

Morpho-syntactic Variation and Methodology:

Problems and Possible Solutions

Gülşat Aygen

Northern Illinois University

Abstract

Bu çalışma Türkçe sözdizim ve biçimbilim alanındaki çalışmalarımızdaki temel yöntemsel sorunlarımızı saptamayı ve çözüm önermeyi amaçlamaktadır . Evrensel Dilbilgisi anlayışımız bütün dillerin araştırılmaya değer olduğu olgusunu içermektedir, Ancak bireylerden örnek veriler derlenirken, olası değişkenler de denetim altında tutulmalıdır, Dilbilim çalışmalarında tam olarak hangi verilerin geçerli sayılabileceği konusuna ilişkin bilgilimsel sorunlar uzun süredir tartışılmaktadır (Quine, 1953, 1972; Chomsky, 1961, 2000, and the references in Gervain, 2003, among others). Sorunlu olduğu için diğer davranışsal bilimlerde dışlanan ve yerini kesin bir şekilde denetlenen, bilimsel deneysel yöntemlere bırakmış olan ‘sezgisel’ ve ‘ içedönük sorgulama’ yöntemi hala anadili Türkçe olan çoğu dilbilim araştırmacısı tarafından temel veri toplama yöntemi olarak kullanılmaktadır (Gervain, 2003). Bu çalışmada, sistematik bir veri toplama yönteminin kullanılmamasının ciddi kuramsal sorunlara yol açtığını savunulmakta ve bir çözüm önerilmektedir. Problem ve olası bir çözüm , Türkçe’de Kural Dışı Durum Yükleme yapısı üzerine bir örnek incelemesi aracılığıyla sunulmaktadır.

Anahtar sözcükler: yöntembilim, sözdizim ve biçimbilim, Kural Dışı

Durum Yükleme yapısı, geçerli veri derleme yöntemleri.

Morpho-syntactic Variation and Methodology:

Problems and Possible Solutionsⁱ

1. Introduction

The problem of variation in data and questionable grammaticality judgements has been a long-observed yet overlooked issue in theoretical linguistics until very recently (Gervain, 2003, Schütze, 2005). However, it has not been discussed in Turkish theoretical linguistics. Unlike work on applied linguistics or historical linguistics, research on syntax and morphology does not necessarily follow the requirements of a scientific research.

As theoretical linguists, we are interested in characterization of native speaker competence, which is not directly accessible for observation. Therefore, make inferences about the linguistic competence of the speakers based on performance data. Epistemological concerns as to what exactly counts as relevant data have long been discussed (Quine, 1953, 1972; Chomsky, 1961, 2000, and the references in Gervain, 2003, among others). Unfortunately, most theoretical linguists rely on “intuitive” and “introspective practice” although this has “long been expelled from other behavioral sciences is problematic and needs to be replaced by strictly controlled experimental methods.” (Gervain, 2003). Somehow, the standard experimental controls are not used in collecting data for linguistic theory. As noted in Gervain, 2003), reliance on native speaker intuition is a necessary consequence of generative principles, but uncontrolled nature of data collection is not.

Our understanding of Universal Grammar dictates that all languages are relevant for the study of UG; so are all individual languages. However, potential variants need to be controlled in collection of individual grammaticality judgements. When the author's individual grammaticality judgement and/or interpretation of a sentence provides a major argument for the proposal, we have all the reason to question the validity of the data. Unfortunately, designing a valid experimental design in collecting and testing data is not the actual practice in generative syntax and morpho-syntax.

In this paper, I argue that the lack of any systematic empirical method yields to serious theoretical problems, and propose an empirical solution: systematic data collection paired with a theoretical goal to account for all varieties rather than one's own idiolect would resolve the current methodological problems in Turkish linguistics. I present a case study of the Turkish ECM, and data collected within the principles of field work. It also proposes a series of measures that we professionals of the field take to prevent non-systematic data from linguistic analyses. Section (2) discusses the relevant literature on the topic; section (3) discusses Turkish morpho-syntax and its problems with methodology; section (4) presents a case study on the Turkish ECM and proposes answers to the questions posed in (3). Section (5) concludes the discussion.

