



Implication of Anaphoric Reference in Texts Related to Agriculture in English and Uzbek Languages

Bozorova Munisa

Researcher of Samarkand State Institute of Foreign languages

Abstract: In this article the implementation of anaphoric reference in English and Uzbek agricultural texts have been analyzed. The theory of anaphora pointed by other scholars is presented. The implication of anaphora in scientific texts is explained with examples taken from the sources. The materials have been analyzed from the point of pragmatics. The examples have been compared and then given the results. Anaphoric reference and its relation with its antecedent are shown in English and in Uzbek as well as the differences and similarities.

Key words: anaphora, agricultural texts, reference, antecedent, anaphoric reference, deictic elements, referential expression, scientific texts, discourses.

Introduction. Some language forms traditionally classified as deictic, under certain conditions, can be transformed into forms of anaphoric indication. Precisely because they are alone and the same linguistic means can realize the function of both deictic and anaphoric references, depending on the conditions of their use; anaphora was initially identified as a subtype of deixis (Saveleva 2012:3) The anaphora and its implication as a referent were studied by some linguists. Ehlich described the anaphora as linguistic means for having the hearer continue (sustain) a previously established focus towards a specific item on which he had oriented his attention earlier (Ehlich, 1982:330). Betty J Birner describes the anaphora as a phenomenon in which one expression – typically a pronoun – is interpreted as coreferential with another expression, which in turn provides the referent. Without this coreference, it would be impossible to determine the referent of the anaphoric expression. (Betty J Birner 2013:130).

This article aims to arrive at an effective means of distinguishing anaphoric referents in two different languages English and Uzbek respectively. In particular our major goal is to give the detailed information about the usage of anaphoric reference in scientific texts. For this purpose, we took the materials from textbooks and articles which is dedicated to agricultural issues in Uzbek and in English. The resources are taken both online materials and printed works of the authors in agricultural sphere.

We will start by defining the anaphora and its way of expressing in texts, the various theories given by the scholars in pragmatics, various examples in English that represents the way of expressing the anaphoric elements, then some examples in Uzbek which indicates the difference and similarity of using referential elements in another language and provides the conclusion of implementation of anaphoric elements in English and In Uzbek agricultural texts.

Materials and methods & Literature review. To explain the anaphoric reference in agricultural texts in English and in Uzbek language the materials were collected only from scientific sources. All the materials has been taken from textbook on agriculture which is written in Uzbek “O’simliklar

bioekologiyasi”, “O’simlikshunoslik”, in English the materials taken from the books: “Crop ecology”, “ Essentials of plant breeding”, other examples were taken from the conference articles dedicated to agricultural issues. Comparative -typological method has been used to analyze the given examples in two language: English and Uzbek. Discourse method is used to analyze the materials taken from agricultural texts.

Language as a virtual system is actualized in speech/discourse and implements a referential function here, and the objects of extra-linguistic reality, designated by linguistic means, are their referents. Act of reference, or the reference of a linguistic unit to extra-linguistic reality, is associated with the speaking subject, with the individualization of the object and characterizes language in action, language in use: one can establish “the referent of any referential expression only if it is used, because that only if it is used does it have a referent” (Reboul, 1994, p. 156). The identification of anaphora as a subtype of deixis (a concept known since ancient times) goes back to the ideas of K. Bühler (Bühler, 2000, p. 103), who strictly distinguished between deictic and nominative linguistic signs. K. Bühler explicitly pointed to two phenomena derived from deixis proper: anaphora and deixis to the imaginary. Anaphoric indication in his concept is a special case of deictic indication based on the general nature of indication. He argues for his position by the fact that Indo-European languages use largely the same words for reference in anaphora as for indication in visual deixis (Bühler, 2000, p. 74–113).

Lyons’ claims that anaphora involves the transference of what are basically spatial notions to the temporal dimension of the context-of-utterance and the reinterpretation of deictic location in terms of what may be called location in the universe-of discourse is convincing (Lyons Semantics 1977: 663).

