic feature, without any role to play in the computational system of English.

Irrealis and Checking in English

Let us now turn to the second empirical question: Is the feature irrealis ever involved in a checking relation in English? If we can show that it is, then we will have to conclude that it is a grammatically active feature. If we cannot, then we will on grounds of parsimony conclude that it is not a grammatical feature of English.

Assuming that subjunctive verb forms are the only English words bearing a possibly grammatical irrealis feature, let us briefly survey their distribution. If we find a context in which the subjunctive is obligatory, we may have found a context in which the feature is participating in checking.

Distribution of Subjunctive verb forms in English

Complements of verbs and nouns

The sentences in (13) illustrate subjunctive complements of certain verbs and nouns. However, as shown in (14), the complement clauses can also appear with indicative form, without losing their irrealis interpretation.

(13) a. Mona prefers that the party be postponed.
     b. We wish that the food were cheaper.
     c. They made a proposal that the house be sold immediately.

(14) a. Mona prefers that the party is postponed.
     b. We wish that the food was cheaper.

The optionality of the subjunctive in this context suggests that there is no formal feature of irrealisness that needs to be checked, since if there were, the subjunctive should be required. It appears that the irrealisness arises from the governing verb or noun, and that the subjunctive verb form, when it appears, adds only a redundant specification of irrealisness.

There are some other verbs and nouns which take either indicative or subjunctive complements. With these, illustrated in (15) and (16), the subjunctive complements receive an irrealis interpretation while the indicative complements receive a realis interpretation.

(15) a. The students insisted that the papers be marked twice.
     b. We all agreed that the meeting be postponed.
     c. The mediator suggested that the offer be increased.

(16) a. The students insisted that the papers had been marked twice.
     b. We all agreed that the meeting was postponed.
     c. The mediators suggested that the offer was too low.

Here one could claim that in the sentences in (15) there is a formal feature of irrealisness, perhaps in the head of CP, which is checked covertly by the irrealis feature of the subjunctive verb form. On the other hand, one could just as easily claim that irrealisness is simply a semantic property of the embedded verbs in (15), and that no checking is involved.

I should also note at this point that in both the contexts just illustrated, the use of the subjunctive appears to be decreasing. Younger speakers tend to use the indicative where possible, and report being unsure about when to use the subjunctive. In sentences like the ones in (15), and (14a) and (14c), younger speakers use modals, giving sentences like the ones in (17).

(17) a. Mona prefers that the party should be postponed.
     b. They made a proposal that the house could be sold immediately.
     c. The students insisted that the papers must be marked twice.
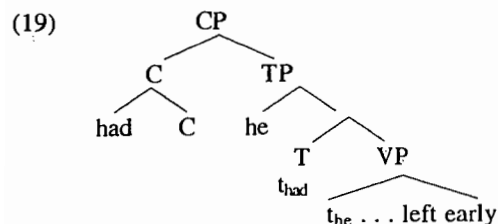   d. The mediator suggested that the offer might be increased.

I return below to the issue of the disappearing subjunctive. For the moment, however, let us focus the language of older or more conservative speakers, who still use the subjunctive on a regular basis.

Conditional Constructions

To clearly show that the irrealis feature is participating in checking, we need an instance of overt movement that can only be satisfied by a subjunctive verb form. Consider the sentences in (18).

(18) a. Had he left early, he would have missed the party.
     b. Were she not so sleepy, she would watch the late movie.
     c. *Was she not so sleepy, she would watch the late movie.

The conditional clauses in these sentences have verb-first order, which suggests that the verb may have moved to the complementizer position, as illustrated in (19). I give only the condition clause, and ignore all irrelevant structural questions.

(19)

```
              CP
             /  \
            C    TP
           / \   / \
         had  C he   \
            had       \
              T        VP
             t_had    /  \
                  t_he ... left early
```

Subjunctive verb forms are obligatory in this construction, as shown by the ungrammaticality of (18c). Assuming that movement in general, and head movement in particular, is always motivated by the need to check a strong feature, we must conclude that the complementizer in the condition clause in (18) bears a strong feature that can only be checked by a subjunctive verb form. Since the feature distinguishing subjunctive from indicative verb forms is irrealis, I conclude that Comp in these clauses bears a strong irrealis feature, and that these sentences provide evidence that, at least for speakers who use sentences like (18a) and (18b), irrealis is, at least to some limited extent, a grammaticalized feature in English.

