



The study of *pro* as an empty category in Azeri Turkish language

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Abstract:

This paper examines the pro-drop parameter in Azeri Turkish. First, some basic concepts and theories in terms of Chomsky's generative grammar school and principles and parameters theory are introduced. Then some theoretical background on the subject of Persian and Turkish languages are briefly presented. Next part is about explanation and description of *pro* features and some evidence and samples of Italian and Persian and Azeri Turkish languages and the last section deals with the results of this study. After giving and comparing evidence of these three languages we conclude that is that Azeri Turkish is a pro-drop language which allows subject to drop and establishes *pro* as a null subject (an empty category) in the position of subject and object can also be removed in some instances and *pro_{arb}* is established in the position of object.

Keywords: Azeri Turkish; principles and parameters theory; pro-drop and Chomsky's generative grammar.



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Introduction:

The purpose of this paper, is the study of *pro* as an empty category in Azeri Turkish which has not been studied in this language independently yet. This paper is based on Noam Chomsky's principle and parameters theory of generative grammar approach which is the most important approach in the second half of the twentieth century and Rizzi's arbitrary interpretation theory.

We will explore to what extent the above models can account for Azeri Turkish language.

Chomsky's school is the dominant school in theoretical linguistics now and comprises a set of linguistic theory which is based on these two philosophical and linguistic beliefs: a) some language features, are biological and inherent with the child's birth. B) The most striking aspect of the language structure is the mathematical and its formal structure.(dabir mogaddam,1378,p:9)

Chomsky always considers two things in his theory: 1) language universal, and 2) the issue of children's language acquisition. In the theory of universal grammar, linguistic knowledge is made of a number of fundamental and universal principles as well as the number of parameters which are specific to the languages(languages have them in-particular), this means that the parameters will vary from one language to another, such as the head-right or head-left in the syntactic groups.(Cook and Newson,2007)

Background studies:

Before discussing about the subject of present research, we would like to refer to the elimination subject in Persian languages briefly.

Samieiyan(1983), in his Phd theses, considers three general courses for Persian language grammar: traditional ,semi traditional and constructivism and generative courses. He deals with the specific grammar of each course and with the elimination of subject, predicate, object, complement, prepositions, conjunctions, other components and major and minor clause. They are discussed in connection with generative base, in generative grammar theory which are used in formulation of the grammatical rules, it means: adding, substitution and elimination.(Megdari,1379)

Empty categories in Persian language are discussed in dabir mogaddam(1367),Karimi(1989),Hashemi Pour(1989), Nemat Zadeh(1372), Golfam(1377), Sharifi(1377), Ameri(1377), Toosi(1378) papers. They refer in order to the subject elimination, null subject of complement clause, existence of null pronoun in Persian language, empty category in the position of controlling subject, merging of *pro* and *PRO* together, eliminated subject in relative clauses (=PRO), existence of unreal gaps and subject of complement clause with some examples and evidence.(Megdari,1379)

It has not been done any research on *pro* in Azeri Turkish language yet, therefore the author is trying to find it in Azeri Turkish language by giving the evidence from this language and compare it with some languages like Italian and Persian.

Theoretical Framework:

- Some basic concepts in generative grammar:

One of the major schools of theoretical linguistics, is the generative grammar school by Noam Chomsky. Chomsky insists that grammar should be predictor and it should be able to produce the grammatical potential sequences as actual ones and be explicit and clear completely and it should not leave anything to guesswork.(vosoughi,1363:104)

He considers that one of the important objectives of linguistics, is to find answers to the following questions in his generative theory:

- 1) What constitutes knowledge of language?
- 2) How is such knowledge acquired?
- 3) How is such knowledge put to use?
- 4) What are the physical mechanisms that serve as material basis for this system of knowledge and for the use of this knowledge? (Cook & Newson,2009:13)

Chomsky provides universal grammar and its principles as follows:

- Universals consists of principles such as locality.
- Chomskyan universals do not have to occur in all languages, unlike Greenbergian universals.
- No language violates a universal principle(the language simply may not use the principle in a particular context).
- Universals are part of the innate structures of the human mind and so do not have to be learnt. (Cook & Newson,2009:13)

The Principles and Parameters Theory:

Major changes between 1965 and 1992 following the development of Standard Theory, leading to design and completion of the of Principles and Parameters theory, which is known as the Standard Theory The most important aspects of



development of the syntactic theory, after the Standard Theory and before the minimalism, are related to the principles which are the bases of language acquisition. The Standard Theory claims that the condition of the principle, which is related to the particular time, determines the acquisition process and because of it, the principles of this theory are language-specific, say English and they have descriptive aspects. New theories such as the Standard Theory, claim that the acquisition of language is led by a set of limited principles and universal conditions which governs the structures of all languages. (Megdari, 1389, from Karimi, 1376:65)

Although the term "Government and Binding", became common to the above theory, Chomsky preferred the term "Principles and Parameters". Because it was the sub theory along with other theories like case theory and syntactic function theory. (Megdari, 1389 from Cook and Newson and Chomsky, 1995:29-35)

In universal grammar theory, language knowledge consists of principles universal to all languages and parameters whose values vary from one language to another, such as head left or head -right in syntactic groups.

One of the achievements of the theory of principles and parameters, is introducing the empty categories. Empty categories are elements that exist but do not have any phonetic representation and are processed in mind. Existence of empty categories in the grammar not only makes the description of the linguistic knowledge of the speakers easier, but also reduces the number of transformational rules and abstract deletion and addition in deep structure and that is the considerable success in simplifying the form of grammar that is Chomsky's important goal in a theory of language. (Megdari, 1389)

Toosi (1378:31) argues that the nature of empty categories is rarely determined by the visible phenomena so they reflect the internal nature of the mind and the study of such elements and categories help to explain the nature of syntactic and semantic features and also contributing the formation of rules.

We can say that these categories are parts of syntactic ones. Chomsky (1986:84) believes that if one element can be understood in a certain position, it will have syntactic realization either as an overt category with phonetic representation or an empty one without phonetic representation. Then the empty categories are necessary to meet the need of lexical base features at all syntactic levels in both deep structure and surface structure.

ECP(Empty Category Principle):

Traces must be properly governed.

A properly governs B if and only if A theta-governs B or A antecedent- governs B. (Chomsky, 1986:17)

A theta-governs B if and only iff A governs B and A theta-marks B.

A antecedent- governs B iff A governs B and A is coindexed with B.

E.E.C.P(Extended Empty Category Principle):

Chomsky (1981) believes that an empty category is a trace if and only if it is properly governed and a pronoun is an empty one if and only if it is under government.

If alpha is a lexical element (like: verb and preposition), the government will be theta-government and if alpha is locally co-indexed with beta, it will be antecedent government. (Chomsky, 1982:16)

1. When do you think [Mary go t]?

In example (1), the verb "go" is a lexical head and governs its "trace".

2. Mary seems t to be sick today.

In this example, "seem" is a rising verb and antecedent governs "Mary".

Thus the government of inflectional head is not considered. That is the agent of finite clause which is governed by inflectional phrase and assigned case in this way, is not governed properly.

Types of Empty Category:

1) Traces 2) abstract pronouns 3) null subject (pro) 4) parasitic gaps

In order to limit the present discussion of these issues, we propose the concept of a null subject in Azeri Turkish.

Before starting the discussion and presentation of evidence, let's review generational grammar school. The goal of generative linguists are not description of a specific language but exact stating underlying principles of human language grammar. They try to identify: 1) what features of the language such as English, are universal and 2) what characteristics of that language are specific to it and how these features are related to the parameters of UG. They do not focus on a specific language. They believe that UG exists in human mind and it is his genetic and inherent talent and all languages are learnt in the same way and they belong to the people of all over the world and it is language specific. English language is not a pro-drop language and the position of subject must be filled by an element. (pro-dropping is a parameter since it is different from one language to another). (Hageman, 1991:18-19)



In typology languages are divided in two groups: 1) pro-drop languages like: Turkish, Persian, Italian, Spanish and 2) non-pro-drop languages such as: English and French. Here are The characteristics of pro-drop languages:

- 1) missing or null subject
- 2) Free inversion in simple sentences.
- 3) Long wh-movement of subject.
- 4) Empty resumptive pronouns in imbedded clauses.
- 5) Apparent violation of the [that- trace] effect.

Pro-drop languages allow AGR to be a local controller but in non- pro-drop languages, pro is identified from inflection by AGR feature, therefore in pro-drop languages inflection and apparently AGR is a proper governor but it does not happen in non- pro-drop languages. (Megdari, 1389)

What is the nature of the null subject (pro)?

