Sign-spatiality in Kata Kolok

How a village sign language of Bali inscribes its signing space (Radboud University Nijmegen, 2012)

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From its inception, the field of sign linguistics has been pre-occupied with the linguistic significance of sign-spatial mapping, and this thesis builds on this long-standing tradition (see for example Supalla 1978; Poizner, Klima & Bellugi 1987; Engberg-Pedersen 1993; Emmorey & Reilly 1995; Taub 2001; Liddell 2003; Perniss 2007). This dissertation presents new data from Kata Kolok, a sign language which emerged in a village community of North Bali and has been the primary means of communication for at least five generations of deaf, native signers (Marsaja 2008; this thesis). Supported by extensive periods of linguistic fieldwork, corpus analysis, as well as targeted, stimulus-based elicitation, it argues that Kata Kolok signers structure their spatial reference system preferentially on the basis of geographical locations, and that they do not utilise the dimensions of the signing space in order to talk about non-spatial concepts.

Part II starts of by summarising what is currently known about Kata Kolok from genetic, anthropological, and sociolinguistic studies that began in the mid-1990s. These initial descriptions form the basis for the methodological choices that led to the creation of a Kata Kolok corpus, which currently consists of almost 150 hours of video data. This digital archive includes sections devoted to spontaneous interaction, culturally entrenched narratives, as well as longitudinal recordings of first language acquisition, and deaf-hearing interactions.² The description of research methodology more generally is followed by a grammatical sketch of

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^{2.} The metadata can be viewed at http://hdl.handle.net/1839/00-0000-0000-0008-CB2B-4@view.

the structural aspects of Kata Kolok. Along the way, some of the features that are of particular interest in terms of linguistic typology, sign language typology, and cross-modal contact are highlighted. Despite the fact that Kata Kolok has been in intimate contact with spoken Balinese from its incipience, the languages have distinct constituent orders with respect to basic transitive clauses, the placement of negation, as well as numeral-noun and adjective-noun orders. The languages also exhibit marked differences in the degree of lexicalisation in semantic fields such as colour and kinship. From the perspective of sign language typology, one of the most striking findings is the absence of spatial modification of transitive verbs.

Part III begins with presenting a brief overview of the ways in which signspatial mappings have been framed as well as the linguistic evidence that has been offered in support of these analyses. Sign-spatial mapping constitutes a diverse range of phenomena that can and should be analysed at different levels of linguistic structure. Part III coins the term 'sign-spatiality' to delineate the specific type of sign-spatial mapping which this thesis deals with: the ways in which signers systematically employ the degrees of spatial freedom of signs to indicate meanings that are ultimately resolved by the interplay between discourse and grammar. Based on a comparison of sign-spatial structures in Kata Kolok and other sign languages, it is shown that the use of sign-spatiality in Kata Kolok discourse is largely limited to absolute spatial reference. This observation leads to the description of alternative, non-sign-spatial structures that are used in Kata Kolok in the domains of person and time reference. On a par with users of previously documented sign languages, Kata Kolok signers may use list buoys in anaphoric reference, as well as role shift as a means of deferred reference. As in other sign languages, tense is not marked on verbs in Kata Kolok, but the past-future distinction is not usually marked adverbially either leaving temporal reference predominantly based on pragmatic inference. On the whole, Kata Kolok's referential structures are primarily resolved by extra-linguistic elements, and it is hypothesised that this system may be facilitated by the dense social networks within the signing community.

Part IV addresses the nature of sign-spatiality as it relates to spatial Frames of Reference described by Levinson (2003). It raises the issue of sign-spatial significance: due to the fact that signs themselves are essentially spatial, and sign-spatiality is exclusively used as a semiotic strategy in Kata Kolok Figure-Ground constructions, an interpretation in any of the three Frames of Reference is available at any time. This part of the thesis is centred on the analysis of spontaneous narratives, and structured elicitation sets known as the Nijmegen Space Games. The results corroborate previous observations that Kata Kolok signers predominantly commit to an absolute Frame of Reference. This means that Kata Kolok signers foreground absolute spatial relations between elements of a scene being described, and generally background their own view of the scene. In contrast to signers of

previously described sign languages, Kata Kolok interlocutors do not perform a mental rotation of simultaneous classifiers when interpreting them. The analysis also shows that deaf Kata Kolok signers adopt variable strategies in solving spatialcognition tasks. This finding is taken to indicate that the choice for a particular Frame of Reference in such cases is influenced by additional eco-cultural factors.

Part V examines pointing signs, which have been traditionally analysed according to their sign-spatial reference to locations and associated entities. Corpus analysis of over one thousand points shows that one in six manual signs is a pointing sign in Kata Kolok, and that pointing signs serve a wide variety of functions, including reference to locations, individuals, colours, body parts, and times of day. Across these functions it is found that the sign-spatial properties of pointing signs are rarely the sole determining factor in their interpretation. Instead, I argue that context, the construction in which a pointing sign occurs, and the formal properties of the pointing sign itself, as well as simultaneous non-manual marking on the face, cue the meaning of a pointing sign. The interpretation of pointing signs in Kata Kolok thus takes into account multiple, composite and incremental signals. This section of the thesis also discusses the grammatical nature of Kata Kolok pointing system as reflected by the degree to which they are morphemised (have systematic form-meaning mappings) and syntactically integrated (in term of filling specific syntactic slots in the utterance). While similar patterns are attested in the literature on pointing gestures in both signed and spoken languages, I argue that we need to compare pointing gestures and pointing signs on equal ground, and this means including all aspects of their semiotic ecologies. Preliminary observations indicate that pointing signs and pointing gestures differ in their relative frequency, communicative load, degree of functional diversification, and compulsoriness, because they are integrated into different semiotic ecologies.

While this thesis aims to provide the reader some insights into the sign-spatial phenomena in the language, the data collection and analysis have not systematically targeted the factors that may have led to Kata Kolok's unusual sign-spatial fingerprint. Such factors could include the impact of Balinese co-speech gesture, L2 learner effects caused by the larger group of semi-fluent signers, and possible inter-generational differences as resulting from the language's relatively limited time depth. Although these aspects of Kata Kolok fall beyond the scope of this thesis, I touch upon them by comparing the findings from Kata Kolok to the literature on Balinese gesture, as well as other (village) sign languages and spoken languages in sections pertaining to these issues in the final thesis part in particular. These cross-linguistic comparisons aim to enable the reader to situate the findings from Kata Kolok in the context of sign language typology. I argue that, on a par with spoken language typology, the analysis of sign languages needs to take into account cross-linguistic variation in the domain of spatial language as expressed

by sign-spatial constructions. These descriptions could ultimately serve a crossmodal typology — the empirically grounded investigation of intramodal and intermodal differences between both natural language modalities — in the domain of space, in particular.

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