On Sentential Inheritance in Turkish: Is "Öyle" a Prosentence?

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ABSTRACT

A conspicuous explanation for sentential inheritance, i.e. the phenomenon of an expression's taking over, in written or oral discourse, the semantic content of a full-fledged declarative sentence *in toto*, is given by means of the philosophically fabricated category of *prosentence*. A prosentence inherits the content of a previously (or only presumptively) uttered declarative sentence in analogy to a pronoun's inheriting the content of a previously uttered noun – in other words, a prosentence is a sentential *proform* that functions similarly to the sentential variable employed in calculi of propositional logic. There are some expressions in natural languages that can be prima facie taken as instances of this category. This paper focuses on the instance of "öyle" in Turkish, and shows that the way "öyle" takes over sentential content in actual usage suggests a non-prosentential model of sentential inheritance, a model in which the inheriting expression functions rather as a pro-predicate, and the complementing (indeterminate) subject expression is ellipted. This pro-predicative-elliptical model employs a structurally more concrete and natural form, namely the traditional subject-predicate form, as the general and abstract form of a declarative sentence, which makes it a healthier alternative to the prosentential model based on the unnatural idea of a sentential variable.

Key Words: Declarative sentence, prosentence, pronoun, proform, Turkish.

1. Introduction: Falsifying a Natural Suggestion

One fructiferous logical fact for the modern philosophy of science has been the utter asymmetry between the verification and falsification of a universal statement, viz. the fact that in order to verify such a statement, one needs to observe exhaustively that *each and every* instance of its (logical) subject is also an instance of its (logical) predicate, while a *single* counter-instance can falsify it. So, for instance, a universal affirmative of the form "Every x is such that, if x is F, then x is G" will not be verified until each and every F will be observed also to be G, but with a single F that will be observed not be G it will be falsified.[2] This fact turns into a simple method of analysis of concepts, if the predicate-letters "F" and "G" are taken to express (possibly distinct) concepts, and the variable "x" to range over their possible particular instances. In this way, say, that concept *F* could be considered independently of concept *G* can be established if one is able to find a single possible (type of) value for "x" which satisfies "Fx" but *not* "Gx".

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[2] The logical fact is immediately transformed into the famous *problem of induction*. See Franz Huber's entry (n.d.) "Confirmation and Induction" in *The Internet Encyclopedia of Philosophy* for the further "fruits" the fact gives for the modern philosophy of science.

The present study employs this simple method to show that the concept of *sentential inheritance* could be considered independently of the idea of a *sentential proform*. Sentential inheritance is the clearly observable phenomenon of a type of expression's taking over the semantic content – with or without certain pragmatic overtones – of a full-fledged declarative sentence as a whole. Since the paradigmatic instance of semantic inheritance in general is provided by the anaphoric use of a nominal expression – most frequently a pronoun – where it goes proxy for a previously uttered noun phrase (of one of the many various sorts), the first natural suggestion is that the sentential variety of semantic inheritance could be explained in terms of the sentential analogues of pronouns – namely, sentential proforms or *prosentences*.

In the following, it is shown, after a brief explanation of semantic inheritance and its sentential variety, that there is at least one type of expression in modern Turkish language, namely "öyle", of which we can make a counter-instance for the mentioned natural suggestion. "Öyle" does appear in some of its uses as a perfect sentential inheritor; however, it is argued that the most reasonable explanation of the grammatical mechanism at work in these uses points to a model where the inheritor is still a sub-sentential rather than a sentential item.[3]

2. Proforms and Inheritance

Some expressions in natural languages bear semantic content by means of their direct relations with the extra-linguistic world, while some others derive their content, wholly or partly, only from other expressions. Typical instances of the first sort of expressions are proper names, such as "Mary" in

(1) Mary knows the truth about the event but just ignores it.