The distinction between deixis and anaphora, carried out in the works ancient Greek grammarians, most researchers refer to areas of semantics and pragmatics (N.D. Arutyunova, J. Lyons, B.A. Vinogradov, I.M. Kobozeva, E.B. Paducheva, V.A. Plungyan, B.A. Uspensky, S. Levinson,). On the other hand, anaphoric and partly deictic relationships and means in language are of great interest to specialists, working in the field of syntax - both traditional and based on methodology of N. Chomsky’s generative grammar, in particular, in the version control and binding theories. Finally, beyond research anaphors in a sentence, some linguists turn to the analysis of means expressions of anaphoric relations in the text (A. Zribi-Herz). Separate a specific problem is the so-called zero anaphora, as well as ellipsis of personal pronouns of the 1st and 2nd persons. Much attention devoted deictic and anaphoric means in his “Theory of Language” K. Buhler. In a number of works in recent years, a pragmatic approach to research anaphoric and deictic means and relations are significantly expanded. Anaphora and deixis in specific languages are also considered as integration of the pragmatic component into the language system or as an expression inherent features of a language community not only linguistic, but also cultural character (V.B. Kasevich).

Anaphora consists in the retrieval via a referentially-dependent indexical expression token from within a given ground of an already existing ‘figure’ (or one which may be relatively easily accommodated or otherwise inferred from context), together with its ‘ground’, the anaphoric predication acting to extend that ground (see Kleiber 1994, Ch. 3) — i.e. to carry it over for the interpretation of the current utterance. So in fact the ‘figure/ground’ relation is an integral part of the operation of these two indexical referring procedures. The occurrence of an anaphor together with the clause in which it occurs as a whole constitutes a signal to continue the focus of attention established —or assumed to be established— at the point of use. The occurrence of an anaphor is a signal to continue the existing attention focus established hitherto (or assumed to be so established); thus, the referents of (weakly stressed, phonologically non-prominent) anaphors are presupposed by the speaker to enjoy a relatively high degree of psychological salience or attention focus level for the addressee at the point in the text where these are used. (Cornish 2007: 10).

“Reference is a way to “hook” an utterance into the world. There is a certain correlation between the semantic type of linguistic expression and the type of reference” (Arutyunova, 1982:18): only depending on its meaning can a referential expression designate one or another object of reality.

Along the lines of the anaphoric element, along with pronominal anaphora, nominal, adverbial and verbal anaphora were distinguished. The expansion of the discursive space for the study of deictic coordinates allows for the absence of any means of indicating a person (time, place), but this “does not mean that such an indication is not implemented at all: it is carried out by other means characteristic of a given, specific language. The absence of any funds can be compensated by others” (Kurbakova, 2009:36–37). Then we can talk about the phenomena of implicit and/or associative anaphora (Kleiber, 1990). Arutyunova emphasizes that anaphoric use of pronouns is based on deictic and in significant respects copies it. (Arutyunova, 1985:18).

In Uzbek linguistics Sh.Safarov states the theoretical aspects of anaphora and deixis in the texts. (Safarov 2008) Shermatov highlighted the use of anaphora in scientific texts in English and in Uzbek (Shermatov 2008), R.Davlatova pointed the deictic and anaphoric elements in Uzbek texts and identified their pragmatic and semantic points (Davlatova 2020).

Results

Anaphoric reference is applied in both English and Uzbek agricultural texts. It is one of the most efficient way of making the context more precise. In English agricultural texts the personal pronouns “they” (1),(2) and “it”(3) typically, has been implied more than the pronoun “he” as an anaphoric element. In Uzbek the anaphoric reference is presented in numerous cases with the assistance of the pronouns “u” (4) in singular and “ular” (5) in plural form. Demonstratives in English “this”, “these” is the most applied form of the anaphoric element in agricultural texts and their alternatives in Uzbek agricultural text were “bu”, “shu”,(6,7) however their form will be changed in many ways in Uzbek and can be used as “bunday”, “shuning ” (10,11) as keeping the same form and meaning in English as demonstratives “this” “that”. When two or three anaphoric references need to be implied in order in English, "this" or "these" and "it" or "they" would serve in that function; in Uzbek, however, the pronouns "u" and "bu" or "shu" would acquire their positions respectively. “bu” or “shu” would be replaced in their places.