Chomsky believes that there is an apparent distinction between *PRO* and *pro* in referential characteristic and that *pro* does not have a reflexive pronoun. The characteristic can be equivalent of overt pronouns but in different distribution. *pro* usually is limited to subject position in pro-drop languages. It can exist without any antecedent. *pro* can have an antecedent when it is far from it. Prescribing *pro* in subject position like *PRO* is not on the basis of lack of government, but it is related to the other features of this situation. This means they typically consist of relationship between AGR and INFL features. In languages which have rich inflectional systems, *pro* is placed in subject position. Perlmutter and Rizzi introduce evidence from some languages that have rich inflectional systems but they do not use *pro* in subject positions except for the case in the subject of A'-argument such as German and Icelandic Languages. German language allow dropping non-semantic pronouns. (Megdari, 1389)

Haung (1984) argues that Chinese allows null subject, i.e. is a pro-drop language, in spite of the fact that it lacks AGR entirely. The same observation holds for Japanese and Korean. Haung's (1984) proposal is to argue that *pro* is possible either in languages with rich agreement or no agreement at all. Some languages (German and Scandinavian languages) allow only expletive, i.e. non-referential, subject to be non-overt. This could be related to the fact that INFL in these languages is richer than it is in English, though poorer than in Italian. We could say that INFL may well license null subjects in these languages, but that its AGR features do not enable us to identify a referential *pro*. The only option for a subject *pro* to survive in such languages would be when it is non-referential, i.e. an expletive *pro*, so that does not restrict the licenser of *pro* to inflection only and in principle other types of heads could license *pro*. (Hageman, 1991)

So we can consider different degrees of *pro-dropping* for these languages.

pro is in the group of non-overt NPs and has value or feature of

[-Anaphor, +Pronominal]. It is the subject for principle B in GB theory. (Hageman, 1991)

PRO is distinct from *pro* in some cases:

- 1) *PRO* is in an ungoverned position but *pro* can be governed by (INFL) or (AGR). *pro* is licensed under the head government. The head can be of any type and it is not limited to the inflection and its contents are recovered through AGR feature of an INFL. (Hageman, 1991)
- 2) *PRO* In some cases can be replaced with a reflexive pronoun but *pro* can be replaced only with regular pronouns.
 1. John wants [PRO/ himself to win].

However, if the *PRO* is not controlled i.e. it does not have any antecedent, it may be free and act like personal pronouns and replaced with a pronoun.

2a. *PRO* to leave would be a mistake.

2b. For one to leave would be a mistake.

According to case theory, complementizer "For" should accompany the overt subject so *PRO* is reflexive pronoun but *pro* is just a pronoun. (Megdari, 1389)

In this part of research we will give some examples of different languages and then we will present some evidence from Azeri Turkish language. It is notable that the given examples are the examples of Hageman (1991) and Megdari (1389) which are compared with the examples of Azeri Turkish language that is the author's native language. Consider the following example from Italian language:

Pro as a subject:

Italian:

3a. Gianni ha parlato.

Gianni has spoken.



3b. eha parlato.
has(3sing) spoken.

3c. Gianni ha detto [CP che [IP e ha parlato]].
Gianni has said that has spoken.

In Italian language, *pro* can be the first, second and third person singular and plural nominative pronoun with clear or unclear interpretations. Because *pro* is in subject position, the contents of it, is recovered by (INFL). In (3a), parlare assign external theta role to Gianni. On the basis of the EPP principle, we postulate that there is a subject position [spec, IP] in all the examples in(3). In (3b), there is an NP-position which is not phonetically realized. We postulate that the [spec, IP] position is occupied by a "zero" element. Gianni is assigned an external theta role by the verb.

The non-overt subject of (3b) is obviously not a trace, there being no antecedent. It would be very reasonable to assimilate *e* with *PRO*. *PRO* must be ungoverned and the finite INFL(in 3b) and (3c) will govern *e*. (Hageman,1991:451)

Persian:

4a. man amadam.
I came.

4b. e amadam.
(pro=I) came.

4c. ei goftam [CP ke [IP ei amadam]].
said that came

Azeri Turkish:

5a. man galdim.
I came.