2. How do we assess reliable data and grammaticality judgements?

Schütze (1996, 2005) aims to show that such methodological negligence can seriously compromise the data obtained, and argues for a more reliable

mode of data elicitation in linguistics, based on standard methods from experimental designs.ⁱⁱ Schütze (1996) aims to identify parallels between linguistic judgment behavior and other types of cognitive behavior, an approach that allows him to arrive at a model of the judgment process that explains linguistic intuitions as the result of the interaction of the language faculty with other cognitive faculties. Based on this model, Schütze puts forward a set of practical recommendations for eliciting more reliable linguistic data. The basic principle is that we all need to pay attention to the requirements of experimental design: embedding the relevant data within natural discourse, making sure we are eliciting what we are asking for by controlling the instructions, preventing discrepancies between the instructions of data elicitation and the research (Schütze, 2005, p. 476). To quote from him: “A general strategy for [developing experimental tasks] is to stick as closely as possible to the ways in which language is actually used for everyday purposes, rather than contriving artificial unfamiliar task.” (Schütze, 2005, p. 477).

2.1 A simple illustration of facts

Why can't we simply ask people whether a sentence is acceptable or not? Simply because there are too many uncontrolled factors in such casual questions and the responses cannot constitute scientific data. For instance, Maclay & Sleator (1960) asked beginning rhetoric students: if the following words form a grammatical English sentence?"

(1) Maclay and Sleator (1960)

a. Label break to calmed about and (3 out of 21 said Yes)

- b. Not if I have anything to do with it. (4 said yes)

Another example came from Carden (1976). In this study participants rejected all imperative sentences and claimed them to be “ungrammatical” simply because they thought that *please* should be added to them.

Based on the quoted literature and the questions raised, I would like to pose the following question:

Can we still think our individual judgements as linguist writers or the answers to the e-mails we send to our linguist/non-linguist friends asking something like “Does this sentence sound grammatical to you?” count as valid data?

I don’t think so. The crucial point here is that our work –particularly the syntactic- literature is full of this kind data. Scientifically speaking, spending endless hours on working on such data is futile, and we have been doing exactly this for a long time. Furthermore, the analyses resulting from various individual judgements cause major theoretical issues. One such case is discussed below.

3. Turkish morpho-syntax and methodology problems

The two major problems in Turkish morpho-syntax are data inconsistencies, and unreliability of the grammaticality judgements in published work.

3.1 Data inconsistencies

One major problem in Turkish theoretical linguistics consists of the data inconsistencies in work focusing on the same phenomenon. (e.g. literature on

the status of agreement morphology in ECMs: Pullum, 1975; Knecht, 1974; Kornfilt, 1976, 1984; Kural, 1993; Zidani-Eroğlu, 1997). Data inconsistencies, I argue, partially result from the informal methodology of data collection, namely, relying on one's own judgements rather than collecting data within the principles of field work.

3.2 Reliability of grammaticality judgements

The second problem is about the reliability of the grammaticality judgements. We have all come across examples that are totally unacceptable, yet are regarded as acceptable, or vice versa. We also see examples with interpretations impossible to get. When the author of a paper is a native speaker of the language s/he studies, and s/he obviously has a vested interest in the outcome of grammaticality judgements, we have solid reasons to question the validity of their judgements. I will not give examples of such data in this article out of respect for my colleagues who have made resort to such marginal structures or interpretations in their work. I also may have been subconsciously biased with my data in my earlier work.ⁱⁱⁱ I will not address bias problem here; however, the major proposal in this paper aims to provide a solution to this problem of potential bias in research, as well. ^{iv}Following is a case study: the infamous ECM.

4. ECMs in Turkish and Who assumes What?

First of all, let us see *who* assumes *what* regarding the presence of agreement in Turkish ECMs. Secondly, we will discuss whether these are

dialects, idiolects or varieties. Following is the list of such differences in the data assumed in work on ECMs^v:

(2)

- i. Compulsory agreement (Pullum, 1975),
- ii. Optional agreement: (Kural, 1993; Zidani-Eroğlu, 1997; Moore, 1998; Özsoy, 2001; Aygen, 2000a,b, 2002/2004; İnce, 2006)
- iii. Compulsory non-agreement (Hankamer & Knecht, 1976; Knecht, 1985; Kornfilt, 1976; and further work, George & Kornfilt, 1981; Öztürk, 2005).

