

# A Syntactic Account of Inherent Reflexives and Their Crosslinguistic Variation

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## INTRODUCTION

**Inherent Reflexives**

- The surface subject is associated with two  $\theta$ -roles.
- A reflexive anaphor ('oneself') or a reflexivizing affix ('self-') is not involved.

- (1) a. John washed the baby.  
b. John washed.

- (2) a. Jean lave le bébé. (French)  
Jean washes the baby  
'Jean washes the baby.'  
b. Jean se lave.  
Jean SE washes  
'Jean is washing.'

## The Variation

### ① Productivity

- (3) a. \*John loves.  
b. \*John draws.

- (4) a. Jean s'aime.  
Jean SE loves  
'Jean loves himself.'  
b. Jean se dessine.  
Jean SE draws  
'Jean draws himself.'

(*French*; Reinhart and Sioni 2005:410, (49a–b))

## ② ECM reflexives

- (5) \*John considers intelligent.  
*Int.* 'John considers himself intelligent.'
- (6) Jean se considère intelligent.  
 Jean SE considers intelligent  
 'Jean considers himself intelligent.'  
 (*French*; Reinhart and Siloni 2005:394, (9b))

## ③ Dative reflexives

- (7) \*John sent a letter.  
*Int.* 'John sent a letter to himself.'
- (8) Jean s'est envoyé une lettre.  
 Jean SE is sent a letter  
 'Jean sent a letter to himself.'  
 (*French*; Reinhart and Siloni 2005:411, (51b))

#### 4 Reflexive nominals

- (9) She dresses slowly because she is an elegant dresser.  
(Reinhart and Siloni 2005:410, (48a))
- (10) Jean est un excellent habilleur/maquilleur.  
Jean is an excellent dresser/“makeup-er” (of others only)  
(*French*; Reinhart and Siloni 2005:410, (48b))

## The Parametric Approach (Reinhart and Siloni 2005)

- The **lex(icon)-syn(tax) parameter** determines whether arity operations like reflexivization should apply in the lexicon or in the syntax.

## English-Type Languages

- The lex-syn parameter is set to 'lexicon'; and so reflexivization is a lexical operation.
- When reflexivization applies in the lexicon, it targets only a subset of Agent-Theme verbs.

### Analysis

- ① *ECM reflexives* → ✗

A lexical operation cannot target distinct lexical items.

[ *x* **ECM Verb** [ *y* **Predicate** ] ]

- ② *Dative reflexives* → ✗

Ditransitive verbs are not Agent-Theme verbs.

[ *x*<sub>Agent</sub> **Ditransitive Verb** *y*<sub>Theme</sub> *z*<sub>Goal</sub> ]

- ③ *Reflexive nominals* → ✓

Reflexivization, as a lexical operation, may feed nominalization.

Lexicon [ REFLEXIVIZATION → NOMINALIZATION ] ⇒ Syntax [     ]

## French-Type Languages

- The lex-syn parameter is set to 'syntax'; and so reflexivization is a syntactic operation.
- When reflexivization applies in the syntax, its target is not limited to a subset of the Agent-Theme verbs.

### Analysis

- ① *ECM reflexives* → ✓

A syntactic operation can target distinct lexical items.

[ *x* **ECM Verb** [ *y* **Predicate** ] ]

- ② *Dative reflexives* → ✓

Reflexivization in the syntax is not limited to Agent-Theme verbs.

[ *x*<sub>Agent</sub> **Ditransitive Verb** *y*<sub>Theme</sub> *z*<sub>Goal</sub> ]

- ③ *Reflexive nominals* → ✗

Reflexivization, as a syntactic operation, cannot feed nominalization.

Lexicon [ NOMINALIZATION ] ⇒ Syntax [ REFLEXIVIZATION ]



## The Parametric Approach: Both Wrong and Superfluous

### *Wrong*

- French, an instance of “syntax” languages, allows certain reflexive nominals.
  - (11) Pour certains hommes, le rasage est un véritable moment de détente.  
for some men, the shaving is a real moment of relaxation  
'For some men, shaving is a real relaxing moment.'  
(from <http://www.comptoirdelhomme.com/soins-rasage.html>)
- English, an instance of “lexicon” languages, allows reflexivization of a phrase (Satoshi Tomioka, p.c.).
  - (12) a. Susan put makeup on Mary at a wedding.  
b. Mary put makeup on at a wedding.
- Also the cases of Czech (Hron 2005), Passamaquoddy (Bruening 2006), and Greek (Papangeli 2004), which show mixed properties of “lexicon” and “syntax” languages
- Arity operations are not parameterized.

