

On the Phonetic Content of Moved Operators: A Reassessment

Talat Masood¹

¹ Department of English, University of Swabi. Email:talatwazir@yahoo.com

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Abstract

This study is concerned with assessing Polinsky's (2016) proposal that the ban (or otherwise) on A-bar movement is itself contingent on the dichotomy of visible vs invisible operators. Thus, in English, where both the relative and wh operators are phonetically visible, both the movements are allowed while in Chukchi where only the wh operator is visible only wh movement is allowed. To assess the universality of her proposal, three different languages belonging to three diverse language families are chosen. They are analyzed in terms of visible vs invisible relative and wh-operators, and the ability of the concerned nominals to move to A-bar positions. In the analysis, English and Hindi/Urdu relativized and wh-constructions behave according to Polinsky's proposal while Pashto behave differently in terms of relativization and wh-constructions. This study, thus establishes that her proposal has utility but is unable to explain the movement of nominals to A-bar positions in all the languages.

Key Words: Visible Vs Invisible Operators; Relative Operator; Wh-Operator; Ergative Languages

Introduction: The goal of this paper is to present data to establish that Polinsky's (2016) idea of phonetically visible vs invisible operators for A-bar movement is not tenable cross-linguistically. Polinsky, based on data from Chukchi had concluded that A-bar movement of wh-elements is allowed due to their phonetically visible nature while relativization is not allowed, as the relative operator is not phonetically visible. To test the validity of her proposal, a sample of three languages is taken wherein English is a Nom-Acc language, Hindi/Urdu is a morphologically split-ergative language, and Pashto is a syntactically split-ergative language. Based on data from these languages, it is established that the disparity in A-bar movement between different operators does not hinge on the phonetically visible vs invisible dichotomy; rather, it is more dependent on case forms of nominals. Thus, it forms part of a larger canvas called syntactic ergativity, which is a complex phenomenon and dependent on more than one factors.

The paper is organized as follows. Section 1 is related to introduction. Section 2 presents a thumbnail sketch of the relevant literature. Section 3 presents an analysis and results based on the data presented. Section 4 presents discussion where the suitability of Polinsky's proposal is discussed. Section 5 concludes the paper.

Literature Review

The nature of syntactic ergativity and the factors that are considered as ingredients of syntactic ergativity have been a topic of discussion for decades in generative enterprise. Some have considered coordination, control, scope, binding, raising, and quantifier float as ingredients of syntactic ergativity while others have considered conjunction reduction, control and relativization

as essential yardsticks for syntactic ergativity (Dixon (1972, 1979, 1994), Bok-Bennema (1991), Kazenin (1994), Manning (1996)). Continuing in this tradition, Polinsky has written a comprehensive book (2016) on this topic. She has discussed dozens of ideas about ergativity (both morphological and syntactic). Of these ideas, one of the most important ideas is her distinction between A-bar movements in terms of phonetically visible and invisible operators. Since, some of the diagnostics for syntactic ergativity include a number of A-bar movements, she has simplified it further and proposes that ergative case bearing nominals are PPs, not DPs. That these PPs are of a special type, as they do not have a visible PP part. That this specialty can be seen in the difference between two types of A-bar movements, namely, relativization and wh-movement. That in Chukchi, a syntactically ergative language, an ergative case bearing nominal cannot be relativized but a wh-nominal can be moved to an A-bar position. This is because ergative relativization has no phonetic content while a wh-operator has a phonetic content: “A’-movement is contingent on the phonetic content of the moved operator, in that only operators that bear phonetic content are permitted to A’-move (Den Dikken 1995). This is why A’-movement is possible in wh-questions but not in relative clauses (where the moved element is a null operator)” (Polinsky 2017: 27). Against this proposal, it is shown in this paper that there are languages, which have both the operators as phonetically visible and both can move to A-bar positions; but, at the same time, there are languages, which have both the operators as phonetically visible but none of them can move to an A-bar position.

