WH-SCOPE MARKING CONTINUUM: A LOOK FROM RUSSIAN, POLISH AND UKRAINIAN

- **1. Introduction**. Slavic languages have constructions consisting of two interrogative clauses: (i) a clause with a fronted *wh*-adverbial, 'what' (Bulgarian (1), Polish (3), Russian, Ukrainian (2)) or 'how' (Czech (4), Serbo-Croatian), and (ii) a *wh*-clause with a fronted *wh*-phrase. Due to the superficial similarities, such constructions are often thought (Fanselow 2006) to instantiate *wh-scope marking* (Lutz et al. 2000), which is a blanket term for minimally bi-clausal structures that semantically are roughly equivalent to long extraction. Stepanov (2000) argues that Russian and Polish constructions closely resemble *wh*-scope marking in Hindi. Focusing on data from Russian, Polish and Ukrainian, I show that Slavic constructions constructs in several aspects with canonical scope marking in German, Hindi and Hungarian. They all represent parenthesis rather than genuine subordination and exhibit a range of semantic properties that disqualify Stepanov's approach. I further show that there are subtle differences between these constructions in the three languages.
- **2.** Wh-scope marking (WSM). In WSM, wh-phrase in the wh-clause takes scope over the entire complex sentence and determines what the whole question is about. In many WSM languages (Child English (5), German, Hungarian, Romani), the other clause contains a meaningless wh-phrase that is called scope marker. Starting from (van Riemsdijk 1982), one family of approaches (Direct Dependency, DD) analyses this phenomenon as a partial movement completed at LF when the scope marker is replaced by the wh-phrase, which makes the LF identical to that of long extraction. Within another family of approaches due to Dayal (1994, 2000) (Indirect Dependency, ID), the two clauses are coindexed and scope marker is a quantifier over propositions whose interpretation is restricted by the wh-clause.
- **3. Core facts**. The chart in (6) portrays Russian, Polish (data from Lubanska 2005) and Ukrainian in the big picture of WSM languages, based on Beck and Berman (2000). Slavic languages seem to mostly pattern with Hindi, though not completely, e.g. further embedding and cross-clausal dependencies (7) are out. Stepanov neglects these differences and further claims that Russian and Polish have a Hindi-type WSM, analysed along the lines of Dayal's ID. The major argument against a movement-based approach (Beck and Berman 2000) is possibility of WSM over polar questions.
- **4. Against ID**. I follow Stepanov in that DD is implausible for Slavic. However, I argue that an ID-analysis is not a good option either. Unlike DD, Dayal (2000)'s system is flexible enough to unite under the same umbrella different syntactic phenomena, from subordinate structures to sequential scope marking, illustrated by English translations throughout. In Dayal's view, these constructions should differ only in the syntactic make-up while their semantics is supposed to be uniform across languages. Another crucial point is that the scope marker should quantify over propositions elsewhere in a language. I argue that this is not the case for Russian, Polish and Ukrainian. First, the set of predicates used in the kak/jak-clause does not form a natural syntactic class. In Russian and Polish (8), this set includes only neutral verbs of thinking such as 'think', 'suppose' and 'consider' but not their more semantically and pragmatically loaded counterparts such as 'fancy'. Ukrainian, along with verbs of thinking, allows 'say' but not its more semantically complex counterpart 'claim' (9). Second, 'how' as a scope marker is typologically rare. Besides alleged cases in Slavic, Warlpiri is another language that uses 'how' in this function (Legate 2002). Warlpiri distinguishes between quantification over individuals and quantification over propositions: 'what' is used to question an individual as in 'What / *how did you see?', while 'how' is used to question propositions as in 'How / *what did you say /ask?'. In addition, 'how' but not 'what' is used as a reply to something incomprehensible, as a request to repeat the information. There is no such contrast in Slavic. Russian and Polish, just like English, ban 'how' where Warlpiri uses it. In colloquial Ukrainian 'how' is also possible. To sum up, there is little empirical support for an ID analysis: some variation cannot be reduced to syntax and kak/jak, the alleged scope marker, cannot quantify over propositions.
- **5. Parenthetical analysis.** Many properties of the constructions in question fall out under the assumption that they are parentheticals (e.g. Lubanska 2005 for Polish). Lack of cross-clausal dependencies such as binding, see (7) and (6), and overall lack of integration into the host clause is a hallmark of paratactic structures (Dehé and Kavalova 2007). Further support comes from the fact that 'how' is a default way to introduce *as*-parentheticals in all three languages. A good parallel from English is *wh*-slifting (Haddican et al. 2011), exemplified in (10), where we find quite similar restrictions on predicates. Another similarity between *wh*-slifting and constructions in question is person restrictions: in Russian and Polish, as well as in English *wh*-slifts, only second person is allowed. Russian, Polish and Ukrainian constructions look alike when compared to scope marking in German, Hindi and Hungarian. However, there is a great deal of microvariation between these constructions, highlighted in (11). It shows that there is no single WSM construction common for all Slavic languages, rather there is a continuum of similar looking phenomena that requires careful investigation.

