Abdul Rafay Khan^{*} Ghazala Kausar^{**}

A Minimalist Comparison of Punjabi and English

Abstract

This study aims to conduct a comparative study of Punjabi, the first language of Punjab regions of Pakistan and India, and English, a West Germanic European language of the Indo European origin. Owing to different backgrounds, these languages exhibit different linguistic and properties, but a Universal Grammar (UG) approach may simultaneously identify some universal principles and parametric variations in the two languages under it Principles and Parameters (P&P).Assuming the Minimalist version of UG and P&P as stipulated by Chomsky (2008), this study focuses on the Non-finite T_{def} constructions of the two languages.

Key Terms:Punjabi, English, Minimalist framework, Universal Grammar,
Non-finite T_{def} Constructions.

1. Punjabi and English: Historical Background

Punjabi, one of the most famous Indo-Aryan languages, is the mother tongue of Punjabis of both Pakistan and India. As it emerged as an independent language from Sauraseni Apabhramsa in 11th century, it has a rich historical and cultural background that can be witnessed in oral and written tradition of great Muslim sufia-e-Karam and Hindu and Sikh saints (Khan & Kausar, 2017). According to encyclopedia Britannica, in early 21st century, there were some 70 million speakers of Punjabi in Pakistan and about 30 million in India; however, Punjanbi Diaspora is spread across the globe, particularly Punjabis are third biggest linguistic community in Canada and fourth biggest in UK (Shackle, 2018).

In a recent overview of the Punjabi language, Butt (2017) mentions Bhatia (1993) as a standard grammar of Punjabi and Akhtar (1999) as a recent source. She supports claims that despite its comparative size, there is very little work on Punjabi and closely related languages like Siraiki and Potwari. According to the inventory of Punjabi case markers provided by Butt (2017, p. 747, table 33.3), The important case markers include: nominative (no case marking, +subject + object);

^{*} Abdul Rafay Khan, PhD scholar of English Linguistics, National University of Modern Languages, Islamabad

^{**} Dr. Ghazala Kausar, Assistant Professor of English, National University of Modern Languages, Islamabad.

ergative (allows -ne marking, +subject - object); accusative (-nu marking, -subject +object); dative (-nu marking, +subject +indirect object); instrumental (-kolomarking on argument and adjunct subject); genitive (-da/di/de on subject (infinitives)); and locative (from) (te/to, argument, adjunct). Despite the difference in case markers, with only a similar -ne ergative marker, the case and agreement patterns in Punjabi appear to function very closely to its closest counterpart in South Asia i.e. Urdu-Hindi. The agreement is always with unmarked arguments either subject or object. If that is not available default masculine singular argument is used as in 'larki-ne mundiaan-nu maria si'. It is evident that both subject and object are marked with -ne (ergative) and -nu (accusative) post-positions, so the V 'maria' and T 'si' is in default masculine singular form. Punjabi is a split ergative language where ergative case is sensitive to perfective aspect and third person subject.

English is a Western Germanic language of the Indo-European family. It's closely related languages are German, Frisian and Dutch. It originated in England, but currently it is a dominant language of United Kingdom, United States, Australia, Canada, New Zealand, Ireland, various Island nations of Pacific Ocean and Caribbean Sea. It is official language of India, Singapore, Philippines, South Africa, and many countries of Sub-Saharan Africa. Many counties of the world adopt it as a first choice of foreign language which gives it the status of 'lingua franca'. Modern English is Analytic (relatively uninflected) whereas its ancestral tongue Proto-Indo-European was synthetic (i.e. inflected). During the course of a history of thousand years, English inflected variable forms have been transformed into invariable uninflected forms. This property makes English different from languages like Sanskrit, Greek, Russian, Latin and German. English is different from other European languages in taking the minimum inflected forms. For instance, if English verb 'ride' is compared to the corresponding terms in German, the English term has 5 inflected forms while German 'reiten' has 13 infected forms. In English only four word categories got inflections: nouns, pronouns (as in He, his, him), Adjectives (as in big, bigger, biggest), and verb forms for tense and aspect. Over the last five centuries, the loss of inflections have grown flexibility of functions i.e. Once different forms were obligatory to differentiate between word classes as nouns or verbs; however, in modern English the flexibility of function has made the expressions as 'planning a table' or 'tabling a plan', 'booking a place' or 'placing a book' possible (Crystal and Potter, 2018).

