PREDICATE NOMINALS
IN EVENTIVE COPULAR SENTENCES*

Isabelle Roy

University of Southern California

1. Introduction

This paper presents a comparative study of predicate nominals in eventive copular sentences. I am concerned with languages that grammaticalize the contrast between *eventive* and *non-eventive* copular sentences, and I discuss here three cases: the optionality of the indefinite article in French and German, the two verbs "to be" in Irish, and case marking in Russian.

Setting aside here non-eventive predications, I show that eventive predicate nominals exhibit non trivial semantic and syntactic similarities that argue in favor of a unified account. I argue that the properties of eventive predicate nominals can be derived from the assumption that the small clause is headed by a functional head Pred (cf. Bowers 1993), and that Pred must be realized. Irish and Russian provide evidence that Pred can be spelled-out as a preposition P, whereas French and German show that it can be phonologically realized as N, through head movement.

This paper is organized as follows. In section 2, I will discuss the alternation between the variants with and without the indefinite article in French and German. I will show that the choice of one or the other of the variants is sensitive both to the nature of the predication, and to whether the property denoted by the predicate is perceived as permanent or transient. In section 3, I will discuss how the same contrast is rendered by the alternation between the two verbs 'to be' in Irish. I will further show that the eventive predicate nominals in Irish share with their French counterpart similarities that suggest that the difference between the two languages is only superficial. In section 4, I will argue that the contrast between permanent vs. transient predicates must be a syntactic one and cannot be made at the level of the lexicon. This discussion will allow me to clarify the notion of 'eventive copular sentences'. In section 5 I will present a unified analysis of eventive nominal predication and argue that there are two ways the predicational head of the small clause is realized: by a preposition (either overt or covert), or by head movement of the predicate

N from its original position. Finally, it will be shown that English patterns, surprisingly enough, with Irish/Russian; such a result will present interesting outcomes in terms of the differences between English and French.

2. Optionality of the indefinite article in French and German
2.1. Predication and identification

Predicate nominals can appear with or without the indefinite article in French[1] and German. The apparent optionality of the article is illustrated in (1) and (2) for the two languages respectively:

(1) Paul est (un) professeur.   (2) Paul ist (ein) Schauspieler.
      Paul is   (a)   professor   Paul is   (an)   actor
      "Paul is a professor."   *"Paul is an actor."*

The variants with and without the indefinite article have radically different properties. One crucial difference is the "function" (in the sense of Higgins 1979)[2] in which each sentence can be used (Kupferman 1979 and Pollock 1983 for French): the variant without article appears exclusively in *predicational* sentences; whereas the variant with the indefinite article is used in *identificational* sentences only. The predicational and identificational readings can be distinguished on the basis of the type of question they constitute an appropriate answer to. Consider the sentence *John is a teacher* in English. On the one hand, it can be an answer to *What does John do?*; and thus, it can get a predicational reading, equivalent to *John teaches*. On the other hand, it is also a felicitous answer to the question *Who is John?*; and accordingly is ambiguous with an identificational interpretation. In French however *Paul est un professeur* "Paul is a professor" is not ambiguous. It can only answer the question *Who is Paul?* (see contrast (3) and (4)) and hence is identificational only.[3] By opposition, the variant without article is the only option to the question *What does Paul do?*, and therefore the only option in predicational sentences:

(3) Qui est Paul?   Paul est *(un) professeur.
      who is   Paul   Paul is   a   professor
      "Who is Paul?"   *"Paul is a professor."*

---

[1] Similar contrasts exist also in other Romance languages such as Italian, Spanish and Portuguese.
[2] Since the work of Higgins (1979), four types of copular sentences are commonly distinguished. The two types relevant for our discussion are illustrated in (ia-b):

(i)   a. *Predicational*   John is tall.
       b. *Identificational*   That man is my teacher.
       c. *Specificational*   The problem is his tie.
       d. *Identity*   The morning star is the evening star.

[3] The use of the variant with article to identify a person extends to definite predicates also, as in *Paul est le directeur de l'usine* "Paul is the factory director", for instance. I will not discuss these sentences here.

(4) Que fait Paul dans la vie?   Paul est (*un) professeur.
     what does Paul in the life   Paul is   a   professor
     "What does Paul do for a living?"   *"Paul is a professor."*

Identical contrasts can be seen in German as well, as shown by the examples (5-6):

(5) Wer ist   Klaus?   Klaus ist *(ein) Schauspieler.
     who is   Klaus   Klaus is   an   actor
     "Who is Klaus?"   *"Klaus is an actor."*
(6) Was macht   Klaus?   Klaus ist (*ein) Schauspieler.
     what does Klaus   Klaus is   an   actor
     "What does Klaus do?"   *"Klaus is an actor."*

The distribution of predicate nominals in contexts known to be predicational only (see also Rouveret 1998) further shows that only the variant without the article is predicational. First, only the bare variant can be pronominalized by the clitic *le* "it" in French (7):

(7) Marie voulait être (*une) infirmière, mais elle ne le sera   jamais.
     Mary wanted to be a   nurse,   but she NEG **it** will-be never
     "Mary wanted to be a nurse, but she'll never be one."

Second, only the bare variant can be the antecedent of a non-restrictive relative clause introduced by *ce que* "which" (8):

(8) Jean   est (*un) médecin, ce que son frère   n'est   pas.
     John is   a   doctor,   which his brother NEG is not
     "John is a doctor, which his brother is not."

Third, only the bare variant is allowed as predicate of a small clause. Consider, for instance, verbs that select small clause complements as *croire* "to believe" (9) and raising verbs as *s'avérer* "to prove (to be)/ to turn out" (10):

 (9) Je croyais   Paul (*un) médecin.
      I   believed Paul   a   doctor
      "I believed that Paul was a doctor."
(10) Jean s'avèrait   (*un) médecin.
       John turned out   a   doctor
       "John turned out / proved to be a doctor."

2.2. Permanent vs. transitory properties

The interpretational difference between the two variants has been argued to relate to a contrast between transitory *vs.* permanent properties. Kupferman (1991) shows that only the variant without the article can appear in constructions that admit exclusively transitory properties, such as absolute constructions and existential constructions. Additional support for this dichotomy comes from the fact that only the bare variant is compatible with spatio-temporal modifications (see Roy 2001). First, only bare predicates are compatible with temporal modifications (11-12).

When the property of 'being a N' is relative to particular situations, the variant without article is the only option:

(11) Paul est (*un) médecin   le jour,   et   (*un) chanteur la nuit.
     Paul is   a   doctor   the day,   and   a   singer   the night
     "Paul is a doctor by day and a singer by night."

(12) Paul est (*un) traducteur à ses   heures libres.
     Paul is   a   translator   at his   hours   free
     "Paul is a translator on his spare time."

In a similar way, only the bare variant accepts locative modification (13):[4]

(13) Paul est (*un) médecin à Paris.
     Paul is   a   doctor   in Paris
     "Paul is a doctor in Paris."

