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RESULT CLAUSES IN ANCIENT GREEK

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ABSTRACT

Result clauses in Ancient Greek are traditionally distinguished in terms of whether they express actual or possible results. After clarifying the sense of possibility being invoked in this distinction, I argue (i) that this notion of possibility functions as a presupposition rather than an assertion of natural result clauses, and (ii) that it cannot be the basis for distinguishing the two clause types, because it is a presupposition of actual result clauses as well. Based on an examination of result clauses in Lysias, I then argue that an alternative account of the relationship between the two clause types deserves further attention.

Keywords: result clauses, Ancient Greek, possibility, presupposition

1. Introduction: Overview of the Traditional Account

In the most general terms, a result clause is a type of subordinate clause which specifies a state or event as the result of a state or event specified in the main clause.[1] In Ancient Greek, result clauses are introduced by the conjunction ὥστε (also: ὥστ', ὥσθ'), *that, so that, as, so as*, and main clauses usually contain an adjectival or adverbial element of degree or kind, such as οὕτως, *so, thus*; τοσοῦτος, *so much, so great*; or τοιοῦτος,*of such a kind.* An example from Plato follows:

(1) *ἐγὼ μὲν οὖν ὅταν σοὶ συγγένωμαι,* ***οὕτω*** *διατίθεμαι* ***ὥστ'*** *ἐμοὶ δοκεῖ μανίαν εἶναι...*
When I am in your company I am ***so*** *affected,* ***that*** *I think it is madness*(*Euthydemus* 306d).[2]

Grammars of Ancient Greek distinguish two types of result clause: natural result and actual result. While both types conform to the above pattern – a main clause specifying degree or kind, followed by a subordinate clause introduced by *ὥστε* – they differ formally in terms of whether the verb in the result clause is finite or infinitival. An actual result clause contains a finite verb and a natural result clause has an infinitive verb. Additionally, they differ in terms of how they are negated: actual result clauses are negated with *οὐ*, and natural result clauses are negated with *μὴ*. Examples (2) and (3) are negated examples of result clauses of each type:

(2) Negated Actual Result Clause
ἐγὼ δὲ ***οὕτω*** *πολλοῦ ἐδέησα τῶν τετρακοσίων γενέσθαι,* ***ὥστε οὐδὲ*** *τῶν πεντακισχιλίων* ***κατελέγην****.*
so far was I from being one of the Four Hundred that I was not even included in the list of the Five Thousand (Lysias 30.8).

(3) Negated Natural Result Clause
οὕτως *ὠκοῦμεν δημοκρατούμενοι* ***ὥστε μήτε*** *εἰς τοὺς ἄλλους* ***ἐξαμαρτάνειν μήτε*** *ὑπὸ τῶν ἄλλων* ***ἀδικεῖσθαι.***

[1] I thank John Hay, Joslin Monahan, Tully Thibeau and the audience at ICGL10 for helpful questions and discussion.
[2] Unless otherwise indicated, translations of Lysias are from Lamb (1930); translations for other authors are listed in the References.

*we have lived in **such a way** under democracy **so as neither to err** against others **nor to be wronged** by others* (Lysias 12.5, translation my own).

Correlative to the formal difference between natural and actual result clauses, a functional or semantic difference is traditionally recognized. While an actual result clause is said to assert the result as a factual occurrence, a natural result clause is said to present the result as a possible occurrence. This distinction is made explicit in the following descriptions:

> A clause of result with ὥστε stating that something may occur…is regularly expressed with the infinitive (Smyth 1984, sec. 2258).
>
> The infinitive with ὥστε denotes an anticipated or possible result… (Smyth 1984, sec. 2260).
>
> [T]he dependent clause [in a natural result clause] in principle expresses a possible consequence (Rijksbaron 2002, 63).

2. A Closer Look at the Traditional Account

2.1 Possibility as Ability

The sense of "possible" result or consequence being invoked in the above descriptions is not transparent. One interpretation that presents itself is that "possibility" is being used in the sense of "ability". On such an interpretation, possibility makes a claim about conditions on the agent (see Bybee et al. 1994, 177-179). On this reading, the event expressed in a natural result clause is possible in the sense that it is enabled by conditions that pertain to the agent. For example, (4) below, which contains an actual result clause, asserts that, as a consequence of the high level of audacity identified in the introductory clause, they are in fact coming here ready to defend themselves.

