

Implicit argument as a free variable: Evidence from pronoun licensing

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This paper demonstrates that Sason Arabic (SA, western Asia) exhibits a hitherto undiscovered causative construction with an embedded active VoiceP, in which the implicit embedded agent may be present only as a free variable, generated in the Voice head itself, and bound by text-level Existential Closure (Heim 1982). On the basis of the possibility of allowing pronouns co-vary with the embedded agent, we demonstrate that this implicit argument differs from the implicit agents of passives, which cannot antecede a subsequent pronoun. In addition to its implications for licensing, the paper provides support to the view that implicit arguments do not form a homogeneous category (cf. Bhatt & Pancheva 2006, Landau 2010) and further calls for a finer-grained distinction than Strong Implicit Argument vs. Weak Implicit Argument of Landau (2010), since that distinction alone does not capture the asymmetry in SA.

It is a construction with an overt embedded theme argument, but no overt embedded agent, with the verb in gerundial/infinitival form, (1).

It maintains an agentive reading where the agent is interpreted as indefinite, non-specific ‘someone’ or ‘some people’.

- (1) si-tu addil beyt-ma
made-1SG build.INF house-a
‘I made (sb.) build a house.’

Thematic Voice. We first provide evidence for a thematic VoiceP layer in the embedded event (drawing on tests from Alexiadou et al. 2015, Bruening 2013). The evidence comes from (i) agent-oriented adverbs associated with the causee, (2), (ii) the availability of instrument phrases modifying the embedded agent, (iii) agent-oriented comitatives, (iv) thematic subject requirement (in that unaccusative verbs are disallowed), (3), (v) lack of stative verbs in the embedded complement.

- (2) aya sa [hazd haşış bı sabır.] (3) *kemal sa var mı mardivan-ad
landlord made.3M [cut.INF grass with patience] Kemal made.3M fall.INF from stair-PL
‘The landlord made [(sb.) cut the grass patiently].’ Int: ‘Kemal made (sb.) fall from the stairs.’

Active Voice. We demonstrate that the VoiceP is active. (i) Non-passivizable idioms: Certain idiomatic expressions, such as *qarf faxz le şeytan* ‘to get lucky; lit. to break the devil’s leg’ lose their idiomatic reading in the passive, (4). They are allowed in the complement of ‘make’, (5), maintaining the idiomatic interpretation.

- (4) faxz le şeytan in-qaraf mı kemal (5) si-tu qarf faxz le şeytan
leg of devil PASS-broke.3M by Kemal made-1SG break.INF leg of devil
‘The devil’s leg was broken by Kemal.’ ‘I made (sb.) finally get lucky.’
*‘Kemal finally got lucky.’

(ii) Sluicing: The embedded VoiceP behaves as active for sluicing. In SA, VP ellipsis may in some cases allow voice mismatching, whereas sluicing does not, in line with Merchant’s (2013) generalization. In (6a), the remnant ‘who’ indicates that the sluice is active and it can target the caused event ‘build’ in the complement of ‘make’, diagnosing ‘build’ as active. In (6b), the remnant ‘by who’ indicates that the sluice is passive, and it can only target the matrix clause, which is an impersonal passive, not the caused event ‘build’, again diagnosing ‘build’ as active.

- (6) a. in-sa addil beyt, hama m-ore ande
PASS-made build.INF house but NEG-know.1SG who
i. ‘It was made (sb.) build the house, but I don’t know who (built it).’
ii. *‘It was made (sb.) build the house, but I don’t know who (made sb. build the house).’
b. in-sa addil beyt, hama m-ore mı ande
PASS-made build.INF house but NEG-know.1SG by who
i. ‘It was made (sb.) build the house, but I don’t know by who (it was made sb. build the house).’
ii. *‘It was made (sb.) build the house, but I don’t know by who (it was built).’

Theme as the grammatical object. (i) definiteness effects, and (ii) CLLD facts indicate that the embedded theme is the grammatical object. (i) In Sason Arabic, a low theme in the passive exhibits definiteness effects, (7). In contrast, the low embedded theme does not, (8). (ii) Objects (but not subjects) in Arabic can be CLLD-ed, (9) (Benmamoun 2000, Aoun et al. 2010). The embedded theme can also undergo CLLD, (10).

