Predicate Nominals in Eventive Predication

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This paper presents a cross-linguistic study of predicative nominals in copular sentences in Modern Irish, Russian, French, and German, languages that grammaticalize, as I will argue, the distinction between eventive and non-eventive copular sentences. Specifically, the distinction is marked for predicate nominals by the choice of the copula in Irish, by case marking in Russian, and by the ‘optionality’ of the indefinite article in French and German. Despite these superficial differences, I show that eventive predicate nominals present non-trivial cross-linguistic similarities that argue for a unified account. The account I propose is based on the assumption that a functional head $Pred$ (cf. Bowers 1993) is the pivot of the predication relation and is responsible for assigning an external theta-role to the subject. I argue that the only difference between the four languages rests on how $Pred$ is realized: either phonologically, by an overt preposition $P$, or by head movement of $N$.

1. Introduction

The present study has two goals. One is to show that the distinction between eventive and non-eventive copular sentences is a relevant one when it comes to predicate nominals. I discuss here three possible ways the distinction is grammaticalized: by the optionality of the indefinite article in French and German, by case-marking in Russian and by the two different verbs ‘be’ in Modern Irish. The three phenomena are, a priori, very disparate. However, I show that they share non-trivial similarities that argue for a unified account. Leaving aside an analysis of non-eventive constructions, I am concerned in this paper with how the article, case marking and the copula can play the same role in licensing eventive predicate nominals.

The second goal is to provide an analysis of the licensing of eventive predicate nominals. I will argue that the properties of eventive predicate nominals in the languages mentioned above can be derived from the assumption that nouns fail to assign theta-roles to their arguments. I will assume that nominals are not direct theta-marker, and accordingly can only get an external argument if it is licensed by a functional head. Along the lines of Bowers (1993), I will assume that the functional head is the support of the predication relation in a small clause. Furthermore, I will distinguish two ways the functional head can be realized: on the one hand, Modern Irish and Russian will provide evidence that it can be spelled-out as a preposition; on the other hand, French and German will show that it can be phonologically realized as $N$, by head movement.

This paper is organized as follows. In section 2, I will discuss the alternation between bare predicate nominals and the variant with indefinite article in French and its correlation with the eventive vs. non-eventive interpretation. 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 permanent or transient. I will, furthermore, show that in terms of its distribution, the eventive variant is the only one compatible with certain syntactic positions, as small clause predicate, for instance, and certain aspectual distinctions. In section 3, I will discuss how the eventive vs. non-eventive contrast is rendered by the alternation between the two forms of the copula, namely $is$ and $bí$, in Modern Irish. I will further show that the eventive predicate nominals in Modern Irish shares with its French counterpart similarities that suggest that the difference between the two languages is only superficial.
In section 4, I extend my discussion to the alternation between Nominative and Instrumental case-marking on predicate nominals in Russian. Section 5 presents a summary of the cross-linguistic properties of eventive predicate nominals. Finally, a unified analysis of eventive nominal predication is developed in section 6.

2. Optionality of the indefinite article in French

2.1. Predication and identification

Predicate nominals can appear with or without the indefinite article in French. The apparent optionality of the article is illustrated in (1) and (2):\(^1\)

(1) Paul est professeur
Paul is professor

'(Paul is a professor)

(2) Paul est un professeur
Paul is a professor

'(Paul is a professor)

For Kupferman (1979) and Pollock (1983), the crucial difference between both types of construction is the 'function' (in the sense of Higgins (1979)) in which each sentence can be used. They claim that bare predicates appear exclusively in predicational sentences, whereas the variant with the article is used in identificational statements only. Since the work of Higgins (1979), four types of copular sentences are commonly distinguished: predicational, identificational, specificational and identity (or equative) statements (3):

(3) 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

**Predicational** and **identificational** sentences differ in two important respects. First, a pronominal subject in identificational sentences must be a deictic pronoun. For the following pair in English, the predicate *my sister* is identificational in (4a), but predicational in (4b):

(4) a. That is my sister (identificational)
b. She is my sister (predicational)

Likewise, in French, identificational sentences are typically constructed with the deictic pronoun *ce* "that/it" (5):

(5) a. C’est mon professeur
    that is my professor
    ‘That is my professor’

b. C’est le maire de Paris
    that is the mayor of Paris
    ‘That is the mayor of Paris’

\(^1\) Similar contrasts exist also in other Romance languages such as Italian, Spanish and Portuguese, as well as in certain Germanic languages such as German and Dutch. German will be discussed in section 6.
The deictic is also the only option with the variant with article (when the subject is a pronominal) (6). By opposition, the deictic is impossible with the variant without article (7). This contrast shows that only the variant with article is identificational, whereas the bare variant is predicational only:

(6)  
C'/ *Il est un professeur  
that / he is a professor  
‘That is a professor’

(7)  
*C'/ Il est professeur  
that / he is professor  
‘He is a professor’

Second, predicational and identificational sentences do not constitute an appropriate answer to the same question. The former is a suitable answer to the question *What...?*; while the latter answers the question *Who ...?*. Consider the sentence *John is a teacher* in English. On the one hand, it can be an answer to *What does John do?*. 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?*. It is, accordingly, ambiguous with an identificational interpretation. In French however *Paul est un dentiste* “Paul is a dentist” is not ambiguous. It can only answer the question *Who is Paul?*, and hence is identificational only. See contrast in (8) and (9). By opposition, again, the variant without the article is the only option as an answer to the question *What does Paul do?*, and therefore the only option in predicational sentences:

(8)  
Q: Qui est Paul?  
who is Paul  
‘Who is Paul?’

A: Paul est un dentiste / *dentiste.  
Paul is a dentist / dentist  
‘Paul is a dentist’

(9)  
Q: Que fait Paul dans la vie?  
what does Paul in the life  
‘What does Paul do for a living?’

A: Paul est *un dentiste / dentiste.  
Paul is a dentist / dentist  
‘Paul is a dentist’

The generalization proposed by Kupferman and Pollock is supported by additional data. More specifically, the distribution of predicate nominals in contexts known to be predicational only (see also Rouveret 1998), further indicates that only the variant without article is predicational. First, only the bare variant can be pronominalized by the clitic *le* “it” (10):

(10)  
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” (11):

(11)  
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 is 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” (12) and raising verbs as *s’avérer* “to prove (to be) / to turn out” and *sembler* “to seem” (13-14):

(12) **Je croyais Paul (*un) médecin**
    I believed Paul a doctor
    ‘I believed that Paul was a doctor’

(13) **Jean s’avèrait (*un) médecin**
    John turned out a doctor
    ‘John turned out / proved to be a doctor’

(14) **Paul semble (*un) médecin**
    Paul seems a doctor
    ‘Paul seems to be a doctor’

In sum, the variants with and without the article enter in complementary distribution in predicational and identificational sentences. Converging data show that only the bare variant is compatible with a true predicational reading. By contrast, the variant with article is restricted to sentences whose function is to identify an individual and typically answers the question *Who is X?*.  