## Superfluous

- Unlike ECM reflexives, the impossibility of dative reflexives in English-type languages does not follow from the lexicon-syntax distinction.
- The target arguments of dative reflexivization belong to a single lexical item, i.e., a ditransitive verb. → Can be targeted by either a lexical or a syntactic operation.  
[  $x_{\text{Agent}}$  **Ditransitive Verb**  $y_{\text{Theme}}$   $z_{\text{Goal}}$  ]
- Hence, the assumption of Reinhart and Siloni (2005) that reflexivization targets only certain verbs when it applies in the lexicon.
- The same can be said if reflexivization applies in the syntax across languages: All that needs to be said is that reflexivization targets different verbs in different languages.
- The distinction between the lexicon and the syntax is not necessary even under Reinhart and Siloni's framework.  
→ The lex-syn parameter is superfluous.

**Conclusion:** Reflexivization takes place in the syntax across languages.

## PROPOSAL

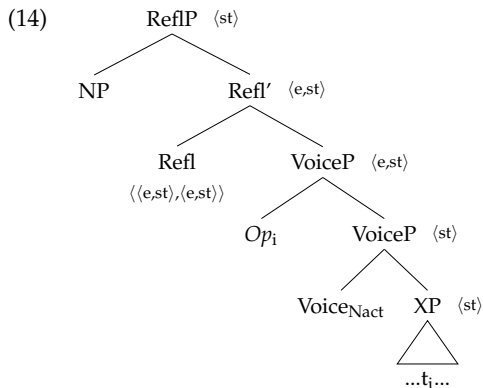
- The reflexive involves a head, *Refl(exive)*, which takes an open predicate and associates the unsaturated variable with the Agent argument that it introduces.

$$(13) \quad \llbracket \text{Refl} \rrbracket = \lambda f_{\langle e, \text{st} \rangle} \lambda x \lambda e. f(e, x) \ \& \ \text{Agent}(e, x)$$

- Refl does the same work with reflexive Voice (Ahn 2015; Labelle 2008); the only difference is that it projects its own phrase and has its own syntactic and semantic properties.

## French-Type Languages

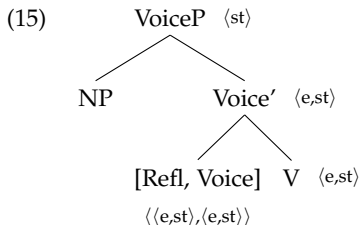
- Refl combines with nonactive VoiceP abstracted over by Op, whose head I assume here is void of any semantic content (Schäfer 2007).



- Reflexivization is productive because Refl does not look into XP; all it sees is VoiceP.
- Reflexivization can be long-distance.

## English-Type Languages

- Refl does not appear on its own but is always bundled with Voice into a complex head (cf. Pytkänen 2008).



- Voice-bundling Refl selects a predicate directly, and thus can be sensitive to the semantics of the predicate. → Not productive
- Reflexivization is local.

## NEAR- VS. PURE-REFLEXIVE INTERPRETATIONS

- The reflexive in English does not allow a near-reflexive interpretation unless there is a reflexive pronoun syntactically bound by an antecedent (Jackendoff 1992).

- (16) a. \*Ringo washed at the Tussaud Museum.  
*Int.* 'Ringo washed a statue of himself.'
- b. Ringo washed himself at the Tussaud Museum.  
*Int.* 'Ringo washed a statue of himself.'

- The same is true for languages like Russian or Hebrew.

- (17) \*Nedavno, posetivšij muzej, Ringo pomyl-s'a.  
 recently having.visited museum Ringo washed-REFL  
*Int.* 'Ringo washed a statue of himself.'  
 (*Russian*; Reuland and Winter 2009:77, (18a))

- (18) \*Dan hitraxec. (*Hebrew*)  
 Dan washed.REFL  
*Int.* 'Dan washed a statue of himself.'

