

# Unifying the semantics for “thematic” and “classificatory” uses of ethnic adjectives

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## 1 Introduction

Ethnic adjectives (EAs, e.g. *French*) have been attributed two uses (see e.g. Kayne 1984; Bosque and Picallo 1996; Fábregas 2007; Alexiadou and Stavrou to appear):

- a “thematic” use, typical with nominalizations ((1a)).
- a “classificatory” use ((1b)), found with nonderived nominals though also with nominalizations.

- (1) a. French agreement (to participate in the negotiations)  
b. French wine

On the thematic use, the EA describes a participant in the situation described by the verb underlying the nominalization. For this reason, some authors (see Section 2) posit that EAs are proper arguments of the nominalization. In this view, (1a) and (2) are equivalent in a strict sense, and ethnic adjectives are nouns at some level of representation.

- (2) agreement by France (to participate in the negotiations)

### But then:

- Why does English (and other languages, though we focus on English here) have two different constructions to express exactly the same semantic relation?
- Why are ethnic adjectives used to express arguments, given that adjectives in general do not function as arguments?
- Why do thematic EAs systematically have a homophonous classificatory EA counterpart? What is the relationship between the two EAs?

### Goals of this talk:

- Challenge the view that EAs are “nouns in disguise”
- Propose a unified account of thematic and classificatory uses of EAs that
  - treats EAs as proper adjectives
  - nonetheless accounts for the phenomena that led to the analysis of EAs as nouns

## 2 Previous proposals

- Under the thematic use, EAs are hidden nominals and express an argument of the noun they modify (e.g. Levi 1978; Fábregas 2007; Alexiadou and Stavrou to appear).
- We take Alexiadou and Stavrou (to appear) as an example; our comments apply in general to the other analyses.

## 2.1 Alexiadou and Stavrou (to appear) (A&S)

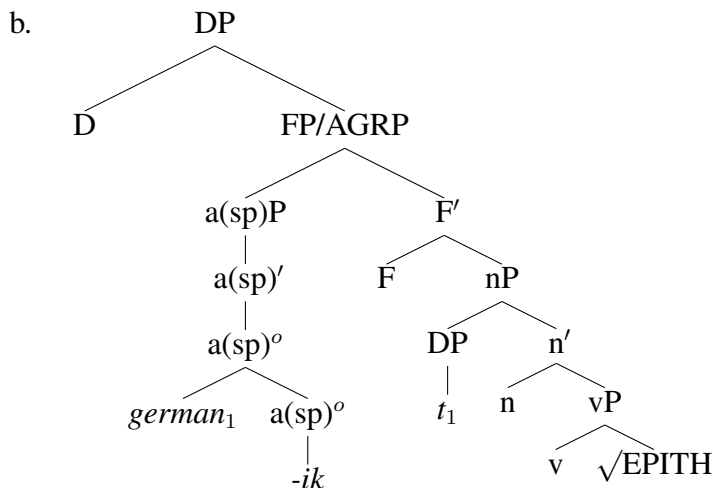
### EAs under the classificatory use (cIEAs)

- Proper, ‘deep’ adjectives, homophonous to EAs under the thematic use, but no account provided
- Contrasts with Fábregas (2007), who treats cIEAs as nominal as well
  - Do not express an argument of the head noun they modify but establish a contextually underspecified relationship with this noun
  - Saturate an open position in the noun’s qualia structure (in the sense of Pustejovsky 1995)

### EAs under the thematic use (thEAs)

- Subtype of relational adjectives (RAs) (see also Bally 1944; Levi 1978; Bosque and Picallo 1996; Fradin and Kerleroux 2003)
- Have a nominal source visible at the level of interpretation
- Bear the agent theta role assigned to them by the (deverbal) noun they modify
- Lack case, thus are deficient and become adjectives in the course of the syntactic derivation, following the framework of Distributed Morphology:
  - Base-generated as DPs in the specifier of the noun phrase they modify
  - In this position they are necessarily assigned the agent theta role by the underlying verb (in analogy to genitive DPs, which are also generated in this position)
  - thEAs are not valued for case & every noun needs to bear case  
→ some morphological requirement forces them to move one specifier up, to Spec, aP
  - In this position they are spelled out as adjectives