Analysis and Results

This section deals with presenting data that show that in syntactically ergative, morphologically ergative and nominative accusative languages the operators are visible; in some, the movement is possible while in others it is not. It points to the fact that the visible vs invisible operators is not a significant factor in determining A-bar movement and the ban on it. For this purpose, first consider English. English has visible operators for both relativization and wh-movement.

1. I saw the pen that she had given to you.
2. The match I watched was boring.
3. What is the name of the doctor?

In (1 and 3) the relative and the wh operators are phonetically visible. In (2), an instance is given where the relative operator is optional. Thus, for English, keeping technical details to the side, a conservative estimate could be that it has visible operators for relativized constructions and wh-questions. Conclusively, there is no ban on movement of relativized nominals and wh-questions in English.

In Hindi/Urdu, there are visible operators for relativization and wh-questions.

4. *jotay jo tum-nay pehnayhai baḷay pyaray hai.*
socks REL you.ERG wear be.PRStoo lovely be.PRS
‘Socks that you are wearing are very lovely.’
5. *os-nay jo ke kaḷa hai meray jotay khareed liyay.*
he.ERG REL COMP standing be.PRSmY shoes buy do.PST
‘He who is standing bought my shoes.’

As can be seen from the examples, they have visible operators. In the first example, an object is relativized. In the second example, a subject is relativized. In both cases, there is an A-bar movement. Thus, it corroborates her proposal. We have not included the discussion on correlatives due to difference of opinion about their true A-bar nature especially movement to A-bar positions. Also, we have avoided discussing situations where relative operators are somehow considered to be invisible as per some situations of resumptive pronouns. Suppose if we agree that there could be some invisible relative operators, still in both cases there is no ban on relativization of nominals.

Therefore, if we ignore the cases where there could be invisible operators, on the whole, relativization data in Hindi/Urdu would substantiate Polinsky idea that the visible operators allow movement to A-bar positions.

For Hindi/Urdu questions consider the following examples:

6. *tum-nay kis-say pocha?*
you.ERG who.ABL ask
'You asked whom?'
7. *kis-say tum-nay pocha?*
who.ABL you.ERG ask
'Whom did you ask?'
8. *tum kaha-say arahay ho?*
you where.ABL coming be.PRS
Literal: 'You, where from coming.'
'Where are you coming from?'
9. *kaha-say tum arahay ho?*
where.ABL you coming be.PRS
'Where from you are coming?'
10. *kon aya?*
who come.PST
'Who came?'
11. *kis-nay ye kaha hai?*
who.ERG this say be.PRS
'Who has said it?'

As far as questions are concerned, they have wh-words in-situ and wh-words clause initially. Some of the wh-words are *kis*, *kaha*, *kon*, etc. However, for our purposes, it is important that the wh-operator is visible and is acting according to Polinsky's proposal.

Pashto

The real problem for Polinsky's proposal lies with reference to Pashto (on various aspects of Pashto grammar and different current theoretical issues in general please refer to Masood 2014, 2021, 2025a, 2025b, 2025c, 2025d, 2025e). In Pashto, we have a robust and visible relativizer *che*. However, the problem is that in Pashto in the present and future tenses the nominative case bearing subjects can be relativized but not the accusative case bearing objects. In the past tense, the absolutive case bearing objects are relativizable but not the ergative case bearing subjects.

12. *zə haghə pen che thə rakəɽay wo kharsavum.*
I.NOMthat pen REL you.ERG give be.PSTsell.PRS
'I am selling the pen that you had given to me.'
13. **zə aspa che topona wahəl ranisum.*
I.NOMhorse REL jumps do.PSTcatch.PRS
14. *zə aspa che topona ye wahəl ranisum.*
I.NOMhorse REL jumps 3P.RP do.PSTcatch.PRS
'I am catching the horse that was jumping.'
15. **ma haghə pen che thə rakaway khartch kɽo.*
I.ERG that pen REL you.NOM give.PRS sell do.PST
16. *ma haghə pen che thə ye rakaway khartch kɽo.*
I.ERG that pen REL you.NOM 3P.RP give.PRS sell do.PST
Literal: 'I that pen that you are giving to me, I sold that.'
'I have sold the pen that you are giving to me.'