- On the contrary, languages like French, Serbo-Croatian, Czech, etc. allow a near-reflexive reading in the reflexive.

(19) Luc a pu s'admirer au Musée Tussaud.  
 Luc AUX can SE admire at-the Museum Tussaud  
*Int.* 'Luc was able to admire a statue of himself.'  
 (French; Labelle 2008:856, (63))

(20) Marko se pokrio na fotografiji.  
 Marko SE covered on photograph  
*Int.* 'Marko covered the image of himself.'  
 (SC; Marelj and Reuland 2013:77, (3b))

(21) Ringo se začal prohlížet.  
 Ringo SE started view  
*Int.* 'Ringo started to look at a statue of himself.'  
 (Czech; Reuland and Winter 2009:77, (19a))



- Interestingly, Reuland and Winter (2009), adopting the parametric approach, claim that if the reflexive is formed in the lexicon (= English-type languages), it does not allow a near-reflexive meaning; while if it is formed in the syntax (= French-type languages), it does.
- If Reuland and Winter's (2009) claim is empirically correct, such a difference might come from the different strategies the two types of languages employ to 'prepare' a semantically open predicate.

- Proxy interpretation of Op

(22) (*Context*: Yesterday, Mary went to a wax museum and saw the statue of a former president. Today, John ran into the former president in the street.)

John ran into the former president that Mary saw yesterday.

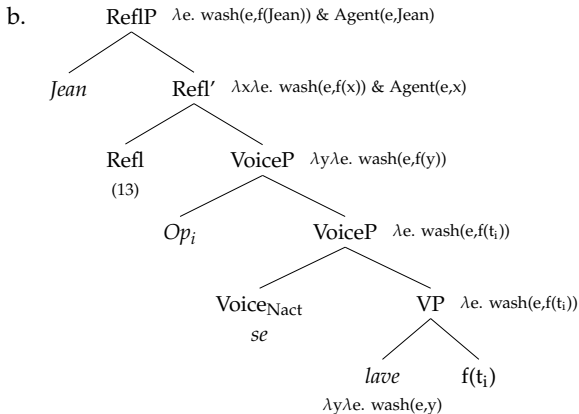
- One way to capture this phenomenon is to assume that the function of Op is to associate a variable with a function that ranges over a set of entities related to its antecedent, rather than the antecedent itself (cf. ‘Near-Reflexive Function’ of Labelle 2008).

(23) John ran into the former president [Op<sub>i</sub> that Mary saw f(t<sub>i</sub>) yesterday]

- Op abstracts over VoiceP in French-type languages.

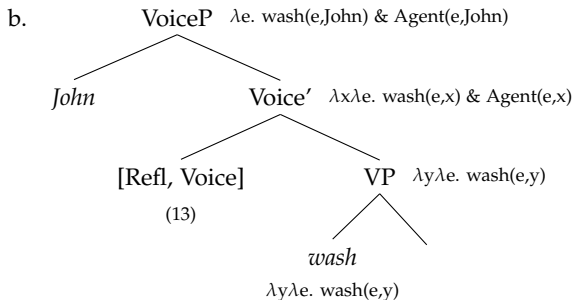
(24) a. Jean se lave.  
Jean SE washes

(French)



- The unsaturated variable percolates up in English-type languages.

(25) a. John washed.