2. The Concept of Language in Universal Grammar

In more than six decade long effort (since 1950's to date) under the rubric of UG Universal Grammar, Chomsky has led to view that language is component of human mind, among other components, which links the other systems of mind: Sensori- Motor (S-M) (related to sound) and Conceptual-Intentional (C-I) (related

to meaning and interpretation) through their respective interfaces as a computational system. These language external but mind internal systems impose some conditions on the computational system of language. In recent years, the UG research has pivoted around 'Strong Minimalist Thesis' (SMT): Language is an optimal solution to the interface conditions. It implies that language must satisfy the conditions imposed by the S-M and C-I systems at the interfaces.

3. This Study- Theoratical Framework

This study aims to conduct a comparative analysis of the non-finite T_{def} constructions of Punjabi and English by utilizing the Multiple Agree mechanism adopted by Chomsky (2008) in his work 'On Phases' (Oph) which is based on SMT. Before coming to the mechanism for non-finite T_{def} constructions, the basic tenets of the work are delineated briefly below.

The Computational System of language (C_{HL}) selects a numeration (a number of lexical items) from the lexicon for the derivational procedure. These lexical items are assembled of certain features which must be interpretable at the interfaces to satisfy the SMT. According to the current mechanism, Principles and Parameters approach entails that languages may vary in the features of these items. However, there are some features which enter into derivation unvalued/uninterpretable. The C_{HL} must provide a mechanism to value these features. The primary operation of C_{HL} External Merge occurs free of cost and takes two syntactic objects to form new syntactic objects from them. However, for the satisfaction of the uninterpretable features: the ϕ features (phi features: number, person and gender) of the functional categories T (Tense) or v* (Light verb), structural case features of the nominal expressions, EPP features of the T or other functional categories, or Edge features (EF) of the phase heads: C and v*, Agee and Internal Merge is required. The Agree operation values the unvalued features of the functional heads T or v* under a probe-goal operation where the probe of functional head v* or T Agrees with some NP/DP goal with unvalued structural case features. The Internal Merge operation is induced to satisfy EPP or EF.

The mechanism delineated above holds for the syntactic constructions containing finite T (Tense) elements which can be represented as T_{comp} . There are some constructions which contain non-finite T (Tense) elements, represented as T_{def} . T_{comp} possesses a complete set of ϕ -features while T_{def} possesses an incomplete set of ϕ features that must be valued under multiple Agree operation induced between a sequence of elements.

4. Analysis

This section provides a comparative account of the syntactic derivations of Punjabi and English which include non-finite T_{def} elements. The major derivations which may include such elements are Raising, Passive, and Exceptional Case Marking (ECM) constructions. Following is the analysis of T_{def} constructions of the two languages in light of Multiple Agree operation (Chomsky, 2008), delineated briefly in section 3. The derivations (1) to (4) are taken from Chomsky (2001, p.7)

- (1) There are likely to be awarded several prizes.
- (2) Several prizes are likely to be awarded.
- (3) We expect there to be awarded several prizes.
- (4) We expect several prizes to be awarded.

Derivation (1) and (2) are 'Raising' while (3) and (4) are 'ECM' constructions. The merge of there at Spec- T_{def} in (3) and supposedly in (1) leads Chomsky to establish that T_{def} possess EPP features. The T def head of infinitival phrase 'to be awarded' possesses only person features from the set of ϕ features. This lack of ϕ features render it ineligible for valuation of structural case features of any nominal goal expression. The expletive 'there' in (1) and (3) also posses the person feature. The associate 'several prizes' merged as the complement of unaccusative/passive verb 'awarded' possesses a complete set ϕ features. According to the multiple Agree mechanism the uninterpretable ϕ features of probe i.e. T_{comp} in (1) and (2) and v* in (3) and (4); person features of expletive 'there' in (1) and (3); person features of $T_{\rm def}$; and structural case features of the nominal expression several prizes are valued in one fell swoop instead of different 'Agree' operations. The complete set of ϕ features of the associate 'several prizes' 'Agree' with the matching person features of the infinitival 'to'; and uninterpretable features of finite T in (1) and uninterpretable features of v^* in (3) 'Agree' with the person features of expletive 'there' to induce multiple agree.