(3) a. *germaniki epithesi*  
German attack



### Relation between thEAs and PPs

- Genitive DPs do not lack case so that they are spelled out as proper nouns; their relation to the event nominal is exactly the same.
- Similar in Fábregas (2007) (‘semantic and formal relationship between PPs and EAs’)

## Advantages of the proposal (according to A&S)

- The adjective always denotes the agent (following Kayne 1984, and others) (but see below).
    - A&S: EAs are syntactically base-generated in the position where agents are base-generated.
    - Further evidence: EAs are in complementary distribution with agent-denoting genitive noun phrases and *by*-phrases ((4)).
- (4) a. \*the Persian application for membership by Iran  
b. \*Persia's Persian application for membership

- EAs cannot be used predicatively ((5a)), are not gradable ((5b)) and cannot be coordinated with 'normal' adjectives ((5c)), but only with other EAs ((5d)) (see Fábregas 2007, for related facts from Spanish).

- (5) a. \*The intervention in Cyprus was American.  
b. \*the very / more American invasion  
c. \*the immediate / quick / possible and American intervention  
d. the Italian and French intervention

⇒ A&S: Follows if EAs are not proper adjectives but nouns underlyingly (e.g. A&S take gradability to be a core property of adjectives, similar in Fábregas 2007).

- EAs are 'anaphoric islands' (Postal 1969): Unlike proper nominals, the nominal underlying the EA is not accessible to rules of outbound anaphora ((6)).

- (6) a. \*The American<sub>i</sub> proposal to the UN reveals its<sub>i</sub>/her<sub>i</sub> rigid position.  
b. America<sub>i</sub>'s proposal to the UN reveals its<sub>i</sub>/her<sub>i</sub> rigid position.

EAs cannot bind anaphors ((7a)), provide an antecedent for personal pronouns ((7b)), or control a relative pronoun ((7c)) (examples from A&S).

- (7) a. The Albanian destruction (\*of itself) grieved the expatriot community.  
b. ??I amerikaniki epemvasi sto Kosovo tus eksethese  
the American interference to Kosovo them (the Americans) exposed  
diethnos.  
internationally  
Intended: 'The American interference in Kosovo exposed them internationally.'  
c. \*Oli katadikasan tin Amerikaniki epithesi sti Servia, i opii fisika exun  
all condemned the American attack to-the Serbia the who of course have  
parelthon se tejes energies.  
past in such acts  
Intended: 'Everybody condemned the American attack to Serbia, who, of course, have a precedent of such activities.'

⇒ A&S: This follows from their becoming adjectives in the syntactic derivation and from the fact that the underlying noun is deficient.

## 2.2 Problems with the nominal account

### EAs do not always relate to agents ((8))

- Counterexamples found in corpus data, see Berndt et al. (2009)
- (8)
- a. the French arrival in Mexico
  - b. the French disappearance from Upper Louisiana
- But the agenthood of the adjective is a necessary condition for the position that A&S claim that EAs are base-generated in (as nouns)

### No motivation for the difference between deficient nouns (thEAs) and genitive DPs

- It remains unclear what regulates the presence or absence of the additional functional projection needed to account for the claim that some nouns (those underlying EAs) do not bear case whereas others (genitive noun phrases) do.
- Fábregas (2007) suggests a difference between the different kinds of nominals but does not explain it.
  - Noun phrases in general are not arguments, but have to be selected by DPs to become arguments.
  - RAs (including EAs) are arguments which are not introduced by a D.  
→ They lack definite interpretations.
  - The deficient adjectival head  $a_{def}$  he proposes with RAs is an alternative means provided by the grammar to license an argument reading in the absence of a DP.
  - A RA is always interpreted as an argument of the noun it establishes an agreement relation with, unlike full DPs, which may establish a formal relationship with verbs which do not directly select for them (e.g. ECM).
  - The deficient adjectival head  $a_{def}$  licenses an argument reading of an nP in the absence of a DP  
→ The RA (nP) is not dominated by the functional projections that usually dominate a noun; if it were, it would spell out as a full DP, not as a RA.