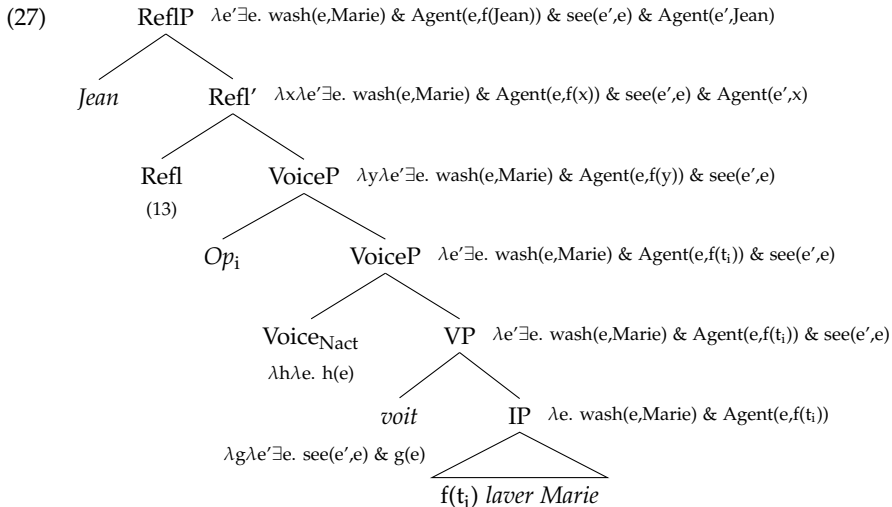
# ANALYZING THE VARIATION

## ECM Reflexives

### *French-type languages*

- (26) Jean se voit laver Marie.                                    (*French*; Reinhart and Siloni 2005:405, (34a))  
 Jean SE sees wash Marie  
 'Jean sees himself wash Marie.'

- Op is generated in the embedded subject position and then moves to matrix VoiceP.

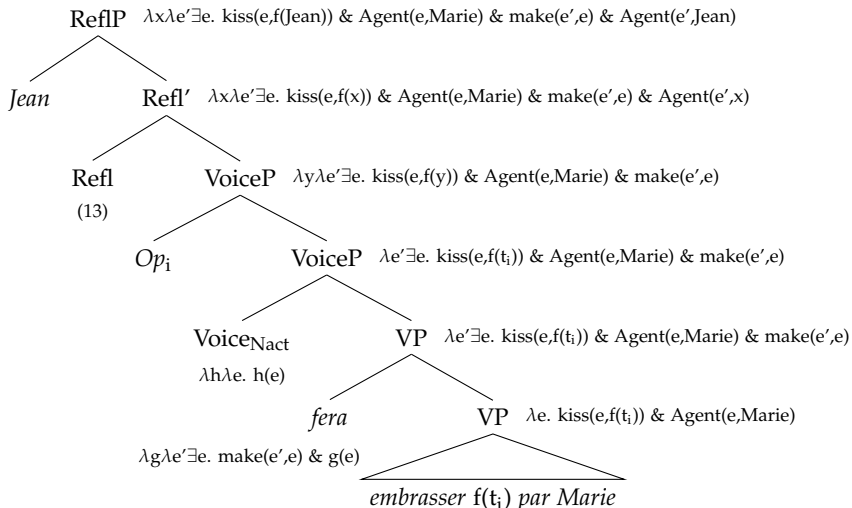


- Causative reflexives can be derived in a similar way.

(28) Jean se fera embrasser (par Marie).  
Jean SE make.FUT kiss (by Marie)  
'Jean will make himself be kissed (by Marie).'  
(*French*; Reinhart and Siloni 2005:407, fn.15, (i))

- The only difference is that Op is generated in the object position of the lower VP.

(29)





*English-type languages*

- (30) \* John considers intelligent.  
*Int.* 'John considers himself intelligent.'

- ECM verbs are not grooming predicates and so cannot be selected by Voice-bundling Refl.

## Dative Reflexives

### *French-type languages*

- (31) Jean s'est envoyé une lettre. (French; Reinhart and Siloni 2005:411, (51b))  
 Jean SE is sent a letter  
 'Jean sent a letter to himself.'

- Op is generated in the Goal argument position of a ditransitive verb.

(32) [<sub>ReflP</sub> Jean Refl [<sub>VoiceP</sub> Op<sub>i</sub> se [<sub>VP/AppIP</sub> envoyé une lettre f(t<sub>i</sub>)]]]

- Refl associates an unsaturated variable with Agent. → Reflexivization is subject-oriented.

- (33) Jean s'est montré l'enfant. (Reinhart and Siloni 2005:412, (53b))  
 Jean SE is shown the child
- Jean<sub>i</sub> showed the child to himself<sub>i</sub>.
  - \*Jean showed the child<sub>i</sub> to himself<sub>i</sub>.

*English-type languages*

(34) \* John sent a letter.

*Int.* 'John sent a letter to himself.'