2.2. Permanent vs. transitory properties

In a more recent paper, Kupferman (1991) further suggested that the dichotomy between bare predicates and the variant with article can be captured in terms of transitory vs. permanent properties (in his terms, 'episodic' vs. 'stable'). He shows that only bare predicates can appear in constructions that admit exclusively transitory properties, as, among others, absolutive 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 modification (15-16). When the property of ‘being a doctor/singer/translator’ is relative to particular situations, the variant without article is the only option:

(15) **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’

(16) **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 (17):

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2 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. For arguments in favor of the view that definite predicates that denote a role / function are predicative rather than referential expressions, see discussions in Van Peteghem (1991) and Higgins (1979) and references therein. Following these authors, I assume that sentences like *John is the captain* are not identity statements. They contrast with real equatives like *The morning star is the evening star*, that require both members of the identity to have the same referential force, and are rare in the language. See also Rouveret (1998).

3 Sentence (17) 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.
Paul est (*un) médecin à 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 (18), only (18b) entails that the individual Paul is now dead. In (18a) no such entailment is made, Paul simply does not practice medicine anymore, which can result from a variety of causes, but not necessarily that the subject does not exist anymore:

(18)a. Paul était médecin => he is now retired, etc…
Paul be.PAST a doctor

b. Paul était un médecin => he is now dead
Paul be.PAST a doctor

'Paul was a doctor'

Third, only bare predicates 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 (19):

(19) 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'

For Carlson (1977), as well as Kratzer (1995), the distinction between temporary and permanent properties is made at the level of the lexicon. Some predicates, like sick, tired, glad, are true of stages of individuals (stage-level predicates) while others, like intelligent, blond, tall, are true of individuals (individual-level predicates).\(^4\) For Kratzer (1995) the difference between stage-level and individual-level predicates follows from whether their argument structure representation involves an additional argument position for events or not: stage-level predicates have an event position that individual-level predicates are lacking. Spatial and temporal modifications are possible with stage-level predicates because they are modifiers of the event variable. Similarly, the absence of life-time effects with stage-level predicates follows from the fact that the past tense operator binds the event variable and not the individual. Under such a view predicates that can receive both a stage reading and an individual reading (consider for instance happy, French etc.), must be ambiguous between two different lexical entries, one stage one and one individual one, with a different argument structure: P\(_1\)(x,e) and P\(_2\)(x), respectively.

However, the claim that the stage/individual distinction is a lexical one is rather problematic as it is almost always possible to coerce one into the other. A predicate like intelligent, for instance, usually cited as unambiguously individual-level, can get a stage reading given the appropriate context, cf. (20). In view of the possibility for any predicate to get a stage reading, one can assume that all predicates involve an underlying event variable. This view is argued for by Higginbotham (1985):

(20) John came to college dumb and left it intelligent.

I will assume here (following Kupferman 1991, Ramchand 1996, and Higginbotham and Ramchand 1997) that the distinction is not lexical but rather syntactic. Stage-level predication involves predication over events, while individual-level predication involves predication over individuals. The former has the logical form (21): the property of being an event of a certain kind is predicated of a

\(^4\) See Higginbotham & Ramchand (1997) for arguments against the existence of a single stage/individual distinction that can explain the distribution of predicates in constructions described as sensitive the contrast between temporary and permanent predicates, i.e. bare plural subjects, existential constructions, absolutive constructions, perceptions verbs and conditionals (cf. Milsark 1974 and Carlson 1977).
situation s. By contrast, the latter has the logical form (22): a particular property is predicated of an individual x (Higginbotham and Ramchand (1997)):

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

(22) Individual-level
\[ \exists x \left[ \lambda x \ldots (x) \right] \]
there exists an individual x, such that x has a particular property

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

Under this view, the optionality of the article in French is the grammaticalization of the distinction between the two types of predications: the bare variant enters in eventive predications and the variant with article enters in non-eventive predications. If any predicate can be constructed either as a property of events or a property of individuals (see above), any predicate should be able to occur either bare or with the indefinite article in French, contrarily to what is generally assumed.

In fact, it is commonly accepted that the variant without the article, in French, can only be 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). This generalization, however, is certainly too restricted. First, we find a considerable number of bare predicate nominals (see (23)), which cannot be considered as professions as such, but do involve some sort of underlying 'activity' in a broader sense:

(23) Paul est auto-stoppeur / fumeur / locataire / prisonnier
Paul is hitchhiker / smoker / tenant / prisoner

‘Paul is a hitchhiker / a smoker / a tenant / a prisoner’

Second, when they can receive an eventive interpretation, even predicates often considered as denoting individual properties exclusively, to be a hero, for instance, are acceptable without the article (24):

(24)a. Il n'a jamais connu son père qui était héros de la Résistance.
he has never known his father who was hero of the resistance

‘He has never met his father who was a resistance hero’

b. Lorsque j'étais enfant, j'habitais à Paris
when I was child I lived in Paris

‘When I was a child, I used to live in Paris’

c. L'enfant peut être tyran
the child can be tyrant

‘A child can be a tyrant’

This constitutes evidence that bare predicates are not restricted to profession denoting nominals and that, contrarily to what is usually assumed, all predicate nominals in French can appear bare, provided

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5 Many predicates that can appear bare in French are indeed adjectives, as shown by the fact that they can be modified by a degree adverbial and can modify nouns. Consider, for instance: idiot ‘idiot’, fou ‘fool’, socialiste ‘socialist’, révolutionnaire ‘revolutionary’, meurtrier ‘murderer/murderous’, rebelle ‘rebel’, Parisien ‘Parisian’, ivrogne ‘drunkard/drunken’, etc…
that an eventive interpretation is available. The fact that the distinction between permanent and transitory properties is grammaticalized by the presence vs. absence of article in French further supports the idea that the distinction cannot be a lexical one.

