Cross-linguistic evidence for underspecification in reflexive morphosyntax  
Martha McGinnis and Christiana Moser, University of Victoria  
mjmcginn@uvic.ca, cimoser@uvic.ca

Core proposals:

- "Reflexive" morphology in both French and Icelandic can realize (non-reflexive) unergative syntax, as well as unaccusative syntax.
- This morphology is underspecified, realizing distinct structures that are independently built and interpreted.

(1) a. Elle s’est offerte pour mener le combat.  
she SE-is offered.F for lead.INF the fight  
‘She offered herself to lead the fight.’ (based on Labelle 2008)

b. Ils se sont réunis.  
they.M SE are gotten.together.M.pl  
‘They got together.’ (Sportiche 1990)

c. Ils se sont rasés.  
they.M SE are shaved.M.pl  
‘They shaved.’ (Sportiche 1990)

(2) a. Hurðin opnaði-st.  
door.the.NOM opened-ST  
‘The door opened.’ (Wood 2014)

b. Það er bari-st.  
EXPL is fought-ST  
‘Someone is fighting.’ (Anderson 1990)

Outline:  
1. Underspecification vs. unification  
2. Evidence from Icelandic  
3. Evidence from French  
4. DM analysis  
5. Conclusions

1. Underspecification vs. Unification

- We maintain that clitic/affix reflexives have passive-like syntax, with a derived subject that binds a Caseless external argument at the LF interface (Marantz 1984, Sportiche 1990, McGinnis 2004).
• We propose that syncretism between unaccusatives and unergatives in Icelandic and French—and reflexive clitics in French—arises from underspecification of the morphology realizing Voice, which allows it to realize nodes with different features.

• In both Icelandic and French, this morphology appears with a small semantic natural class of unergatives. We postulate that a post-syntactic Impoverishment rule targets these semantic classes, so that default morphology is used.

By contrast, Labelle (2008) analyzes French reflexive *se* as an unergative Voice head that (i) introduces the external argument, and (ii) asserts that the reference of the object theta-role depends on the external argument; no direct object is projected in the syntax.

\[
\text{3) Elles, } \text{se}_2 \text{ sont } [\text{VoiceP } t_1 \ t_2 \ [\text{VP lavées}]]. \\
\text{they.F SE are washed.F.pl} \\
\text{‘They washed (themselves).’}
\]

Similarly, Wood (2014, 2015) analyzes a class of -st clauses in Icelandic as reflexive, namely what he calls *figure reflexives*:

\[
\text{4) a. Hann tróð henni inn með hópnum.} \\
\text{he squeezed her.DAT in with the.group} \\
\text{‘He squeezed her in with the group.’} \\
\text{b. Hann tróð-}st \text{ inn með hópnum.} \\
\text{he squeezed-ST in with the.group} \\
\text{‘He squeezed in with the group.’}
\]

Like Labelle, Wood offers an unergative analysis of these reflexives. However, he goes a step further, and unifies this analysis with his analysis of -st unaccusatives:

\[
\text{5) a. Þær opnúðu dyrnar.} \\
\text{they opened the.door} \\
\text{‘They opened the door.’} \\
\text{b. Dyrnar opnúðu-st.} \\
\text{door.the opened-ST} \\
\text{‘The door opened.’}
\]

Specifically, Wood proposes that both uses of -st involve an expletive argument—a DP (-st) that can merge in a theta-position but cannot receive a theta-role.
In the figure reflexive, -st merges in spec-pP, associated with the figure theta-role, like the toothpaste in I squeezed the toothpaste out of the tube.

(6) Figure Reflexive

Since -st is expletive and thus cannot receive a theta-role, the figure role is passed up the tree by semantic composition, and assigned to the next DP (the external argument), which then has two theta-roles.

In the anticausative, -st merges in spec-Voice, usually associated with the agent theta-role. Here, there is no higher DP in VoiceP to receive the agent role, so -st must merge instead with expletive Voice (and non-causative v), yielding an anticausative reading.

(7) Anticausative
• As we have seen, Wood’s analysis treats “figure reflexives” as syntactically similar to unergatives, with a referential subject originating in spec-Voice—though it also has an expletive DP in spec-pP.

• By contrast, we argue here that both Icelandic and French have (-st/se) unergatives that show syncretism with unaccusatives, but that these are non-reflexive; and that true reflexive clitic/affix derivations have a derived subject.