- (1) Kak misliš, kakvo se sluči? BULGARIAN how think.2sg.pres what RFL happen.3sg.pst 'What do you think? What happened?', lit. 'How do you think what happened?'
- (2) jak ty fiadaješ, naviščo Rosiji Krym? UKRAINIAN how you think.2SG.PRES for.what to.Russia Crimea 'What do you think? Why does Russia need Crimea?' lit. 'How do you think why Russia needs Crimea?'
- (3) jak sądzisz, kiedy skończy się życie na ziemi? POLISH how suppose.2SG.PRES, when end.3SG.PRES RFL life on Earth 'What do you suppose? When will life on Earth end?', lit. 'How do you suppose when life on Earth will end?'
- (4) Co myslíš, kdy už vybere si princ nevěstu? CZECH what think.2SG.PRES when already choose RFL prince bride 'What do you think? When will the prince finally choose a bride?'
- (5) What do you think which animal says woof woof? (Thornton 1990, 246)

CHILD ENGLISH

(6) Properties breakdown: Slavic vs. Hungarian, German and Hindi

	Hungarian	GERMAN	Hindi	Ru, Pol, Ukr
A. any <i>wh</i> -phrase	\checkmark	\checkmark	✓	✓
B. any amount of <i>wh</i> -phrases	\checkmark	\checkmark	✓	✓
C. ungrammaticality across negation	✓	\checkmark	✓	✓
D. scope marking over polar questions	*	*	✓	√
E. cross-clausal dependencies (e.g. binding)	✓	√	✓	* (7)
F. further embedding	\checkmark	\checkmark	✓	*
G. any proposition-taking predicate in the kak/jak-clause	\checkmark	\checkmark	✓	* (8), (9)
H. choice of scope marker	what	what	what	how

- (7) *kak predpolagaet [každyj iz kandidatov]_i, skol'ko ljudej za nego_i progolosuet? RUSSIAN how suppose.3SG.PRES each of candidates how.many people for him vote.3SG.PRES Intended: 'How many people does [each candidate]_i suppose that will vote for him_i?' (contra Stepanov, who judges such sentences acceptable)
- (8) jak myślisz /*rozumiesz /*wiesz, kogo Janek kocha? POLISH how think.2SG.PRES / understand.2SG.PRES / know.2SG.PRES whom Janek love.3SG.PRES 'What do you think / *understand / *know? Whom does John love?' (Lubanska 2005, 101)
- (9) jak ty vvažaješ / kažesh / *tverdyš, xto pryjšov? how you think.2SG.PRES / say.2SG.PRES / claim.2SG.PRES who came 'What do you think / say / *claim? Who came?'

UKRAINIAN

(10) How fast is the climate changing do you think?

ENGLISH

(11) Properties breakdown: Russian vs. Polish vs. Ukrainian

	Russian	Polish	UKRAINIAN
A. neutral speech predicates in the <i>kak/jak</i> -clause	*	*	\checkmark
B. present tense resctriction on the <i>kak/jak</i> -clause	✓	*	*
C. second-person restriction on the <i>kak/jak</i> -clause	\checkmark	\checkmark	*
D. kak/jak in requests to repeat the question	*	*	\checkmark
F. flexible order of clauses	\checkmark	*	✓
G. prosodic autonomy of the kak/jak-clause	\checkmark	*	N/A

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