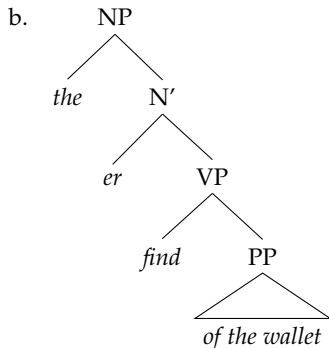
- Ditransitive verbs are not grooming predicates and so cannot be selected by Voice-bundling Refl.

## Reflexive Nominals

- Baker and Vinokurova (2009): The agentive nominalizer like *-er* in English is a **nominal version of active Voice** that adds Agent to the structure.

(35)  $[[\text{Agentive nominalizer}]] = \lambda f \hat{\ } \lambda x \text{ Gen } e. f(e) \ \& \ \text{Agent}(e,x)$   
 (where  $\hat{\ }$  indicates the nominalization operator of Chierchia (1985) and Gen a generic operator)

(36) a. the finder of the wallet



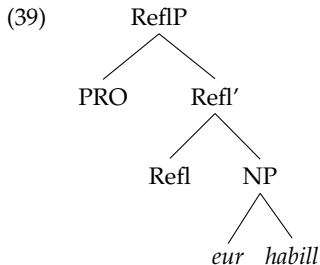
(37) a.  $\hat{\ } \lambda x$  Gen e. the unique  $x$  such that  $\text{find}(e, \text{the wallet}) \ \& \ \text{Agent}(e, x)$

b. the unique  $x$  such that  $x$  is the kind of thing that is Agent in generically many events of finding the wallet

### *French-type languages*

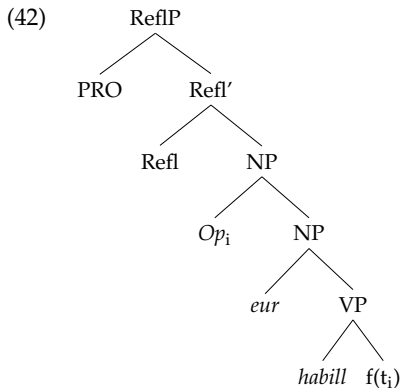
- (38) Jean est un excellent habilleur/maquilleur.  
 Jean is an excellent dresser/“makeup-er” (of others only)  
 (*French*; Reinhart and Siloni 2005:410, (48b))

- Refl in French-type languages selects nonactive VoiceP, not active VoiceP.
- Why can't it take active VoiceP? Maybe it can select at least the nominal version?



- Unlike the verbal version of active Voice, the nominal version does not project an Agent argument but contains it in itself.
    - (40) a. \* the barbarians' destroyer of the city
    - b. the barbarians' destruction of the city
  - (41) a. \* Richard Doll's finder of the link between cigarette smoking and lung cancer
  - b. Richard Doll's finding of the link between cigarette smoking and lung cancer
- The external variable of the agentive nominalizer can never be unsaturated. → Cannot be taken by Refl that only selects an open predicate.

- What about the following?



- Ruled out for semantic reasons

(43)  $\llbracket \text{RefIP} \rrbracket = \lambda x \text{ Gen } e. \mathbf{dress}(e, f(\text{PRO})) \ \& \ \mathbf{Agent}(e, x) \ \& \ \mathbf{Agent}(e, \text{PRO})$



- The current view is supported by the fact that French allows reflexive ‘eventive’ nominals.

(44) a. Pour certains hommes, le rasage est un véritable moment de  
for some men, the shaving is a real moment of  
détente. (= (11))

relaxation

‘For some men, shaving is a real relaxing moment.’

b. Le séchage et le peignage sont facilités.  
the drying and the combing are facilitated  
‘Drying and combing are facilitated.’

(Conditioner advertisement at

<https://www.auberdog.com/chats/toilettage-et-shampoing-83/anju-beaute-soin-apres-shampoing-beauty-care-mask-c645>)

- This can be accounted for if both reflexivization and nominalization apply in the syntax and if the agentive nominalizer is active Voice while its eventive counterpart is not.