2. Evidence from Icelandic

Icelandic -st often indicates an unaccusative verb, which usually alternates with a causative counterpart—though not always (8j) (Anderson 1990):

\[
\begin{align*}
\text{(8)} & \\
\text{a. } & \text{gleðja-}st & \text{‘rejoice’} & \text{gleðja} & \text{‘gladden X’} \\
\text{b. } & \text{kvelja-}st & \text{‘suffer’} & \text{kvelja} & \text{‘torture X’} \\
\text{c. } & \text{lýja-}st & \text{‘get tired, worn out’} & \text{lýja} & \text{‘tire X out’} \\
\text{d. } & \text{hefja-}st & \text{‘begin}_{intr}’ & \text{hefja} & \text{‘begin}_{tr}’ \\
\text{e. } & \text{opna-}st & \text{‘open}_{intr}’ & \text{opna} & \text{‘open}_{tr}’ \\
\text{f. } & \text{finna-}st & \text{‘exist, be found’} & \text{finna} & \text{‘find’} \\
\text{g. } & \text{heyra-}st & \text{‘be audible’} & \text{heyra} & \text{‘hear’} \\
\text{h. } & \text{týna-}st & \text{‘be/get lost’} & \text{týna} & \text{‘lose’} \\
\text{i. } & \text{ágogga-}st & \text{‘be hooked (fish)’} & \text{gogga} & \text{‘catch with a hook’} \\
\text{j. } & \text{elda-}st & \text{‘get older’} & \text{eldri} & \text{‘older’}
\end{align*}
\]

The same -st morphology can also be used with unergatives. How do we know? Impersonal passives in Icelandic are possible with unergatives (9a), but not unaccusatives (9b) (Zaenen and Maling 1990, Sigurðsson and Egerland 2009):

\[
\begin{align*}
\text{(9)} & \\
\text{a. } & \text{Það var } & \text{synt.} & \text{EXPL } & \text{was swum} \\
& & & \text{‘There was swimming.’} \\
\text{b. } & \text{*Það var } & \text{sokkið.} & \text{EXPL } & \text{was sunk} \\
& & & \text{(‘There was sinking.’)}
\end{align*}
\]
Icelandic figure-reflexives allow impersonal passives (Wood 2014, 2015). This supports the analysis that active figure reflexives have an unergative structure, in which the subject is the external argument.

(10) a. Bjartur tróð-**st** gegnum manNFprögina. active
Bjartur.NOM squeezed-ST through the.crowd
‘Bjartur squeezed (himself) through the crowd.’

b. Það var troði-**st** gegnum manNFprögina. impersonal passive
EXPL was squeezed-ST through the.crowd
‘There was squeezing through the crowd.’

Wood’s analysis predicts that figure reflexives involve two theta-roles. However, some -**st** clauses lack a second theta-role. In (11a) there is no implication that he is directed at me, but the structure is still unergative, allowing an impersonal passive (11b).

(11) a. Nú hæði-**st** hann að mér.
now mocks-ST he at me
‘Now he mocks me.’

b. Oft var hæð-**st** að mér fyrir sérviskuna.
often was mocked-ST at me for peculiarity.the
‘I was often mocked for my peculiarity.’

Wood postulates an expletive **p** head in (11), comparable to expletive Voice and **v**.

Not only are there unergative -**st** clauses without a figure role—there are other roots that take -**st** without a PP at all, as in (12) and apparently (13) (Anderson 1990):

(12) Það er bari-**st**.
EXPL is fought-ST
‘Someone is fighting.’ = (2b)

(13) a. drauga-**st** ‘walk slowly, like a ghost’ (cf. draugur ‘ghost’)
b. bjálfa-**st** ‘behave like an idiot’ (cf. bjálfi ‘fool’)
c. ferða-**st** ‘travel’ (cf. ferð ‘journey’)
d. dylja-**st** ‘hide intr’ (cf. dýlja ‘hide X’)
e. fela-**st** ‘hide intr’ (cf. fela ‘hide X’)
f. klæma-**st** ‘use obscene language’ (cf. klæma ‘speak badly of X’)
g. svelgja-**st** ‘swallow down the wrong throat’ (DAT subject)
The existence of such verbs supports our proposal that unergative reflexives in Icelandic are simply intransitives, not involving an additional theta-role or a $pP$. Icelandic may lack true reflexives; it seems to lack ECM reflexives (Andrews 1990, Wood 2014, 2015):

(14) **Hann** tel-**st** [__ vera sterkur].
    He.NOM believes-ST to be strong.NOM
    *‘He believes himself to be strong.’
    ‘He is believed to be strong.’