It is worth noting that none of these claims is based on data collected methodologically within the principles of fieldwork, or data tested within a scientifically valid experimental design. They reflect either the idiolect of the author and/or his/her native speaker friends, or the impressions of the author as to the varieties out there.

However, two of these varieties, namely compulsory agreement and compulsory non-agreement are referred to as Dialect A and B in the literature (Pullum, 1974; Kornfilt, 1976; Aygen, 2002; among others).

The two questions we will attempt to answer in this case study are the following:

(3)

- a. Question #1: Do these forms really exist?
- b. Question #2: Can these technically be defined as dialects?

4.1 A case study: An answer to Question #1:

Scientific report on the Method:

4.1.1 Subjects.

71 native speakers of Turkish who have spent the first 15 years of their lives in different geographical locations. Non-linguists; at least college educated; age group 30-50; male (28) and female (43). Regional distribution : Marmara (İstanbul, Yalova, Bursa, İzmit, Kocaeli,), Trakya (Edirne, Tekirdağ, Çanakkale), Aegean (İzmir, Manisa, Denizli), Central Anatolia (Ankara, Eskişehir, Nevşehir), East Anatolia (Siirt, Erzurum), Mediterranean (Alanya, Mersin, Adana), Black Sea (Samsun), Germany (3 instances to include a potential dialectal region).

4.1.2 Materials.

ECMs with or without agreement morphology were embedded in the discourse of two simple jokes: the first joke included the agreement morphology in the ECM structure, the second did not.

4.1.3 The Procedure.^{vi}

Following is an account of what the questionnaire were asked to do:

- (4) The questionnaires were asked to
 - a. state their age/sex/education level;
 - b. identify the places they've lived in before 15 (roughly the critical age);
 - c. read the jokes out loud or to ask someone else to read it to them out loud to ensure that literacy, and pre-disposition to book-grammar did not interfere with their grammaticality judgements;

- d. to identify any sentence(s) that they think does not sound OK; AND
write down the corrected one. This is asked to control interference of
variants (see Carden, 1976), and make sure they reject certain sentences
because there is or there is no agreement on the predicate, rather than
other irrelevant stylistic reasons. This question has proven to be very
useful: some respondents changed sentences irrelevant to the study for
stylistic reasons;
- e. [they were also asked] to fill in the inflectional ingredients of the ECM
predicate of a sentence as a control question to determine those who
regard agreement to be optional.

4.1.4 Results.

Only the results relevant to the questions asked in this study will be reported. 6 responses have replaced all ECMs with –DIK constructions.^{vii} These results also have sociolinguistics implications as to which geographical locations, and gender, age groups correlate with these variations, etc, but we will not get into these in this research.

The major results of this survey for our purposes are the following:

(5) Results

- a. Two variations exist; optional agreement and agreement required
- b. the compulsory non-AGR leaves room for skepticism since there
are 4 responses under this category, two of which actually
changed the ECMs into either a finite clause or a –DIK clause.

This result leaves us with only 2 responses out of 71.

- c. There is some evidence as to the existence of a variation that does not allow ECMs at all (particularly from Alanya).

(5) Table on RESPONSES = 71

(a) Raw results

Total	+AGR	NON-AGR	OPTIONAL AGREEMENT		NO ECM/-DIK
			Prefers AGR	No preference	
71	24	2+2 (?)	18	15	10
%	33.80	5.63	25.35	21.12	14.08

(b) Overall results

Total	Prefers, requires OR DOESN'T MIND [+AGR]	NON-AGR
71	57	4 (?)
%	80.27	5.63

4.1.5 Discussion.

Since an overwhelming majority of the subjects surveyed (80.27) require, prefer or do not mind the presence of agreement on the ECM predicate, it is safe to state that the dominant variation is this one. This finding requires any syntactic analysis of ECMs to include an account for agreement in their analysis. Regardless of the small scale of the subject population (71 people), the fact that almost every major region of Turkey is represented in the survey, and that there is a consistency in terms of the age/education and gender(s) of the subject population, we could argue that the surveyed population provides a proper representation of Modern Turkish. This survey has been done and presented here with the hope of many other colleagues re-testing these facts at a much larger, and hopefully a more controlled way in the near future.