where it gathers its semantic content by means of the semantic relation called *reference* it bears to a particular female person Mary, who is a member of the extra-linguistic world. Typical instances of the latter sort of expressions are *pronouns*, i.e. expressions of a certain type that can go proxy in many contexts for nouns, such as the personal pronoun "she" in

(1)′ <u>Mary</u> knows the truth about the event. <u>She</u> just ignores it.

where it gathers its semantic content only through the mediation of the proper name "Mary" occurring in the preceding declarative sentence, which in turn gathers its own semantic content from the extra-linguistic world (through reference as in (1)). In other contexts, the same (type of) pronoun "she" can go proxy for *other* proper names, making it bear *different* semantic contents, determined by extra-linguistic items different than the particular Mary referred to in (1) and (1)′, and this fact is what groups it with the second sort of expressions mentioned above.

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[3] There might be other, possibly more central uses of "öyle", and other, possibly more vivid and smooth instances of non-nominal inheritors in Turkish, but the logic of falsification mentioned above allows me to disregard them in favor of a single type of use of this single type of expression. Again, I consciously disregard the possible *pragmatic* overtones in the fictional examples I use in my discussion, and the possible speech acts that can be exercized by types of expressions containing "öyle". In sum, this paper had better not be seen as concerning the nature of "öyle" at large, or as a comprehensive account of inheritors and inheritance in Turkish.

A more illuminating alternative for the label "pronoun" in the literature is "pronominal" (Crystal 1999: 274), for it better highlights the grammatical *attribute* – namely, *nominality* – of the range of expressions that a pronoun can go proxy for. One can then further abstract from the idea of pronominal the more generic idea of a *proform*, "[a]n item in a sentence which substitutes for another item or construction" (Crystal 1999: 274), and view pronominals (i.e. pronouns) merely as "*nominal* proforms". So in principle there have to be *non-nominal* kinds of proform, as various as non-nominal parts of speech, such as adjectival, adverbial and verbal proforms – i.e. pro-*adjectives*, pro-*adverbs* and pro-*verbs*. Some (controversial) instances of these non-nominal kinds of proform, respectively, might be as follows:

(2) She said that there was a <u>hurried</u> man, but I didn't see <u>such</u> a man. ("Such" as pro-adjective)

(3) The boy was walking <u>very slowly</u>. <u>So</u> walking, he was late for the class. ("So" as pro-adverb)

(4) I <u>admired</u> her – you know I <u>did</u>. ("Did" as pro-verb)

Basically, there are at least two types of use of proforms in language (broadly considered): *lazy* uses and *quantificational* uses (Grover 1977: 591). A proform is used lazily when, as the label suggests, it is in principle possible to replace it with the expression from which it derives its meaning, i.e. with its *antecedent*. This is the case in all of (1)', (2), (3) and (4). For instance, one could simply replace the pro-verb "did" in (4) with its antecedent "admired" without changing the semantic (but probably changing to some degree the pragmatic) value of the sentence:

(4)' I admired her – you know I admired (her).

In a quantificational use of a proform, this is rarely (or maybe never) the case. Such uses are observed typically in the colloquial translations of quantified formulae of formal languages such as logic and mathematics. Consider

(5) For <u>every natural number</u>, there is a natural number that doubles <u>it</u>.[4]

The semantic content of the pronoun "it" is definitely the function of the antecedent expression "every natural number", but in a very different manner than the one in which, e.g., the semantic content of "she" is a function of that of "Mary" in (1)'. The antecedent in (5) is a quantified expression that cannot be substituted directly for "it", for that would result in an utter change in the semantic content of the sentence:

(5)' For every natural number, there is a natural number that doubles every natural number.[5]

In a lazy use, a proform can be said to inherit the semantic content of their antecedents, so proforms of laziness can be called *inheritors*, and the relevant operation *inheritance* (Grover, 1977: 592-93). The grammatical variety of the proforms is immediately echoed as various kinds of semantic inheritance: inheritance can be nominal, adjectival, adverbial and so on.

