

“Me give a paper at PLC18!?”

On Adult Root Infinitives

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Goals of the talk:

- outline pragmatic, phonological, and morphosyntactic properties
- outline typological distribution and variability
- examine syntactic phrase-structure, arguing for a mono-clausal analysis

1 Non-syntactic properties

- *discourse-pragmatic*

expresses **incredulity** (!?) towards a previously uttered proposition (a reference turn; cf. [Bücker 2008](#)), it may be preceded by an incredulous expression like *What!?*, and/or followed by a Coda expression confirming the incredulity

- (1) So, will you give a paper at PLC18? – What!? Me give a paper at PLC18!? No way, dude!
Their referees are super-picky!

- *prosodic*

Subject bears focal stress (CAPS), the intonation contour is final-rising (global rise ‘[↗]’ typical of *yes/no*- and echo-questions)¹

- (2) a. HIM like ↗ books!? *focussed Subject/rising intonation*
b. #HIM like ↘/→ books!? *#falling/level intonation*
c. #Him like ↗ books!? *#unfocussed Subject*

- *Why Adult?*

ARIs are a phenomenon of adult L1; there’s a structurally similar phenomenon in child language: Child Root Infinitives (CRIs; cf. [Rizzi 1994](#))

¹There’s another use of the ARI with falling intonation (‘...’) and unfocussed Subject, in which case it does not express incredulity, but ‘non-genuine incredulity’: *Him like books... Whatever you say...* Although I won’t be discussing this sub-type, the syntactic analysis presented in section 3 should carry over to it.

(3) Baby eat cookies. *CRI* (from Radford, 1990)
 ('The baby eats/is eating cookies.')

(4) The baby eat cookies!? *ARI*
 ('The baby is supposed to/should eat cookies!')

→ CRIs are a frequent and polysemous characteristic of child language (they assert, ask, command, etc.), while ARIs are an infrequent phenomenon in adult L1 with a very *specific* pragmatics (incredulity) and semantics (modal-irrealis)

2 Morphosyntactic properties

2.1 Why *Root*?

- nonfinite structures are generally restricted to subordinate contexts (→ dependent structures)

(5) a. I'll make [him like books]. *bare infinitive*
 b. I want [him to like books]. *to-infinitive*
 c. I saw [him reading]. *present participle*
 d. I consider [my thesis finished]. *past participle*

- but: ARIs cannot be embedded (under equivalent predicates) → they are a *root phenomenon* (i.e. restricted to main clauses)²

(6) *I doubt/wonder/don't believe [him like books].

2.2 Why *Infinitive*?

- the verb in ARIs lacks tense and agreement inflection, the Subject lacks NOM Case

(7) a. Him like/*likes/*liked books!? *ARI*
 b. He likes/liked/*like books. *Declarative*

2.3 Subject Case

- Subject pronouns in ARIs occur in ACC (English), or in OBLIQUE Case (French), even though the canonical Subject Case is NOM in both languages

(8) a. HIM/*HE like books!? *accusative Case*
 b. LUI/*IL aimer les livres!? *oblique Case*
 him.obl/he.cl like the books

²Potts & Roeper (2006) offer a pragmatic/semantic explanation for the unembeddability of ARIs: ARIs only have *use conditions* (→ expressive meaning), but *no truth conditions*, according to them a prerequisite for embeddability.

Q: What licenses/assigns the non-canonical Subject Case?

- **structural/inherent Case:** unlikely unless one assumes an [ACC]-assigning null C^o akin to for (9-b):

- (9) a. Anna loves_[ACC] him_[ACC]. *structural Case (V^o assigns)*
 b. It is healthy [for_[ACC] him_[ACC] to love Anna]. *structural Case (C^o assigns)*
 c. [CP C^o_[ACC] [IP Him_[ACC] love Anna]]!? *?structural Case (null C^o assigns)*

- **FOCUS-related:** unlikely since NOM pronouns can well be focussed (or must be so; cf. (10-a))

- (10) a. HE_[FOC] is the double agent (, not Herbert)!
 b. ?*HIM_[FOC] is the double agent (, not Herbert)!