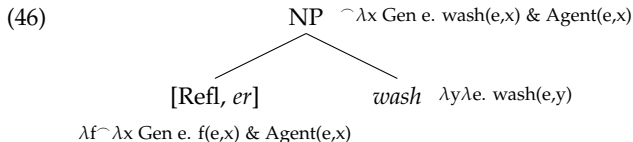
*English-type languages*

(45) a. She dresses slowly because she is an elegant dresser.

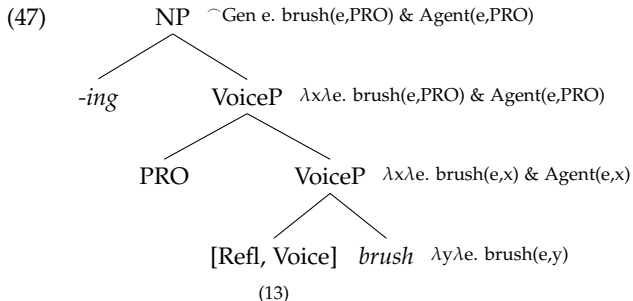
(Reinhart and Siloni 2005:410, (48a))

b. When the brushing is finished, the braces should be shiny.

- Refl may bundle with any type of Voice head, including nominal Voice like *-er*.
- Derivation of a reflexive agentive nominal:



- Derivation of a reflexive eventive nominal (Based on Bruening 2013 with some modification):



## UNACCUSATIVITY OF THE REFLEXIVE IN ROMANCE

The reflexive in Romance shows contradictory properties.

- It employs unaccusative morphology; *se, si*, etc.
- The surface subject behaves as if it is an external argument.

- In European Portuguese, the subject in the reflexive, unlike the subject in the unaccusative, cannot be realized as bare indefinite nouns (Alboiu, Barrie, and Frigen 2004).

- (48) a. Caiem **rochas** da montanha.  
 fall rocks from.the mountain  
 ‘Stones are falling from the mountain.’
- b. \*Trabalham **crianças**.  
 work children  
 ‘Children are working.’
- c. \*Lavam-se **crianças** na banheira.  
 wash-SE children in.the tub  
 ‘Children are washing themselves in the tub.’

(European Portuguese; Alboiu, Barrie, and Frigen 2004:6, (5a–c))

- In French, the focus particle *seul* 'only' cannot be associated only with the variable of an embedded predicate (Sportiche 2014).

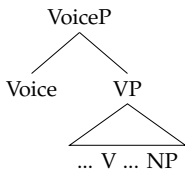
(49) Seul Pierre se trouve intelligent.                      (*French*; Sportiche 2014:311, (14))  
 only Pierre *SE* finds intelligent  
 'Only Pierre finds himself intelligent.'

- Possible*: Pierre is the only x such that x finds x intelligent
- Possible*: Pierre is the only x such that x finds Pierre intelligent
- Impossible*: Pierre is the only x such that Pierre finds x intelligent

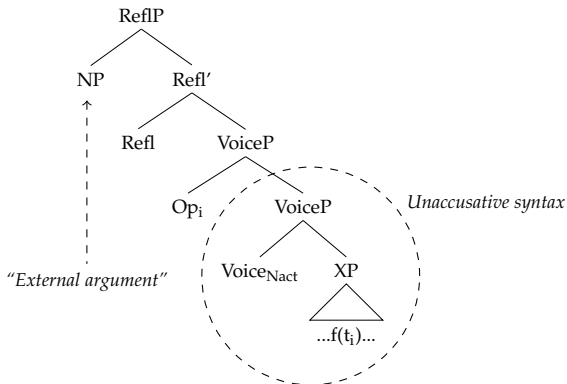
## Proposal

- Unaccusative syntax is responsible for the unaccusative voice morphology (Embick 2004).
- ReflP in Romance involves unaccusative syntax, where VoiceP does not project its specifier.

### Unaccusative syntax



### ReflP in Romance



# CONCLUSION

- A purely syntactic approach to reflexivization is not just possible but actually necessary to properly account for inherent reflexives and the relevant crosslinguistic variation.
- There is an independent functional head that represents the notion of reflexivity in the linguistic structures.
- The strategies of making use of this functional head in each language influences the peculiar patterns that the language shows regarding reflexivization.



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