5b. e galdim.
(pro=I) came.

5c. e dedim [CP ke [IP e galdim]].
said that came.

In each of the examples 4 and 5, the pronominal subject is missing. Inflectional system in Azeri Turkish like Persian is very rich and the content of null subject (*pro*) is recovered by the verb. *pro* includes personal pronouns, both singular and plural forms. In (4b) and (5b), "am" and "dim" functions as INFL and both indicates the first singular pronoun and the meaning can be realized without any overt subject. The reason is the AGR feature of INFL. There is a null subject or pronoun in them. (4c) and (5c) includes sentences with relative clauses. *pro* present in both main and independent clauses and they are governed by INFL of verb. The speakers of Turkish and Persian languages tend to use overt subject "man" to emphasize on the subject of the main clause.

Pro as object:

Italian:

6a. Un dottore serio visita e_i nudi_i.
A good doctor visits nude. (masc pl)
A good doctor examines his patients nude.

(6a) contains a masculine plural predicate AP(nudi). The plural AP again does not relate to the subject NP, which is masculine singular. Again the plural AP relates to the implicit object. In Italian the properties of **object pro** differ from those of **subject pro**: object *pro* is restricted in interpretation. The recovery of the content of object *pro* in Italian is due to a rule of arbitrary interpretation. Subject *pro* is equivalent to a subject pronoun: depending on the finite INFL it may be first, second or third person, singular and plural and it can have a non-specific interpretation or specific one. (*pro_{arb}*). (Hageman,1991:460-461)

Persian:

7. in alamat (be mardom) dar mogabele xatarat hošdar midahad.
8. Ali hamiše amadeye ozrxahi (az mardom) ast.

In Persian language, object position is filled by a null or zero pronoun, "let's say null object" that can be replaced with a relative pronoun or a lexical category. On the other hand it is governed by INFL, so it is an arbitrary *pro*. (Megdari,1389)

**Azeri Turkish:**

9.man hamiša (siza) hazır be xedmatam.

I am always (for you) ready to service.

I am always (for you) at your service.

10. O bu sirra bara (siza) bir şey dede.

he/she about this secret (to you) something said.

he/she told you something about this secret.

It is the same in Turkish language too. In this language constituents can be moved easily without any change in meaning. The constituents will be used in the beginning of sentences if the speakers emphasize on them and they will be stressed at that time, for example in (10), "siza"= for you, comes after the subject "o".

For the identification of verb-governed *pro*, Rizzi proposes that the content of *pro* is established through a mechanism of *arb* assignment, which will associate the arbitrary interpretation with *pro*.

"*Arb interpretation*"

Assign *arb* to the direct theta role.(Rizzi,1986:521)

Discourse language direction:

Persian and Turkish languages both use discourse language direction which reflexive pronouns are bound in them. (Haug,1977) argues that languages like them include thematized NG which is used for eliminating the same theme of a sentence with the theme in the previous one. The result of such process is eliminating of a theme chain.

Persian:

11a.A: aya Ali an mard ra ferestad?

Did Ali send that man?

11b. B: na. xodaš šaxsan amad.

* No. himself came in person.

Azeri Turkish:

12a . A: Saye babasini gatte?

Did Saye bring her father?

12b. B: yox. öze šaxsan galde.

*No. herself came in person.

In Persian and Turkish languages the reflexive pronouns "xodaš" and "öze", can be bound to "Ali" and "Saye". But it is not the same in their English counterparts. In author's mind, example (11 a) has ambiguity in meaning. The reflexive pronoun "xodaš" "can refer both to "Ali" and "an mard" (that man) ,i.e. the hearer can receive sentence)11b) in the form below:

"No. That man came himself not because Ali sent that man".

Authors believes that it is better to mention "that woman" instead of "that man", i.e. the other sex, or extend the context to prevent ambiguity in meaning. The ambiguity occurs in writing more than in speech, since in speech the previous or following context or sentence or background knowledge of the hearer about the topic of conversation helps to avoid the ambiguity.

Impersonal mood:**Azeri Turkish:**

13a .A:çara nade?

A: solution is what?/ what is the solution?

B: satmax e .

B: to sell/ to sell it.

13b. bir yolo var: unutmaz e .

One way has: to forget.

There is one way: to forget.