- **default Case:** ACC crops up just about everywhere but in the canonical Subject position

- (11) a. Him/*He tired, they decided to camp for the night. *adjunct SC*
 b. It was us/*we. *predicate nominal*
 c. Me/*I, I like beans. *left dislocation*
 d. Us and them/*We and they are gonna rumble tonight. *conjoined Subject*
 e. Me/*I too. *ellipsis*
 (cf. Schütze, 1997: :53)

→ default Case³ in English is ACC (cf. Akmajian 1984:3f., Etxepare & Grohmann 2001:206f.)⁴; similarly, French employs OBLIQUE (DATIVE) as a default; other languages (that I know of) use NOM for the contexts in (11)

2.4 Verbless ARIs

- as a matter of fact, ARIs appear to occur most frequently *verbless* (i.e. NP-argument + AP/-PP/NP-predicate)

- (12) Ich schwanger!?! Nee, ich steh' doch nur auf gutes Essen...
 I pregnant
 'Me pregnant!?! Nope, I just dig good food...'

Q: Do verbless ARIs as in (12) have the same (underlying) syntactic structure as their counterparts containing a verb? [cf. 3.3 for discussion...]

³In *Distributed Morphology*, unvalued Case features receive a default value post-syntactically (cf. Schütze, 2001).

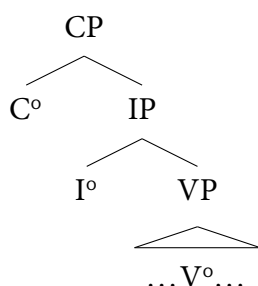
⁴Visser (1963: :237ff.) identifies NOM as the default Case for older stages of English.

3 Syntax of ARIs

3.1 Minimalist Syntax

- clauses consist of three domains: (i) VP, where argument structure is established (EVENT); (ii) IP, where TAM-features are introduced and where the Subject is licensed (PROPOSITION); (iii) CP, where discourse/speaker-related phenomena are established (SPEECH ACT) (cf. e.g. (Chomsky, 1995: ch. 4))

(13) *The three clausal domains*



Q: What's the phrase-structural complexity of ARIs: VP, IP, or CP?

3.2 Are ARIs monoclausal?

Q: Does the ARI form one clause (mono-clausal), or is it really two syntactically distinct phrases (bi-phrasal)?

- problem: speaker judgements differ as to whether the ARI forms *one* intonation phrase (IntP) (14-a) or *two* (14-b)

- (14) a. [IntP HIM like books]!?
- unified intonation contour*
- b. [IntP HIM]!?
- [IntP Like books]!?
- comma intonation/punctuation*

→ while (14-a) supports a mono-clausal analysis of the ARI, (14-b) suggests a bi-phrasal one

3.2.1 Morphosyntactic arguments for a mono-clausal analysis

- coreferential binding of reflexives**: "A reflexive must be bound within the smallest category [α] containing it, its case assigner, and a Subject" (Büring, 2005: 55) → a reflexive and its antecedent must be clause-mates

(15) I've just heard that Kurt committed suicide... – What!? Kurt kill himself!? This can't be true!

→ [Kurt_i kill himself_i]!?

vs. ?[Kurt_i]!?

[Kill himself_i]!?

→ for *Kurt* and *himself* to be clause-mates, they need to share a unified structure: [_α Kurt_i kill himself_i]!?

- **agreeing infinitives:** languages like Brazilian Portuguese have infinitives that agree with the Subject⁵

(16) *inflected infinitive (Brazilian Portuguese)*

- a. Nós irmos à festa!? Que piada!
we go-INF-1pl to the party what joke
'Us go to the party!? What a joke!'
- b. Eles saírem cedo de casa? Impossível.
they get.out-INF-3pl early of home impossible
'Them leave home early!? Impossible!'

→ agreement is a *local* morphological reflex, i.e. the agreeing elements have to be clause-mates

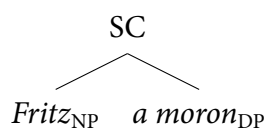
NOTE: for now, I adopt a mono-clausal analysis, leaving open the bi-phrasal option, or whether both the mono-clausal and the bi-phrasal ARI constitute two sub-types of a more general scheme...

