More students attended FASL than CONSOLE

Roumyana Pancheva, University of Southern California

In some languages, the title of this abstract cannot be rendered with a phrasal comparative (PC, (1a)); a clausal comparative (CC, (1b)) must be used instead. Three types of analysis of PCs are evaluated, and only one – the small clause analysis – is shown to be able to accommodate this observation.

1. OBSERVATION. In Bulgarian, both PCs and CCs are possible when *more* is in positions other than the subject (e.g., (2)) (CCs have an overt *wh*-operator, which PCs lack.) The DP in PCs need not be a subject (see (2b)). When *more* is part of the subject, only CCs are acceptable (see (3)). Polish and Serbo-Croatian behave like Bulgarian. Hindi and Japanese are like English in allowing the PC variant of (3).

2. THREE TYPES OF ACCOUNTS. (2.1) CCs are usually analyzed as in (4). Er QRs in the matrix clause and a wh-operator moves to Spec, CP in the than-clause. The result is the LF in (4a), where er takes two degree predicates as arguments. The than-clause is pronounced after the matrix due to extraposition or late merger. Ellipsis then leads to the PF in (4b). (2.2) PCs have received three accounts. (2.2.1) The reduction analysis (RA) holds that the than-clause is the same in PCs and CCs, but ellipsis differs (Bresnan 1973, Lechner 2001, Merchant 2006, a.o.). Typically, ellipsis of TP is implicated, as in (5), with movement of the remnant he (and possibly movement of the matrix associate she). RA is challenged by the fact that the remnant behaves as if it is part of the matrix with respect to case-licensing, anaphora, negative concord and extraction. (2.2.2) The direct analysis (DA) holds that than has a DP complement, as in (6) (Hankamer 1973, Kennedy 1999, a.o.). The PC er cannot be the same as the CC er; compare (4a) to (6a) where er combines first with an individual. Bhatt and Takahashi (2007) posit a different er in PCs (in Hindi and Japanese), which combines first with the remnant, then with a predicate of individuals and degrees, created by movement of the associate she and QR of er, and finally with the associate, in an LF as in (6b) (cf. Heim 1985, Kennedy 1999). (2.2.3) The complement to than has been claimed to be a small *clause* (Pancheva 2006). The remnant is the subject of predication and is ECM-ed by *than*, thus exhibiting the syntactic properties of a complement to a preposition. Modifying this analysis by introducing a whoperator we get (7). The wh-operator can only move up to the edge of vP, as there is no CP. The LF of (7a) is minimally different from that of (4a) and the same er is involved. At PF, the predicate of the small clause is obligatorily elided, given the unchecked wh-features of the degree operator.

3. COMPARING THE ANALYSES. (3.1) Under RA, (3) is mysterious. In both the PC and CC versions, the than-clause has the structure in a) with TP elided. The difference is only in the pronunciation of the whoperator. There is no reason why that should be obligatory in (3)/(8a) but not in (2b)/(8b) or (2a)/(8c). Moreover, in other languages the difference between PCs and CCs is reflected not in the pronunciation of the wh-operator, but in the type of than (e.g., Polish niż vs. od), yet the facts of (3) are the same. (3.2) DA too cannot explain (3). For the PC, it posits (9a), which should be just as good as (9b), the structure for the PC (2b), or as (9c), the structure for the PC (2a). QR of er from the subject of the matrix in (9a) cannot be blamed for the unacceptability, as the same QR obtains in the matrix of the acceptable CC version of (3) ((9d)). And if the associate FASL moves as well, for the licensing of ellipsis, (9d) and (9a) become even more similar. (3.3) The small clause analysis posits (10) for the *than*-clause in the PC in (3). The acceptable PC in (2b) has the structure in (10b), and the PC in (2a) has the structure in (10c). We suggest that (10a) is unacceptable because the wh-operator originates inside the subject in Spec, vP. In contrast, in (10b,c) the wh-movement originates inside the complement of v. But we also need a modification to (10a): in the Bulgarian-type languages it is not just the degree wh-operator that moves, rather the whole DP wh-many students has to move (11). This is so because these languages prohibit extraction out of subjects. Hindi and Japanese, on the other hand, allow such extraction (e.g., Stepanov 2001) and so (10a) is acceptable. (11) would be interpretable, if allowed. Yet this movement is prohibited as too local. The specifier of vP cannot target the vP as it will only recreate its original position (e.g., Abels 2003 on anti-locality in movement). In the CC version of (3) the problem does not arise since the subject DP wh-many students moves to Spec, CP. Finally, as the title suggests, English allows what appears to be the PC version of (3). Yet, since English does not allow extraction out of subjects, this must be a case of a CC (as also suggested by Bhatt and Takahashi 2007).