Note, incidentally, that sentences with a bare predicate can always be paraphrased by a verb or a verbal phrase. Thus, Jean est danseur “John is a dancer” is equivalent to John dances, and similarly Jean est médecin “John is a doctor” to John practices medicine or John doctors, and so on. Similarly Paul est locataire “Paul is a tenant” can only mean something like Paul rents his place (and does not own it), and L’enfant peut être tyran “A child can be a tyrant” means that children can behave in a tyrannical manner. The fact that bare predicates entail the actual practice of the activity (in a broad sense) denoted by the predicate nominal can be seen very clearly in the contrast in (25-26). Consider the oddness of example (25): when the actual practice of the activity is negated, the sentence results in a contradiction. Contrastively, the property of being 'an N' is independent of the practice of an activity (26):

(25)#Jean est médecin, mais il ne pratique plus.  
John is doctor but he does not practice anymore

(26)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"

Assuming that bare predicates are constructed in eventive copular sentences gives us some insight as to why they are compatible with aspect, whereas the variant with 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 (27b). The imperfective aspect, however, is a default aspect, and can take both variants (27a):

(27)a. Paul était (un) médecin  
Paul was a doctor  
"Paul was a doctor"

(27)b. Maintenant, comme il fonctionne si mal, mon réfrigérateur est *(un) congélateur  
now as it functions so bad, my refrigerator is a freezer  
"At this point, since it malfunctions, my refrigerator is a freezer"

In view of examples like (2), I disagree with Kupferman (1991) who claims that bare nominals are subject to a [+human] constraint, rather than animacy:

(2) a. Fido est guide d’aveugles / chien de garde.  
Fido is guide of blinds / dog of guard  
"Fido is a guide dog / a guard dog"

b. La deuxième fourmi est ouvrière.  
the second ant is worker  
"The second ant is a worker (ant)"

Similar facts have been noted, independently, by Kupferman (1979).
b. Paul a été (*un) médecin
   Paul has been a doctor
   'Paul has been 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 article:

(28) Paul deviendra (*un) peintre
    Paul become.FUT a painter
    'Paul will become a painter'.

Similarly, the variant with article cannot appear with perfective verbs such as to die either. In both (29) and (30) the state of ‘being a N’ is bounded, and is incompatible with a non-eventive predicate:

(29) Paul mourra (*un) médecin
    Paul die.FUT a doctor
    'Paul will die a doctor'

(30) Paul sortira de son école (*un) architecte
    Paul come out. FUT of his school an architect
    'Paul will graduate as an architect'

In sum, eventive predicate nominals in French present the following characteristics. First, they are predicational only, i.e. they cannot enter in identificational sentences. Second, as eventive predications, they tend to be interpreted as transitory property, rather than permanent ones. Third, they are compatible with all aspects (perfective and imperfective) as well as perfective verbs. Finally, they are the only option in small clauses.

In the next section I am concerned with Modern Irish, which marks the contrast between eventive and non-eventive copular sentences by the choice of the copula. The purpose of the discussion of the Irish facts is to show that not only the dichotomy is relevant for that language too, but also that eventive predicate nominals present significant similarities with bare predicate nominals in French.

3. Eventive predications in Modern Irish
3.1. The two verbs ‘be’ and predicate selection

Modern Irish has two forms for the verb 'be', namely bí and is.8 Bí is traditionally known as

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8 The following table (from Carnie 1995) gives a brief summary of the different forms of the two copulas:

<table>
<thead>
<tr>
<th></th>
<th>bí</th>
<th>is</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>tá</td>
<td>is</td>
</tr>
<tr>
<td>Past</td>
<td>bhi</td>
<td>ba</td>
</tr>
</tbody>
</table>
a 'substantive be', and *is* as 'copular be'. The two copulas have very different selection properties. *Is* can productively appear with NP predicates, but not with APs, PPs nor VPs. By contrast, *bí* is productive with AP, PP and VP predicates, but cannot appear with predicate nominals (see Stenson 1981, Carnie 1995, Doherty 1996, among others). What matters for us here, is that *is* is the only option with predicate nominals (31-32):.

(31)a. Is dochtúir Maíre  
  COP-IS doctor Maíre  
  'Maíre is a doctor'

b. Is é Seán an dochtúir  
  COP-IS AGR Sean the doctor  
  'Sean is the doctor' (Doherty 1996)

(32)*Tá mo dheartháir shagart  
  COP-BI my brother Priest  
  intended: 'My brother is a priest' (Stenson 1981)

In order for a predicate nominal to be constructed with *bí*, it must be complement of a preposition. Compare the ungrammaticality of (32) with (33) where the predicate nominal *shagart* "priest" is introduced by the preposition *in* "in".:11

(33)Tá mo dheartháir ina shagart  
  COP-BI my brother in.AGR priest  
  'My brother is a priest'

The *bí*-construction in (33) contrasts minimally with the *is*-construction in (34):

(34) Is sagart é mo dheartháir  
  COP-IS priest AGR my brother  
  'My brother is a priest'

As we will see in the next sub-section, the difference between the *bí*-construction and the *is*-construction is reminiscent of the contrast produced by the optionality of the indefinite article in French, from the point of view of their interpretation, as well as their syntactic behavior.

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9 The opposition between *bí* and *is* is analogous to the *ser* and *estar* contrast in Spanish and Portuguese, as previously noted by Ó Máille (1912) (as 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 (32-33) in Modern 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 (*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.

10 In this paper, I am concerned with Modern Irish particularly; however, similar facts are attested in other Celtic languages as well. For a discussion of Scottish Gaelic, see Ramchand (1996) and Adger & Ramchand (2003). For a discussion of Welsh, see Rouveret (1996).

11 The agreement marker on the preposition is sometimes described as a possessive pronoun. Prepositions bear agreement across the board in Irish (Halle & McCloskey 1984).
3.2 Properties of the is-constructions and bí-constructions

The copula *is* is traditionally said to predicate essential or inherent properties, while *bí* is used to predicate more temporal properties, as well as existence and location (cf. Stenson 1981). According to Stenson, 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". The following pair (35-36) illustrates the contrast with the predicate *man*:

(35) Is fear é
    COP-IS man he
    ‘He is a man’

(36) Tá sé ina fhear (anois)
    COP-BI he in.AGR man (now)
    ‘He is a man (now)’ (Stenson 1981)

Kind predicates in definitions, as in (37-38), can only enter in constructions with *is*, as expected:

(37) Is éan smólach
    COP-IS bird thrush
    'A thrush is a bird'

(38) Is iasc é an bradán
    COP-IS fish AGR the salmon
    'The salmon is a fish' (Ó Siadhail 1989)

The interpretational difference between the NP predicates in construction with *is* and the PP predicate in construction with *bí* mirrors the difference between the variant with and without article, respectively, in French. The NP in construction with *is* denotes a defining property and is interpreted as permanent. The PP in construction with *bí* is eventive. As it is the case in French the eventive predicate cannot get an identificational reading. In identificational sentences, i.e. as an appropriate answer to the question *Who...?*, the copula *is* is the only option (39):

(39) Q: Cé hé an bainsteoir?
    who AGR the manager
    ‘Who is the manager?’