4.2 Question #2: Are these dialects?

Dialects are not defined by any variation: dialects refer to systematic differences in multiple components of grammar. That is, Dialect A and B

would have systematic differences in syntax, phonology and morphology. Deep South Dialect of American English differs from the Northeast one in many syntactic constructions: multiple modals, multiple negatives, etc; in morphology: coke vs. soda; in phonology: the so-called “drawl”. There is no further evidence that variations in ECM corresponds to other systematic differences in grammar in such a way that we can distinguish them as Dialects. As a noted linguist, Stan Dubinsky states (1995 and p.c.), “When a linguist says that the set of judgments motivating the analysis constitute a distinct dialect, one might reasonably ask whether the dialect in question has any other characteristic features (such as an identifying lexicon, phonology, etc). If it doesn't, then it is probably not a regional, ethnic, social, or gendered dialect but rather a "dialect of convenience".^{viii}

We do not know yet any systematic variations in different components of grammar, i.e. syntax, morphology has been established. Therefore, I will refer to them as morpho-syntactic variations until further work proves otherwise.

As Dubinsky, a noted linguist says (p.c.)^{ix} “An analysis of phenomena in [any] actual dialect needs to be able to explain how the dialect differences result from parameter settings (or microparameter settings) that are distinct from the standard.”

4.3 An overview of available analyses of the Turkish ECM

The analysis of ECM is dependent on the structure identified as well as the variation assumed. Some work simply assumes a structure with no

justification of the choice or no arguments against alternatives structures proposed in the literature.^x Some do present arguments in favor of the structure assumed or identified. For the sake of methodology, our major concern here, we prefer the latter strategy, because a plausible strategy would require the researcher to do the following:

- (6) A researcher should
 - a. check the morphological ingredients, which in and of itself might be misleading since identification of morphemes is problematic: e.g. –DI can be analyzed as an aspect or tense morpheme.^{xi}
 - b. test the hypothesis developed based on morphological ingredients with syntactic tests.

or

 - c. adopt an existing proposal (a CP or an Asp)
 - d. provide an argument for the choice (i.e. explain why the alternative is not the better choice).

One of such consistent analyses out there is that of Kornfilt (1976, and subsequent work): since George & Kornfilt (1981), agreement is analyzed as the major finiteness parameter and it has a projection of its own (earlier work) or it is on C (recent work). More recent work (Aygen, 2002/4, 2005 a,b, 2006; and Ince, 2006) have some convincing arguments questioning the CP-analysis of ECMs, favoring a reduced clause analysis.^{xii} Obviously, feature configuration on the available maximal projections is crucial to the analysis; therefore, ECMs could consist of CPs with empty T and C, or +agr C, etc.

Crucially, it is worth noting that none of the work above (except for Aygen, 2004) attempts to account for all variations. Aygen (2004) proposes a structure to account for all variations. In terms of the syntactic mechanism that licenses the accusative subject, there are multiple proposals which do not attempt to account for all variations.

(7) Proposals for ECM

- a. Raising analyses, (Kornfilt, 1976; Zidani-Eroglu, 1997; Moore, 1998; Özsoy, 2001; Aygen, 2002; among others)
- b. In situ analyses (Aygen ms; Öztürk, 2005)
- c. Merging at VP + raise to spec vP (Ince, 2006)^{xiii}

5. Conclusions, suggestions and issues for further research

In this paper, we have made a case study of the Turkish ECM to show that we morphologists and syntacticians need to make “designing a valid experimental design in collecting and testing data” an actual and standard practice. Based on a controlled study, we have seen that of the three “dialects” assumed in the literature previously, none of them can technically be referred to as a dialect. Secondly, of the variants claimed in the literature, the one that requires or prefers the presence of agreement on ECM predicates is predominantly represented among the subjects of the study representing major geographical sections of Turkey; the one that regards agreement optional is the second group represented. The variant that requires the lack of agreement is not represented in a statistically significant way. Of the 4 (out of 71) subjects included in this category, two actually marked the ECMs in both jokes as incorrect changed it

into a finite clause. For the control section of the survey, only two respondents filled the predicate with an aspect/tense morphology and omitted the agreement.

