The grammaticalization of Chinese *ba*: grammaticalization, 'lateral' grammaticalization and case theory:

In this paper, I propose to analyse the grammaticalization of Chinese co-verbs within Minimalism using Roberts and Roussou (R & R) (1999, 2003), Roberts (2010) and van Gelderen (2011) as my theoretical models. There have been proposals that Chinese co-verbs should be analysed as case-markers (Feng (2000, 2005), van Gelderen (2011)), which are morphological spell-outs of K(case) in generative syntax, given that they are markers of subcategorisation and are hence equivalent to morphological case (Bittner and Hale (1996:4), van Kemenade and Vincent (1997:18ff), Anderson (2006:51-53, 211), Butt (2009:39), Moravcsik (2009:231-232)) when morphological case is the original characterisation of K(case) (Lamontagne and Travis (L & T) (1986, 1987, 1992)). The grammaticalization of K(case) constitutes a new functional category for testing the Minimalist hypotheses on grammaticalization, since R & R (2003) only analyse the grammaticalization of auxiliary verbs (T), complementisers (C) and determiners (D). Moreover, the grammaticalization of Chinese co-verbs is in this paper argued to be related to Simpson and Wu (S & W) (2002) and Wu's (2004) 'lateral' grammaticalization, which has important consequences on modern case theory. It is impossible to analyse all Chinese co-verbs, and so I shall focus on Chinese *ba*.

In Tse (2012a, b, c, 2013a, b, in review), it has been argued that 'lateral' grammaticalization, analysed by S & W (2002) and Wu (2004) in Minimalism, is a similar yet different phenomenon compared to grammaticalization. R & R (2003:2-4) and van Gelderen (2011:4) argue that grammaticalization involves 'structural simplification' where 'simplicity' is defined by the former as the reduction of 'feature syncretisms' (i.e. 'the presence of more than one formal feature in a given structural position: H [+F, +G…]' (R & R (2003:201), Roberts (2010:49)) and by the latter as the presence of uninterpretable features in lieu of interpretable ones (van Gelderen (2011:4, 16-17, 20-21, 41-43)). This explains why grammaticalization is so common in language typology (see e.g. Heine and Kuteva (2002)), since 'structural simplification' is argued to be a natural mechanism in language acquisition and hence in language change (R & R (2003:2-3, 15-17)). Moreover, R & R (2003:200) argue that grammaticalization always involves an 'upward shift of features'. 'Lateral' grammaticalization is coined by S & W (2002:198-202) to describe a change where one functional category (e.g. D) is re-analysed 'laterally' as another (e.g. T) with no 'upward shift of features' e.g. Chinese *de* in *shi-de* constructions (S & W (2002:169), Wu (2004:120)):

1)	wo	shi	zuotian		mai	piao	de
	I	be	yesterday		buy	ticket	DE
2)	wo	shi	zuotian		mai	de	piao
	I	be	yesterday		buy	DE	ticket

'It was yesterday that I bought the ticket.'

Such D > T re-analysis has cross-linguistic counterparts (S & W (2002:199-200), Wu (2004:149-153)), namely determiners (D) > copula verbs (T), which is a strong cross-linguistic trend (Heine and Kuteva (2002:108-109), van Gelderen (2011:chapter 4)) e.g. Chinese *shi*:

3)	qian	li	er	jian	wang	
	thousand	mile	then	see	king	
	shi	wo	suo		yu	ye
	this	I	NOMINALISER		desire	DECLARATIVE.PARTICLE

'To see the king after travelling a thousand miles, this (is) what I want.' (3a)

OR 'To see the king after travelling a thousand miles is what I want.' (3b) (Mencius, 4th century BC)

In the original constructions (1), 3a), *de* and *shi* are analysed as determiners (D) (S & W (2002:169-170), Wu (2004:120-121), Li and Thompson (L & T) (1977:420), Feng (1993:284, 2003:31-32)), whereas in 2) and 3b) they are re-analysed as T elements, since *de* in 2) is suffixed to the verb (*mai*) and expresses past tense (T(past)) (S & W (2002:170, 175), Wu (2004:127)) whereas *shi* in 3b) is a copula verb (L & T (1977:427), Feng (1993:301, 2003:30-35)). This D > T re-analysis conforms to R & R's 'reduction of feature syncretisms', since as determiners Chinese *de* and *shi* hold an *Agree* relation with an (empty) nominal complement and therefore incur an extra feature place-holder (S & W (2002:189), Wu (2004:140-142), L & T (1977:422-423)), whereas as T elements this *Agree* relation is lost (S & W (2002:190), Wu (2004:140-142)). Furthermore, as determiners they hold interpretable phi-features ([i-phi]), whereas as T elements they hold uninterpretable ones ([u-phi]), which conforms to van Gelderen's 'simplicity'. This explains the cross-linguistic distribution of D > T re-analysis. However, *de* and *shi* end up holding T features that are not re-analysed from below but from pragmatic implicature: *shi-de* constructions (1) imply that the embedded action (*mai piao* 'to buy ticket') has already occurred, which gives rise to T(past) in 2) (S & W (2002:175-177)), and the implied identity between the apposed constituents in 3a) gives rise to the copula verb in 3b).