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[4] This can be seen as some rough reading in English of the formula "$(\forall x)[x$ is a natural number $\rightarrow \exists y(y$ is a natural number & $y = 2x)]$".

[5] The resulting new formula: $(\forall x)[x$ is a natural number $\rightarrow (\exists y)(y$ is natural number $\rightarrow (\forall z)(z$ is a natural number $\rightarrow y = 2z))]$.

Here it should be noted that the lazy-quantificational distinction as it is given above cannot be exhaustive, since there are uses of proforms in which they relate to their semantic antecedents in neither way, as in:

(6) Mary likes my shirt but I like hers better.

In (6) it is perfectly clear that the relation between "hers" and its antecedent "Mary" is not quantificational. The relation nor can be called lazy, for a direct substitution of "Mary" for the possessive pronoun "hers" would obviously result in a change in semantic content. In such cases, some other elements – in this case, the adjectival phrase "my shirt" – of the preceding clause also contribute to the *restoration* of the intended semantic content of the relevant expression – here of "hers". Besides, the grammatical kind of inheritance in such cases may remain undetermined, when the proform and the antecedent(s) are of different grammatical categories. Consider:

(7) Mary likes my shirt but her shoes are definitely better than mine.

The grammatical kind of the inheritance (if any) between the pronominal adjective "her" and the proper name "Mary" in (7) can neither be called nominal (because the inheritor is an adjective) nor adjectival (because the antecedent is a noun).[6] Thus, although it is intuitively hard to *not* see cases like (6) as instances of semantic inheritance of some sort – as the semantic value of "hers" *is* a function of the preceding clause – only lazy uses of proforms had better be considered to be proper instances of inheritance.

3. Sentential Inheritance

Grammatical variation does not stop short at the sub-sentential level: (declarative) *sentence* as a whole constitutes a distinct grammatical kind. The reason is that there are some distinctive grammatical qualities that signal the sentence-hood of an expression (or a sequence of expressions), just like those that signal adjective-hood, adverb-hood, and so on. Accordingly, one could expect that this should be immediately reflected onto the plane of semantic inheritance. Indeed there are certain uses of some expressions that can be viewed as instances of sentential inheritance. However, a bit of abstract thinking is required to embrace them.

The initial thought is quite simple: if there is to be semantic inheritance on the level, not only of sub-sentential parts of speech, but of whole sentences, then there have to be *sentential inheritors*, that is, *prosentences* that can be used lazily. What kind of grammatical shape should we expect a prosentence to take? Several qualities can be counted, such as the inability to be modified by an adjective, or the inability to modify any part of speech, and the like, but the essential positive idea is provided by conjunctions and sentential connectives: a prosentence should be able to occupy the *grammatical positions* typically opened by conjunctions and connectives. For instance, a prosentence should be able to occupy the positions introduced by the conjunction

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[6] However, cf. Zimmerman 1978, p. 256.

$$\_\_\_, but\_\_\_.$$

or the connective

$$It\ is\ not\ true\ that\_\_\_\_.$$

And since they are to be inheritors, they should be able to derive the semantic content of an antecedent sentence *in toto*. Some, like the philosopher Franz Brentano, held that the exclamatives "yes" and "no" in some of their uses could be considered as prosentences (*fürwörter*) (Grover 1992: 85). Consider:

(8)   A: The weather is nice.

      B: Yes.

Here, "yes" can be seen as a prosentence used lazily, hence as a sentential inheritor, for it is possible to restate B's statement by directly substituting the sentence "The weather is nice" for "Yes" (although it would make a colorless kind of dialogue between A and B). However, "yes" and "no" cannot occupy the grammatical positions opened by *some* of the expressions of the above sort, though not for grammatical but pragmatic reasons. Consider:

(8)′ A: The weather is nice.

      B: *It is not true that <u>yes</u>.

The failure here is obviously *not* of a grammatical nature, and accordingly quite different than, e.g., the following one:

(8)′′ A: The weather is nice.

