POS in Mandarin and in Universal Grammar

Background: According to an influential tradition of analyses, gradable adjectives do not directly denote properties but rather denote functions from degrees to properties (type <d,et>) (Cresswell 1977) or measure functions (type <e,d>) (Bartsch and Vennemann 1973; Kennedy 1999, 2007). On both degree-based approaches, a null morpheme or type-shifter POS must be posited in order to explain how an apparently bare gradable adjective can be directly predicated of an individual with no type mismatch in order to achieve positive predication.

A potentially unsatisfying aspect of these approaches is that in the overwhelming majority of the world's languages, POS does not have any overt realization, the bare form of the adjective being used for positive predication. This is in contrast to comparative predication, which in about one-third of the world's languages is realized as an overt morpheme such as English *-er/more* (Bobaljik 2007). This suggests the generalization in (1).

(1) Universally, the comparative form of an adjective is derived from its positive form.

However, based on Mandarin data like (2) — which appears to counterexemplify (1) — it has been suggested that in Mandarin the positive form is morphologically marked (e.g., Kennedy and McNally 2005:fn5), which could be taken as evidence for the existence of POS as a real linguistic object.

(2) a. zhangsan gao.
Zhangsan tall
'Zhangsan is taller (than someone known from context).'

b. zhangsan **hen** gao.
Zhangsan very tall
'Zhangsan is tall.'

Purpose: This paper argues that not only does Mandarin data like (2) not counterexemplify (1), the proper analysis of the Mandarin data actually *depends* on the status of (1) as a real universal claim.

Details: For concreteness, I assume the <d,et> analysis of gradable adjectives, and in order to derive (1), I propose the following universal markedness principle:

(3) **Universal Markedness Principle:** Universally, comparative semantics is provided by an explicit morpheme in syntax which is overt in some languages and null in others, whereas positive semantics is provided by a type-shifting rule that does not project in syntax.

This makes the prediction that in languages with overt comparative morphology, comparatives are marked with respect to the positive form, and in languages with null comparative morphology, the comparative and positive forms are homophonous, but — crucially — there can be no language in which the positive form is marked but the comparative form is not.

To explain the Mandarin data, I use the independently motivated proposals in (a) and (b) to reformulate the Mandarin facts in terms of the asymmetry in (4).

a. Data from negation, polar interrogatives, embedded clauses, among other constructions, show that despite what (2) would lead us to believe, Mandarin does have a covert way of achieving

positive semantics (henceforth, POS), subject to certain licensing conditions (Liu 2009).

b. Data from a variety of comparative constructions support the conclusion that Mandarin has a null comparative morpheme (henceforth, COMP) (Grano ms).

(4)	a.	*zhangsan	POS	gao.	*Intended*: 'Zhangsan is tall.'
	b.	zhangsan	COMP	gao.	= 'Zhangsan is taller.'
	c.	zhangsan	hen	gao.	= 'Zhangsan is tall.'

To explain the asymmetry in (4), I propose that Mandarin has a constraint — derivable from more general principles of grammar — against AP being the direct complement to T(ense):

(5) **Mandarin Tense-Adjective Prohibition:** *[T AP]

Hence, *hen* has been co-opted as a semantically bleached degree adverb used to approximate positive semantics in a way that satisfies *[T AP]. In its absence, COMP is able to satisfy *[T AP] since it projects between T and AP, but POS is not, because, given (3), it does not project in syntax, and hence does not satisfy *[T AP].

Independent support: The environments in which *hen* is not required for positive interpretation are precisely those environments in which there is no potential violation of the *[T AP] constraint. This can happen when other material intervenes between T and AP (e.g., negation (6)), or when T is not projected (as in attributive uses of adjectives (7)).

(6)	zhangsan	bu	gao			
	Zhangsan	NEG	tall			
	'Zhangsan is not tall.'					*[T AP] satisfied: *hen* not required
(7)	yi	ge	congming	de	haizi	
	one	CL	smart	PRT	child	
	'a smart child'					*[T AP] satisfied: *hen* not required

Implications: Mandarin does not counterexemplify the universal generalization that comparatives are the marked member of the positive/comparative opposition; on the contrary, its proper analysis actually depends on this generalization.

Hence we can maintain (1) as a true universal claim, which in turn suggests that one of the following two statements must be true:

(i) POS is a type-shifting rule with no visibility in syntax; more generally, natural languages employ both (syntactic) null morphemes and (syntactically invisible) type-shifting rules, and to distinguish between the two options we must rely on indirect evidence.

(ii) POS does not exist; gradable adjectives directly encode properties, and their meaning in comparatives and other contexts must be derived on this basis (as in Klein 1980).

This disjunction limits the space of analytical options in ways that merit further investigation.