Discussion. The pronouns "it" and "they" tend to be used in English agricultural texts to indicate the antecedent of the previous sentence. It may only be one word in certain situations.:

- (1) *Transgenic cultivars (Chapter 4) are a recent innovation that has been adopted rapidly. They were used on over 123 Mha worldwide in 2008, 15 years after their first release in the mid-1990s. (David J. Konnor Crop ecology UK.- Cambridge University press 2011: 28)*

In the example *they* and *their* stands as an anaphoric reference for the *transgenic cultivars* in the latter sentence, the author expresses the antecedent with two anaphoric element in the same time in the various form. These pronouns can be applied as an anaphoric reference to the noun phrase in the examples given below, when expressing the noun phrase as antecedent the form of the anaphoric reference is varied but it do provide the same meaning of the antecedent:

- (2) *Five themes listed in Box 1. I unify the contents of this book. They relate contemporary issues in food supply and environmental management to attributes of farming systems as previously presented ((David J. Konnor Crop ecology UK.- Cambridge University press 2011:17)*
- (3) *If an individual part is found to be genetically superior, it could be propagated en masse by vegetative means. In this situation, the type of progeny, that is released as cultivar (Rex Bernardo Essentials of plant breeding. Woodbury.: Stemma Press- 2014: 13).*

This procedure is carried out in Uzbek through the use of the pronouns "u" in the singular form and "ular" in the plural, The anaphoric reference “u” stands as an anaphoric reference for the antecedent *ginko biloba* and its function is carried on in the latter sentences as it can express the same meaning and it has got in the form *uni* however the antecedent stays the same *ginko biloba*:

- (4) *Ginkgo biloba o'simligi 2 uyli o'simlik hisoblanadi. Tuxumdonlar urg'ochi daraxtlarda, gulchanglar esa erkak daraxtlarda rivojlanadi. U tabiiy holda faqat Xitoyda o'sadi, ammo shunga qaramay mo'tadil iqlimi bo'lgan bir qator mamlakatlarda yetishtiriladi. Uni Shimoliy Amerika, Sharqiy Osiyo va ayrim Yevropa mamlakatlaridan topish mumkin, u yerda*

farmatsevtika bozori ehtiyojlari uchun yetishtiriladi. (International Journal of agrobiotechnology and veterinary medicine special issue 2022:611)

- (5) *Epifit yo'sinlar daraxt va butalarning po'stlog'iga yopishib yashashga moslashgan. Ular substratdan faqat yashash muhiti sifatidagina foydalanadi (International Journal of agrobiotechnology and veterinary medicine special issue 2022:656).* If the antecedent is presented in plural form, in Uzbek it stands as an *ular* in the role of an anaphoric element.

In English, as we have seen, the third-person pronouns are neutral with respect to proximity, but distinguished in terms of gender. Turkish, by contrast, has three demonstratives distinguished in terms of deictic proximity, but neutral with respect to gender (Lyons Semantics 1977).

The demonstrative pronouns "this" and "these" are mostly inferred by scientists as an anaphoric reference, and they perform a significant part in pointing the given antecedent in the previous sentence. While implication of this in English agricultural text the antecedent in the sentence is presented in sequence as the given meaning and the idea will flow in a right way and the reader will not be distracted and the repetition of the same word or phrase is boring. The substitution of the whole phrase or the noun happens with the assistance of the demonstrative *this* or *these*:

- (6) *The production of a farm, region, or country is defined mathematically as the area harvested times yield per unit area. This is such an obvious relationship that its significance is often overlooked in discussions of carrying capacity and input-output relationships "I agricultural systems. (David J.Konnor Crop ecology UK.- Cambridge University press 2011:51)*
- (7) *First the bacteria: this includes a variety of unicellular organisms with insecticidal and fungicidal properties. (New AG international 2010sept)*
- (8) *The evaluations typically need to be replicated across different locations and years because the best cultivar in one environment is often not the best in a different environment. These environments may be subject to biotic stress, such as drought and low soil fertility. (Rex Bernardo Essentials of plant breeding. Woodbury.: Stemma Press- 2014: 117)*

In Uzbek agricultural texts, demonstrative pronouns in a variety of forms, such as "shu," "bu," "mana bu," "shunday," "bunday," and "ana shu," might be used in place of them as well. :

- (9) *Masalan, soyaning "O'zbek-2" navining ildizlaridagi tuganaklar soni 115 tadan 92 tagacha, "Do'stlik" navida bu ko'rsatkichlar tegishli 145 dan 118 tagacha hamda "O'zbek-6" navida 165 dan 130 tagacha kamayganligi qayd etildi. (International Journal of agrobiotechnology and veterinary medicine special issue 2022:745)*
- (10) *Plantagoaceae (Zupturumdoshlar) Plantago.l. Zupturum turkumiga mansub plantogo major.l katta bargli zupturumning O'zbekistonda 6 ta turi uchraydi va shundan 4 tasi dorivor hisoblanadi(Сборник Международной Научно-Практической Конференции 2022: 726).*

The form of anaphoric reference which can substitute *this* in Uzbek texts are numerous, one of them is *shu*, its place in the sentence may be varied as it should take some suffixes and in the example it is expressed as *shundan*, presenting the antecedent of the whole phrase in the former sentence. In the example given below (11) the word *bunday* comes as an anaphoric reference and points the phrase without need of repeating the idea which is primary for scientific writing:

- (11) *Barcha elementlar odatda metallar bilan metallmaslarga bo'linadi. Lekin bunday bo'linish shartlidir. (Mustafayev, Xolmurodov. O'simliklar bioekologiyasi. Toshkent- O'qituvchi 1992. B.45)*
- (12) *Kovrak - (Ferula) turkumi selderdoshlar (soyabonguldoshlar)- Apiaceae (Umbelliferae) oilasiga mansub ko'p yillik o't o'simlikdir. Ushbu dorivor o'simlikning olimlarimiz tomonidan yer yuzida 160 dan ziyod turlari aniqlangan. (Mustafayev, Xolmurodov. O'simliklar bioekologiyasi. Toshkent- O'qituvchi 1992. B.117)*

Antecedent of anaphoric connections can be not only a single word, but also units of a higher level - a phrase, a sentence or even several sentences (supra-phrasal unity) (Bogdanov, 1977; Kolotilova,

1983). In English agricultural texts “that” can be used as an anaphoric reference as here in the example taken the pronoun “that” appears in the second sentence being anaphoric elements for the whole noun phrase in the former sentence and giving the meaning without repeating the phrase: (13) *Pfizer developed an alternative green process that conversed several steps of pregabalin synthesis from use of organic solvents to water. That reduced both health hazards and production heating requirements. (EhP -2010- June:15)*

Examples are numerous where two different types of anaphoric references have been used in a single paragraph, suggesting additional anaphoric elements and raising the reader's comprehension level. The second anaphoric reference in the sentence is "their," which has an antecedent that occurs in the same line as the NP. "This" appears here as an antecedent for the NP:

(1) *A cropping system (or livestock- pasture system) is the temporal sequence of crops and management practices in individual fields. At this level we can examine the production processes of plants, their dependence on environmental conditions, and the role of soil processes that support plant growth. (David J.Konnor Crop ecology UK.- Cambridge University press 2011:14)*

The pronoun “it” is considered as one of the most productive anaphoric reference which is used in agricultural texts, in the example it stands as an anaphoric element for the noun phrase. In the same context the author used another reference, however, here the word “such” comes in this role.