      B: *It is not true that <u>the weather</u>.

Thus, grammatically at least, "yes" and "no" are (apparently) capable of functioning as prosentences, but only when the pragmatic setting is appropriate.

Better instances come from the very locus of the notion of prosentence, namely, the philosophical discussions on the nature of *truth*. The question of the nature of truth, in a nutshell, is what kind of semantic value, if any, is borne by the truth predicate "...is true". Some theories – such as the correspondence theory, roughly the view that the truth of a proposition/statement consists in its correspondence with reality – attribute a philosophically and/or scientifically significant semantic value to the predicate, while others deny this and hold that the question should be answered by recourse essentially to the grammatical and/or logical functions served by the truth predicate in natural and formal languages.

The latter sort of theories are standardly classified as "deflationary theories",[7] as they deflate the notion/property/concept of truth by analyzing it back (or down) to the grammatical and/or logical functionings of the truth predicate itself. One leading deflationary theory, the *prosentential account*,[8] holds that the truth predicate is a grammatical device for forming prosentence-like expressions in natural languages – call them *natural prosentences* – which function like the *sentential variables* in a formal logical language that employs *propositional quantification*. Now the standard quantificational theory of formal logic employs quantifiers, such as "for all" and "there exists", which can quantify over *individual* variables like x, y, z. Since individual variables go proxy for *names* of individuals, the natural language readings of formulae of individual quantification is standardly carried out by means of *pronouns*. So, for instance, the quantificational formula "$(\forall x)(Fx \to Gx)$" can be read as "Everything is such that if *it* is F then *it* is (also) G" (in other words, "Every F is G").

But logical formalism allows one to define quantificational frameworks also for *propositional* inputs, which employ place-holders for whole declarative sentences, namely, sentential variables like p, q, r. And the problem is that there is no easy natural way to meet such variables in a one-to-one way as in the case of individual quantification. Consider:

(9) $(\forall p)(\text{Mary believes that } p \to p)$.

The formula cannot be given the natural translation "*Everything is such that if Mary believes that *it* then *it*" for obvious grammatical reasons. A grammatically acceptable natural reading of the formula is "Everything is such that if Mary believes *it* then *it is true*" (in other words, "Everything Mary believes is true"); however, this reading of the formula cannot meet the two occurrences of the sentential variable "p" in a *uniform* way. Now Dorothy Grover's 1972 article "Propositional Quantifiers"[9] first solves the problem of providing such uniformity by extending the English language with the artificial expression "thatt" which is stipulated to be an atomic prosentence. In the resulting extended language, namely *English + "thatt"*, formula (9) could be read as:

(9)′ Everything is such that if Mary believes that <u>thatt,</u> then <u>thatt</u>.

But the stipulation is so made that "thatt" can also function as a lazy prosentence, as in:

(8)′′′ A: The weather is nice.

   B: Thatt.

The crucial point here is that *English + "thatt"*, according to Grover, would be, not a *conceptual* but merely a *grammatical* extension of English (Zimmerman 1978: 257), so that if any type of expression could be found within English itself that could serve the functions served by "thatt" in *English + "thatt"*, then the conceptual import of that type of expression in those uses could be explained away. In other words, the concept expressed by that type of expression would be *deflated* at least for the relevant kinds of use. Thus, the essential point of the 1975 prosentential account of truth is to show,

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[7] See Michael P. Lynch's edition (Lynch 2001), for a clear classification, and adequate treatments, of the modern theories of truth. For a more comprehensive and detailed discussion, see Künne 2003.

[8] The defining work is Dorothy Grover et al.'s 1975. See also Grover's later edition of her own articles on the subject (Grover 1992).

[9] Reprinted as chapter 2 in *ibid.*, pp. 46-69.

not only that expressions like "it/that is true" can serve the purely grammatical functions served by "thatt" in *English + "thatt"*, but that these grammatical functions can explain the presence of a truth predicate in English *exhaustively*, with the result that truth is not a scientifically/philosophically interesting notion. (I will not attempt here to give the further details of the account, which are irrelevant to my discussion.)