Second, the bare variant does not give rise to "lifetime effects" (cf. Musan 1995) in the past tense. Consider both sentences in (14), only (14b) entails that the individual Paul is now dead. In (14a) no such entailment is made, Paul simply does not practice medicine anymore:

(14) a. Paul était   médecin.   (absence of lifetime effects)
        Paul be.PAST   doctor
        "Paul was a doctor."
     b. Paul était   un médecin.   (lifetime effects)
        Paul be.PAST   a   doctor
        "Paul was a doctor."

Third, only the bare variant can receive an interruptive reading (cf. Fernald 1994). Again, the bare variant is the only option when the state of 'being an N' is temporally restricted (15):

(15) Paul sera   (*un) professeur trois fois   dans sa   vie.
     Paul be.FUT   a   professor   three times in   his life
     "Paul will be a professor three times in his life."

Finally, only the bare variant entails the actual practice of the activity denoted by the predicate nominal as shown by the contrast in (16-17). Consider the oddness of example (16): when the actual practice of the activity is negated, the sentence results in a contradiction. Contrastively, the property of being "a N" is independent of the practice of an activity (17):

(16) # Jean est médecin,   mais   il ne pratique plus.
       John is   doctor   but   he does not practice anymore
       intended: "*John is a doctor, but he does not practice anymore.*"

---

[4] Sentence (13) with the variant with the article has a reading where *à Paris* "in Paris" is interpreted as 'according to the people in Paris'. However, in this case, the locative PP is not used as a locative binder for the predicate.

(17) Jean   est   un   médecin, mais   il ne pratique plus.
     John   is   a   doctor   but   he does not practice anymore
     "John is a doctor, but he does not practice anymore"

The contrastive properties of the two variants of predicate nominals in French can be summarized in (18). The same properties hold for German:

(18)

	variant without article	variant with article
a) Identificational reading	no	yes
b) Lifetime-effects	no	yes
c) Spatio-temporal modification	yes	no
d) Activity reading	yes	no
e) Small clause predicate	yes	no

3. Predicate nominals in copular sentences in Irish
3.1. The two verbs "to be"

The contrast between permanent and temporary properties is rendered by the choice of one of the two verbs "to be" in Irish. Irish has two forms for the verb "to be", the so-called "substantive auxiliary" *bí* and the copula *is*.[5] The copula *is* is traditionally said to predicate essential or inherent properties, while *bí* is used to predicate more temporal properties (Stenson 1981). A predicate nominal in construction with *is* expresses "a defining characteristic" of the subject; while in construction with *bí* it rather describes "what someone does, is more dynamic in concept, and suggests a state rather than a property" (Stenson 1981: 94):

(19) Is   shagart   è   mo dheartháir.
     COP-IS   priest   AGR   my brother
     "My brother is a priest."
(20) Tá   mo dheartháir   ina   shagart.
     COP-BI   my brother   in.AGR   priest
     "My brother is a priest."

---

[5] The opposition between *bí* and *is* is analogous to the contrast between *ser* and *estar* in Spanish and Portuguese, as previously noted by Ó Máille (1912) (cited in Stenson 1981 and Ó Siadhail 1989). A further similarity between the two languages is that predicate nominals in Spanish cannot occur with *estar* (**Juan está médico* 'Juan is(*estar*) doctor'), and must be introduced by a preposition (*Juan está de médico* 'Juan is(*estar*) of doctor'). Compare with (19-20) in Irish. However, Spanish is more complex than Irish in the sense that it does not exhibit simply a binary distinction with the copulas, but rather a three-way distinction, as it allows in addition, for the optionality of the article with the copula *ser* as it is the case in French and German (*Juan es (un) médico* "Juan is(*ser*) (a) doctor")). Thus, Spanish has three types of copular sentences with predicate nominals: *ser* ø NP, *ser* article NP, *estar* P NP. For the time being, I will let Spanish aside for future research.

The two verbs 'to be' have very different selection properties, and in particular with respect to predicate nominals. *Is* can productively appear with NP predicates (19) (but not with APs, PPs nor VPs); whereas *bí* can never take NPs (21) (but it is productive with AP, PP and VP predicates). In order for a predicate nominal to be constructed with the verb *bí*, it must be complement of the preposition *in* "in"[6] (see Stenson 1981, Carnie 1995, Doherty 1996, among others),[7] as in sentence (20):

(21) * Tá   mo dheartháir   shagart.
        COP-BI   my brother   priest
        intended: *"My brother is a priest."*   (Stenson 1981)

In the next sub-section we will see that the PP[*in*-NP] in *bí*-constructions shares the properties of the variant without the article in French and German.

3.2. Properties of is-constructions and bí -constructions

The interpretational difference between the NP predicates in *is*-constructions and the PP[*in*-NP] predicate in *bí*-constructions mirrors the difference between the variant with and without article, respectively, in French and German. As it is the case in French the eventive predicate is predicational only, and cannot get an identificational reading. The copula *is* is the only option in identificational sentences, i.e. as an appropriate answer to the question *Who is X*? (22):

(22) Cé   hé   an Búrcach?   Is   é   an   Búrcach   an bainisteoir.
      who AGR the Burke   COP-IS AGR the Burke   the manager
      "Who is Burke?"   *"Burke is the manager."*
                                    (Christian Brothers 1962 cited in Stenson 1981)

In addition, sentences constructed with *bí* do not give rise to lifetime effects in the past tense. Sentence (23a) does not entail that the subject Sean is now dead, but simply states that he ceased to be a doctor. On the contrary, (23b) entails unambiguously that the individual Sean is now dead:

(23) a. Bhí   Seán   ina   dhochtúir.   (absence of lifetime effects)
         COP-BI.PAST Sean   in.AGR   doctor
         'Sean was a doctor.'
     b. Ba   dhochtúir   Sean.   (lifetime effects)
         COP-IS.PAST doctor   Sean
         "Sean was a doctor."

Again, the absence of lifetime effects in (23a) is an indication that the sentence can be interpreted as relative to a particular situation. This is further supported by the fact that the *bí*-construction allows for the PP[*in*-NP] to be modified by temporal modifiers (24):

---

[6] The agreement marker on the preposition is sometimes described as a possessive pronoun. Prepositions bear agreement in Irish (Hale & McCloskey 1984).
    [7] Similar facts are attested in other Celtic languages as well. For a discussion of Scottish Gaelic, see Ramchand (1996) and Adger & Ramchand (2003).