So why does an apparently reflexive interpretation arise in figure reflexives? And why do they require a PP?

(15) **Bjartur** tróð-**st** [**PP** gegnum manþröngina].
    Bjartur.NOM squeezed-ST through the.crowd
    ‘Bjartur squeezed (himself) through the crowd.’

We are currently investigating whether figure reflexives do, in fact, require a PP. If they do, this is arguably connected to the observation below. The *way*-context (Marantz 1992) involves a predicative structure which can combine with an activity root like *joke* or *squeeze* (e.g. a stress ball), but is odd with a motion root like *walk*.

(16) a. Morris joked his way through the crowd.
    b. Morris squeezed his way through the crowd. (*squeezing a stress ball*)
    c. ?*Morris walked his way through the crowd.

If only the path-PP is present, without *way*, it appears that the root must be understood as expressing directed motion (17). This isn’t possible for *joke*, but it is for *squeeze*, where the path-PP licenses a directed-motion interpretation for the root.

(17) a. *Morris joked through the crowd.
    b. Morris squeezed through the crowd. (*squeezing a stress ball*)
    c. Morris walked through the crowd.

As the agent of an unergative directed-motion $vP$, the external argument is interpreted as the “figure” associated with the “ground” of the path-PP.

- We postulate that there is no spec-$pP$ theta-position in such expressions; the PP simply forms a constituent with the root, and compositionally affects the interpretation of the (external or internal) argument it combines with.
On this view, Icelandic figure reflexives require a PP because -st is licensed in the context of unergative structures involving a directed-motion vP (as well as in unergative structures with an arbitrary list of lexical roots).

3. **Evidence from French**

Like Icelandic -st, French se often indicates an unaccusative verb. These may (18a) or may not (18b) have a corresponding causative counterpart (Sportiche 1990).

(18) a. Ils **se** sont réunis.
   they.M SE are gather.M.pl
   ‘They got together.’

b. Il **s’est** évanoui.
   he SE-is passed.out.M.sg
   ‘He passed out.’

We propose that se can also be associated with unergatives. French disallows impersonal passives; however, impersonal intransitives (with an expletive and a postverbal subject) allow unaccusatives, and are marginal with unergatives (Sportiche 1990).

(19) a. Il a cuit beaucoup de tomates.
   EXPL have cooked many of tomatoes
   ‘There cooked many tomatoes.’

b. ?Il a dormi plusieurs enfants.
   EXPL have slept several children
   ‘There slept several children.’

Moreover, with unergatives, the postverbal subject of the impersonal construction cannot be associated with the clitic en. En can only be associated with an internal argument.

(20) a. Il en a cuit beaucoup.
   EXPL of.them have cooked many
   ‘There cooked many of them.’

b. *Il en a dormi plusieurs.
   EXPL of.them have slept several
   ‘There slept several of them.’
Likewise, with a se-unergative, the impersonal construction is marginal and disallows en. (Both are permitted on a middle reading, which has a derived subject.)

(21)  

a. **Il se rasait beaucoup de soldats.**  
EXPL SE shaved many of soldiers  
‘There shaved many soldiers.’  
‘There were shaved many soldiers.’  

b. **Il s’en rasait beaucoup, de soldats.**  
EXPL SE-of.them shaved many of soldiers  
*‘Soldiers, many of them shaved.’  
‘Soldiers, many of them were being shaved.’

Sportiche (1990) treats such verbs as reflexive rather than unergative, and proposes that the reflexive reading is ruled out in (21) because the internal argument needs to move overtly to the subject position in order to bind an anaphoric external argument.

Labelle (2008) gives a similar example (22). Unlike Sportiche, she argues that French se-reflexives are unergative, and that en is impossible with reflexives because they lack an internal argument.

(22)  

a. **Il s’en est offert une pour mener le combat.**  
it SE-of.them are offered one to lead the fight  
‘One of them offered herself to lead the fight.’  

b. **Il s’en est présenté beaucoup pour cet emploi.**  
it SE-of.them are presented many for this job  
‘Many of them presented themselves for this job.’

However, she does note that the parallel reflexive examples below would be grammatical (Labelle 2008:870, fn. 27). These cases are not predicted by an unergative analysis of reflexives, nor by Sportiche’s binding-theoretic analysis of se impersonals.

