Affectedness and Psych Predicates in Marori and beyond

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I will discuss morphosyntactic properties of affectedness in Marori (also known as Morori/Moraori; ISO 639-3: mok; a subgroup-level isolate, TNG/Papuan, 16 fluent speakers) and beyond, with particular attention to the principles governing the morphosyntax-morphosemantic interface, contributing to the debate as to what extent syntactic argument structures are (morpho)lexically determined or constructed in syntax (cf. Müller and Wechsler 2014). The data from psych verbs in Marori highlights the role of argument-structure from the lexicon, and also provides evidence for syntactically constructed transitivity. This may give rise to mismatches in transitivity across different layers of structure (semantics, morphology and syntax). Marori provides motivation for separating argument structure from surface valence, supported by LFG (Bresnan 2001) and HPSG (Sag, Wasow, and Bender 2003).

Marori shows evidence for the two subclasses of psych predicates known in the literature (Experiencer-Subject and Experiencer-Object predicates; ESP and EOP, respectively). However, it furthermore shows a distinction between agentive and patientive ESPs. Salient properties of the patientive ESP exemplified in (1a) include its verbal morphology on the AUX verb and syntactic transitivity in the clausal syntax. In a non-psych predicate like 'hit' (1b), the OBJ argument receives prefix agreement (i-) and the SUBJ argument receives suffix agreement (-m). For a patientive ESP like 'afraid' (1a), its verbal AUX morphology is essentially 'transitive' in showing both SUBJ and OBJ affixes. However, this ESP is actually morphologically intransitive as both affixes are co-referential, marking SUBJ. This is one of the salient morphological properties of the middle construction in Marori, in addition to the AUX root form of -ngg(V)- (with V being a harmonized vowel). For this and other reasons, such as the constraints on argument marking by =i, AUX selection, aspectual properties of dynamicity, controllability, and telicity, I will argue that inflected verbal morphology in Marori is essentially morphosemantic, rather than morphosyntactic. Prefixal and suffixal exponents are not, strictly speaking, OBI and SUBJ marking respectively; they encode asymmetric paired properties associated with the general notion of affectedness and controllability, where causation and sentience/agentiveness (causer, agentive vs. causee, patientive) and change (undergoing change of a state/location/existence vs. stationary relative to movement/change) are significant; cf., proto-role properties (Dowty 1991).

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(1).a. na (koro) sira i-ngg-ra-du b. pa=na=i ter=i-mo-m

1SG dog afraid 1SG-AUX-DUR-1SG.PRES FUT=1SG=U hit=1SG-AUX-3PL.FUT

'I am afraid (of the dog) (at the moment of speaking).' "They will hit me.'
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Nevertheless, SUBJ and OBJ are relevant grammatical relations in Marori, both lexically determined and analytically constructed. Evidence for this comes from two inter-related constraints in middle-active alternations associated with psych verbs. Firstly, a patientive ESP allows a transitive middle structure, as in (1a) where OBJ shows up in syntax without OBJ agreement on the AUX. The morphologically intransitive middle is syntactically ambitransitive, allowing an optional OBJ.

Secondly, the agentive ESP such as kamaen 'angry' can appear in the intransitive middle structure (with -nggV-), but does not allow an optional free OBJ NP; e.g. ka '2SG' is unacceptable in (2a). To be acceptable, it must appear with a different auxiliary, the active-transitive -pndV-, as in (2b). Here the transitive construction allows both ESP and EOP readings, whereas the same transitive construction of NP+NP+AUX:pndV with a patientive psych predicate sira 'afraid' has only the EOP reading (3). The (im)possibility of ambiguity associated with the same constructional pattern suggests the significance of lexical (sub)classes (of psych predicates) in the argument structure. The Marori pattern is parallel to the polysemous causative/applicative morpheme, e.g. -i in Indonesian (Arka et al. 2009) where an agentive psych predicate like marah 'angry' results in derived -i applicativisation (ESP) marahi 'angry with X/*make X angry' whereas a patientive/stative predicate results in -i causativisation, e.g. sakit 'painful' $\rightarrow sakit$ -i 'hurt/make X feel pain'.