(24) Bhí   Seán   ina   dhochtúir   tráth.
     COP-BI.PAST   Sean   in.AGR   doctor   once
     "Sean was a doctor once."   (Doherty 1996)

Finally, the eventive predicate, i.e. PP[*in*-NP], constitutes the only option in small clause predicate. As discussed in the literature (see Chung & McCloskey 1987, for instance) the predicate position of a small clause cannot be filled by an NP in Irish. Irish requires instead that the nominal be introduced by the preposition *in* "in", exactly as in the *bí*-construction. Consider, for instance, the verb *happen* that selects a small clause complement (25) and a perception verb (26):

(25) a. *Tharlaigh   iad   dlíodóiri.
         happened.PAST   them   lawyers
         intended: *"It happened that they were lawyers."*
     b. Tharlaigh   'na   dhlíodóir   é.
         happened.PAST   in.AGR   lawyer   him
         "He happened to be a lawyer."   (Chung & McCloskey 1987)
(26) Chonaic   mé   Ciarán   *(ina)   léachtóir.
     see.PAST   I   Ciaran   in.AGR   lecturer
     "I saw Ciaran as a lecturer."   (Doherty 1996)

The PP[*in*-NP] predicate that is licensed in eventive constructions is also licensed in small clauses. Similarly to what we have seen in French, only eventive predicate nominals can constitute appropriate small clause predicates in Irish.

To conclude, the PP[*in*-NP] predicate that occurs in eventive copular sentences in Irish shares with the variant without article in French and German not only the same interpretation (temporary, activity-like denoting expression), but also use (predicational, as opposed to identificational) and syntactic environment (as small clause predicate, with temporal modifiers):

(27)

	variant without article (French; German)	PP[*in*-NP] (Irish)
a) Identificational reading	no	no
b) Lifetime-effects	no	no
c) Spatio-temporal modification	yes	yes
d) Activity reading	yes	yes
e) Small clause predicate	yes	yes

4. Eventive copular sentences
4.1. A syntactic distinction

The distinction between permanent vs. temporary properties is often formalized as the stage-level vs. individual-level distinction. This distinction is often believed to be a lexical distinction between predicates that express permanent properties (*intell-*

igent, doctor) and predicates that express temporary properties (*sick, absent*) (see, for instance Carlson 1977, Kratzer 1995). However, this view poses a number of problems.[8] First, it is always possible to coerce a permanent property into a temporary one (28) (Higginbotham 1985):

(28) John went to college dumb and left it intelligent.

Second, in both French and Irish any predicate nominal can enter in either construction, independently of whether it denotes a property perceived as permanent or not. Predicates that express permanent properties can appear with or without the indefinite article (as in (29), for instance, where the properties of being 'a resistance hero' and 'a tyrant' presumably hold permanently of the individual denoted by the subject, but can still occur without the article):

(29) a. Il   n'a jamais connu son père   qui   était   (un) héros de la Résistance.
        he   has never   known his father who   was   (a)   hero of the resistance
        "He has never met his father who was a resistance hero."
     b. L'enfant peut   être   tyran.
        the child can   be   tyrant
        "A child can be a tyrant."

Similarly, a property like being "a hitchhiker", which does not hold permanently of an individual can be constructed with or without an article:[9]

(30) Je suis (une) auto-stoppeuse,   mais seulement parce que je n'ai pas le choix.
     I   am   (a)   hitchhiker,   but only because I have not the choice
     '*I am a hitchhiker, but only because I don't have any choice.*'

Similarly, in Irish typical permanent properties like 'to be a man' can appear in both the *is* and *bì* constructions, showing that the distinction between stage-level and individual-level properties cannot be a lexical one:

(31) a. Is   fear   é.
        COP-IS   man   he
        '*He is a man.*'
     b. Tá   sé   ina   fhear   (anois).
        COP-BI   he   in.AGR   man   (now)
        '*He is a man (now).*'   (Stenson 1981)

---

[8] For further arguments against a lexicalist approach see Higginbotham & Ramchand (1997).

[9] It is commonly accepted that the variant without article exists only with profession and nationality denoting nominals (which include real professions like *dentiste* "dentist" as well as functions and titles like *ministre* "minister", *président* "president", *roi* "king", and so on). However, this generalization is certainly too strong as we find a considerable number of bare predicate nominals (see (ii)), which cannot be considered as professions as such, but do involve some sort of underlying "activity" in a broader sense:

(ii) Paul   est   auto-stoppeur   / fumeur   / locataire   / prisonnier.
     Paul   is   hitchhiker   / smoker   / tenant   / prisoner
     '*Paul is a hitchhiker / a smoker / a tenant / a prisoner.*'

In German, however, the variant without article seems to be more restricted than in French.

I assume instead that the distinction between stage-level and individual-level predicates is syntactic and relates to the structure of copular sentences involved (following Kupferman 1991, Ramchand 1996, and Higginbotham and Ramchand 1997). In particular, I assume that stage-level predication involves predication over events (32): the property of being an event of a certain kind is predicated of a situation *s*; while individual-level predication involves predication over individuals (33): a particular property is predicated of an individual x (following Higginbotham & Ramchand 1997):

(32) Stage-level:
$\exists s [\lambda e [\ldots] (s)]$
there exists a situation s, such that s has the property of being an event of a particular kind

(33) Individual-level:
$\exists x [\lambda x [\ldots] (x)]$
there exists an individual x, such that x has a particular property

Accordingly, on the one hand, stage-level properties, i.e. spatio-temporally dependent properties, correspond to events and are constructed in *eventive* predications. On the other hand, individual-level properties are fundamentally properties predicated of an individual and are constructed in *non-eventive* predications.

4.2. Predicate nominals

It is usually accepted that nominals are individual-level predicates only, while adjectives can be either stage-level or individual-level predicates (cf. Milsark 1974, among others). The traditional diagnostics for the distinction between stage-level and individual-level predicates in English show that nominals are never stage-level: they are excluded from existential constructions (34a), they cannot appear with perception verbs (34b), and they allow for a generic reading of bare plurals (34c):

(34) a. *There were people doctors   b. *John saw Paul a doctor
      c. Dogs are mammals   (generic; *existential)

However, the variant without the article in French exhibits the characteristics of stage-level predicates: as we have seen in section 2, it accepts spatio-temporal modifications, it does not give rise to lifetime-effects, and so on. Moreover, it passes the tests for stage-level predicates illustrated above with English. Unlike predicate nominals in English (34a-b),[10] bare predicate nominals in French can appear in existential constructions (35),[11] and can appear in the small clause complement of a perception verb (36):

(35) Il y a   des   hommes (mauvais) chirurgiens.
     there is indef.pl men   (bad)   surgeon
     'There are men (that are) (bad) surgeons.'

---

[10] French does not have bare plurals; I leave aside the test (c).
[11] The possibility of inserting an adjective shows that *homme chirurgien* "man surgeon" cannot be a compound noun.

(36) J'ai   vu   Paul   enfant   une seule fois;   maintenant il est grand.
     I have   seen   Paul   child   one only time   now   he is big
     'I've seen Paul as a child only once; he is now grown-up.'

These properties cannot be explained if the distinction between stage-level and individual-level predicates is a lexical one. Assuming that the distinction is syntactic, however, gives us some insight to why predicate nominals, which are traditionally assumed to be individual-level predicates only, can exhibit properties of stage-level predicates in French and Irish.