A very interesting case of non-finite T constructions exhibiting multiple Agree are participial passives. Constructions (5) and (6) ((18) in Chomsky, 2001, p.17) are taken to illustrate Multiple Agree in such constructions.

- (5) C [$_{\beta}$ T seem [Exp to have been [$_{\alpha}$ caught several fish]]].
- (6) [$_{\beta}$ v expect [Exp to have been [$_{\alpha}$ caught several fish]]].

Derivations (5) and (6) differ in having finite probes T and v respectively, but they exhibit a similar mechanism of participle Agree at α stage of derivation. Participial being adjectival, lack person features from the complete set of ϕ features. The

defective participle probe 'Agrees' with goal i.e. direct object associate 'fish' in number and gender, but not in person. This defective probe can't value the structural case features of the goal. Hence uninterpretable features of ϕ participle probe are valued but structural case features are still unvalued which render the participle active for further probe. At β phase level, the probe T or v (in case of (5) and (6) respectively) has to enter into triple Agree triple agree relations: (Probe/Exp), (Probe/participle) and (Probe/DO). This redundant mechanism of triple agreement leads Chomsky (2008) to adopt multiple agreement mechanism which values the uninterpretable features of the chain [probe (T or v)-participlegoal (NP)] in a sequence.

In Punjabi, the non-finite constructions are obtained by two major operations i.e. 'infinitivalization' and 'participialization'. The former type of constructions are obtained by adding '-naa' suffix to the verbal stem e.g. ('jau-naa' (going)). In this process, the morphological realization of ϕ -features (person, number, and gender), tense, and aspects features are lost. For instance, past continuous finite form 'ja riaa si (was going)' which contains morphological evidence of number, person, gender, tense and aspect can be compared with the non-finite form 'jau-naa (going/to go) where all such features are morphologically lost. As compared to it, the latter strategy ('participialization') allows different non-finite verb forms e.g. parhdaa hoiaa/bathia hoiaa/jaaun valaa mundaa (The studying/the seated/ the going boy). As compared to the former strategy, it is evident that the participie agrees with the following NP in number and gender (Bhatia, 1993, p. 50, 51). From this characterization of features in participles, it can be assumed that the Punjabi non-finite participial forms also lack person features just like English participial constructions do.

- (7) Mainjaaunaachandaaan.I(I want to go.)(Bhatia, 1993.p. 45)
- (8) CP[β TP Main_i -[vP Main_i -[VP-[α TP T def PRO jaaunaa]-chanda_v]-v]- aan_T]]

Derivation (7), schematically described in (8), is a control predicate construction. The infinitive is formed by adding suffix –naa to the stem verb form 'jaa' go. This infinitive is merged with a null non-finite tense auxiliary to form non-finite TP '*jaauna*' (to go). This TP forms α phase level which contain no strong phase head i.e. v* or C. The non-finite TP merges with main verb of the matrix clause '*chanda*' (*want*) to form VP. This VP merges v to form vP which merges with the EA '*main*' at Spec-v position. This VP merges with finite auxiliary '*aan*' to form TP which merges with C to form CP. Now the derivation reaches the strong phase level β where T derives Agree ϕ features from C and become the probe to search for a goal with complete set of ϕ features. The EA subject sitting at Spec- v

positions is the only goal in the domain of the probe. So, T Agrees with the EA subject *'main'* to value the un-interpretable ϕ features of the probe T and structural case features of the goal. What about the un-interpretable features of the null nonfinite T of the infinitive *'jaaunaa'*? As a control predicate, it must have a complete set of abstract ϕ features though overtly all features are morphologically lost in the process of 'infinitivalization'. It may be assumed that there is PRO subject with a complete set of abstract ϕ features ϕ features which becomes goal for the uninterpretable features of T _{def}. In probe goal relation the abstract ϕ features of the null T _{def} are valued while the abstract null case is assigned to PRO subject.