(1)	She attended more FASLsa than him.b than he did.	(PC) (CC)		
(2)	a. Ivan poseti poveče k Ivan attended more c 'Ivan attended more conferenc	conferencii ot conferences that ces than Maria (did)	(kolkoto) how-many '.	Maria. Maria
	b. Ivan poseštava FASL p Ivan attends FASL n 'Ivan attends FASL more often	oo-često ot nore-often than n than CONSOLE'	(kolkoto) h how-much	CONSOLE. CONSOLE.
(3)	Poveče studenti posetixa more students attended 'More students attended FASL that	FASL ot ⁵ FASL than an CONSOLE'.	*(kolkoto) how-many	CONSOLE. CONSOLE
(4)	<i>er</i> ₁ [she attended d ₁ -many FASLs] than [$_{CP} wh_2$ he did attend d ₂ -many FASLs] a. [<i>er</i> λd_2 [he did attend d ₂ -many FASLs]] λd_1 [she attended d ₁ -many FASLs] b. <i>er</i> ₁ [she attended d ₁ -many FASLs] than [$_{CP} wh_2$ he did attend d₂-many FASLs]			
(5)	er_1 [she attended d ₁ -many FASLs] than [_{CP} wh_2 he ₃ [_{FP} x_3 attended d ₂ -many FASLs]]			
(6)	 er₁ [she attended d₁-many FASLs] than [_{DP} him] a. [er [him]] λd₁ [she attended d₁-many FASLs] b. she [[er [him]] λd₁ λx₂ [x₂ attended d₁-many FASLs]] 			
(7)	<i>er</i> ₁ [she attended d ₁ -many FASLs] than [him ₃ wh_2 [_{vP} x ₃ attend d ₂ -many FASLs]] a. [<i>er</i> λd_2 [he attend d ₂ -many FASLs]] λd_1 [she attended d ₁ -many FASLs] b. <i>er</i> ₁ [she attended d ₁ -many FASLs] than [him ₃ wh_2 -[_{vP} x ₃ attend d ₂ -many FASLs]]			
(8)	a. (*) than $[_{CP} wh_2 \text{ CONSOLE}_3 [_{\overline{TP}} - d_2 - \text{many students attended } x_3]]$ b than $[_{CP} wh_2 \text{ CONSOLE}_3 [_{\overline{TP}} - \text{Ivan attends } x_3 - d_2 - \text{often}]$ c than $[_{CP} wh_2 \text{ Maria}_3 [_{\overline{TP}} - x_3 - \text{attended} \cdot d_2 - \text{many conferences}]]$			
(9)	 a. * FASL [[er [CONSOLE]] λd₁ λx₂ [_{TP} d₁-many students attended x₂]] b. FASL [[er [CONSOLE]] λd₁ λx₂ [_{TP} Ivan attends x₂ d₁-often]] c. Ivan [[er [Maria]] λd₁ λx₂ [_{TP} x₂ attended d₁-many conferences]] d. er₁ [_{TP} d₁-many students attended FASL] 			
(10)	 a. * than [CONSOLE₃ wh₂-[_{vP}-d₂-many students attended x₃]] b than [CONSOLE₃ wh₂-[_{vP}-Ivan attends x₃-d₂-often]] c than [Maria₃ wh₂-[_{vP}-x₃ attended d₂-many conferences]]] 			
(11)	* than [CONSOLE ₃ wh ₂ -mar	ny students [_{vP} d₂-m	any students at	tended x ₃]]
ABELS, K. (2003). "Successive Cyclicity, Anti-locality, and Adposition Stranding" PhD thesis, UConn. * BHATT, R. AND S. TAKAHASHI (2007). "Direct Comparisons: Resurrecting the Direct Analysis of Phrasal Comparatives" SALT 17. * BRESNAN, J. (1973). "The Syntax of the Comparative Clause Construction in English," <i>Linguistic Inquiry</i> 4, 275-343. * HANKAMER, J. (1973). "Why There are Two Than's in English" CLS 9, 179-191. * HEIM, I. (1985). "Notes on Comparatives and Related Matters," ms, University of Texas,				

Austin. & KENNEDY, C. (1999). Projecting the Adjective: The Syntax and Semantics of Gradability and Comparison. Garland Press, NY. & LECHNER, W. (2001). "Reduced and Phrasal Comparatives". NLLT 19, 4, 683-735. & MERCHANT, J. (2006). "Phrasal and Clausal Comparatives in Greek and the Abstractness of Syntax" Ms. University of Chicago. & PANCHEVA, R. (2006). "Phrasal and Clausal Comparatives in Slavic" FASL 14, 236-257. STEPANOV, A. (2001). "Cyclic Domains in Syntactic Theory." PhD thesis, UConn.