Is this strong feature interpretable or uninterpretable? Chomsky (1995) claims that only uninterpretable categorial features can be strong. I follow Massam and Smallwood (1996) and Legate and Smallwood (1996, 1997) in assuming that there are non-categorial strong features, such as Case for Irish and Niuean TP's and phi for English small clauses.

The data in (18) are compatible with irrealis in C being either interpretable or uninterpretable. If it is interpretable, then the corresponding feature on the verb will be uninterpretable and will disappear under checking. Conversely, if it is uninterpretable, then it will disappear when checked by the corresponding interpretable feature on the verb. In either case C will bear an interpretable

irrealis feature at LF, and the clause will receive an irrealis interpretation, as required. I therefore adopt the less controversial view that the strong irrealis feature on C is uninterpretable and is checked by the interpretable feature on the verb after overt verb movement to C.

Let us now briefly look at the more modern versions of (18), given in (20).

(20) a. If he had left early, he would have missed the party.
     b. If she were not so sleepy, she would watch the late movie.
     c. If she was not so sleepy, she would watch the late movie.

The question that arises is the following: does the complementizer *if* have an uninterpretable irrealis feature, comparable to the one we posited in (18)? If it does, the feature must be weak, since there is no overt verb movement. The grammaticality of (20c), however, suggests that no checking of any irrealis feature takes place between the verb and the complementizer, since the verb in (20c) is indicative, not subjunctive. Another possibility is that *if*, like the subjunctive verb forms, has an interpretable irrealis feature, and merges to check the uninterpretable feature of C in (20). This line of thinking is also implausible, since *if* can head realis clauses as well as irrealis ones, as shown in (11b) above and (21).

(21) If two plus two equals four, then his answer is wrong.

In fact, a case can be made that the realis/irrealis interpretation of an if-clause arises, not from *if* itself, but entirely from the realis/irrealis interpretation of the consequent. Examples are given in (22) of conditional statements with realis consequent clauses, and in (23) of conditional statements with irrealis consequents.

(22) a. If the book is here, then the paper is finished.
     b. If the clown was funny, then the children enjoyed the party.
     c. *If the book were here, then the paper is finished.
     d. *If the clown were funny, then the children enjoyed the party.

(23) a. If the book arrives on time, then we will finish the paper.
     b. If the clown was/were funny, then we would be laughing.
     c. If the car was towed, then we will have to walk home.
     d. If two plus two equals four, then you will lose the bet.

It seems that realis condition clauses can appear with both realis and irrealis consequent clauses, as shown in (22a) and (22b) on the one hand, and (23c) and (23d) on the other. However, irrealis condition clauses can only appear with irrealis consequent clauses, as shown by the ungrammaticality of (22c) and (22d). Intuitively, this is perfectly reasonable, since something that neither has already happened nor is in the process of happening cannot possibly be a necessary condition for something that is happening or has happened. The restrictions on realis and irrealis interpretation in if-clauses thus seem to be

semantic rather than formal, similar to the restrictions on irrealis interpretation for when-clauses, as illustrated in (24).

(24) a. When the book arrived, we unwrapped it immediately.
      b. When the book arrives, we will unwrap it immediately.
      c. When the book arrived, we would have unwrapped it (but it didn't, so we couldn't).

Thus it seems that in irrealis if-conditional sentences with indicative verb forms, there is no evidence for a grammatical irrealis feature at all. The conditional clause is interpreted based on the semantically determined realisness of the consequent. When the conditional clause is irrealis, it may be subjunctive, but as with the complements of verbs like wish, the subjunctive provides only redundant specification of irrealisness.

What, then, is the status of the irrealis feature in English grammar? I propose that irrealis was once a grammatical feature of the English inflectional system, but that it is nearing the end of a process of degrammaticalization. Only older speakers, or those who are very conservative, retain any systematic use of the subjunctive in irrealis contexts, and almost no-one rejects indicative forms in the same contexts. The constructions in (18) have an old-fashioned flavour, and are rejected out of hand by some younger speakers. The conditional use of the present subjunctive, common in the works of Shakespeare (25a) has been entirely lost from productive use, appearing only in a few nursery rhymes and clichés in current use, illustrated in (25b) and (25c).

(25) a. If music be the food of love, play on. (Shakespeare, Twelfth Night)
      b. Be he alive or be he dead, I'll grind his bones to make my bread!
         (Grimm & Grimm: Jack & the Beanstalk)
      c. Be it ever so humble, there's no place like home.