4.3. Aspect

Furthermore, assuming that bare predicates in French and German are constructed in eventive copular sentences gives us some insight to why they are compatible with aspect, whereas the variant with the article becomes ungrammatical when aspect is realized. As aspect modifies the nature of the event, expressed aspect is only compatible with eventive copular sentences, and hence, with the bare variant.

Two pieces of data support this generalization. First, the article is not allowed when perfectivity is marked, by means of the auxiliary (37a).[12] The imperfective aspect, however, is a default aspect, and can take both variants (37b):

(37) a. Paul a été (*un) médecin.   b. Paul était (un) médecin.
        Paul has been a   doctor   Paul was   a   doctor
        "Paul has been a doctor."   *"Paul was a doctor."*

Second, aspectual copulas like *devenir* "to become", as opposed to the copula *être* "to be", can also only take bare predicates. *To become* entails a change of state that is incompatible with the non-eventive reading associated with the variant with the article:

(38) Paul   deviendra   (??un)   peintre.
     Paul   become.FUT   a   painter
     "Paul will become a painter."

Similarly, the variant with the article cannot appear with perfective verbs such as *to die* either. In both (39) and (40) the state of 'being a N' is bounded, and is only compatible with an eventive predicate:

(39) Paul   mourra   (*un)   médecin.
     Paul   die.FUT   a   doctor
     "Paul will die a doctor."
(40) Paul   sortira   de son école   (*un)   architecte.
     Paul   come out. FUT   of his school   an   architect
     "Paul will graduate as an architect."

---

    12 Similar facts have been noted, independently, by Kupferman (1979).

Similar contrasts exist in German. Although the contrast is less strong than in French for my informants, it is, nevertheless, attested:
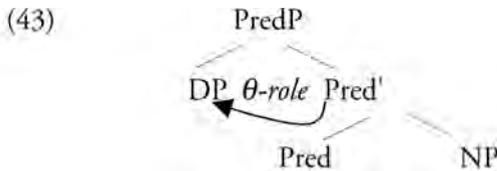
(41) Paul   war   (ein)   Schauspieler.
     Paul   was   an   actor
     "Paul was an actor."
(42) Paul   ist   (??ein) Schauspieler   gewesen.
     Paul   is   an   actor   been
     "Paul has been an actor."

To conclude, I assume that the distinction between stage-level and individual-level predicates is a syntactic one and relates to the structure of copular sentences. Stage-level predicates are constructed in eventive copular sentences and involve predications over situations. Predicate nominals can be eventive, and therefore can exhibit the traditional properties of stage-level predicates. Having defined the nature of eventive predicate nominals, I will turn in section 5 to a unified analysis of eventive predicate nominals.
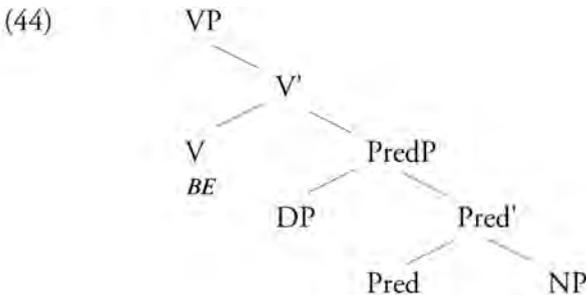
5. A unified account for eventive predicate nominals
5.1. Predicational functional head

I assume that the head of the small clause is a functional projection in a hierarchical structure as exemplified in (43). Following Bowers 1993, for instance, I will take this functional head to be the predicational head Pred. The DP subject is licensed in spec-Pred where it receives an external theta-role from Pred':

(43)

```
                    PredP
                   /     \
              DP θ-role  Pred'
                        /      \
                     Pred       NP
```

I take the verb 'to be' to be a raising verb, as generally assumed, that takes a small clause of the type illustrated above as complement. The structure of eventive copular sentences is as follows:

(44)

```
        VP
          \
           V'
          /   \
         V     PredP
        BE    /     \
            DP       Pred'
                    /      \
                 Pred       NP
```

I further assume that the head Pred must be realized; and I argue in the rest of this section that there are two ways Pred can be realized: either by a preposition (*P-licensing*), or by the predicative head N through head movement (*N-licensing*).

5.2. P-licensing

5.2.1. Overt P

The implementation of the analysis for Irish is quite straightforward: the head Pred is realized by the preposition *in "in"* in Irish.[13] The predicate nominal *shagart* "priest" in (45a) is theta-marked by the preposition.[14] Accordingly, sentence (45a) has the structure (45b):

(45) a. Tá   Sean   ina   shagart.
          COP-BI   Sean   in.AGR   priest
          'Sean is a priest.'
      b. [$_{VP}$ [$_{V'}$ ^{BI} [$_{PredP}$ [$_{DP}$ *Sean*] [$_{Pred'}$ *in* [$_{NP}$ *shagart*]]]]]

The NP *shagart* "priest" is generated in the complement position of *in* "in", the head Pred. The sequence *in*-NP is a small clause predicate, and the DP subject is generated in the subject position of the small clause, i.e., in spec-PredP. The fact that PP[*in*-NP] is compatible with small clause predicate positions follows from the fact that PP is indeed a small clause itself, and thus can be selected not only by the copula *bí*, but also by any raising verb or verb that usually selects a small clause.

---

[13] Alternatively, Adger & Ramchand (2003) proposed that the preposition in *bí*-constructions in Scottish Gaelic (a language closely related to Irish) is needed in order to introduce an event variable that nouns are lacking. However, two arguments based on French support the view that nouns, like adjectives and verbs, are predicates of events also. First, the argument based on the logic of VP modifiers, proposed by Davidson (1967) in favor of the existence of an underlying event for verbs, can be reproduced with bare predicate nominals in French. The fact that the entailment in (iiia) is invalid, i.e. the conjunction of 'being a dentist' and 'being in Paris' does not entail 'being a dentist in Paris', indicates that the two predicates are potentially two independent events. Consequently, nominals also must be seen as relative to events (iiib):

(iii) a. Paul est dentiste. (Paul is dentist)   b. ∃e [dentist(e, paul) & in(e, paris)]
          Paul est à Paris. (Paul is in Paris)
          ∴ Paul est dentiste à Paris. (Paul is a dentist (=practices dentistry) in Paris)

Second, if nominals were not predicated of an event, we would expect them to be incompatible with adjectives like *future* or *former*, known to be predicates of events only (cf. Larson 1995, 1998, among others). This prediction is not borne out by the data:

(iv) John is a former lawyer.
      a. √ ∃e [lawyer(j,e) & former(e)]   b. # ∃e [lawyer(j) & former(j)]

[14] Note the role of prepositions in licensing of external arguments for eventive nominals in English predicates such as (v):

(v) a. Paul is *(in) transit.   b. The partners are *(at) war with each other.
     c. The house is *(on) fire.   d. The road is *(under) construction.