### thEAs and PPs cannot be exactly the same in function / relation to the noun they modify

- They are often not interchangeable (see also Bartning 1980; Berndt et al. 2009)

### No account of the systematic relation between thEAs and cIEAs

- A&S treat thEAs and cIEAs as merely homophonous.
- Fábregas (2007) fares better:
  - Treats both as hidden nominals: in one case, spelled out as a morphologically defective adjective; in the other, as a full adjective.
  - A ‘semantic drift between relational and qualitative A’ goes only in one direction, from relationships to qualities (through metonymy) - establishing a relationship with an entity implies possessing some specific properties; the reverse implication does not hold.  
⇒ Still, no indication as to when you get one and when the other.

## The complementary distribution of EAs, on the one hand, and genitive DPs and *by*-phrases, on the other, does not require a nominal account

- A&S: the event nominals combining with thEAs (in Greek) are of the non-argument supporting type (R-nouns, following Grimshaw 1990)  
⇒ Such nouns should not license agent-denoting phrases in the first place.
- Related to this point, it is not clear how an R-noun can assign a theta role at all.

## The facts in (5) do not require a nominal account, either

- The fact that EAs do not coordinate with other adjectives and are not gradable cannot be taken as an argument against treating them as proper adjectives.
- There are other adjectives that do not coordinate freely with predicative adjectives and are not gradable (see e.g. McNally and Boleda 2004; Gehrke and McNally to appear).
- Many adjectives are not (straightforwardly) intersective (see also Kamp and Partee 1995, and literature cited therein).

## 3 Analysis

### 3.1 The basic semantics

#### Preliminary observations:

- EAs have an additional use as predicates of ordinary individuals. One predicates origin ((9a)); the other, a set of properties typical of individuals of that origin ((9b)).

- (9) a. Guillem is French.  
b. But he is not very French.

- We ignore these interpretations here as orthogonal to our purposes, but we build on the notion of origin for the semantics of the classificatory/thematic uses.

- (10) a. **French**( $x$ ) iff **Origin**( $x$ , **France**)  
b. **Origin**( $x$ ,  $y$ ) iff  $x$  comes into existence within the spatial domain of  $y$ .

NB: The **Origin** relation is specifically associated with EAs and not generally with other RAs (e.g. *molecular*).

#### Some comments on the **Origin** relation:

- Correctly predicts that e.g. (11a) is false despite the fact that LMcN has had a Spanish passport for many years.
- May need to be slightly weakened insofar as we have detected cases where the nationality predication is accepted even though the individual in question was not born in the nation in question, as in (11b).

- (11) a. Louise McNally is Spanish.  
b. Josep Quer is Catalan.

**Basic semantics for the thematic/classificatory uses:** A combination of Mezhevich's (2002) and McNally and Boleda's (2004) analyses of RAs

- Common nouns treated as functions from kinds to sets of individuals realizing the kind via a realization relation  $\mathbf{R}$  (Carlson 1977).
- EAs treated as intersective modifiers of kinds (as the classificatory use suggests).
- The EA contributes a contextually-determined relation  $R$  between the kind described by the nominal property ( $P_k$ ) and the nation associated with the EA.

- (12) a.  $\llbracket \text{French} \rrbracket: \lambda P_k \lambda x_k \lambda y [\mathbf{R}(y, x_k) \wedge P_k(x_k) \wedge R(x_k, \mathbf{France})]$   
 b.  $\llbracket \text{French wine} \rrbracket: \lambda x_k \lambda y [\mathbf{R}(y, x_k) \wedge \mathbf{wine}(x_k) \wedge R(x_k, \mathbf{France})]$   
 c.  $\llbracket \text{French discovery} \rrbracket: \lambda x_k \lambda y [\mathbf{R}(y, x_k) \wedge \mathbf{discovery}(x_k) \wedge R(x_k, \mathbf{France})]$

**Basic advantages of this approach:**

- Treats EAs as proper adjectives and avoids the inelegant claim that they are lexically ambiguous.
- Treating EAs as adjectives accounts for their failure to enter into binding/anaphora relations.