Now the uniform translation sought for (9) above could have been provided if the reading went:

(9)'' Everything is such that if Mary believes that <u>it is true,</u> then <u>it is true</u>.

In (9)'', the expression "it is true", taken as an *atomic* (indivisible) whole, can be seen, at least in this context, as some natural language analogue of the sentential variable. Expressions like "it/that is (not) true" can clearly occupy the sentential gaps introduced by conjunctions and connectives, since they form whole declarative sentences; but more importantly, alongside their quantificational uses, they have lazy uses which make them appropriate instances of the category of prosentence:

(8)'''' A: The weather is nice.

B: That is true.

(10) John says that <u>the library is open 24 hours</u>. If <u>that is true</u>, then I can study there in the night.

In (8)'''', "that is true" functions just like the "Yes" in (8) and inherits the full content of the sentence uttered by A, and in (11) it inherits the full content of "The library is open 24 hours". The suggestion here is that expressions like "it/that is (not) true" are, contrary to appearances, *functionally* atomic prosentences, of which "...is true" forms only, as it were, an ortographic part, and thus one should not look for any semantic value to assign to the truth predicate *in isolation*.

4. Sentential Inheritance in Turkish: "Öyle" as Inheritor

Considered from a purely grammatical perspective, truth-predicative prosentences like "it/that is (not) true" are actually molecular, not atomic, expressions: they contain as parts a *pronoun* ("it/that"), an affirmative or negative copulative *verb* ("is/is not"), and the *adjective* "true". However, this molecularity on the grammatical level actually widens the range of application of these prosentences, since one can then easily *modify* the inherited content by modifying the verb "to be" with respect to time and aspect.[10] Nevertheless, there are certain *grammatically atomic* expressions in natural languages, some not-rare uses of which appear to serve the function of sentential inheritance. One such instance is the Turkish expression "öyle" (approximately "so"[11] or "such" in English, as the context may require).[12]

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[10] This is in line with Dorothy Grover's "mature" view of the temporal-aspectual manipulation of inherited sentential content: see the introduction to Grover 1992. Her classical view (1975), which realizes the relevant manipulations *from without*, necessarily calls to aid a host of artificial sentential connectives.

[11] Cf. Grover 1992, p. 85.

[12] See Demirci 2014, for a survey of nominal and non-nominal Turkish proforms, and a rather liberal *semiotic* account of what corresponds to *semantic inheritance* in my discussion. (See also fn. 2 above.) The account does make use of a notion of prosentence, but it disregards its logico-philosophical generation.

The first relevant mark about "öyle" is its exclamative use to affirm, and hence re-utter in a sense, an already uttered declarative sentence. So in

(11) A: Hava güzel.

    B: Öyle.

(A: The weather is nice. B: [That is] so.)

"öyle" seems to function just like the "Yes" in (8) and to inherit the full content of the declarative sentence "Hava güzel". Now since the antecedent here is a subject-predicate sentence, it might be argued that "öyle" inherits the content exclusively of the predicate expression "güzel" ("[is] nice"), and that the subject expression "Hava" ("The weather") is ellipted in B's statement. However, that this exclamative function of "öyle" does not change in any way even in cases where the antecedent is not of a predicative form is clear from instances of the following sort:

(12) A: Ahmet havanın güzel olacağını bilseydi bizimle gelirdi.

    B: Öyle.

(A: Had Ahmet known that the weather would be nice, he would have come with us. B: [That is] so.)

Here, "öyle" inherits the *full* content of the antecedent, which is a counter-factual conditional containing no simple predicate to be inherited from in isolation.

The second relevant mark is that "öyle" has some other lazy uses where it fills in the sentential gaps opened by conjunctions and sentential connectives:

(13) A: Etrafta kimseler yok.