The example in (26), which illustrates not only irrealis-checking but also non-auxiliary verb fronting, is from a 17th-century poem.

(26) I could not love thee (Dear) so much
      Lov'd I not Honour more.
                          Richard Lovelace(1618-1657): "To Lucasta, Going to the Wars"

What about Imperatives?

The absence of overt morphological agreement marking on present subjunctive verb forms in English raises the question of a possible relation between the subjunctive and the imperative. It is clear that, if imperative clauses denote propositions, these propositions are irrealis rather than realis. Let us therefore consider the possibility that imperatives, like the conditional subjunctives in (18) and (25), are characterized by an uninterpretable irrealis feature in C.

Several differences between imperatives and conditional subjunctives are immediately apparent. First, whereas overt verb movement to C is obligatory in (18) and (25), the examples in (27) show that the verb need not move to C in imperatives.

(27) a. You come here right now.
      b. Everybody be quiet.
      c. Students line up on the left, please, and staff stay to the right.
      d. Nobody move!

On the other hand, the data in (28) suggest that there is something moving to the left of the subject in some imperatives.

(28) a. Let's everybody hide in the basement.
      b. Don't anybody move.
      c. May the force be with you.
      d. Let the games begin.

And archaic forms like those in (29) suggest that verb movement in imperatives, like verb movement in conditional subjunctives, was once more salient that it is today.

(29) a. Perish the thought!
      b On your head be it!
      c. So be it.

A second difference between conditional subjunctives and imperatives has to do with finiteness and the status of the subject. I have argued elsewhere (Cowper 1996) that the grammatical reflex of finiteness is the ability/need to license an overt subject. In current terms, this means that finite TP's have a strong D-feature that must be checked by overt movement or merger of a D-bearing element to the TP-specifier position. The conditional subjunctives are clearly finite, in that there is always an overt subject, as in (18) and (25), or an expletive, as in (30), in Spec/TP.

(30) Were there any reason to leave, I would do so at once.

The status of imperatives with respect to finiteness is not so clear. First, many imperatives lack overt subjects altogether, suggesting that the imperative verb form may be more like a bare infinitival than like a subjunctive. When overt subjects do occur, they can sometimes be argued to be vocatives ((27a), and to a lesser degree (27b) and (27c)) rather than true subjects. On the other hand, the subjects in (27d) and (28) cannot reasonably be seen as vocatives. Something must be licensing the overt subjects in these cases, although the optionality of overt subjects indicates that it is not exactly the same mechanism as is used in true finite clauses. It is interesting to note, in this regard, that the one case in which an overt subject/expletive is required is when a modal appears, as in (28c), (28d) and (31).

(31) a. May *(you) live for a hundred years.
     b. May there be nothing but joy in your future.
     c. Let there be light.

Modals are generally considered to be inherently finite elements merged as the heads of TP's. Modals in imperatives are invariably to the left of their subjects, which indicates that they have most likely moved from T to C. The possibility that modal imperatives do not involve movement from T to C, and that the subject has simply failed to move to Spec/TP, can be ruled out by sentences like (31b). Here the subject position is occupied by an expletive, which we assume is merged directly into the TP specifier. At this point, I see no reason to treat *let*, in (31c), any differently from *may*.

I conclude that in modal imperatives there is obligatory overt movement from T to C. This tells us that in such clauses, C must bear a strong feature that can be checked by the modal. Interestingly, it cannot be checked by other elements found in English T-heads, as illustrated in (32).

(32) a. Let the children be taken to the palace.
     b. *Be the children taken to the palace.

As for non-modal imperatives such as those in (27), I am tempted to propose, although I am not prepared to argue in detail, that there is a (phonologically null) modal element moving form T to C in these cases as well. An interesting property of this putative abstract modal is that, unlike an overt modal, it cannot license an expletive *there*, as shown in (33), although it can license an argument in subject position.

(33) a. Let there be no more noise in here.
     b. *There be no more noise in here.

Looking again at verb-initial conditional clauses, notice that the element in initial position can sometimes be a modal, as in (34), at least for speakers who can use *should* in if-clauses.

(34) a. Should I find your gloves, I will bring them to you.
     b. If I should find your gloves, I will bring them to you.

A comparison of finite imperatives and conditional clauses yields the table in (35).