- (7) a. in-addel beyt-*(ma). PASS-built.3M house-*(a) 'A/*?The house was built.'
 b. beyt-(ma) in-addel house-(a) PASS-built.3M 'A/The house was built.'
- (8) si-tu addil beyt-(ma) made-1SG build.INF house-(a) 'I made (sb.) build a/the house.'
- (9) a. haşış ams aya hazad-u. grass yesterday landlord cut-3M 'The grass, yesterday the landlord cut it.'
 b. kemal qara-(*u) gaste. Kemal.M read-3M newspaper.F 'Kemal, he read the newspaper.'
- (10) haşış ams aya sa hazd-u. grass yesterday landlord made cut-3M 'The grass, yesterday the landlord made (sb.) cut it.'

We also show agreement asymmetries that diagnose the theme as a grammatical object. Moreover, we demonstrate that the embedded theme is licensed by the embedded VoiceP, not the matrix VoiceP. Even when the matrix clause is an impersonal passive construction, (6), the embedded theme is still licensed as a grammatical object. This provides further evidence for the active nature of the embedded Voice.

Anaphors vs. pronouns. (i) Reflexives, (ii) reciprocals, and (iii) depictives are licensed in the active, but not in the passive, (11-12). They are also not licensed by the embedded agent (see (13) due to space).

- (11) odav in-addel (*mışa roen/rou). homework PASS-do.3M for themselves/himself 'The homework was done for (*themselves/himself).'
- (12) xanni in-kar-a (??sarxoş). song.M PASS-write-3M (??drunk) 'The song was composed drunk.'
- (13) iya_i satte addil_k odav (*mışa rou_k/roen_k/bazen_k) / sarxoş_{i/*k}. she made do.INF homework for himself/themselves/each.other / drunk 'She_i made (sb._k / some people_k) do the homework (*for himself_k/themselves_k/each other_k)/drunk_{i/*k}.'

In line with the crosslinguistic pattern, pronouns are also not licensed in passives, as such a disjoint-reference interpretation is forced, (14). In the same vein, implicit agents of passives cannot antecede a subsequent pronoun, e.g. (15) (unless through the accommodation process (see e.g. Koenig & Mauner, 2000)).

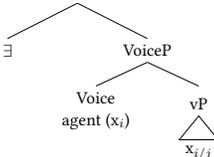
- (14) aya in-ada tirab-en-_{*j} e_j. landlord pass-give land-their 'The landlord was given their-_{*j} lands e_j.'
- (15) kul mara beyt le ande in-addel e_j ad-1-llu-_{*j} direm. every woman house of who PASS-built gave-3F-him money 'Every woman whose house was built e_j gave him-_{*j} money.'

However, unlike passives, in 'make'-causatives, pronouns may co-vary with the embedded agent, (e.g. 16-17).

- (16) aya sa_j bayu tirab-a_j. landlord made sell.INF land-her 'The landlord made (sb._j) sell her_j land.'
- (17) boş karrad, ta aya i-si hazd haşış, i-hazed. most times if landlord 3M-makes cut.INF grass 3M-cut Lit: 'Usually, if the landlord makes (sb._j) cut the grass, he_j cuts it.' 'Most people cut the grass if the landlord makes them (do so).'

Analysis. We capture the asymmetry in (19) by positing that the indefinite, embedded agent in 'make'-causatives is present as a free variable x_i , (18a-18b), generated in the Voice⁰, and bound by text-level Existential Closure (Heim 1982). With no quantificational force of its own, it gets bound either by being under the scope of an unselective quantifier in the sentence, e.g. *if*-clauses, adverbs, or in their absence by an \exists on texts. This analysis also captures the possibility of e.g. 'cross-sentential anaphora' or 'donkey sentences' with this construction. Voice and *vP* combine via Predicate Modification with both being of type $\langle s,t \rangle$.

The subsequent pronoun(s) can be licensed by virtue of being co-indexed with the agent variable on Voice⁰ and being bound by the same operator, e.g. \exists , sketched roughly as (18a). A non-co-indexed pronoun variable gets reference from context.

- (18) a. 
- b. $\lambda e. \text{AGENT}(i, e)$

(19)

	anaphors	pronouns
active	✓	✓
<i>make-caus.</i>	*	✓
passive	*	*

- (20) $\lambda e. \exists x. \text{AGENT}(x, e)$

Passives, however, have an \exists over the unexpressed agent, internal to Voice, (20), thus cannot bind elements outside Voice. Anaphors and depictives further require a projected binder.