    B: Öyle, *ama* birazdan burada olurlar.

(A: There is no one around. B: [That is] so, *but* they will be here shortly.)

(14) Ahmet kütüphanenin 24 saat açık olduğunu söylüyor. Öyley*se*, gece orada çalışabilirim.

(Ahmet says that the library is open 24 hours. *If* [that is] so, *then* I can study there in the night.)

"Öyle" can also be used in place of the more standard "o halde" ("therefore") in Turkish readings of logical argument schemata. Consider the following Turkish reading of a schematization of the mood *Barbara* of Aristotelian logic:

(15) Her B, C'dir.

    Her A, B'dir.

    Öyleyse, her A, C'dir.

(Every B is C. Every A is B. If [that is] so, then every A is C.)

Here, "öyle" by itself communicates the *conjunction* of the two premisses of the argument schema: in other words, "öyleyse..." here means "Her B, C *ve* her A, B ise..." ("If every B is C *and* every A is B, then...") However, "öyle" does not seem to be a promising tool for reading formulae of propositional quantification uniformly without unnatural adjustments. Pushing our limits, we might try to give non-uniform readings for *some* such formulae by calling to aid "nasıl" ("how"). Consider:

(16) (∀p)(Mary says that p → p).

(16)' Herşey Mary nasıl diyorsa öyle(dir).[13]

(Everything is how Mary says it is.[14])

In any case, it is clear that it will not be able to serve the functions served by Grover's "thatt".

Now the question is *how* the expression "öyle" can ever serve the function of sentential inheritance. The question can be analyzed into two sub-questions, viz. (i) how it can serve the function of inheritance, and (ii) how it can occupy the grammatical position of a sentence. One way to begin to answer these questions is to ask first *what* "öyle" is: which grammatical category does "öyle" belong to? The main Turkish literature on parts of speech seem to favor the category of *adverb*. For instance, Tahsin Banguoğlu classifies "öyle" as a pronominal adverb in the instrumental ("bilelik") case (Banguoğlu 2011: 383); Muharrem Ergin views it as an adverb of manner formed from the personal pronoun "o" and the instrumental case suffix "ile" (Ergin 2013: 261); İbrahim Kutluk likewise views it as a composite adverb (Aksan 1983: 115); and Süer Eker counts it as, again, an adverb of manner (Eker 2011: 378).

Critically, however, Eker reminds us that in Turkish morphology, there is no exclusive form that adverbs possess (Eker 2011: 378), a form that could apply to adverbs and to them only, although some items, such as the equative case marker "+CA" (Gülsevin 1997: 74) can be viewed as an adverb-forming suffix. But he also notes that almost any adjectival expression can be used alternatively as an adverb (Eker 2011: 377). This last point is also made by Ergin with the addition that, conversely, "öyle" (which is primarily an adverb of manner) can also be used as an adjective to modify a noun (Ergin 2013: 261), as in:

(17) A: Burada <u>telaşlı</u> bir adam gördün mü?

   B: Hayır, <u>öyle</u> bir adam görmedim.

(A: Have you seen any <u>hurried</u> man here? B: No, I haven't seen <u>such</u> a man.)

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[13] This interesting type of use of "öyle" seems to be paralleled by its appearance as a proform mentioned by Prof. Dr. Ömer Demircan in the following example: "A: AB Yönetimi Türkiye'ye iki yüzlü davranıyor. (The EU Administration is in a dissembling attitude towards Turkey). B: Ben *öyle* düşünmüyorum. (I don't think *so*.)" (Demircan 2005: endnote 4.) "Öyle" can be replaced here only by a *nominalization* of the sentence uttered by A, which complicates the matters. (Indeed Demircan fails to specify what *kind* of proform "öyle" is here.)