There is a need for a lot more research on the topic. For further work, I would like to propose two questions that rose out of this inquiry and that need to be answered:

(8) Two questions for further work

- (a) Is there a variant of Modern Turkish that does not allow ECMs and substitutes –DIK constructions instead? Particularly speakers of Turkish from Alanya and its surroundings should be studied.
- (b) Is there really a variant of Modern Turkish that regards the presence of agreement morphology ungrammatical, or does it only exist in the literature? Since non-existence cannot be proven, we need studies that cover larger populations, and improved surveys with further control questions. Considering the small number of respondents in this category, we need further control questions to see whether these respondents really ruled out agreement or preferred not having agreement. The latter would fall in the optional agreement category.

As for the main problems regarding methodology addressed in this study, I would like to suggest that we

- teach our students the principles of scientific research and research designs vigorously
- not accept any work that is based on/restricted to the individual judgements of the author in the neither as professors in the classroom nor as reviewers for conferences and journals
- insist on making “real data” gathered within the principles of scientific research a requirement at our conferences and journals
- establish the scientific validity of work Turkish linguistics by changing our very informal attitude toward data, making research designs a core part of our work.
- Educating future linguists to elicit/collect examples in a scientific way, and read previous work on linguistics with a critical view in terms of methodology.

Unfortunately, they will find famous work that defined the field to have relied on unreliable examples.

Selected references:

- Aygen, G. (2006). Finiteness and the relation between agreement and nominative case. In C. Boeckx (Ed.), *Agreement Systems* (63-98). Amsterdam: John Benjamins.
- Aygen, G. (2005a). Finiteness, case and agreement. In V. Chand et al. (Eds), *The Proceedings of West Coast Conference in formal linguistics (WCCFL)*, Cambridge: Cascadilla Press.
- Aygen, G. (2005b). Finiteness, case and agreement. In A. Makkai, et al (Eds.), *LACUS Forum XXXI: Interconnections* (83-92), Houston: LACUS.
- Aygen, G. 2002/4. Finiteness, case and clausal architecture. (Doctoral dissertation). Harvard University, Boston. Appeared as 2004, MITOPL volume 23, Cambridge, MA.
- Aygen, G., 2002. Is there ECM Raising in Turkish. Harvard University, manuscript. At <https://sites.google.com/site/gulsataygen/publications>
- Aygen, G. (2003). Extractability and the nominative case feature on tense. A. S. Özsoy, D. Akar, M. Nakipoglu-Demiralp, E.E. Taylan, & A. Koc (Eds.). *Studies in Turkish Linguistics* (81-94). Istanbul: Boğaziçi University Press.
- Brendemoen, Bernt & E. Csato. (1986). The head of S in Turkish. A comparative approach to Turkish syntax. In A. Aksu Koç & E. Erguvanlı-Taylan (Eds) *Proceedings of the Turkish Linguistics Conference. August 9-10, 1984* (85-100), İstanbul, Boğaziçi University.