(2) *The strong agricultural extension service in the US, for example could be counted on to identify a disease outbreak early, and it could prescribe costly pesticides to stop the flare-up. Such detection and control measures, however, required the kind of resources that poor countries often lacked. (Agro chemicals news in brief 2000 N3)*

Because the pronouns "u, ular" can be used as both demonstrative and personal pronouns in Uzbek, they can be implied when used as an anaphoric reference. Typically, this anaphoric reference can be used in alongside with the demonstrative pronouns "bu, shu". However, it is allowed to apply the repetition in scientific texts, authors tend to use anaphora in their texts and the meaning of various anaphoric reference can be inferred through the text. In the example the anaphoric references *bular, ular* stand for one antecedent *savol*, the anaphoric elements used here denotes the antecedents at the same time it is different than in English both in form and in the layout of presence in a sentence :

(3) *Tadqiqotning birinchi bosqichida anketa to'qqizta savoldan iborat bo'lib, ularda ochiq va yopiq savollar aralash tarzda berildi. Bular orasida fikr-mulohazalarni chuqurroq bilish maqsadida ochiq savollarga ko'proq e'tibor qaratildi. (O'zbekistonda agrar sohani innovatsion rivojlantirishning nazariy va amaliy asoslari Respublika ilmiy- amaliy konferensiya to'plami 2022:70)*

Conclusions. As a conclusion we can say that implementation of anaphoric elements in scientific texts is typical in English and in Uzbek respectively. In agricultural texts in Uzbek and in English anaphoric references is used effectively as it provides the author the opportunity of explaining the material briefly and easily. On the other hand, the readers can deduce the given data without much effort and repetitions. Anaphoric elements in English agricultural texts are in most cases applied with the assistance of demonstratives especially with “this” and “that” and the analogues are various in Uzbek texts such as “u”, “bu”, “shu”, “ushbu” all of which can provide the same function as an anaphoric reference. The demonstratives “this”, “that” “shu”, “bu” or “ushbu” identifies attributive forms in the texts In English the forms of anaphoric elements have been changed into “they” to “their” or “them”, however in Uzbek the form of the anaphoric elements changed by adding suffixes as “bu” - “buning” - “bunga”, “shunday”, “shunga”. The anaphoric reference is used to denote either one word or phrase in the previous sentence in some examples they can substitute the whole phrase in both languages. The pronouns “he”, “they” are implied as an anaphoric element in English scientific texts, their substitution in Uzbek scientific text is not different as in English only are formed by adding suffix: “u” and “ular”. One of the difference of implying anaphora in English and in Uzbek is that the pronoun “u” perform the role of “he” and “this”, “that” in English which may mislead while reading the text. In some cases on antecedent can stand for two anaphoric reference but in various forms as “their” “them” “uni”, “unga”, “uning”. However, some scientists prefer to

use different references in their sentences “this”, “it” sometimes “such”. In Uzbek scientific texts “u”, “bu” or “ushbu” can be implied as reference for one antecedent.

REFERENCES:

1. Арутюнова, Н.Д. (1982). Лингвистические проблемы референции Новое в зарубежной лингвистике. – М. : Радуга,– Вып. XIII : Логика и лингвистика (проблемы референции). – С. 5–40.
2. Арутюнова, Н.Д. (1985) Истоки, проблемы и категории прагматики /Д. Арутюнова, Е.В. Падучева // Новое в зарубежной лингвистике : сб. статей. – М. : Прогресс,. – Вып. XVI: Лингвистическая прагматика – С. 3–42.
3. Богданов, В.В. (1977). Семантико-синтаксическая организация предложения. – Л. : Изд-во ЛГУ, – 204 с.
4. Бюлер, К. (2000). Теория языка. Репрезентативная функция языка М. : Прогресс,– 528 с.
5. Вольф, Е.М. (1974). Грамматика и семантика местоимений – М. : Наука, – 222 с.
6. Касевич, Вадим Борисович. (2013). Когнитивная лингвистика. В поисках идентичности . - Москва : Языки славянской культуры, - 185 с
7. Кибрик, А.А. (1983). Об анафоре, дейксисе, и их соотношении Разработка и применение лингвистических процессоров / под ред. А.С. Нариньяни. – Новосибирск : ВЦ СО АН СССР,– С. 107-129.
8. Кибрик, А.А. (1992). Человеческий фактор в языке : Коммуникация, модальность, дейксис– М. : Наука,. – 281 с.
9. Савельева Е.Б. (2012) Дейксис и анафора: общее и специфическое // Вестник ИГЛУ. М., № 2.- С.181-183.
10. Сафаров Ш. (2008). Прагмалингвистика. - Т.: «Ўзбекистон миллий энциклопедияси» давлат илмий нашриёти, – 285б.
11. Шерматов А.А. (2008) Инглиз илмий – техник матнда дейксиснинг ифодаланиши: Филол. Фанл. Номз....автореф. – Тошкент: ЎЗМУ, – 22б.
12. Betty J. Birner (2013) Introduction to pragmatics Chichester, UK: Blackwell Publishing 342p.
13. Brown, Gillian - Yule, George. (1983). Discourse Analysis. Cambridge University Press.
14. Bühler, K. (1990). Theory of Language: The representational function of language. Amsterdam: John Benjamins.
15. Cornish, F. (2007). English demonstratives: Discourse deixis and anaphora. discourse-pragmatic account. In Nilson, Aba Appiah Amfo & Borthen (eds.), 147-166.
16. Cornish, F. (2009, April 2324). Indexicality by degrees: Deixis, ‘anadeixis’, and (discourse) anaphora. Conference given at the symposium “quel sens pour la linguistique” organised to mark the award of docteur honoris causa to Professor Sir Johns Lyons. Universite’ de Toulouse-le Mirail
17. Ehlich, K. (1982). Anaphora and deixis: Same, similar, or different? In R. J. Jarvella & W. Klein (Eds.), Speech, place and action. Studies in deixis and related topics (pp. 315358). Chichester, UK: Wiley
18. Kleiber, G. Anaphore – deixis; où en sommes-nous? / G. Kleiber // Texte présenté au Colloque La Deixis. L’Information Grammaticale, 51, 1990. –P. 3–18.
19. Fillmore, C.J. (1997). Lectures on Deixis. Stanford, Calif.: CSLI Publications.
20. Himmelmann, N. P. (1996). Demonstratives in narrative discourse: A taxonomy of universal uses. In B.A. Fox (ed.), Studies in Anaphora, Amsterdam/Philadelphia: John Benjamins, 205-254.

21. Lakoff, R. (1974). Remarks on this and that. In Proceedings of the Tenth Regional Meeting of the Chicago Linguistic Society. Chicago Linguistic Society, 345-56.
22. Levinson, S. C. (2004). Deixis. In L.R. Horn & G. Ward (eds.), *The Handbook of Pragmatics*. Malden, MA, USA/Oxford, UK/Carlton, Australia: Blackwell Publishing, 97-121.
23. Lyons, J. (1977). Ch. 15: Deixis, space and time. In *Semantics, Vol 2*. Cambridge: Cambridge University Press, 636-724.
24. Lyons, J. (1979). Deixis and anaphora. In T. Myers (ed.), *The Development of Conversation and Discourse*. Edinburgh: Edinburgh University Press, 88-103. Reprinted as Ch. 9 in Lyons, J. (1991), *Natural Language and Universal Grammar*. Cambridge: Cambridge University Press, 166-178.
25. Milner, J.-C. (1982). *Ordre et raisons de langue – Paris : Seuil*, – 375 p.
26. Récanati, F. (2005). Ch. 6: Deixis and anaphora. In Z. Gendler Szabó (ed.), *Semantics versus Pragmatics*. Oxford: Clarendon Press, 286-316.
27. Reboul, A. (1994). Deixis et anaphore // *Dictionnaire encyclopédique de pragmatique*. – Paris : Seuil, – P. 349–372.