[14] Note that (16)' will be ambiguous between (16) and its logical converse "(∀p)(p → Mary says that p)", even if it is to count as a correct reading of (16) (which, I believe, it is not).

where "öyle" (here "such") is an adjective appearing within the adjectival phrase "öyle bir adam"("such a man"). It is clear from these observations that "öyle" in Turkish is doubly an adverb-adjective, as also acknowledged by Geoffrey Lewis (Lewis 2000: 68).

Here the relevant point about an adverb-adjective in Turkish is that it can always serve the grammatical *function*,[15] all by itself, of *predicate* in a predicative sentence. And since the subject expression of a predicative sentence can always in principle be ellipted, an adverb-adjective functioning as the predicate of a sentence can in isolation fill in any given sentential gap. This easily explains the ability of "öyle" to occupy the sentential position in general, hence answering (ii).

The answer to (i) requires a little more reasoning. Now Banguoğlu, Ergin and Kutluk all point to the morphological molecularity of "öyle", and the first two explicitly point to the pronominal atom in this molecule, namely the pronoun "o" ("that", only distant or out of sight). Given that the paradigm instances of inheritors are nominal proforms, and that "öyle" contains one such proform in its body, it is most reasonable to conclude that "öyle"s ability to *inherit* anything whatsoever is provided by this proform.[16] But in what way? Since that proform is *nominal*, it clearly cannot inherit sentential content. The only reasonable way out is to see "öyle" itself as a *compound proform*, formed from an atomic nominal one with the addition of a case marker. The pronoun "o" cannot inherit a sentential content, so "öyle" should be making of this nominal proform a non-nominal one.

The immediate thought that this non-nominal proform which is made of the nominal "o" is a *sentential* proform – in other words, that "öyle" is a *prosentence* – begs the question, because "öyle"s sententiality itself required an explanation and received one above. Then why not use this very explanation of "öyle"s sententiality to determine the type of proform it actually is? The explanation above tells that "öyle"s ability to occupy the sentential position is the result of its *predicability* of a given subject expression, and of the fact that this expression could in principle be ellipted. Thus, although it is tempting and indeed most reasonable to view "öyle" directly as a pro-adverb (or a pro-adjective) – since it is a proform and and an adverb (or adjective) at once – a recourse will have to be made again to the point about predicability in order to explain the ability of an adverbial (or adjectival) form to occupy the sentential position all by itself. This shows that the correct account should leave the grammatical form aside and focus rather on the grammatical function of the expression under question. What explains, then, "öyle"s being a sentential inheritor is *the fact that it is a pro-adverb (or pro-adjective) that functions as the predicate of an elliptical sentence.* In a word, it is a *pro-predicate*.

The only remaining obstacle are cases presented by examples like (12) above. How can a pro-predicate inherit the full content of a non-predicative sentence – of a sentence without any predicate term at all? The only thing I will attempt to do at this point is to propose a very simple model to overcome this difficulty. The model consists of viewing the predicative schema "S is P" as an abstract and general representation of the declarative sentence form, functioning like, but containing a bit more *inner structure* than, the sentential variable "p" of propositional calculi. The informal justification comes from the idea that every given declarative sentence, whatever surface grammatical structure it

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[15] See Aarts 2001, pp. 108-10, for the critical distinction between grammatical *forms* and grammatical *functions*. *Subject* and *predicate* in a sentence are functions, not forms.

[16] Note that in each of these accounts, "öyle" is grouped with its siblings "böyle" and "şöyle", and all three admit the same kind of morphological analysis. I do not deal with the latter two, for they do not respond to my main intention in this discussion as capably as "öyle", although they *do* as well inherit sentential content in some types of context. See fn. 2 above.

possesses, will be expressing a *judgment* about *something*. This indeterminate *something* can be viewed as the *Subject*, and the *judgment* expressed about it as the *Predicate*, of the given declarative sentence. So there is a natural basis to view *any* declarative sentence as convertible *in principle* to the "S is P" form, although actual grammatical frameworks determined by natural languages such as Turkish, English, Korean, Latin, etc. cannot provide the sufficient means to this end. But this abstract general form can nevertheless be read in natural languages by using a *pronoun* to represent the indeterminate *Subject* – hence a pro-subject – and a *pro-predicate* to represent the indeterminate *Predicate*; e.g., in Turkish as:

O, öyle.