    A: Is é an Búrcach an bainsteoir.
    COP-IS AGR the Burke the manager
    ‘Burke is the manager’ (Christian Brothers 1962; cited in Stenson 1981)

In addition, sentences constructed with the copula *is*, just like the variant with article in French, gives rise to lifetime effects in the past tense. Sentence (40a), for instance, entails unambiguously that the individual Sean is now dead. By contrast, in sentence (40b) no such entailment is made. The individual Sean just ceased to be a doctor:

(40) a. Ba dhochtúir Sean
    COP-IS.PAST doctor Sean
    ‘Sean was a doctor’
Again, the absence of lifetime effects in (40b) is an indication that the sentence can be interpreted as relative to a particular situation. This is further supported by the fact that the *bi*-construction allows for temporal modifiers ((41) and consider also the use of *now* in (35)):

(41) Bhi Seán ina dhochtúir tráth
    COP-BL.PAST Sean in.AGR doctor once
    'Sean was a doctor once'

(Doherty 1996)

Finally, the eventive predicate, i.e. [*pp in-N*], constitutes the only option in small clause predicate. As discussed in the literature (see Chung and McCloskey 1987, for instance) the predicate position of a small clause cannot be filled by an NP in Irish. Instead, Irish requires, exactly as in the *bi*-construction, that the nominal be introduced by the preposition *in*. Consider, for instance, the verb *happen* that selects a small clause complement (42) and perception verbs (43):

(42) a. *Tharlaigh iad dliodóir*
    happened.PAST them lawyers
    intended: 'It happened that they were lawyers'

b. Tharlaigh 'na dhliodóir é
    happened.PAST in.AGR lawyer him
    'He happened to be a lawyer'

(Chung and McCloskey 1987)

(43) a. *Chonaic mé Ciarán léachtóir*
    see.PAST I Ciaran lecturer
    intended: 'I saw Ciaran as a lecturer'

b. Chonaic mé Ciarán ina léachtóir
    see.PAST I Ciaran in.AGR lecturer
    'I saw Ciaran as a lecturer'

(Doherty 1996)

The PP predicate that is licensed in eventive constructions is also licensed in small clauses. Similarly to what we saw in French, small clauses predicate nominals can only be eventive in Irish.

The contrast between eventive and non-eventive predications is relevant for Irish and distinguishes between copular sentences constructed with *bi* and *is*, respectively. The predicate that appears in eventive sentences in Irish shares with the bare variant in French not only the same interpretation (temporary, activity-like denoting expression), but also use (predicational, as opposed to identificational) and syntactic environment (as small clause predicates, and with temporal modifiers). These similarities argue for a unified account of the two languages. From a comparative perspective, the issue is to understand how the copula in Irish and the (absence of) article in French play the same role in licensing eventive predicate nominals. In parallel, we also need to account for the fact that eventive predicate nominals in Irish cannot be a bare NP, but instead a PP.

In the next section I am concerned with Russian, a language that grammaticalize the distinction between eventive and non-eventive copular sentences by case marking. My purpose is to show that Instrumental marked predicate nominals share the same properties as the bare variant in French and the PP in construction with *bi* in Irish.
4. Case marking and nominal predication in Russian

4.1. Nominative vs. Instrumental case

Russian copular predicates can bear either Instrumental or Nominative case (44):

(44)a. Saša byl muzykantom
    Sasha was musician.INST
    'Sasha was a musician'

b. Saša byl muzykant
    Sasha was musician.NOM
    'Sasha was a musician'  (Bailyn & Rubin 1991)

In the past tense (as in (44)), Instrumental and Nominative case are in apparent free variation. However, they receive different interpretations. As discussed by many authors (Wierzbicka 1980, Bailyn and Rubin 1991, Matushansky 2000, Filip 2001, among others) Instrumental-marked predicates express properties perceived as transient. Sentence (44a) receives a temporary interpretation: 'Sasha was a musician temporarily, at some point'. For Filip (2001), Instrumental-marked predicates involve a 'change of state' (45):

(45) On byl učitelem (potom) fotografom
    he was teacher.INST (then) photographer.INST
    'First he was a teacher, then he became a photographer'  (Geist 1999, cited by Filip 2001)

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

Assuming the dichotomy between eventive and non-eventive predications, Instrumental case marked predicates show up in eventive sentences only. They are the counterpart of the bare variant in French and the PP predicate in bi-constructions in Irish. By opposition, Nominative marked predicates are restricted to non-eventive predications. Again, the similarities between the three languages extend beyond the interpretational contrast, as discussed in the next sub-section.

4.2. Eventive predicate nominals

First, as expected, identificational sentences, as well as true equatives (46), require a Nominative-marked predicate:

(46) Mark Twain byl Samuèl Klements
    Mark Twain.NOM was Samuel Clements.NOM
    'Mark Twain was Samuel Clements'

As pointed out by Pereltsvaig (2001), the optionality of case marking disappears when the predicate nominal is headed by a demonstrative (47). She takes this data as evidence of a DP/NP contrast in Russian. Alternatively, we can interpret the data as evidence that identification can only be made through a Nominative-marked predicate:

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12 This is not true of the other tenses (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. For the reason that they do not allow for case alternation, I will not consider these tenses here. However, the reason why Instrumental is not allowed in the present (where the copula is null) remains to be explained.
Second, Nominative-marked predicates give rise to lifetime effects (Matushansky 2000): in (44b) Sasha is now dead, whereas Instrumental-marked predicates do not. In (44a), the individual Sasha is simply not a musician anymore.

Third, as it was the case previously for French and Irish, the predicate position of small clauses can only be filled be the eventive predicate nominal, i.e. the predicate can only be marked by Instrumental case (48):

Similarly, Instrumental case is the only option in predicate position of a small clause selected by a raising verb like become (49) and turn out (50) (cf. Bailyn and Rubin 1991):

Finally, sentences (49) and (50) 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 (51a-b), Nominative becomes impossible. This is not true of the default copula (51c):

In addition, Nominative case is blocked with the default copula in environments where aspect is explicitly given by the sentence. For instance, in (52a) the clause introduced by adverbial poka “while”, which expresses perfectivity (cf. Matushansky 2000), blocks Nominative case on the predicate. Instrumental case is not subject to the same constraint (52b):
(52)a. *Poka Katja byla studentka, Petja ždal eć
while Katia was student.NOM Peter waited her 'While Katia was a student, Peter waited for her'

b. Kogda Katja byla studentkoj, u nee ne bylo deneg
when Katia was student.INST to her NEG was money 'When Katia was a student, she had no money'

To summarize, there exists a clear similarity between the behavior of Instrumental-marked predicates in Russian, the bare variant of predicate nominals in French, and the PP in bí-constructions in Irish. They receive the same interpretation (temporary rather than permanent; non-defining; eventive). They are excluded from identificational sentences. They represent the only option in small clauses. They are compatible with expressed aspect. Again, the similarities between the three languages argue for a unified account.