**Initial problem for extension to the thematic use:** No obvious account of why the EA can only pick out those subkinds of events on which the nation (or representative individuals - see below) bears an agent(-like) thematic role, e.g. nothing in (12c) blocks France from being what is *discovered*.

**Solution:**  $R = \text{Origin}$

- Attribute origins to kinds as well.
- Consider the agent(-like) participant as the origin of the eventuality(-type) in question.

NB: Other interpretive options are possible in the right contexts; ask about these in the question period.

**But it also raises other questions:**

- How to account for the fact that EAs sometimes identify not the nation but representative individuals or the people of a nation as a whole?
- How to account for the fact that, despite the robustness of the **Origin** relation as a restriction on the interpretation of EAs, there are some exceptions?

### 3.2 Nations, representative individuals, and peoples

- The EA can refer either to the respective nation or to representative individuals from the nation.

- (13) a. (the) French flag/geography/wine [i.e., the country of France]  
 b. the French invasion/victory [i.e., by French representatives]

- In this respect, the EA behaves just like the corresponding name of the country:

- (14) a. We visited France. [i.e., the country of France]  
 b. France signed the treaty. [i.e., representative individuals from France]  
 c. France won the World Cup. [i.e., representative individuals from France]

⇒ **The nation is the entity introduced via the semantics of the EA.**

- Whatever metonymic processes apply in the case of the corresponding noun (which largely depend on the predicate(s) with which the EA/nation noun co-occurs) should also apply in the case of the EA.
- However, the EA sometimes seems to pick out the nation's people as a whole, rather than just representative individuals, something the name of the nation cannot easily do:

- (15)
- a. the Spanish mentality [i.e., of Spanish people in general]
  - b. ?Spain has that mentality.
  - c. Spanish eyes [i.e., of Spanish people in general]
  - d. ??Spain has beautiful eyes.

- We attribute this contrast to two factors:
  - The nation name competes with the name for the people of the nation (e.g. *France/the French*); this promotes a division of labor between the two.
  - Entailments arising indirectly via the **Origin** relation.

### 3.3 Clarifying the Origin relation

- The origin of kinds corresponds to the origin of their first recognized instances (cp: the invention of a kind of object is supported by the invention of an instance of the kind).
- Since these instances have a specific origin, we can associate the kind with that origin as well.

#### The classificatory use:

- The kind in question must come into existence (or at least have been thought to come into existence) in the nation in question; e.g. (16a) is not acceptable as a description of a style created by a random Italian individual or even by a community of Italians e.g. in the US (note the existence of e.g. *Italian-American*).

- (16)
- a. (painting/furniture/music in) the Italian style
  - b. The French press (was probably invented in France in the 1850s, but first patented by Italian designer Attilio Calimani in 1929).

- When the existence of the kind in question must be mediated by the existence of representative individuals or the nation in question's people (see (17)), it is the origin of those individuals that matters.

- (17)
- a. the Spanish mentality
  - b. Spanish eyes

#### The thematic use:

- We assume that event nouns modified by EAs generally describe types of events (see e.g. comments in Grimshaw 1990; Van de Velde 2004), hence the semantics in (12) can apply.
- We take eventualities to have as their origins the individuals who immediately cause, initiate or control them (cf. e.g. Pustejovsky 1995, and his interpretation of the Agentive quale).

- (18)
- a. the Italian attack on Ethiopia
  - b. the British arrival on the American continent in the 17th century

- The analysis rules out cases where the EA bears a typical theme role, but interestingly allows for exceptions when the eventuality can be understood as under the control of or as caused by the theme; cp. (19b):

- (19) a. ??the French disappearance from the list of nations that haven't approved the treaty  
 b. the French disappearance from Upper Louisiana

- In the case of psych nouns, the use of an EA to express an experiencer is possible when the state is not externally provoked, as with psych nouns with “target of emotion” arguments ((20)).