(23)  

a. **Il s’en est lavé beaucoup dans ces douches publiques récemment.**  
there SE-of.them are washed many in these showers public recently  
*‘Many of them washed in these public showers recently.’  
‘Many of them were washed in these public showers recently.’

We postulate that these well-formed examples involve true reflexives, in which the external argument is an anaphor, bound at LF by the internal argument when it moves into the position of the expletive subject.
By contrast, the ill-formed examples of impersonal *se*-constructions involve unergative inherent reflexives.

(24) Il s’en est lavé beaucoup dans ces douches publiques récemment.

*‘Many of them washed in these public showers recently.’

(22) = ‘Many of them were washed in these public showers recently.’

We propose that such inherent reflexive constructions are not syntactically reflexive (Reinhart and Siloni 2005, Labelle 2008). Instead, the semantics of the root allows a self-directed reading in an unergative syntactic context.

Further evidence that true reflexives in French are not unergative is that French allows raising clauses based on ECM reflexives (25) (Sportiche 1990). This follows if reflexives involve a derived subject in French, but is difficult to explain on an unergative analysis.

(25) a. Jean la considère [<la> intelligente].

Jean her considers intelligent.

‘Jean considers her intelligent.’

b. Jean se considère [<Jean> intelligent].

Jean SE considers intelligent

‘Jean considers himself intelligent.’

• On this view, unergative reflexives require an “inherently reflexive” root in French simply because these roots condition the context that licenses reflexive morphology for unergative Voice. True reflexives involve a derived subject (as Sportiche argues).

• In French, reflexive/unaccusative/unergative Voice is inflected for person and number, using underspecified forms that syncretize with pronominal clitics. We postulate that these reflect agreement between Voice and the derived subject.

4. **DM analysis**

To briefly sketch the details of our DM analysis, we postulate these Voice features:

• [EXTARG.R]: introduces an external argument with independent reference
• [EXTARG.A]: introduces a Caseless anaphoric external argument
• [CASE]: checks structural Case (e.g., on the direct object)
(26) a. **transitive**  b. **unergative**  c. **reflexive**  d. **unaccusative**

- Voice: [EXTARG.R]
- Voice: [EXTARG.R]
- Voice: [EXTARG.A]
- Voice: [CASE]

As noted above, the narrow distribution of -st/se in unergatives suggests that it is normally blocked by a vocabulary item realizing [EXTARG.R], and that in certain unergatives this feature is deleted from Voice by a post-syntactic rule.

(27) Impoverishment rule

\[
[\text{EXTARG.R}] \rightarrow \emptyset \text{ in env. } [-\text{Case}] \{\sqrt{X}\}
\]

In Icelandic, \{\sqrt{X}\} = alternating directed-motion roots, as well as a possibly idiosyncratic set of other roots; in French, \{\sqrt{X}\} = inherent reflexive roots.

We propose the following key vocabulary items for Icelandic and French: zero morphology in transitives and (unimpoverished) unergatives, as well as in zero-marked unaccusatives (\{\sqrt{Y}\}); “reflexive” morphology elsewhere, not limited to Voice in French.

(28) Vocabulary items: Icelandic

a. Voice [EXTARG.R] $\leftrightarrow$ $\emptyset$
b. Voice $\leftrightarrow$ $\emptyset$ in env. \{\sqrt{Y}\} (zero-marked unaccusatives)
c. Voice $\leftrightarrow$ -st

(29) Vocabulary items: French

a. Voice [EXTARG.R] $\leftrightarrow$ $\emptyset$
b. Voice $\leftrightarrow$ $\emptyset$ in env. \{\sqrt{Y}\} (zero-marked unaccusatives)
c. [SPKR, PL] $\leftrightarrow$ nous
d. [PART, PL] $\leftrightarrow$ vous
e. [SPKR] $\leftrightarrow$ me
f. [PART] $\leftrightarrow$ te
g. [ ] $\leftrightarrow$ se
5. **Conclusions**

- We have argued that both Icelandic and French have non-reflexive unergatives whose Voice morphology (-st/se) shows syncretism with unaccusative clauses. These unergatives may imply reflexivity semantically, but do not express it syntactically.

- In French, this Voice morphology also shows syncretism with true reflexives, which involve a derived subject that binds a Caseless anaphoric external argument at LF.

- The underspecification-driven syncretism in Voice morphology obscures the differences among unergatives, unaccusatives and reflexives; but syntactic evidence reveals their structural distinctions.

**References**


Marantz, Alec. 2005. Objects out of the lexicon: objects as events. Ms, MIT.