Irish is a VSO language, where V raises to T and carries tense information, while the DP subject remains in the VP-internal position (cf. Chung and McCloskey 1987). The copula *bí* is generated in V and moves to T:

(46)   (Irish)
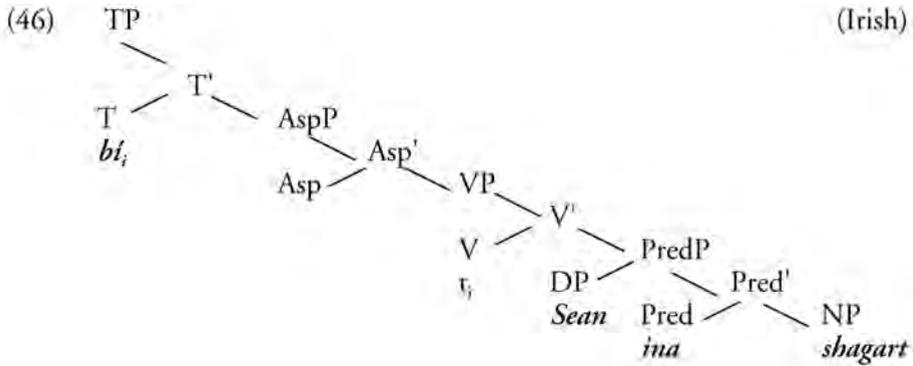
The event variable in the *bí*-construction is introduced by the nominal and is bound, I assume, by Aspect, which introduces existential closure over the event. As an aspect projection is obligatorily realized in eventive sentences, the compatibility of the *bí*-construction with aspectual distinctions follows. I assume that T, however, is a predicate of event.

5.2.2. Covert P

The account proposed above and carried out for Irish extends straightforwardly to Instrumental-marked predicates in Russian under the assumption that Instrumental is assigned by an empty preposition, and that Pred is realized by a covert P.

Russian predicate nominals in copular sentences can bear either Instrumental or Nominative case (47):[15]

(47) Saša byl muzykantom.   (48)   Saša byl muzykant.
     Sasha was musician.INST   Sasha was musician.NOM
     "Sasha was a musician."   *"Sasha was a musician."*
                                                    (Bailyn & Rubin 1991)

Instrumental-marked predicates express properties perceived as transient. Sentence (47) receives a temporary interpretation: "Sasha was a musician temporarily, at some point" (cf. for instance Bailyn & Rubin 1991, Matushansky 2000, Filip 2001, among others) or has been claimed to involve a "change of state" (Filip 2001) (49):

---

[15] In the past tense only (cf. for instance, Matushansky 2000 and Filip 2001): Nominative is the only option in the present tense and Instrumental is highly preferred or the only option in the future tense. The reason why Instrumental is not allowed in the present (where the copula is null) remains an issue.

(49) On   byl   učitelem   (potom)   fotografom.
      he   was   teacher.INST (then)   photographer.INST
      "First he was a teacher, then he became a photographer."

<div align="right">(Geist 1999, cited by Filip 2001)</div>

By contrast, Nominative-marked predicates (48) express properties that are seen as inherent or 'defining' (Matushansky 2002).

Assuming the distinction between eventive and non-eventive copular sentences, Instrumental case marked predicates appear in eventive sentences only, while Nominative marked predicates are restricted to non-eventive predications. Instrumental marked predicate nominals are the Russian counterpart of the variant without the article in French and German, and the PP[*in*-NP] in Irish. First, Instrumental marked predicates cannot appear in identificational sentences (50), as well as true equatives (51), which both require Nominative case:

(50) Ivanuška-durаčok   byl   tot   brat   / *tem bratom   kotoryj
      Ivanushka-fool   was   that   brother.NOM   / that brother.INST which
      vsegda popadal v bedu.
      always got into trouble.
      "Ivanushka the Fool was that brother that always got into trouble."

<div align="right">(Pereltsvaig 2001)</div>

(51) Mark Tven   byl   Samuèl Klements.
      Mark Twain.NOM was   Samuel Clements.NOM
      "Mark Twain was Samuel Clements."   (Matushansky 2000)

Second, Instrumental-marked predicates do not give rise to lifetime effects: in (52b) the individual Sasha is now dead, whereas in (52a), he is simply not a musician anymore (Matushansky 2000):

(52) a. Saša   byl   muzykantom.   (absence of lifetime effects)
          Sasha   was   musician.INST
          "Sasha was a musician."
      b. Saša   byl   muzykant.   (lifetime effects)
          Sasha   was   musician.NOM
          "Sasha was a musician."

Third, as it was the case previously for French and Irish, the predicate position of small clauses can only be filled by the eventive predicate nominal, i.e. the predicate can only be marked by Instrumental case (53):

(53) Sovremenniki   sčitali   Puškina   *veliki poèt   / velikim poètom.
      contemporaries considered Pushkin.ACC   great poet.NOM   / great poet.INST
      "Contemporaries considered Pushkin (to be) a great poet."

<div align="right">(Matushansky 2000)</div>

Similarly, Instrumental case is the only option in the predicate position of a small clause selected by a raising verb like *become* (54) and *turn out* (55) (cf. Bailyn & Rubin 1991):

(54) Saša stal   vračom.   (55) Saša okazalsja   durakom.
     Sasha became doctor.INST   Sasha turned out fool.INST
     "Sasha became a doctor."   *"Sasha turned out to be a fool."*

Finally, sentences (54) and (55) constitute not only evidence that Instrumental marked predicates can be small clause predicates, but also that they are compatible with aspectual distinctions. The sensitivity of case marking to aspect has been discussed by Matushansky (2000), who shows that only Instrumental marked predicates are compatible with expressed aspect. Aspect in Russian is obtained by morphological affixation (prefix or suffix) to a simple verb that is usually taken to be imperfective by default. With aspectually specified forms of the copula (56a-b), Nominative becomes impossible. This is not true of the default copula (56c):

(56) a. Ja pobyla   zavedujuščej   / * zavedujuščaja dva časa.
        I   was. PERF   manager.INST   / manager.NOM   two hours
        "I have been a manager for two hours."
     b. Ja byvala   zavedujuščej   / * zavedujuščaja no redko.
        I   was.IMPERF manager.INST   / manager.NOM   but rarely
        "I have been a manager, but rarely."
     c. Ja byla   zavedujuščej   / zavedujuščaja dva časa | no redko.
        I   was   manager.INST   / manager.NOM   two hours | but rarely
        "I have been a manager, for two hours | but rarely."