- (20) a. the Italian love for opera  
 b. the American admiration of the French

- Also note the following contrasts:

- (21) a. American surprise at how close Saddam Hussein had gotten to the bomb before the first Gulf War  
 b. American anger at the cost of propping up the US economy  
 c. American irritation with British imperialism in the Middle East

- (22) a. ??the American surprise at Pearl Harbor/by the enemy army  
 b. ??American irritation by the neighboring regime

- (23) a. the surprise of the Americans at Pearl Harbor/by the Japanese  
 b. the irritation of the American government by the neighboring regime

- Non-agentive uses of thEAs are problematic for A&S. One way out for them:

- Project a vP on top of the unaccusative verb.
- Move the EA to receive an agent role associated with the vP.

Problems for this solution:

- Need to allow for more than one thematic role per argument
- Why can vP project if the structure is going to be nominalized, but not if it is realized as a vP (projects TP and CP), i.e. why is (24) grammatical, and (25) is not?

- (24) a. French disappearance from Upper Louisiana  
 b. [[[French]<sub>i</sub> [<sub>nP</sub> -ance [<sub>vP</sub> [French]<sub>i</sub> disappear<sub>j</sub> [<sub>VP</sub> [French]<sub>i</sub> disappear<sub>j</sub> [<sub>PP</sub> from Upper Louisiana]]]]]]

- (25) a. \*John disappeared Mary.  
 b. [<sub>vP</sub> John disappear<sub>i</sub> [<sub>VP</sub> Mary disappear<sub>i</sub>]]

- Unlike A&S's analysis, the current proposal does not run into problems when the context overrides an agentive reading of the EA.

### 3.4 An additional advantage of the analysis

Our analysis correctly predicts the contrast in (26) vs. (27), which is not accounted for by the previous analyses.

- (26) a. George Washington was the father of America. ≠  
 b. George Washington was the American father.

- (27) a. George Washington was a president of America. =  
 b. George Washington was an American president.



- *American father* in (26b) requires a kind of fathers originating in America.
  - Many such kinds can be defined, e.g. fathers living in America, fathers born in America, fathers that are being fathers in an American way.
  - One relevant kind is not among them: the kind of fathers of America.
    - \* No such kind exists because the father-offspring relation specifies a unique father for a specific offspring.
    - \* Thus, the equivalence in (26) does not obtain.
- *American president* in (27b) requires a kind of president originating in America.
  - It is possible to define a number of such kinds (presidents of any organization in America, presidents who act in a way that originates from America), depending on the context.
  - One possible kind: presidents of America; for a context favoring this interpretation, it holds that each representative of this kind is at the same time a president of America.
- This asymmetry is also at the base of the difference in the article use between (26b) and (27b).

## 4 Conclusion

### Responding to the challenges:

- Why do two different constructions (EAs vs. genitive DPs / PPs) express an allegedly same semantic relation?  
⇒ EAs are actually not semantically equivalent to their nominal counterparts (or PPs; also see Berndt et al. 2009).
- Why are EAs used to express arguments, given that adjectives in general do not function as arguments?  
⇒ EAs are not proper arguments: the argument-like interpretation arises when EAs modify event nominals as a result of the interaction between the semantics of the adjective and that of the noun.
- Why do thematic EAs systematically have a homophonous classificatory EA counterpart? What is the relationship between the two EAs?  
⇒ The two uses derive from a single lexical entry; the common semantic analysis involving an **Origin** relation accounts for both readings.

### More generally

- As EAs are a subclass of relational adjectives, the data and analysis lend support to the analysis of relational adjectives defended in McNally and Boleda (2004).
- The usefulness of the **Origin** relation in the analysis of the thematic reading suggests that we still have things to learn about the linguistically (and cognitively) salient aspects of eventualities and their participants.

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