17. *zə haghā pen che thə rakaway kharsavum.
I.NOMthat pen REL you.NOM give.PRS sell.PRS
18. zə haghā pen che thə ye rakaway kharsavum.
I.NOMthat pen REL you.NOM 3P.RP give.PRS sell.PRS
Literal: 'I that pen that you are giving to me, I sell it.'
'I am selling the pen that you are giving to me.'
19. *ma aspa che topona wahəl rawonisəla.
I.ERG horse REL jumps do.PSTcatch.PST
20. ma aspa che topona ye wahəl rawonisəla.
I.ERG horse REL jumps 3P.RP do.PST catch.PST
Literal: 'I the horse that jumps caught.'
'I caught the horse that was jumping.'
21. zə aspa che topona wahi ranisum.
I.NOMhorse REL jumps do.PRS catch.PRS
'I am catching the horse that is jumping.'

In (12), an absolutive case bearing nominal is relativized. In (13) and (19) ergative case bearing nominals are relativized. As can be seen, these examples are ungrammatical. In (14) and (20), a resumptive pronoun is added to make these constructions grammatical. In (15) and (17) accusative case bearing nominals are relativized. As these are ungrammatical, therefore, resumptive pronouns are added in (16) and (18) to rescue these constructions. In (21) a nominative case bearing subject is relativized and it is grammatical. As can be seen from these examples, ergative and accusative case bearing nominals are not relativizable while nominative and absolutive case bearing nominals can be relativized.

Questions in Pashto have visible operators. The most well-known operators are *cha*, *tsook*, and *tsə*. In Pashto, both *wh*-in-situ and *wh*-elements to the left of the clauses can be found. Here, we are considering examples where *wh*-elements are located to the left of the clause.

22. da pen cha maat kʲo?
this pen who.ERG break do.PST
'Who broke this pen?'
23. cha da pen maat kʲo?
who.ERG this pen break do.PST
'Who broke this pen?'
24. tsook rarawan day?
who.NOM coming be.PRS
'Who is coming?'
25. tsook prevatho?
who.NOM fall.PST
'Who fell?'
26. pa paiso day tsə waghishtal?
with money 2P.WP what buy.PST
'What did you buy with the money?'
27. tsə day math kʲəl?
what 2P.WP break do.PST
'What did you break?'

Discussion

In the examples above, we noticed that English had visible relative operators and *wh* operators. In both cases, the nominals can move to A-bar positions. This sits well with Polinsky's proposal: they

are visible therefore they can move to A-bar positions. Hindi/Urdu also fits well with Polinsky's scheme of things. In Hindi/Urdu, the relative operator and wh operators are visible and they can move to A-bar positions. Thus, they are acting according to Polinsky's proposal that visible operators could move to A-bar positions but not the invisible ones.

However, the real challenging case could be that of Pashto. In Pashto, we have visible relative operator *che*. However, interestingly, ergative case bearing nominals and accusative case bearing nominals cannot be relativized. Concurrently, nominative and absolutive case bearing nominals can be relativized. This shows that the role of the visible relative operator as far as relativization of nominals in Pashto is concerned is minimal. This goes against Polinsky's idea that nominals in relative clauses with invisible operators cannot be relativized. Rather in Pashto, relativization facts point towards a larger picture of the divide between syntactically ergative languages and morphologically ergative languages and the phenomena that establish that divide (for morphological ergativity/ split-ergativity please refer to (Blake 1977; Goddard 1982; Comrie 1991; Aissen 1999; Keine 2010; Malchukov 2008; Legate 2008, 2014; Woolford 2006, 2008; McGregor 2010) while for syntactic egativity/ split-ergativity please refer to (Jelinek, 1993; Jelinek & Carnie 2003; Carnie 2005; Alexiadou & Anagnostopoulou 2006; Merchant 2006; Kiparsky 2008; Coon & Preminger 2012; Deal 2016a & Deal 2016b)).