(35)

	Finite Imperatives	Conditionals
fronted present subjunctives	extremely archaic	extremely archaic
fronted past subjunctives	N/A	somewhat archaic but still productive for some speakers
fronted overt modal	yes (may, let)	somewhat archaic and limited (should)
fronted null modal	yes	no
merged C	no	*if*

The similarities between the two constructions are striking, and suggest that some common mechanism may be at work. As we saw earlier, modals trigger irrealis interpretation of their complement propositions, and as such can be said to bear some kind of irrealis specification. The fact that in both constructions, it is precisely the modals and subjunctive verb forms that are eligible to move to C suggests that the triggering feature may indeed have been irrealis in both cases. The difference between a conditional clause and an imperative would presumably follow from the context in which the CP appears, and to some extent from the semantics of the modal, if one is involved.

Assuming that such a view of this slightly archaic version of English is correct, what survives in the grammar of younger speakers today? Does the presence of a grammaticalized irrealis feature in finite imperatives in the conservative grammar strengthen the evidence for a grammatical irrealis feature? I think that once the subjunctive verb forms are taken out of the picture, the case for a grammatical irrealis feature collapses. We have already seen that such a feature is not necessary to account for conditional clauses headed by *if*. What is left is overt T-to-C movement in finite imperatives. If we assume, I think reasonably, that a modal, null or overt, is essential to the semantics of a finite imperative, then there is a much simpler account of obligatory T-to-C movement. Essentially, we simply say that a non-declarative matrix complementizer has a strong T feature. Both in questions and in imperatives, then, T must move overtly to C. The difference between imperatives and questions can be made to follow from the presence of an interpretable Q feature in questions, and its absence in imperatives.

There is an attractive consequence to this last proposal. Sentences with fronted modals, such as those in (36), are notoriously ambiguous between a question reading and an imperative reading.

(36) a. Could the children wait in the hall?
     b. Would you take the parcel to the post office?

The analysis just sketched claims, in fact, that the only difference between a question containing an overt modal and a finite imperative is the presence of the

feature Q, which in this instance is not involved in any checking relations, and thus triggers no movements of any sort.

Conclusion

In conclusion, I claim that with the disappearance of the English subjunctive as a fully functioning verb form, the formerly grammatical feature of irrealis is, or will be within a generation, a purely semantic property of English lexical items. Languages with robust subjunctive paradigms, in contrast, are likely to retain irrealis as a grammatical feature. In another case, James (1991) discusses a view of the preterit form in Moose Cree as irrealis.. Thus it seems that inflectional morphology can play an important role in supporting the grammatical status of a semantically-based feature, and that the disappearance of inflectional morphology can trigger the degrammaticalization of such a feature. What other factors can participate in the grammaticalization or degrammaticalization of a feature, and which features can be grammaticalized or degrammaticalized remains to be determined.

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Sarah Cummins
Université Laval

1. Introduction

Semantic descriptions of verbs and prepositions sometimes use similar terms to describe members of both classes. Both verbs and prepositions can be static or dynamic, both can be directional, both can depict paths. Verbs and prepositions sometimes combine by matching traits. For example, stative verbs match up with static prepositions and repel dynamic ones, as in (1):

(1) a. Lou lives at (*to) her parents' house.
    b. Tom is lying on (*onto) the bed.

Verbs that contain a notion of path may go with prepositions that contain a notion of path, and directional verbs may match up with directional prepositions:

(2) a. Sam dashed to/towards/*at the store.
    b. The army advanced towards/into/*in the forest.

In other cases, these traits don't match. Sometimes the dynamicity of either verb or preposition imposes dynamicity on the sentence, despite a lack of this quality in its partner, as in (3).

(3) a. And now the riders are into the woods!
    b. A mysterious figure suddenly appeared at the window.

Or the preposition's dynamicity may enhance a latent dynamicity in the verb, while a static preposition brings out a latent stativeness, as illustrated in (4).

(4) a. The clematis grew onto the trellis
    b. The clematis grew on the trellis.

There are also puzzling incompatibilities between verbs and prepositions. Apparently directional verbs may repel a directional preposition, as in (5).

(5) a. *Dan arrived toward the station.
    b. *Dan returned into the station.

Or verbs that seem to depict a path reject a preposition that does the same:

(6) a. *Dan arrived to the station.
    b. *Flo funneled wine to the bottle.

This paper explores these compatibilities and incompatibilities and how they are best expressed. Most researchers have offered generalizations in notional