5. Summarizing the data

In the previous three sections I have discussed how the contrast between eventive and non-eventive predications is grammaticalized in French, Modern Irish, and Russian. Leaving aside non-eventive sentences, eventive predicate nominals are licensed by the absence of article in French, the copula bí and a preposition in Irish, and Instrumental case in Russian. I have shown that these predicates present non-trivial similarities that argue for a unified account. Eventive predicate nominals cannot be used in identificational sentences. They are not ‘defining’ properties and are always interpreted as more ‘temporary’ and activity related than the other. From a syntactic point of view, I have shown that they are compatible with all aspects (bounded vs. unbounded events), and that they can be predicate in small clauses.

Having established the semantic and syntactic similarities between eventive predicate nominals in French, Russian and Irish, the cross-linguistics puzzle at this point is to understand how the article, case and the copula can play the same role in licensing eventive predicate nominals.

Further, at the language specific level, we need to understand why NPs cannot be predicates, and require instead to be embedded in a PP in Irish and why, with this respect, nominals differ form adjectives; why Russian eventive predicates bear Instrumental case rather than a structural case (Accusative, for instance); and finally, why eventive predicates must be bare in French.

Taking Irish as a starting point, I will propose in the next section a unified analysis based on the assumption that nominals cannot license ‘directly’ their external argument. In section 6.1 I will argue against the generally admitted assumption that nominals differ from other types of predicates because they cannot be stage-level predicates. In section 6.2 I will discuss the theta-marking properties of nominals and develop the hypothesis that predicate nominals can only take an external argument if a functional head, pivot of the predication relation, licenses it. Finally, in sections 6.3 and 6.4 I will implement the hypothesis and further propose two ways the functional head can be realized, namely, by a preposition (in Irish and Russian) or by the nominal head itself (in French).

6. Eventive nominal predication: a unified account
6.1. Event argument for nominals

I adopt the common dichotomy between DPs and NPs, along the lines of Abney (1987) and assume that a determiner is the head of its own projection, and selects an NP as its complement. Moreover, I take the D-layer to be the locus of referentiality (cf. Longobardi 1994). Accordingly, DPs, which are referential expressions, can be arguments. By opposition, NPs are predicates. Predicates are unsaturated expressions. If NPs are predicates, i.e. if they have an undischarged theta position, the impossibility for a simple NP predicate to be predicated of a subject in the bí-construction in Irish is unexpected. Recall that in such constructions, the NP predicate must be preceded by a preposition (see
examples (32) and (33) repeated below). In this sense, nominals differ from other predicates, such as adjectives and prepositional phrases:

(32) *Tá mo dheartháir shagart
COP-BI my brother priest
intended: 'My brother is a priest'

(33) Tá mo dheartháir ina shagart
COP-BI my brother in.AGR priest
'My brother is a priest'

In this sub-section I argue against the hypothesis that predicates nominals are incompatible with the eventive copula *bi* because they lack an event variable. Instead, I show, on the basis of the behavior of bare predicates in French more specifically, that nominals also are predicates of events.

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 difference between stage and individual predicates in English show that nominals are never stage-level: they are excluded from existential construction (53a), they cannot appear with perception verbs (53b), and they allow for a generic reading of bare plurals (53c):

(53)a. *There were people doctors
b. *John saw Paul a doctor
c. Dogs are mammals

However, as I have already shown in section 2, although this could be true of the variant with article in French, the bare variant is stage-level. Note, incidentally, that English does not have a bare variant. Evidence to argue against the idea that NPs, as opposed to APs and PPs, are predicates of individuals only and lack an event variable, comes from the following data. First, unlike predicate nominals in English, bare predicate nominals in French can appear in existential constructions (54a), and can appear in the small clause complement of a perception verb (54b):

(54)a. Il y a des femmes peintres / des étudiants propriétaires
there is of-the women painters / of-the students owners
‘There are women (that are) painters / students (that are) owners’

b. Je n’ai jamais vu Paul enfant / étudiant
I NEG.have never seen Paul child / student
‘I’ve never seen Paul as a child / a student’

Second, 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 nominals in French. Consider the famous sentence *Brutus stabbed Caesar in the back with a knife*. The argument made by Davidson is that the conjunction of modifiers does not entail the whole sentence. The entailment in (55) is invalid, as the stabbing in the back could have been with a sword, for instance, and the stabbing with a knife could have happened in the chest, for instance:

(55) Brutus stabbed Caesar in the back
Brutus stabbed Caesar with a knife
∴ Brutus stabbed Caesar in the back with a knife

---

13 French does not have bare plurals. I leave aside the third test here.
This is taken as evidence that the sentence *Brutus stabbed Caesar in the back with a knife* denotes an event and that each modifier (*in the back* and *with a knife*) is a predicate of the event. Consider the logical form in (56):

(56) \( \exists e \ [\text{stabbing}(e, \text{brutus}, \text{caesar}) \& \text{in}(e, \text{back}) \& \text{with}(e, \text{knife})]\)

Following the same rationale, the fact that the entailment in (57) is also invalid indicates that 'being a dentist' and 'being in Paris' are potentially two independent events (or states):\(^{14}\)

(57) Paul est dentiste (Paul is dentist)
Paul est à Paris (Paul is in Paris)
∴ Paul est dentiste à Paris (Paul is dentist in Paris)

Consequently, nominals too must be seen as relative to events. Thus, the sentence *Paul est dentiste à Paris* “Paul is a dentist in Paris” denotes an event, and each phrase *dentiste* and *à Paris* is a predicate of the underlying event. Consider the logical form in (58):

(58) \( \exists e \ [\text{is-dentist}(e, \text{Paul}) \& \text{in}(e, \text{Paris})]\)

Finally, 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:

(59) John is a former lawyer.
    a. \( \forall \exists e \ [\text{lawyer}(j, e) \& \text{former}(e)]\)
    b. \( \# \exists e \ [\text{lawyer}(j) \& \text{former}(j)]\)

Thus, I conclude that there is convincing evidence that predicate nominals have an event position in French, but also in English. Therefore, there is no reason to assume that nominals denote differently from adjectives, prepositional phrases and verbs.