In (13a) and (13b), “satmax” and “unutmax” are both infinitives and the position of subject cannot be governed by AGR , so we can consider *pro_{arb}* in the place of empty category.

Consider the following examples from Azeri Turkish language:

14a. *e/pro maayna elade e/proarb .*
 examined .

(He/She) examined (the patient(s)/him/her/them).

14b. *e/pro kilasda gašah oygaširix e/proarb.*
 in the class well learn.
 We learn in the class well.

In (14a), there are two empty categories: 1) subject pronoun “she/he”: *pro* is used in the place of it because it is governed by INFL “de” and agrees with the verb, that is the AGR feature of the INFL determines *pro*. 2) object position : the meaning of it can be understood implicitly , so according to Rizzi’s theory the verb can allow *pro* to place in the object position and its content can be recycled through arbitrary interpretation(Megdari,1389), gives some example of Persian language and believes that the empty category belongs to *pro_{arb}*.

15) می گویند او آدم خوبی است.

Say he/she is a good person.

They say that he/she is a good person.

16) زدندش.

Hit him/her.

They hit him/her.

She argues that because these positions are under government and replaceable with overt pronoun, *pro_{arb}* functions as subject.

The author believes that according to principles and parameters theory, the position of null subject which is governed by INFL ,is filled with *pro* and according to Rizzi’s theory, the position of object which is governed by verb, is filled with *pro_{arb}*. In above examples, the verbs” say and hit him/her” are governed by INFL not verb, therefore *pro* can be present in these positions not *pro_{arb}*.

Discussion:

Pro in Azeri Turkish language:

Pro is a type of non-overt NP_s and is belong to empty categories. Empty categories are included some properties. Chomsky introduced a principle to constrain the occurrence of traces which are another kinds of empty categories, known as *empty category principle*: Traces must be properly governed.(Haegeman,1991)

In Persian, Turkish and Italian languages, there are some evidence for NP_s that can be overt or non-overt (empty).

European languages with rich, verbal agreement pattern allow for phonetically empty subjects in finite clauses “pro” Spanish, Italian,... . Those with impoverished verbal agreement do not. English, French, German... .(Simpson,2005)

Subject agreement:

Turkish is a *pro* drop language with null subjects that are locally identified via agreement morphemes on verbs.

Azeri Turkish:

17. *yedim (I) ate pro ate*
yedin (you) ate
yede (she/he) ate
yeix (we) ate
yediz (you) ate
yediler (they) ate

Full/ rich agreement provides a means to identify the reference of the subject and licenses the occurrence of “pro” an empty pronoun. Null and overt subjects in Turkish occur both in main and subordinate clauses(examples18 , 19) and both



necessarily agree with the number and person morphology on the verb. Third person singular agreement morpheme is null and third person plural morpheme is optional Gender is not marked in Azeri Turkish.(Turan,1996)

18. **pro** Ankaraya gettiler.

Ankara went.

(they) went Ankara

19. **pro** Dedim ke Ankaraya gettiler. (Relative Clause)

(I) Said that Ankara went.

Ankara pro said that they went.

Object agreement:

Certain languages exhibit object agreement markers on verb and allow for specific- definite object to remain phonetically unexpressed license "**pro**" in object position.

Chichewa:

20. Mikango yanu i-na-zi thamangits-a e

Lions your SM-PAST-OM-chase-ASP

your Lions chased them.(Baker,1998,in Quhalla,1999)

Subject pro-drop languages Italian, Spanish which do not have object agreement markers do not allow for pro-drop patterns in object position.

The occurrence of pro-drop is seen to be regularly linked to the occurrence of agreement.((simpson,2005)

Azeri Turkish like Persian and Chichewa allow it. This language also allows definite and indefinite null objects although they are not locally identified in the same way with agreement markers or object clitics.

Azeri Turkish:

21. o hardan (biza) yemax gatirar.

He sometimes (for us) brings food.

He sometimes brings food (for us).

In example (21), "biza"= for us, comes after the subject " o".

In Azeri Turkish language ,object position is filled by a null or zero pronoun which can be substituted by a pronoun or a lexical element.On the other hand, it is governed by INFL, so it is a pro_{arb} , i.e. it has an arbitrary interpretation.

The result is this according the given evidence: Azeri Turkish language is a pro-drop language and allows both null subject and object in main and subordinate clauses and in expressing personal mood.

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