The account for the Russian data can be unified with the account of Irish when we assume that Pred is realized by an empty preposition in Russian, which is responsible for assigning Instrumental case to the predicate. The covert preposition Ø in Russian (57) is the same functional head Pred as the overt preposition '*in*' in Irish:

(57)
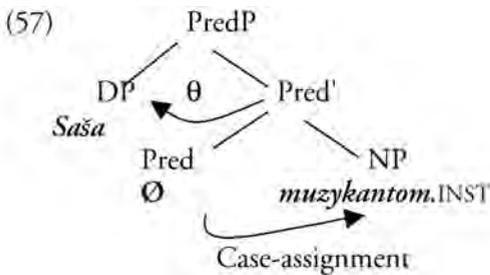
A structure similar to (57) has been argued for, independently, by Bailyn & Rubin (1991) for all Instrumental marked predicates in Russian. The only difference is that I take Pred to be a covert preposition in Russian. The reason why Russian marks eventive predicate nominals with Instrumental case, instead of a structural case, namely Accusative (*vs.* Nominative in non-eventive constructions) has often been an unanswered question. Under the view developed here, it is so because case is assigned by a preposition.

The apparent difference between case-marking in Russian and PP in Irish is, indeed, only a superficial one, linked to the fact that the former is a case language,

while the latter is not, a common variation across languages. In both cases, Pred is realized by a preposition.

The structure of eventive nominal predication in Russian is as follows (58): the copula is generated in V and moves to T; the DP subject moves to spec-TP to get Nominative case:
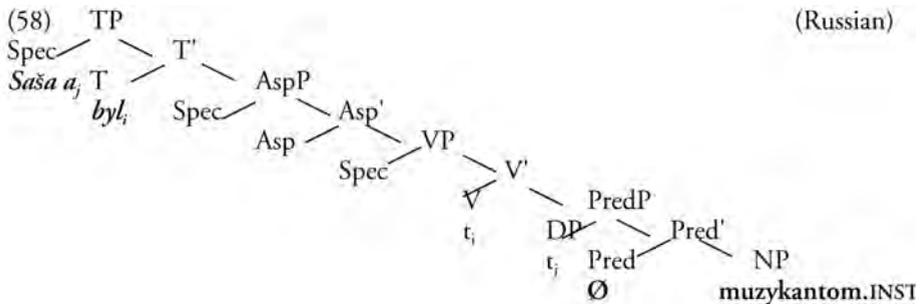
(58) ... (Russian)

5.3. N-licensing

5.3.1. Head movement

Given our premises and the unified account proposed for Irish and Russian, the fact that French and German do not exhibit an overt preposition with predicate nominals is rather unexpected. Since there is, by assumption, a functional head Pred in these languages that licenses the external argument of a predicate nominal, and since Pred needs to be realized, either it is realized as an empty preposition, as in Russian, or it is realized by some other element, functional or not. I will argue in this sub-section that the correct analysis is that Pred is realized by the predicative head N through head movement from its original position, as illustrated in (59):

(59)
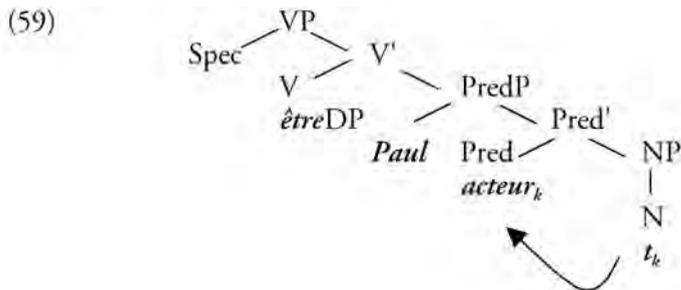
This view is supported by two pieces of data: the lack of agreement on the predicative heads, and the impossibility for the predicative head to be modified by an adjective or a relative clause.

First, Noun Incorporation is subject to the Head movement Constraint (cf. Travis 1984), which prevents a head to move to another head position if there is an

intervening head. Here, N can move to Pred only if NP is the complement of Pred. More specifically, an intervening head like Number, above NP, would block incorporation. Accordingly, I predict that incorporated predicate nominals in French and German cannot bear agreement. This prediction is borne out by the data. Number agreement is absent on bare predicates (i.e. on eventive predicate nominals) in French and German.[16] The lack of number agreement is illustrated with the predicate nominal *général* "general" in (60a), and the compound *avocat international* "international lawyer" in (60b):[17]

(60) a. Paul et Simon   sont *?généraux / général   (des armées).
        Paul and Simon   are   general.PL / general.SG of-the armies
        "Paul and Simon are generals (of the army)."

     b. Dupont et Dupré sont *avocats internationaux /avocat international.
        Dupont & Dupré   are*lawyer.PLinternational.PL /lawyer.SGinternational.SG
        "Dupont and Dupré are international lawyers."

In German, both a bare singular and a bare plural are possible (see (61a) and (61b), respectively). However, (61b) cannot be an eventive copular sentence, but rather is a non-eventive one. In other words, the bare plural predicate *Generäle* "generals" in (61b) is the plural of the variant with article (i.e. **ein General** "a general"*)*, and not of the bare singular (*General* "general"):

(61) a. Paul und Robert sind General.   b. Paul und Robert sind Generäle.
        Paul and Robert are   general.SG   Paul and Robert are   general.PL
        "Paul and Robert are generals."   *"Paul and Robert are generals."*

The claim that (61b) cannot be an eventive predication is supported by two pieces of evidence. First, it can only be interpreted as identificational, i.e. it constitutes an appropriate answer to the question *Who are Paul and Robert?*, and not to *What do they do?* Recall that eventive sentences cannot have an identificational reading. Second, the plural is the dispreferred option with an aspectual copula like *become*. Recall, again, that aspectual copulas take eventive predicates only:

(62) Paul und Robert wollen Arzt   / ??Ärzte   werden.
     Paul and Robert want   doctor.SG   / doctor.PL   become
     "Paul and Robert want to become doctors."

Second, assuming that adjectives attach higher than NP (i.e. at some functional layer between NP and DP), the impossibility to modify a bare predicate by an adjective and a relative clause in French and German further supports the view that

---

[16] This generalization seems to be subject to dialectal variations, as certain speakers of French and German allow plural agreement as well.

[17] Only a very limited set of nouns exhibit a clear plural form in French. In fact, although plural is always marked in the written system, it is rarely pronounced (except for irregular plurals and in the context of a liaison, for instance). In both examples in (60) *general* and *international* are unambiguously singular. In (60b) I take the fact that the adjective *international* is singular as in indication that the whole predicate is singular.

they are bare NPs. The insertion of an adjective modifying the bare predicate nominal obligatorily triggers the appearance of the article (63-64). Note that the article is required with both pre and post-nominal adjectives in French:[18]

(63) a. Paul   est   *(un)   riche / surprenant / agréable / beau (…) médecin.
     Paul   is   a   rich / surprising   / agreeable / beautiful doctor
     "Paul is a rich / surprising / agreeable / beautiful doctor."

     b. Paul   est   *(un)   médecin   âgé   / intelligent / réputé …
     Paul   is   a   doctor   aged / intelligent / reputable
     "Paul is a(n) old / intelligent / well-known doctor."