Accordingly, the fact that, in Irish, nominals in eventive predications must be introduced by a preposition cannot be related to the absence of event variable (contra Adger and Ramchand (2003)). By assumption, nominals have an event position, and hence, they should be fully compatible with the eventive copula *bi*, like APs and PPs. So the question remains why nominals in Irish cannot appear in eventive sentences if they are not embedded in a PP. In the next sub-section I propose that P is necessary for theta-marking the external argument.

### 6.2. Nominals and theta-marking

I propose that the particular behavior of nominals follows from their inability to assign theta-roles to their arguments. Nominals fail to assign directly an external theta-role to their subject, and theta-assignment must be mediated by a preposition. The preposition P is a functional head, pivot of the predication relation. P is a predicational head in the sense of Bowers (1993).

This analysis builds on the proposal made by Emonds (1985) and Grimshaw (1990) that nouns are ‘defective’ theta markers. As usually understood, the notion of *theta-marking* involves two relationships. The predicate licenses an argument, and an argument satisfies a slot in the argument structure of the predicate. I will refer to the former as *theta-assigning* and the latter as *argument-taking* for the clarity of the discussion. As pointed out by Grimshaw (1990), these two relationships are logically distinct, although they are traditionally grouped together under one label, i.e. *theta-marking*.

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\(^{14}\) See also Parsons (2000) for a similar argument.
Empirical evidence to support the independence of both relationships from one another comes from the contrast between derived nominals and verbs with respect to the distribution of their arguments. Derived nominals have an argument structure (it is usually the same as the related verb), but, as opposed to verbs, they cannot take 'directly' an argument. Instead, the argument of a nominal head N must be introduced by a preposition, a fact previously noticed by Emonds (1985) and reported by Grimshaw (1990). Consider the contrast between the derived nominals in (60) and their related verb in (61) (examples from Emonds 1985):

(60)
\begin{itemize}
  \item a. Their destruction *(of) the city
  \item b. His preference *(for) red wine
  \item c. The election *(of) John *(as) president
\end{itemize}

(61)
\begin{itemize}
  \item a. They destroyed the city
  \item b. He prefers red wine
  \item c. They elected John president
\end{itemize}

Argument-taking is satisfied in both cases, as a constituent satisfies the internal argument of the head N and V. However, theta-marking of a DP argument by the head N fails. Following Emonds, theta-marking is not satisfied because the head N cannot assign directly theta-roles to its arguments. Emonds distinguishes two ways in which a head can assign a theta-role: directly to its sister complement, or indirectly by the mediation of an intermediate functional element. The asymmetries in the complement distribution of nouns and verbs come from the fact that verbs are direct theta-assigners, while nouns are not. Theta-assigning from a nominal head must be supported by a functional head, spelled-out as the preposition P. Hence, while verbs can satisfy both argument-taking and theta-assigning, nominals can only satisfy argument-taking. It is the functional head P that is responsible for assigning a theta-role to the DP argument of the head N. Similar data can be found in French, as illustrated by the pair below (examples from Emonds 1985):

(62)
\begin{quote}
Sa préférence *(à) boire du vin blanc avec le poisson
his preference *(to) drink of the wine white with the fish
\end{quote}

(63)
\begin{quote}
Il préfère *(à) boire du vin blanc avec le poisson
he prefers *(to) drink of the wine white with the fish
\end{quote}

The French examples show, furthermore, that the need for P is independent of the categorical nature of the argument of the head N. (62) illustrates infinitival complements more specifically. Note that these examples also provide evidence that the preposition is not required for case-marking, since infinitives do not bear case. For further discussion of this point see Emonds (1985, chapter 1) and Grimshaw (1990, chapter 3).

Emonds and Grimshaw’s works focus more specifically on the argument structure of DPs, and the internal arguments of the nominal head. However, I want to suggest that the view they argued for should be extended to nominals in predicative position as well, i.e. to NPs predicated of a subject. In other words, the ‘defective’ character of nouns affects not only their ability to assign directly a theta-role to their internal arguments, but also to assign directly an external theta-role. That is to say that an argumental DP in spec-NP cannot be assigned an external theta-role from N’. This claim is supported
by the ungrammaticality of the omission of the preposition in examples (64). By assumption, P is the realization of a functional head responsible for assigning a theta-role to the arguments of a head N. The external theta-role of a predicate nominal is assigned by P’ to Spec-PP (65):

(64) Paul is *(in) transit.
    The partners are *(at) war with each other.
    The house is *(on) fire.
    The road is *(under) construction.

(65) VP
    V'      
    |      
    V      PP
    |       BE 
    DP     θ-role P' 
    Paul   P     NP
    in     transit

The view of P as a functional head, support of the predication relation, is consistent with the structure of predication proposed by Bowers (1993). P is the realization of a predicational head Pred. Notice, however, that the proposal developed here differs from Bowers' original claim in the sense that only nouns require a functional head Pred. For Bowers, however, no category is able to assign an external

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15 Similar examples can be found in French; see (3a-b) where the thematic relationship Agent is mediated by the preposition de “of” and (c-d) where the thematic role Patient is mediated by the prepositions en “in” and sous “under”:

(3) a. Je suis de mariage samedi.
    I am of wedding Saturday
    'I'm a participant/guest in a wedding on Saturday'

b. Paul est de vaisselle.
    Paul is of dishwashing
    'Paul is doing/responsible of the dishwashing'

c. La ville est sous contrôle
    The city is under control
    'The city is under control'

d. La route est en construction / travaux
    the road is in construction / works
    'The road is under construction'

The French examples indicate clearly that the incapacity of nominals to assign theta-roles is not restricted to derived nominals. Consider, more specifically, the similarity between construction and works in (3d).

16 Notice that the argument in subject position in (64) is not always the Agent. In the case of The road is under construction, for instance, the DP the road is the Patient of the construction and receives, therefore an internal theta-role. In this case, I assume that the internal argument is raised to the subject position by passivization. My point is not to provide a complete analysis for these constructions here, but rather to point out the role of P in theta-marking the argument of the nominal head.
theta-role to its specifier position, and every predication relation must be supported by Pred.\textsuperscript{17}

Assuming that prepositions have their own argument structure, the argument of the preposition and the argument of the noun are identified by \textit{\theta-identification}, along the lines of Higginbotham (1985). The mechanism of \textit{\theta-identification} discharges the thematic-role of the non-projecting element (i.e., here, the NP). By identification, the \textit{\theta} position in the nominal \textit{transit} is linked to the \textit{\theta} position in the preposition \textit{in} in such a way that they can both be satisfied by a single argument \textit{Paul} (see 87). The preposition \textit{in} can be understood here as the main predicate of event, and the nominal \textit{transit} as a modifier of the event denoted by \textit{in}:

\[(66)[\text{pp Paul}(x,e) [\text{p in}(x,e) \text{transit}(x,e)]] \]

\textit{\theta-identification}

To conclude this sub-section, nominals are not direct \textit{\theta}-assigners, and can only take an argument via the mediation of a functional head. Building on the insight of Emonds (1985) and Grimshaw (1990) for internal arguments, this view can be extended to external arguments as well. The hierarchical structure I assume for small clauses is, independently, consistent with Bowers (1993) and the existence of a predicational head. The predicate nominal in a small clause appears in the complement position of Pred, and the subject is licensed in Spec-Pred (Pred is realized as P in (65)).