3.3 ARIs as VPs (Small Clauses)

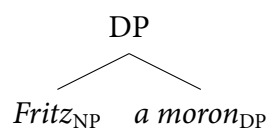
- **Small Clauses (SCs)** are verbless argument–predicate structures (cf. Williams, 1974)

(17) a. I consider [_{SC} Fritz a moron]. (SC: 'Fritz ^{is} moron')

b. *exocentric*



c. *endocentric*



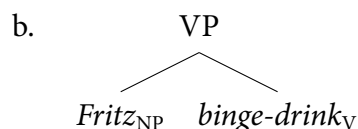
- some consider Perception Verb Complements (PVCs; cf. Felser 1999) *verbal* SCs

(18) I saw [_{SC/VP} [_{NP} Fritz] [_{VP} binge-drink]]. *PVC*

- minimal assumption: ARIs are just bare VPs (Progovac 2006; cf. CRIs) → **verbal Root Small Clauses** (VRSCs = small main clauses headed by V)

(19) a. Fritz binge-drink!? Unbelievable! *ARI*

⁵Thanks to Marcello Modesto for the Brazilian Portuguese data.



→ the Subject in SpecVP receives a default Case, the verb a default infinitival inflection

3.4 ARIs as IPs

- diagnostic for clause structure: **adverbial modification** (Cinque, 1999; Jackendoff, 1972) → particular classes of adverbs occur in (= are licensed by) particular clausal domains (CP = discourse-domain; IP = Case/TAM-domain; VP = thematic domain)

(20) *C-related adverb (speaker-oriented)*

- a. I saw [_{CP} that unfortunately Jerry willingly smoked cigarettes]. CP
 b. I saw [_{VP} (*unfortunately) Jerry (*willingly) smoke cigarettes]. VP

- applied to ARIs:

- (21) a. Jerry willingly smoke cigarettes!? ✓ *ARI + I-adverb (Subject-oriented)*
 b. *Him unfortunately smoke cigarettes!? **ARI + C-adverb (speaker-oriented)*

4 Finiteness & Force

4.1 Finiteness

- *What's finiteness?*

traditionally, finiteness is associated with four properties: (i) tense, (ii) NOM Case, (iii) Subject-verb agreement (SVA), and (iv) independent contexts (main/root clauses)

Q: *How are these properties related to each other?*

- with the development of generative GBT (cf. Chomsky, 1981, 1986), the notion of finiteness found its way into syntax as a *purely descriptive* label [\pm Fin] of the inflectional node I(nfl)^o → essentially, this has only captured the properties 1–4 listed above, implicationaly

- (22) a. I^o[+Fin] → [+Tns] → [+Agr] → [NOM]
 b. I^o[-Fin] → [-Tns] → [-Agr] → ([ACC/GEN])

→ [\pm Fin] = [\pm Tns]

Q: *Does finiteness equal tense?*

- the choice of a certain COMP (= C^o) correlates with the tensedness of I^o:

- (23) a. *that* = C^o[DECL] → I^o[+Tns]
 b. *if* = C^o[INT] → I^o[+Tns]

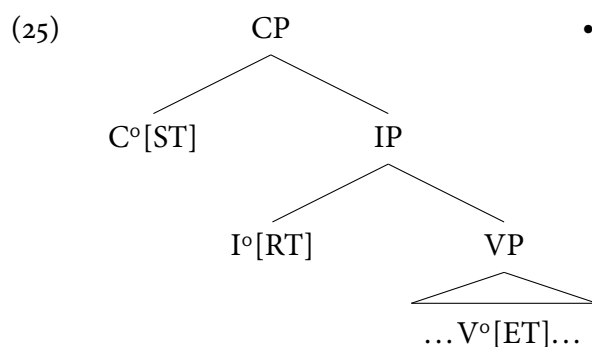
- nonfinite clauses don't have a CLAUSE TYPE, hence they are introduced by no COMP at all (*to* is a lower TAM-particle)⁶:

- (24) I expect [_{IP} Fritz to devour Chomsky]. I^o[-Tns]

Q: So, if there's an interaction between C^o and I^o in its scope, how does this dependency look like?