(64) Paul ist *(ein) reicher / erstaunlicher / anerkannter / angenehmer Arzt.
     Paul is   a   rich   / surprising   / well-known / agreeable   doctor
     "Paul is a rich / surprising / well-known / agreeable doctor."

Examples (65-66) illustrate the same fact with relative clauses:

(65) a. Paul   est   *(un)   médecin   que   tout le monde   aime.
     Paul   is   a   doctor   that   everybody   loves
     "Paul is a doctor that everybody likes."

     b. Paul   est   *(un)   médecin   qui   travaille   trop.
     Paul   is   a   doctor   who   works   too much
     "Paul is a doctor who works too much."

(66) Paul   is   *(ein)   Arzt   den   alle   mögen.
     Paul   is   a   doctor   that   all   like
     "Paul is a doctor that everybody likes."

Contrary to French/German, in Irish and Russian, number agreement must be realized: the NP inside the PP selected by *bí* must bear agreement in Irish (67), and Instrumental marked predicates must bear agreement in Russian (68):

(67) a. Tá   Seán agus Máire 'na   ndochtúirí.
     COP-BI Sean and Máire in.AGR doctor.PL
     "Sean and Maire are doctors."

     b. Tá   siad   'na   gcáirde maithe   ag a chéile.
     COP-BI they   in.AGR   friend.PL good.PL   at each-other
     "They are good friends to one another."

(68) a. Saša i Miša   byli   muzykantami   / *muzykantom.
     Sasha and Misha were   musician.INST.PL / musician.INST.SG
     "Sasha and Misha were musicians."

     b. Kogda   oni   byli   studentami, …
     when   they   were   students. INST.PL
     "When they were students, …"

---

18 Both in French and in German there is a very restricted set of exceptions to this generalization. In French, for instance, the few adjectives allowed with the bare variant are: *professionnel* "professional", *amateur* "amateur", *bon* "good", *excellent* "excellent", *mauvais* "bad", certain nationality adjectives as *grec* "Greek" (under the appropriate reading).

Agreement on the predicate in Irish and Russian suggests that NP is dominated by a NumP, site of the realization of agreement. In other words, with P-licensing the predicate can involve an additional layer of functional projection above NP, while with N-licensing, incorporation blocks any intervening head above NP. Furthermore, Irish and Russian are not subject to any constraint with respect to the modification of the NP inside the PP predicate (69) and the instrumental marked predicate (70), respectively. This again supports the idea that predicates in Irish and Russian involve an additional functional layer, to which by assumption, adjectives and relative clauses are adjoined:

(69) Tá   sé   ina   fhear láidir   (anois).   (Irish)
     COP-TA he   in.AGR man   strong   (now)
     "He is a strong man (now)."   (The Christians Brothers 1999)

(70) a. Makarenko byl   xorošim   učitelem.   (Russian)
        Makarenko was   good.INST   teacher.INST
        "Makarenko was a good teacher."

     b. Zoluśka   byla   bednoj   krest'jankoj.
        Cinderella was   poor.INST   peasant.INST
        "Cinderella was a poor peasant."   (Matushansky 2000)

5.3.2. *Against an empty P*

The main argument against an empty P in French and German comes from the fact that eventive predicate nominals do not bear a case that can possibly be assigned by a preposition in German. Prepositions in German can assign Accusative, Dative or Genitive case. However, bare predicate nominals can only bear Nominative, a default case. The difficulty to see what case a bare nominal bears in German is that case appears on adjectives and articles only. Hence, it is not expected to be visible at all on a bare singular as in *Paul ist Skifahrer* "Paul is a skier". Nevertheless, the few adjectives that can modify the bare predicate are, under the traditional view, Nominative-marked. This suggests that bare predicates bear Nominative (71):[19]

(71) Paul   ist   professioneller   Skifahrer.
     Paul   is   professional.NOM   skier.NOM
     "Paul is a professional skier."

Since Nominative cannot be plausibly assigned by a preposition, there is no empty P in German, and by extension, neither in French.

5.4. English

5.4.1. *Covert P*

We now have three tests that help distinguishing the two strategies of licensing of the head Pred from one another: number agreement, the possible modification of the head N by an adjective and case marking.

---

[19] The variant with the article is also marked with Nominative case. Hence, contrary to Russian, case does not discriminate between the two types of predicates.
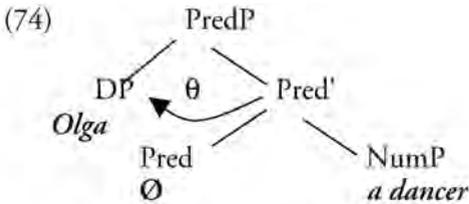
These tests applied to English (the case test is not relevant, as English is not a case language), produce the surprising result that English is an Irish/Russian like type of language, and not a French/German type of language as one would a priori expect. First, English exhibits obligatorily number agreement on predicate nominals: a plural subject triggers a plural agreement on the predicate:

(72) John and Paul are doctors / *doctor.

Second, a predicate nominal modified by an adjective can receive an eventive interpretation. Consider the famous example (73). Sentence (73) is ambiguous between two readings: it can be interpreted either as "Olga is a dancer and a beautiful person" (intersective reading) or as "Olga dances beautifully" (non-intersective reading) (Larson 1995). The second reading corresponds to the eventive predication, where *Olga is a dancer* is interpreted as *Olga dances*:

(73) Olga is a beautiful dancer.

Accordingly English patterns with Irish/Russian, and licenses its head Pred through the P-licensing strategy. Hence, contrary to French/German, we can assume that Pred is realized as an empty preposition in English. This claim is compatible with Bowers (1993), who assumes that Pred is a null head in English:

(74)

$$
\begin{array}{c}
\text{PredP} \\
\diagup \quad \diagdown \\
\text{DP} \quad \theta \quad \text{Pred}' \\
\textit{Olga} \quad \diagup \quad \diagdown \\
\text{Pred} \quad \quad \text{NumP} \\
\varnothing \quad \quad \textit{a dancer}
\end{array}
$$

5.4.2. Obligatory indefinite article

Although the similarity between English and Irish/Russian may seem surprising at first sight, it presents some interesting results, especially in terms of the contrasts between English and French. First, it provides some understanding to why English does not have a variant without article and the article remains obligatory in eventive predication. The obligatory presence of the article *a/an* in eventive predication in English constitutes further evidence for the additional functional layer NumP above NP, assuming that the indefinite article is the spell-out of Num:

(75) Olga is *(a) dancer.

The indefinite article is obligatory in non-eventive sentences, as it is a mark of agreement. The article *a/an* is ambiguous between the indefinite article (in non-eventive sentences) and a mark of agreement (in eventive sentences).