6.3. P-licensing

Turning back to Irish, the analysis can be implemented in a straightforward manner. The obligatory presence of a preposition in the substantive verb \textit{bí}-construction (67a) is a further illustration of the 'defective' character of nouns. The predicate nominal \textit{shagart} "priest" cannot assign a \textit{\theta}-role to the external argument, which is, instead, \textit{\theta}-marked by the preposition. The preposition \textit{in} is the realization of the head of the small clause Pred, necessary to support the predication relation. Accordingly, sentence (67a) has the structure in (67b). The representation (67b) in identical to the representation proposed for the sentence \textit{Paul is in transit} in (65):

\[(67)a. \text{Tá Sean ina shagart} \]
\[\text{COP-BI Sean in.AGR priest} \]
\[\text{‘Sean is a priest’} \]

\textsuperscript{17}Baker (2002) presents evidence that in Edo (a Nigerian language), not only nouns (4a), but also adjectives (4b) require a copular particle to license their external argument. Baker argues that \textit{yé} and \textit{rē} are predicational heads, that support the predication relation and \textit{\theta}-mark the external argument. With this respect, non-verbal predicates contrast with verbs (4c):

\[(4) \]
\[a. \text{Úyì *(rē) òkhaémwèn} \]
\[\text{Uyi PART chief.N} \]
\[\text{‘Uyi is a chief’} \]
\[b. \text{Éméri *(yé) mòsémòsè} \]
\[\text{Mary PART beautiful.ADJ} \]
\[\text{‘Mary is beautiful’} \]
\[c. \text{Éméri mòsè} \]
\[\text{Mary be.beautiful.V} \]
\[\text{‘Mary is beautiful’} \]
As the sequence \textit{in}-NP is a small clause predicate, it can be selected not only by the copula \textit{bí}, a raising verb, but also by any raising verb or verb that selects a small clause. The fact that PP is compatible with small clause predicate positions follows from the fact that PP is indeed a small clause itself\footnote{I am not discussing the syntax of non-eventive predicate nominals here. However, the fact that they cannot appear in small clause predicate constitutes an indication that the \textit{is}-construction does not involve a small clause. Instead they could be analyzed as equatives (cf. also Carnie 1995), for instance.}. The copula \textit{bí} is generated in \textit{V}. Irish is a VSO language, where \textit{V} raises to \textit{T} and carries tense information, while the \textit{DP} subject remains in the \textit{VP}-internal position (cf. Chung and McCloskey 1987):

\begin{equation}
\text{(68)} \quad \text{(Irish)}
\end{equation}

The event variable in the \textit{bí}-construction is introduced by the nominal (see sub-section 6.1) 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 \textit{bí}-construction with aspectual distinctions follows. I assume that \textit{T}, however, is a predicate of event.

The account proposed here and carried out for Irish extends straightforwardly to Russian. In Irish, the head \textit{Pred} is realized by an overt preposition. Contrastively, I assume that in Russian, \textit{Pred} is realized by an empty preposition, responsible for assigning Instrumental case to the predicate. \textit{Ø} in Russian (69)\footnote{See also Bailyn and Rubin (1991) for a similar analysis.} is the same functional element as the overt preposition in Irish:

\begin{equation}
\text{(69)}
\end{equation}

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, \textit{Pred} is realized by a preposition. The reason why Russian marks eventive predicate nominals with Instrumental case, instead of a structural case, namely Accusative \textit{(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 structure of eventive nominal predication in Russian is summarized in (70):

\begin{equation}
\text{(70)}
\end{equation}
6.4. N-licensing

Given our premises, and the unified account proposed for Irish and Russian, the fact that French does not exhibit an overt preposition with predicate nominals is rather unexpected. Besides, there is no particular reason to believe that nominals can get an external argument without the support of any functional head in French. (Recall the data discussed in sub-section 6.2.) Thus, if there is a functional head Pred in French that licenses the external argument of a predicate nominal, and if 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.

The main argument to discard the first option in favor of the second one comes from German, a language that, like French, marks the eventive vs. non-eventive contrast by the optionality of the article (71):

(71) Klaus ist (ein) Schauspieler
’hKlaus is an actor’

Second, it is compatible with both perfective and imperfective aspects, while the variant with article is restricted to unbounded events. Although the contrast is less strong than in French for my informants, it is, nevertheless, attested:

(72) Q: Wer ist Klaus? A: Klaus ist ein Schauspieler / *Schauspieler
‘Who is Klaus?’ ‘Klaus is an actor’

(73) Q: Was macht Klaus? A: Klaus ist *ein Schauspieler / Schauspieler
‘What does Klaus do?’ ‘Klaus is an actor’

Second, it is compatible with both perfective and imperfective aspects, while the variant with article is restricted to unbounded events. Although the contrast is less strong than in French for my informants, it is, nevertheless, attested:

(74) Paul war (ein) Schauspieler.
‘Paul was an actor’

(75) Paul ist (??ein) Schauspieler gewesen
‘Paul has been an actor’

I am very thankful to my informants for their judgments and our discussions of the data.
If we accept that the bare variant in German is the same thing as the bare variant in French, an argument against the empty preposition in German should also discard the hypothesis for French.

Prepositions in German can assign Accusative, Dative or Genitive case. Hence, an empty P should assign either one of these three cases to its complement, and German would be like Russian. However, bare predicate nominals can only bear Nominative. 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 adjective that modifies the bare predicate is, under the traditional view, Nominative-marked. Which suggests that the bare predicate bears Nominative (76):

(76) Paul ist professioneller Skifahrer.