Questions in Pashto are also interesting. In Pashto, both wh-in-situ and wh- to the left of a clause can be found. Thus, technically, we have visible operators for Pashto. However, there is also a dichotomy. Ordinarily, we can form questions with all wh-words and their morphological case form could be any. However, if an additional CP is added, then questions can be formed with wh-words that carry nominative and absolutive cases and questions cannot be formed with wh-words that carry ergative and accusative cases:

Erg-Abs construction:

(57)	<i>[*cha khwa.ɽəla?]</i>	<i>[CP hagma he.NOM eat.PST</i>	<i>wai</i>	<i>[CP/TP che say.PRS</i>	<i>rotai COMP</i>
	who.ERG bread.ABS	he.NOM eat.PST		say.PRS	COMP
	Literal: 'Who, he says, was eating the bread?'				

Nom-Acc construction:

(58)	<i>[tsook khori?]</i>	<i>[CP hagma he.NOM eat.PRS</i>	<i>wai</i>	<i>[CP/TP che say.PRS</i>	<i>rotai COMP</i>
	who.NOM bread.ACC	he.NOM eat.PRS		say.PRS	COMP
	'Who, he says, is eating the bread?'				

Now what this dichotomy conveys is the fact that it could be because of two reasons:

- a. wh-elements in Pashto occupy Spec TP.
- b. With the addition of an extra CP, there are differences between wh-elements in terms of A-bar movement due to their cases.

In the first scenario, since it is difficult to prove that there is vacuous movement in such constructions, therefore, the possible explanation hinges on the point that when the wh-element is moved to an A-bar position, then there is dichotomy between nominative and accusative nominals, and ergative and absolutive nominals. As far as the grammaticality of wh-questions with both ergative/accusative and nominative/absolutive cases is concerned, it is perfectly justifiable because there is no dichotomy between these case bearing nominals when they occupy A positions. Since, here they occupy Spec TP which is an A position, therefore, no issue arises.

The same is the case with the second scenario. In the second scenario, which in fact is contingent on the first one, the wh-elements are moved to an A-bar position. Since, due to syntactic ergativity and accusativity of Pashto, arguments carrying ergative and accusative cases cannot be moved to A-bar positions and arguments carrying nominative and absolutive case can be moved to A-bar positions; therefore, ergative and accusative case bearing wh-elements cannot be moved to A-bar positions and nominative and accusative case bearing wh-elements can be moved to A-bar positions.

The take away from this discussion on wh-elements in Pashto is that the dichotomy in wh-elements for movement to A-bar positions is based on case-forms, not on visible vs invisible nature of wh-operators. Therefore, it does not substantiate Polinsky's idea of visible vs invisible operators for wh-movement.

Conclusion

The major goal of this study was to find the universality of Polinsky's (2016) proposal of visible vs invisible operators for A-bar movement. She had proposed that for relativization and wh-questions, nominals do not face the ban if the relative and wh-operators are visible and vice-versa. Also, she had extended this discussion to the PP nature of such constructions but since it was not related to our topic, therefore, we did not explore that topic. Data from three different languages, namely, English (West Germanic), Hindi/Urdu (Indo-Aryan) and Pashto (Indo-Iranian) was presented. From the analysis of data, it was gathered that English and Urdu acted according to her dichotomy of visible vs invisible operators as in both the languages the wh- and relative operators were visible. However, Pashto proved troublesome as relativization of ergative case bearing nominals and accusative case bearing nominals was not possible although Pashto had visible relative operator. Similarly, in wh-questions, if an additional declarative CP was added then wh-elements bearing ergative and accusative cases were unable to move across that CP. Even in wh-constructions the pivot for ban vs movement was case, not the dichotomy of visible vs invisible operators. Thus, this study established that though Polinsky's proposal may have utility for a number of languages, it cannot be applied to all the languages.

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