(That is so.)

Ellipting the subject term in this abstract form, one obtains the simple

Öyle.

([That is] so.)

This final form then perfectly represents, just like the sentential variable "p", the declarative sentence in complete generality and abstractness. This in turn explains the ability of "öyle" to inherit the full content of any given sentence with any surface grammatical structure.

5. Conclusion

Sentential inheritance is a common linguistic phenomenon that calls for explanation. Following the much clearer case of nominal inheritance, in which nominal proforms are at the center, one immediately tends towards the idea of a sentential proform to explain sentential inheritance. However, this idea is actually suggested by an unnatural representation of the general form of declarative sentence in complete abstractness, namely by the atomic sentential variable employed in propositional logical calculi. Thus, it becomes reasonable to look for real, natural cases of sentential inheritance in natural languages independently of this representation.

One such case is provided by the "öyle" of Turkish. "Öyle" is clearly a sentential inheritor, but equally clearly not a prosentence, since (i) it cannot mimic within natural language the quantificational uses of the sentential variable; but much more importantly (ii) its employments as inheritor do have an explanation in terms of *sub-sentential* mechanisms. So the real value of "öyle" as an instance of sentential inheritor is that it adequately illustrates the possibility of theorizing about the phenomenon of sentential inheritance without recourse to an artificial grammatical type like prosentence.

References

Aarts, B. (2011). *Oxford Modern English Grammar*. Oxford: Oxford University Press.

Aksan, D. (1983). *Sözcük Türleri (Ad, Sıfat, Belirteç, Adıl, İlgeç, Bağlaç, Ünlem, Eylem)*. Ankara: Türk Dil Kurumu.

Banguoğlu, T. (2011). *Türkçenin Grameri*. Ankara: Türk Dil Kurumu.

Crystal, D. (1999). *The Penguin Dictionary of Language*. London: Penguin Books.

Demircan, Ö. (2005). DÜŞÜM'e bağlı yanılgılar. *Açık Sayfa* (personal blog). Retrieved from: http://mintltd.com/2/demircan/acik02.htm#_ftnref5.

Demirci, K. (2014). Pro-forms: Are Pronouns Alone in the Function of Representation? *Bilig*, 68: 97-116.

Eker, S. (2011). *Çağdaş Türk Dili*. Ankara: Grafiker.

Ergin, M. (2013). *Türk Dil Bilgisi*. İstanbul: Bayrak Basım Yayım Tanıtım.

Gülsevin, G. (1997). *Eski Anadolu Türkçesinde Ekler*. Ankara: Türk Dil Kurumu.

Grover, D. (1977). Inheritors and Paradox. *The Journal of Philosophy*, 74 (10): 590-604.

Grover, D. (1992). *A Prosentential Theory of Truth*. Princeton: Princeton University Press.

Grover, D.; Camp, Jr. J. L.; Belnap, Jr. N. D. (1975). A Prosentential Theory of Truth. *Philosophical Studies*, 27 (2): 73-125.

Huber, F. (n. d.). Confirmation and Induction. In *The Internet Encylopedia of Philosophy*. Retrieved from https://www.iep.utm.edu/conf-ind/.

Künne, W. (2003). *Conceptions of Truth*. Oxford: Oxford University Press.

Lewis, G. L. (2000). *Turkish Grammar*. Oxford: Oxford University Press.

Lynch, M. P. (ed.) (2001). *The Nature of Truth*. Cambridge, Mass.: The MIT Press.

Zimmerman, M. J. (1978). Propositional Quantification and the Prosentential Theory of Truth. *Philosophical Studies*, 34 (3): 253-268.