Paul is professional skier

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

I propose instead that when the functional head Pred is not realized by P, it is licensed by N. The crucial assumption is that Pred must be realized. In French and German, since there is no P, the realization of Pred is achieved by incorporation of the head N to the Pred head. 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, we 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 in French and German. The lack of number agreement with plural subjects is illustrated with the predicate nominal *général* “general” in (77a), and the compound *avocat international* “international lawyer” in (77b):

(5) a. Je le croyais *(être)* un médecin
   I him believed to be a doctor
   ‘I believed him to be a doctor’

b. Je le croyais *(être)* médecin
   I him believed to be doctor
   ‘I believed him to be a doctor’

If the copula were the functional head responsible for theta-marking the subject of predicate nominals, we would expect neither its optionality, nor the difference in meaning it triggers. Accordingly, the hypothesis that the copula is the head of the predicational relation must be rejected. Instead, we will assume that *être* “to be” and *sein* “to be” are raising verbs in French and German, as it is the case in Irish and Russian.

21 The variant with article is also marked with Nominative case. Hence, contrarily to Russian, case does not discriminate between the two types of predicates.

22 An alternative analysis would be that the copula itself is the spell-out of the predicational head in French and German. However, this hypothesis must be rejected on the following ground. The copula sometimes must appear in small clauses (5a) and sometimes cannot (5b). Furthermore, the absence vs. presence of the copula correlates with a difference in form and interpretation of the predicate. The absence of copula is allowed only with a bare predicate. Hence, sentence (5a) has an eventive interpretation only. By contrast, the presence of the copula is allowed only with the variant of the predicate with article. Sentence (5b) receives a non-eventive interpretation only:

23 This judgment seems to be subject to some dialectal variation, as certain speakers find the plural form acceptable as well.

24 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 heard (except for irregular plurals and in the case of a liaison, for instance). In both examples in (77) *general* and *international* are unambiguously singular. In (77b) I take the fact that the adjective *international* is singular as in indication that the nominal *avocat* is singular also.
In German, both a bare singular and a bare plural are possible (see (78a) and (b), respectively). However, (78b) is not an eventive copular sentence, but rather a non-eventive one. In other words, the bare predicate Generäle “generals” in (78b) is the plural of a singular with article (i.e. ein General “a general”), and not of the bare singular (General “general”):

(78a). Paul und Robert sind General.
Paul and Robert are general.SG

b. Paul und Robert sind Generäle.
Paul and Robert are general.PL

‘Paul and Robert are generals’

Two arguments support the claim that (78b) cannot be an eventive predication. First, it can only be interpreted as identificational, i.e. as an answer to the question Who are Paul and Robert?. Recall that eventive sentences cannot have an identificational reading. Second, the plural is the dispreferred option with an aspectual copula like become. Recall that aspectual copulas accept eventive predicates only:

(79) Paul und Robert wollen Arzt / ??Ärzte werden.
Paul and Robert want doctor.SG / doctor.PL become

‘Paul and Robert want to become doctors’

Furthermore, 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 they are bare NPs. The insertion of an adjective modifying the bare predicate nominal obligatorily triggers the appearance of the article (80-81). Note that the article is required with both pre and post-nominal adjectives in French:

(80) 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 an old / intelligent / well-known doctor’

(81) 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 (82-83) illustrate the same fact with relative clauses:

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25 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’, nationality adjectives as grec ‘Greek’ (in the appropriate context).
(82)a. Paul est *(un) médecin que tout le monde aime.
\[\text{Paul is a doctor that everybody loves} \]
\[\text{Paul is a doctor that everybody likes} \]
b. Paul est *(un) médecin qui travaille trop.
\[\text{Paul is a doctor who works too much} \]

(83) Paul is *(ein) Arzt den alle mögen.
\[\text{Paul is a doctor that all like} \]
\[\text{Paul is a doctor that everybody likes} \]

Contrarily, in Irish and Russian, number agreement must be realized on the predicate NP. The NP inside the PP selected by \textit{bí} must bear agreement in Irish (84), and Instrumental marked predicates must bear agreement in Russian (85):

(84)a. Tá Seán agus Máire ‘na ndochtúirí
\[\text{Seán and Máire are doctors.} \]
b. Tá siad ‘na gcáirde maithe ag a chéile
\[\text{They are good friends to one another.} \]

(85)a. Saša i Miša byli muzykantami / *muzykantom.
\[\text{Sasha and Misha were musicians' \}
b. Kogda oni byli studentami, ...
\[\text{When they were students, …} \]

Agreement on the predicate in Irish and Russian suggests that NP is dominated by a NumP (Number Phrase), 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 (86) and the instrumental marked predicate (87), 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:

(86) Tá sé ina fhear lándar (anois)
\[\text{'He is a strong man (now)'} \]

(87) Makarenko byl xorošim učitelem
\[\text{'Makarenko was a good teacher'} \]

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26 I am very thankful to Jim McCloskey for the data presented in this section and our discussions.
b. Zoluška byla bednoj krest'janko

Cinderella was poor

'Cinderella was a poor peasant' (Matushansky 2000)

Accordingly, the only difference between French/German on the one hand (88), and Irish/Russian, on the other (89), is the nature of the element that realizes the functional head Pred. The former group of languages uses P-licensing, and the latter N-licensing. This difference aside, the structure of eventive predication is the same in all four languages:

(88)

\[
\begin{array}{c}
\text{Spec} \quad \text{VP} \\
\quad \text{V} \\
\quad \text{DP} \\
\quad \text{PredP} \\
\quad \text{Pred'} \\
\quad \text{NP} \\
\end{array}
\]

(89)

\[
\begin{array}{c}
\text{Spec} \quad \text{VP} \\
\quad \text{V} \\
\quad \text{DP} \\
\quad \text{PredP} \\
\quad \text{Pred'} \\
\quad \text{NumP} \\
\quad \text{NP} \\
\quad \text{N} \\
\end{array}
\]

This account provides a single analysis as to why 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 predication is identical in all four languages. 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 and Rubin (1991) and Bowers (1993).

7. Conclusion

I have argued for a unified analysis of eventive predicate nominals in Modern Irish, Russian, French and German. My basic assumption was that the predication relation between a predicate nominal and its subject must be mediated by a functional head Pred. Pred, the head of a small clause selected by be, is responsible for assigning an external theta-role to the subject. The four grammar systems discussed here differ only with respect to the phonological realization of Pred, which can be spelled-out as a preposition (overt in Irish and covert in Russian) or realized by head movement of N (in French and German).

Note, incidentally, that the P-licensing strategy is available for those languages that do not have an indefinite article: Irish lacks an indefinite article, and Russian lacks articles all together. On the contrary, the N-licensing strategy is available for the two languages that have an indefinite article, and in both cases, the article is realized in non-eventive constructions only. The possibility that nominals in
Irish and Russian are never bare NPs (cf. discussion of Irish in Chung and McCloskey 1987, for instance), and that P-licensing takes place when N-licensing cannot occur, is left open for further research.

References