5.4.3. 'Olga is a beautiful dancer'

Second, it provides some insight regarding the fact that the sequence *beautiful dancer* can be interpreted as eventive in English but not in French. A sentence like *Olga est une*

belle danseuse "Olga is a beautiful dancer" in French has only one reading, namely 'Olga is a dancer and a beautiful person', and lacks the eventive reading 'Olga dances beautifully'.

Because the article is ambiguous between the indefinite article and the mark of agreement, and because English has only one copula, a sentence like *Olga is a dancer* is ambiguous between an eventive predication and a non-eventive predication. The ambiguity gives rise to the two interpretations mentioned above. This is clearly not the case in French, where the variant with article can only receive a non-eventive reading. The cross-linguistic variation is predicted under my account, as *a beautiful dancer* can be a property of events in English but not in French.

6. Conclusion

To conclude, the only difference between French/German on the one hand, and Irish/Russian/English on the other, is the nature of the element that realizes the functional head Pred. The former group of languages licenses the head Pred through N-licensing (76), and the latter through P-licensing (77). This difference aside, the structure of eventive predication is the same in all five languages:

(76)   (French/German)

```
          VP
   Spec  /  \
        V    V'
             / \
          DP    PredP
         Paul   /   \
             Pred    Pred'
            acteur_k  /  \
         Schauspieler_k  NP
                         |
                         N
                         t_k
```

(77)   (Irish/Russian/English)

```
          VP
   Spec  /  \
        V    V'
             /  \
          DP    PredP
                /   \
             Pred    Pred'
              |      /   \
              |   NumP
              |     |
              |    NP
              |     |
              |     N

             in    shagart        (Irish)
             ø     muzykantom     (Russian)
             ø     a dancer       (English)
```

This account provides a unified analysis to the fact that eventive predicates are introduced by an overt preposition in Irish, are assigned Instrumental case in Russian, and must be bare in French and German. The three phenomena are reducible

to whether Pred dominates a P or an N. This difference aside, the structure of eventive predications is identical: eventive copular sentences are constructed with an eventive copula that selects a small clause headed by a predicational head. A similar small clause structure has been, independently, argued for by Baylin & Rubin (1991) and Bowers (1993). As I have shown this analysis is easily extendable to English, and produces interesting results in terms of the variation between English and French.

References

Adger, D. and G. Ramchand, 2003, "Predication and Equation", *LI* 34(3): 325-60.

Bailyn, J. F. and E. J. Rubin, 1991, "The Unification of Instrumental Case Assignment in Russian". In Taborio, A. and W. Harbert (eds.), *Cornell Working Papers in Linguistics* 9: 99-126.

Bowers, J., 1993, "The Syntax of Predication", *LI* 24(4): 591-656.

Carlson, G., 1977, *Reference to Kind in English*. Garland Publishers, New York.

Carnie, A., 1995, *Non-Verbal Predication and Head Movement*. Ph.D. dissertation, MIT, Cambridge.

Christian B., 1962, 1999, *New Irish Grammar*. Fallons, Dublin.

Chung, S. and J. McCloskey, 1987, "Government, Barriers, and Small Clauses in Modern Irish", *LI* 18(2): 173-238.

Davidson, D., 1967, "The Logical Form of Action Sentences". In N. Rescher (ed.), *The Logic of Decision and Action*. University of Pittsburgh Press, Pittsburg.

Doherty, C., 1996, "Clausal Structure and Modern Irish Copula", *NLLT* 14: 1-46.

Fernald, Th. B., 1994, *On the Non-uniformity of the Individual and Stage-level Effects*. Ph.D. dissertation. UCSC, Santa Cruz.

Filip, H. 2001, "The Semantics of Case in Russian Secondary Predication". In *Proceedings from SALT 11*: 192-211.

Geist, L., 1999, "Russisch *byt* als funktionale und/oder lexikalische Kategorie", *ZAS Papers in Linguistics* 14: 1-39.

Hale, K. and J. McCloskey, 1984, "On the Syntax of Person-Number Inflection in Modern Irish", *NLLT* 1: 487-533.

Higginbotham, J., 1985, "On Semantics", *LI* 16: 547-93.

—, and G. Ramchand, 1997, 'The Stage-Level/Individual-Level Distinction and The Mapping Hypothesis'. In *Oxford Working Papers in Linguistics, Philology and Phonetics* 2: 53-83.

Higgins, F. R., 1979, *The Pseudo-cleft Construction in English*. Garland Publishers, N.Y.

Kratzer, A., 1995, "Stage-Level and Individual-Level Predicates". In G. Carlson and F. J. Pelletier (eds.), *The Generic Book*. The University of Chicago Press, Chicago: pp. 125-75.

Kupferman, L., 1979, "Les constructions *Il est un médecin / C'est un médecin*: essai de solution", *Cahiers de linguistique* 9: 131-164, Presse de l'Université du Québec, Montréal.

—, 1991, "Structure événementielle de l'alternance *un/ø* devant les noms humains attributs", *Langage* 102: 52-75.

Larson, R., 1995, "Olga is a beautiful dancer". Talk presented at LSA, New Orleans.

Matushansky, O., 2000, "The Instrument of Inversion: Instrumental Case in the Russian Copula". In Billerey and Lillehaugen (eds.), *WCCFL 19 Proceedings*, Cascadilla Press. pp. 288-301.

—, 2002, "Encasing the Time: Temporal Effects on Russian Predicative Case". Talk presented at NELS 23, MIT.

Milsark, G., 1974, *Existential sentences in English*. Ph.D. dissertation, MIT, Cambridge.

Musan, R., 1995, *On the Temporal Interpretation of Noun Phrases*. Ph.D. dissertation, MIT, Cambridge.

Ó Máille, T., 1912, "Contributions to the History of the Verbs of existence in Irish", *Ériu* 4(1): 1-102.

Ó Siadhail, M., 1989, *Modern Irish: Grammatical Structure and Dialectal Variation*. Cambridge Studies in Linguistics, Cambridge U.P., Cambridge.

Pereltsvaig, A., 2001, "On Thematic Relations in Copular sentences". In M. Yoo and J. Steele (eds.), *McGill Working Papers in Linguistics* 15(2).

Pollock, J.-Y., 1983, "Sur quelques propriétés des phrases copulatives en français", *Langue Française* 58: 89-125.

Ramchand, G. C., 1996, "Two Subject Positions in Scottish Gaelic: the Syntax-Semantics Interface", *Natural Language Semantics* 4(2): 165-91.

Rouveret, A., 1998, "Points de vue sur le verbe 'être'". In A. Rouveret (ed.), *"Etre" et "Avoir": syntaxe, sémantique, typology*. Presses Universitaires de Vincennes, Saint-Denis. pp. 11-65.

Roy, I., 2001, "Predicate Nominals in French". Ms. University of Southern California.

Stenson, N., 1981, *Studies in Irish Syntax*. Ars Linguistica 8. Gunter Narr Verlag, Tübingen.

Travis, L., 1984, *Parameters and effects of word order variation*. Ph.D. dissertation, MIT, Cambridge.