- (9) O apney bhra noon laben jaa rea aye. (He is going to find his brother.)
- (10) CP [β TP O i T [vP-[VP [α TP O_i apney bhraa noon laban]-jaaV] rea v] e T].

Derivation (9), schematically described in (10), is a raising construction. It is obtained by the following procedure: The DO i.e. DP 'apney bhraa' merges with the V 'laban' to form VP which merges with non-finite T to from TP which merges with v* to form v*P. This v*P merges EA i.e. Subject 'O' at Spec-v* position. DO is assigned θ -role at the time of merge by V while Subj is assigned θ role by v*. For valuation of uninterpretable features, v* probe 'Agrees' with the goal DP 'apney bhraa'. In this process, the structural case of the goal nominal is valued as accusative while unvalued ϕ -features of the probe are valued. At α stage of derivation T is defective, so it can't ender into Agee relation with the EA i.e. Subj .The α TP merges with the V of the matrix clause β i.e. '*jaa*' to form VP which merges with the light verb 'rea' to form v*P which merges with the finite T auxiliary 'e' to form TP which merges with C to complete the CP. T derives Agree features from C and probes for a goal for feature valuation. The subj 'O' sitting at Spec-T of α is active to become the goal. Hence, the unvalued features of probe and goal are valued under Agee operation. To satisfy the EPP features of finite T of β , the Subj is raised to Spec-T of β . Apart from the mechanism of ϕ and structural case feature valuation, the study of (9) has other significant consequences. The presence of marked DO with overt accusative marking in α phase headed by non-finite T strengthens the assumption that DO is valued case by v* instead of T. The presence of a DO in the absence of a finite T with a complete set of ϕ features induce that the former category Agree with some functional head other than T to value its structural case features.

(11) Kitabann chapen lei tayyar nei. (Books are ready to be printed)

(12) CP [TP Kitabaan T [α Kitabaan chapen lei]-tayyar _{Adj} nei_T].

Derivation (11), schematically described in (12), contains a passive participial α phase. The DO *'kitabaan'* merges as the complement of the passive V 'chapen'

which merges with the non-finite T auxiliary '*lei*' (which may be taken as an equivalent to English non- finite auxiliary 'to') to complete α phase of derivation headed by non-finite T _{def}. The Adjective '*tayyar*' selects the α TP as its complement to form AdjP which merges with the copular finite auxiliary '*nei*' to form TP. The T probe has a complete set of uninterpretable ϕ features which can only be valued by a goal like nominal '*kitabban*' which has complete set of interpretable ϕ features. In the way of 'Agree' between probe T and goal '*kitabban*' comes the adjective '*tayyar*' and participle '*chapen*' which is also adjectival. However, these adjectival elements do not induce any intervention effect between long distance Agree of finite T in β and DO '*kitabban*' in α , rather a multiple Agree operation in induced in which all the uninterpretable features of the sequence: [probe-adjective-participle-goal] i.e. [(finite T) nei-tayaar-chapan-kitabban] are valued by the complete ϕ set of interpretable features of the goal NP, and the goal is valued structural case features as 'nominative'.

5. Conclusion

This study finds that uninterpretable features of non-finite T_{def} elements in Punjabi participial and infinitival constructions may be valued under multiple Agree operation like English where the T_{def} elements in particularly raising and exceptional case marking constructions are valued under a multiple Agree sequence. A difference between Punjabi and English T_{def} constructions is that in the former language such elements usually are phonologically null (unpronounced) while in the latter language the non-finite clauses are identified by an overt tense element 'to'. The multiple Agree may be considered as universal phenomenon among languages with the conceptual benefit of removing redundancies of multiple Agree operations.

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