Tse (2012a, b, c, 2013a, b, in review) argues that these formal differences explain the empirical differences between grammaticalization and 'lateral' grammaticalization, since while 'phonological weakening' and 'univerbation' are regularly displayed by the former (R & R (2003:218-232)), they do not seem to occur in the latter: Chinese *de* is toneless both as a D and as a T element with no perceptible phonetic difference (S & W (2002:173-174, 190-194)), and there is no evidence for copula verbs derived from determiners undergoing 'phonological weakening' or 'univerbation' either (Chinese *shi* is still phonologically and syntactically full (toned) in modern Mandarin). 'Phonological weakening' and 'univerbation' in grammaticalization are argued to be caused by 'upward feature analysis', which is intuitively sound since 'upward feature analysis' necessarily causes 'syntactic compression' and 'phonological weakening'/'univerbation'. The T elements in 'lateral' grammaticalization hold features that are derived from pragmatics and hence do not undergo 'compression'.

Modern Chinese *ba* is analysed as a functional element in little v by Li (2006:408-413) and Huang, Li, Li (2009:175-178), and Feng (2005:7, 10) argues that Chinese co-verbs are case-markers (K) merged under little v, since there is a thematic relationship between the co-verb and the main verb, namely K(accusative) in the case of *ba*, as it marks the object of the main verb (4b):

4)	xian	chang	ba	qin	nong
	leisure	often	BA	lute	play

'In my leisure, I often take a lute and play it.' (4a)

'In my leisure, I often play a lute.' (4b) (Ji Du Shi Yi, 8th century AD)

Feng (2002:127-129) argues that *ba* is originally a lexical verb in a serial verb construction (4a), and when it is re-analysed as a case-marker (K) (4b), it undergoes 'structural simplification', since it loses its verbal argument structure and the VP that it heads (*ba qin*) is re-analysed as a KP with the result that there is only one lexical verb left (*nong*) (4b). Furthermore, as a case-marker (K), *ba* holds features that are not re-analysed from a lower position, since K(case) is postulated to represent morphological case (L & T (1986:57-58, 1992:159-161)), and given that Chinese has never had morphological case, it should not have K(case) in the first place. The K(case) features held by *ba* are instead derived from pragmatic implicature, namely the possibility to interpret *ba*, an originally lexical verb (4a), as an accusative case-marker for the second (main) verb (4b). The grammaticalization of *ba* as a case-marker (K) therefore conforms not only to R & R's 'structural simplification' but also to Tse's characterisation of 'lateral' grammaticalization, which is supported by its cross-linguistic distribution (Zou (1995:79-80), Heine and Kuteva (2002:289-290)) as well as its lack of 'phonological weakening' and 'univerbation', since all Chinese co-verbs are still phonologically and syntactically strong (toned) in modern Chinese. This analysis suggests that K(case) as a functional category does not exist universally for all languages and should not be postulated for languages that do not have morphological case (e.g. Chinese), since K(case) seems to be 'laterally' inferred from pragmatics in the grammaticalization of case-markers in a language that does not have morphological case. This is a radical revision to various attempts to equate K(case) with abstract case and give it universal status (L & T (1986:51-52, 1992:157, 166), Weerman (1997:441-448)). Diachronic syntax, such as grammaticalization and 'lateral' grammaticalization', can shed light on synchronic syntax, namely case theory.

Bibliography:

Anderson, J. M. (2006): *Modern Grammars of Case: A Retrospective.* Oxford: Oxford University Press.

Bittner, M. and Hale, K. (1996): 'The Structural Determination of Case and Agreement'. *Linguistic Inquiry* 27(1):1-68.

Butt, M. (2009): 'Modern Approaches to Case: An Overview', in Malcukov, A. and Spencer, A. (eds), *The Oxford Handbook of Case.* Oxford: Oxford University Press, pp. 27-43.

Feng, S-L (1993): 'The Copula in Classical Chinese Declarative Sentences', in *Journal of Chinese Linguistics* 22(2):277-311.

Feng, S-L (2000): ' ''Xie maobi'' yu yunlü zufa de dongci bingru'. *Yuyan jiaoxue yu yanjiu* 1:25-31.

Feng, S-L (2002): 'Prosodic structure and the origin of *ba* Construction', in Triskova, H. (ed), *Tone, Stress and Rhythm in Spoken Chinese, Journal of Chinese Linguistic* monograph 17:119-168.

Feng, S-L (2003): 'Gu Hanyu panduan ju zhong de xici'. Research in Ancient Chinese Language 58(1):30-36.

Feng, S-L (2005): 'Qingdongci yiwei yu gujin hanyu de dongbin guanxi [Light verb movement in Modern and Classical Chinese]'. *Yuyan kexue* [Linguistic Science] 1:3-16.