- Carden, G. (1976). *English quantifiers: Logical structure and linguistic variation*. Corrected edition. Academic Press, New York.
- Cowardt, W. (1997). *Experimental syntax: Applying objective methods to sentence judgments*. Thousand Oaks, CA: Sage Publications.
- Dubinsky, S. & Williams, K. (1995). Recategorization of prepositions as complementizers: The case of temporal prepositions in English. *Linguistic Inquiry*, 26(1), 125-137.
- Dubinsky, S. (1991). Case assignment of VP-adjoined positions: Nominative objects in Japanese. *Linguistics*, 30(5), 873-910.
- Gervain, J. (2003). Syntactic microvariation and methodology: Problems and perspectives. *Acta Linguistica Hungarica*, 50(3-4), 1-31.
- Hankamer, J., & Knecht, L. (1976). The role of subject-object distinction in determining the choice of relative clause participle in Turkish. *Harvard Syntax and Semantics*, 2, 197-219.
- İnce, A. (2006). "ECMs as Object Control Structures in Turkish". In Erin Bainbridge Brian Agbayani (eds.), *Proceedings of WECOL: Volume 17*, 208-221.
- Knecht, L. (1985). Subject and object in Turkish. (Unpublished doctoral dissertation). MIT, Boston.
- Kornfilt, J. (1977). A Note on subject raising. *Linguistic Inquiry*, 8, 736-742.
- MacLay, H., & Sleator, M.D. (1960). Responses to language: Judgements of grammaticalness. *International Journal of American Linguistics*, 26, 275-282.

- Moore, J. (1998). Turkish copy raising and A-chain locality. *Natural Language and Linguistic Theory*, 1(6), 149-189.
- Özsoy, A. S. (2001). On small clauses, other bare verbal complements and feature checking in Turkish. In E. Erguvanlı-Taylan (Ed.), *The Verb in Turkish* (213-237). Amsterdam: John Benjamins Publishing Company.
- Öztürk, B. (2005). Accusative subjects in Turkish. Handout. Mediterranean Syntax Meeting, Rhodes, Greece.
- Pullum, G. K. (1975). On a nonargument for the cycle in Turkish. *Linguistic Inquiry*, 6, 494-501.
- Schütze, C. T. (1996). *The Empirical Base of Linguistics: Grammaticality Judgements and Linguistic Methodology*. University of Chicago, Chicago.
- Schütze, C. T. (2005) Thinking about what we are asking speakers to do. In S. Kepser & M. Reis (Eds.), *Linguistic evidence: Empirical, theoretical, and computational perspectives* (457-485), Mouton de Gruyter, Berlin.
- Zidani-Eroğlu, L. (1997). Exceptionally Case Marked NPs as Matrix Objects. *Linguistic Inquiry*, 28, 219-230.

ⁱ A previous version of this article was presented at the 13th International Conference on Turkish Linguistics in Uppsala in 2006, and the LSAAnnual Convention in Anaheim in 2007.

ⁱⁱ Schütze (1996) reviews the literature on linguistic judgments and identifies a set of factors that influence the judgment process, and hence have to be controlled for when collecting linguistic data. This is an excellent resource as a study on grammaticality judgements.

ⁱⁱⁱ This bias does not only surface as marginal/non-existing interpretations, it sometimes surfaces as contradictory data being suppressed from the discussion. I am not questioning my or any one of my colleague's integrity or ethical stand here. I am simply pointing out the fact that adequate controls are necessary to eliminate potential bias in the author's own grammaticality judgements: this bias is most probably a sub-conscious process.

^{iv} See Wayne Cowart's (1997) book *Experimental Syntax*, which provides guidelines for the experimentation with linguistic judgments, along with an introduction to relevant psychological methods.

^v I am told that Serkan Sener has an unpublished manuscript. However, I could not access it at the time this article was submitted for publication.

^{vi} The survey including the instructions and the texts is in the appendix.

^{vii} Three out of six of these responses were from Alanya. It might be interesting to look into that area and see if there is consistent evidence showing the existence of a variation/dialect that lacks ECM in its grammar.

^{viii} See also Dubinsky and Williams (1995) for a case of true dialectal differences.

^{ix} This is from a personal communication with Dubinsky via e-mail in 2006.

^x I am not citing specific work to refrain from insulting any colleagues, but there is, unfortunately, an abundant amount of work that fits the description.

^{xi} The presence of agreement might involve higher functional heads (C or T) or not, depending on your theory.

^{xii} However, we also have analyses out there assuming either one of the previously claimed analyses, but making claims inconsistent with the structures assumed in the study.

^{xiii} Of the work cited above, Ince (2006) provides a very strong syntactic case against previous work and in favor of a "merging-analysis".