- (2). a. pa=na (*ka) kamaen i-nggo-ru b. pa=na ka=i kamaen komdoru soon-1SG 2SG angry 1SG-AUX.NPL-1SG.FUT soon=1SG 2SG=U angry k-pndo-ru 'I'll be angry (*with you).' (ESP reading) 2SG-AUX-1SG.FUT i) 'I'll be angry with you.'' (ESP reading)
 - ii) 'I'll make you angry.' (EOP reading)
- (3). efi hos purfam=i sira panda that ghost person=U scared 3.AUX.3NPL.PRES i)* 'The ghost is scared of people.' (ESP reading) ii) 'The ghost makes people scared.' (EOP reading)

To account for the intriguing psych verb constraints in argument realisations in Marori (and beyond), I propose that verbal morphology serves a partial mapping function in complex constructive strategies within the mapping mechanism. Adopting (G)PFM (Generalised Paradigm Function Morphology) (Stump 2001, Spencer 2010) within the parallel structure model of LFG (easily couched within HPSG), I will illustrate that the inflected auxiliary has a set of morphosemantic features. An AUX like ingradu (1a) (with both patientive (U) and agentive (A) exponents) contains co-indexed referential features {1 sg} associated with the paired A vs. U features, such that the same referent is interpreted as partly in control of the situation (i.e., as both A and U). The mapping mechanism includes both semantic and syntactic PF (Paradigm Function) mapping (PF.syn and PF.sem), formulated in (2). The mapping is regulated and constrained by AUX selection, co-indexation, and other general principles of argument ranking, not shown here. The A and U morphological exponents are associated with A and U features, whose co-referentiality triggers the PF.syn and PF.sem in (2): A-U features are linked to a single U experiencer (U:exp), which is therefore also mapped onto SUBJ in syntax. In effect, verbal morphology regulates the linking of U:exp to SUBJ, saying nothing about the stimulus/theme argument (if any). The analysis correctly captures the fact that, if overtly expressed, the stimulus must be expressed as OBJ, rather than SUBJ. It also captures the transitivity mismatch: a morphologically middle intransitive form, parasitic to transitive morphology, but syntactically ambitransitive as the same form can be used in a transitive or intransitive valence structure (e.g., indicated by bracketing *koro* 'dog' in (1)).

(2) a. PF.syn(
$$\langle X, \sigma:\{[U:1.sg] [A:1.sg]\}\} = \langle iXdu, \sigma':\{(\uparrow SUB]):1.sg\} \rangle$$

b. PF.sem ($\langle X, \sigma:\{[U:1.sg] [A:1.sg]\}\} = \langle iXdu, \sigma':\{U:exp:1.sg\} \rangle$

Also key to the proposed analysis is the treatment of Marori auxiliaries as light verbs, with their own argument structures encoding affectedness. Building on earlier insights on transitivity and causativisation/applicativisation (Jackendoff 1990, Alsina 1992, Butt 1995, among others), the AUX –nggV- is analysed as a three-place middle-voice auxiliary predicate lexically specifying its U being fused with the embedded experiencer argument. The fused arguments must be thematically similar. The ambitransitive structure in (1) can be informally represented as having the parallel structure in (4). The colour coding shows multiple exponents of the same information and the portmanteau nature of the exponents; e.g. –du glossed as '1SG.PRES' also carries durative aspectual meaning. Crucially, sira 'afraid' has a patientive experiencer argument specification, naturally fusing itself with the semantically similar matrix (U) argument (linked to SUBJ as imposed by the PF.syn in (2a)). An agentive psych predicate like kemaen 'angry' would have [exp:agt] in its a-str specification. Being dissimilar, it is not fusible with the matrix U; a different AUX, namely pndV (cf. (3a)) is required. The full paper will detail the principles of argument fusion, and precise representations of the ambiguous sentences of the type in (2b) in Marori, and similar patterns in Indonesian languages such as Balinese and Indonesian.



References

Alsina, Alex. 1992. "On the argument structure of causatives." Linguistic Inquiry no. 23 (4):517–555.

Arka, I Wayan, Mary Dalrymple, Meladel Mistica, Suriel Mofu, Avery Andrews, and Jane Simpson. 2009. "A linguistic and computational morphosyntactic analysis for the applicative -i in Indonesian." In *The Proceedings of the LFG 09 Conference*, http://cslipublications.stanford.edu/LFG/14/lfg09toc.html, edited by Miriam Butt and T. H King, 85-105. Cambridge.

Bresnan, Joan. 2001. Lexical functional syntax. London: Blackwell.

Butt, Miriam 1995. The Structure of Complex Predicates in Urdu. Stanford: CSLI Publications.

Dowty, David. 1991. "Thematic Proto-roles and Argument selection." Language no. 67:547-617.

Jackendoff, Ray. 1990. Semantic Structures. Cambridge, Massachusetts: MIT Press.

Müller, Stefan, and Stephen Wechsler. 2014. "Lexical approaches to argument structure." *Theoretical Linguistics* no. 40 (1–2):1–

Sag, Ivan A, Thomas Wasow, and Emily M Bender. 2003. *Syntactic theory: a formal introduction (second edition)*. Stanford: CSLI. Spencer, Andrew. 2010. "Factorizing lexical relatedness." *Linguistische Berichte Sonderheft* (17).

Stump, Gregory T. 2001. Inflectional Morphology: a theory of paradigm structure. Cambridge: Cambridge University Press.