Gelderen, E. Van. (2011): *The Linguistics Cycle. Language Change and the Language Faculty.* Oxford: Oxford University Press.

Heine, B. and Kuteva, T. (2002): *World Lexicon of Grammaticalization.* Cambridge: Cambridge University Press.

Huang, J., Li, A. and Li, Y. (2009): *The Syntax of Chinese.* Cambridge: Cambridge University Press.

Kemenade, A. van and Vincent, N. (1997): 'Introduction: parameters and morphosyntactic change', in Vincent, N. and Kemenade, A. van (eds) *Parameters of morphosyntactic change.* Cambridge: Cambridge University Press, p. 1-25.

Lamontagne, G. and Travis, L. (1986): 'The Case Filter and the ECP', in *McGill Working Papers in Linguistics* 3.2:51-75.

Lamontagne, G. and Travis, L. (1987): 'The Syntax of Adjacency', in *Proceedings of the West Coast Conference on Formal Linguistics* 6:173-186.

Lamontagne, G. and Travis, L. (1992): 'The Case Filter and Licensing of Empty K'. *Canadian Journal of Linguistics* 37(2):157-174.

Li, A. (2006): 'Chinese *Ba*', in Everaert, M. and van Riemsdijk, H. (eds), *The Blackwell Companion to Syntax: Volume I*, Blackwell, pp. 374-468.

Li, C. N. and Thompson, S. A. (1977): 'A Mechanism for the Development of Copula Morphemes', in Li, C. (ed) *Mechanisms of Syntactic Change,* Austin and London: University of Texas Press, p. 419-444.

Lightfoot, D. (1999): *The Development of Language: Acquisition, Change, and Evolution.* Oxford: Blackwell.

Lightfoot, D. (2006): *How New Languages Emerge.* Cambridge: Cambridge University Press.

Moravcsik, E. A. (2009): 'The distribution of case', in Malcukov, A. and Spencer, A. (eds), *The Oxford Handbook of Case.* Oxford: Oxford University Press, pp. 231-245.

Roberts, I. (2010): 'Grammaticalization, the clausal hierarchy and semantic bleaching'. In Traugott, E. C. and Trousdale, G. (eds), *Gradience, Gradualness and Grammaticalization.* John Benjamins Publishing Company, p. 45-73.

Roberts, I. and Roussou, A. (1999): 'A formal approach to ''grammaticalization'' '. *Linguistics* 37:1011-1041.

Roberts, I. and Roussou, A. (2003): *Syntactic change. A Minimalist approach to grammaticalization.* Cambridge: Cambridge University Press.

Simpson, A. and Wu, Z. (2002): 'From D to T – determiner incorporation and the creation of tense.' *Journal of East Asian Linguistics* 11:169-202.

Tse, K. (2012a): 'What is 'lateral' grammaticalization? ', Poster presented at the Seventh 'Language at the University of Essex Postgraduate Conference' (LangUE), University of Essex, Thursday 14th June.
http://www.2shared.com/file/CK--0XGC/What_is_lateral_grammaticaliza.html

Tse, K. (2012b): 'What is 'lateral' grammaticalization? Chinese *de* and *shi*', Paper presented at the Twentieth Annual Conference of the International Association of Chinese Linguistics (IACL-20), Polytechnic University of Hong Kong, Thursday 30th August.
http://www.2shared.com/file/mdybmyHc/What_is_lateral_grammaticaliza.html

Tse, K. (2012c): ' 'Lateral' grammaticalization and Minimalism', Paper presented at the Manchester and Salford New Researchers Forum in Linguistics, University of Manchester, Saturday 3rd November.
http://www.2shared.com/file/WxuarlXZ/Lateral_grammaticalization_and.html

Tse, K. (2013a): 'Grammaticalization and 'lateral' grammaticalization, formalism and functionalism', in *Working papers of the University of Geneva, GG@G, SWIGG 12.* http://www.2shared.com/file/Lofhxrvv/Grammaticalization_and_lateral.html

Tse, K. (2013b): 'What is 'lateral' grammaticalization?', in Languages at the University of Essex (LangUE), *Proceedings for LangUE 2012.* http://www.2shared.com/file/VmDRlAEI/What_is_lateral_grammaticaliza.html

Tse, K. (in review): ' 'Lateral' grammaticalization and Minimalism', in *Proceedings for the Manchester and Salford New Researchers Forum in Linguistics.*

Zou, Ke (1995): *The Syntax of the Chinese BA-constructions and Verb Compounds: a Morpho-Syntactic Analysis.* PhD dissertation. University of Southern California.

Weerman, F. (1997): 'On the relation between morphological and syntactic case', in Vincent, N. and Kemenade, A. van (eds) *Parameters of morphosyntactic change.* Cambridge: Cambridge University Press, pp. 427-459.

Wu, Z. (2004): *Grammaticalization and Language Change in Chinese: a Formal View.* Oxford: Oxford University Press.