4.2 The Syntax of Tense

- Reichenbach's (1947) **Tense Logic**: tenses are pairs of times (ST, ET, RT) ordered as contemporaneous ('=') or preceding ('<')⁷ → *ex.* SIMPLE PAST ((ET=RT) < ST))⁸ vs. PRESENT PERFECT ((ET) < (RT=ST))
- in neo-Reichenbachian approaches, tense is calculated in (= can be read off) the syntax, with C^o ⊃ ST, I^o ⊃ RT, and V^o ⊃ ET⁹



- whatever the mechanism ultimately employed to relate two times (e.g. co(ntra)-indexation, syntactic binding, feature-checking/valuation), what matters is that **only if the temporal value on I^o (= RT) can 'anchor' to the temporal/deictic value on C^o (= ST), can finiteness (= deictic tense) be established** (cf. Bianchi, 2003)

- finiteness is a two-place relation between a **propositional content** (IP) and a **speech event anchor** (C^o; → Bühler's 1934 deictic centre, Kratzer's 1991 modal base, Bianchi's 2003 logophoric anchor)

- Predictions:

- (1) if there's no C^o, a structure must be non-finite → non-finite structures are 'smaller' (less complex) than finite ones;

⁶However, some nonfinite clauses *can* be introduced by a nonfinite Comp for: [_{CP} For him to read Chomsky] is a nuisance.. Also cf. Italian *di* and French *de* (cf. Rizzi, 1997).

⁷Actually, [±COINCIDE].

⁸E.g. *Fritz snored (yesterday)* reads as 'There is an event of Fritz snoring at the event time ET (*yesterday*), which is anterior to a reference time RT, which in turn is contemporaneous with the Speech time ST (the now).'

⁹Cf. e.g. Roberts & Roussou's (2002) T-binding by Fin^o.

- (2) a finite structure must contain C^o;
- (3[?]) C^o may also be *defective* (\approx [-FIN]), in which case the structure is non-finite, but makes room for e.g. *wh*-elements (*I wonder [what to steal]*) or the non-finite *Comp for* (*[For him to read Chomsky] is pure horror*)

5 Back to the ARI...

- the fact that the ARI doesn't allow for left-peripheral phenomena (*wh*-expressions, topicalisation, focus fronting, speaker-adverbs)¹⁰, but for IP-related ones (Subject-oriented adverbs, relative tense) suggests that **the ARI is an IP**

Q: If 'illocutionary force' is somehow represented as *CLAUSE TYPE* in C^o – which the ARI doesn't have – where does the force it has ('incredulity') come from?

- instead of assuming for every root clause a *CLAUSE TYPE* in C^o (e.g. DECL, INT,...), it is reasonable to assume for a subset of expressions (incl. the ARI) a pragmatically enriched illocutionary potential

5.1 Outlook

- find more evidence for a mono-clausal syntactic analysis
- collect further cross-linguistic data that support the widespread typological distribution of the ARI (particularly in non-European languages)
- a unified theory of the syntax of finiteness → there exist languages that don't employ the *TIME* dimension to express finiteness morphosyntactically, but rather *SPACE* (e.g. Halkomelem Salish) and *SPEECH EVENT PARTICIPANTS* (e.g. Blackfoot) (cf. Ritter & Wiltschko, 2005)
- examine further root nonfiniteness phenomena (e.g. German *wh*-infinitivals; cf. Reis 2003)
- have a look at 'quirky infinitives' (infinitive *NOM* Subjects, tensed infinitives, agreeing infinitives)
- examine further structures that express 'incredulity'

¹⁰It is in this respect mysterious that a particular group of Western Romance languages *does* allow for speaker adverbs, clitic left dislocation, and deictic temporal adverbs. To accommodate this, Etxepare & Grohmann (2005) assume another projection FP above IP.

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