(4) *καὶ εἰς **τοσοῦτόν** εἰσι τόλμης ἀφιγμένοι **ὥσθ' ἥκουσιν** ἀπολογησόμενοι*
*and they have carried audacity to **such a pitch that they come here** ready to defend themselves* (Lysias 12.22).

If we now replace the finite verb *ἥκουσιν* in example (4) with the infinitival form *ἥκειν*, we obtain a natural result clause. According to the present interpretation of possibility as ability, this result clause asserts that, as a result of the antecedently expressed high level of audacity, they *are able to* come here ready to defend themselves. We might translate this natural-result-clause equivalent of example (4) as: *And they have carried audacity to such a pitch as to be able to come here ready to defend themselves*.

While the interpretation of possibility as ability seems to play a role in some result clauses, it is unlikely to be the main interpretation of possible occurrence in natural result clauses. This is so both because there are many clauses where ability is not relevant to the predicate expressed, and because in cases where ability clearly is part of the intended meaning of natural result clauses, it is usually expressed lexically, with the predicate *δύναμαι*. Example (5) below is illustrative:

(5) *οὕτω διετέθημεν οἱ παρόντες ὑπὸ τῶν τούτῳ πεπραγμένων καὶ τῶν λόγων τῶν ἐκείνης... ὥστε...μηδένα τῶν παρόντων δύνασθαι φθέγξασθαι...*

*all of us present were **so** moved by the deeds done by this man and by her words...**so as** for no one among us present **to be able** to utter a sound...* (Lysias 32.18, translation my own).

In addition, δύναμαι, is also used to express ability in actual result clauses, as in example (6) below:

(6) ***οὕτω** σκαιὸς εἶ καὶ ἀναίσθητος, Αἰσχίνη, **ὥστ' οὐ δύνασαι** λογίσασθαι ὅτι τῷ μὲν στεφανουμένῳ τὸν αὐτὸν ἔχει ζῆλον ὁ στέφανος...;*
*are you **so** unintelligent and blind, Aeschines, **that** you **are incapable** of reflecting that a crown is equally gratifying to the person crowned...?*(Demosthenes, *Orationes*18.120).

To summarize: if we understand the central semantic difference between natural and actual result clauses as the difference between *able to do X* and *does X*, we are left without an account of the difference in meaning between natural result clauses containing an additional lexical expression of possibility with δύναμαι, and the more frequent case where ability is expressed formally. Additionally, we are left without an account of the meaning of clauses where ability is not even a candidate explanation of "possible occurrence".

2.2 Possibility as Epistemic Modality

Another interpretation of the sense of possibility implied in the description of natural result clauses as expressing possible as opposed to factual occurrences is that it is a type of epistemic modality. In contrast to the agent-oriented ability discussed above, epistemic possibility is not part of the content of the utterance (see Bybee et al 1994, 179-180). Instead, it makes a claim about the speaker's relation to the content of the utterance - in particular, that the speaker is only partly committed to, or confident of, its truth. The traditional description of natural result clauses as expressing events that "may occur" or that are "possible consequences", suggests that epistemic possibility is indeed the intended interpretation of what is expressed by natural result clauses. However, this is unlikely to be the intended interpretation. For the usual way of expressing such modality in Ancient Greek is with a finite verb in the optative mood and the particle ἄν. Such so-called "potential optative" constructions (see (7) and (8) below) serve precisely the role of weakening the speaker's epistemic commitment to the truth of the proposition.

(7) *πολλοὶ γὰρ* ***ἂν γένοιντο***.
There ***might*** *be many ways* (Plato, *Republic* 449c).

(8) *συνδοκεῖ καὶ ὑμῖν,* ***γένοιτ᾽ἂν*** *ἡμῖν ἐν λόγοις ἱκανὴ διατριβή.*
So if you on your part approve, we ***might*** *pass the time well enough in discourses*
(Plato, *Symposium* 177d).

2.3 Possibility as Natural Tendency

If it is neither agent-oriented ability nor epistemic modality that is being referenced when natural result clauses are identified as expressing possible rather than actual results, what sense of possibility is intended? What seems to be intended is the claim that natural result clauses express natural tendencies. That is, instead of expressing the claim that an event may have occurred rather than asserting that it did occur, natural result clauses, on this view, express the fact that such an event tends to be the result of the antecedently expressed condition, or that it is what "usually" or, as the name implies, "naturally" results from such conditions.

As Goodwin says:

> With the infinitive the result is one which the action of the leading verb tends to produce; with the indicative, one that action does produce (Goodwin 1894, sec. 1450).

The connection between possible result and natural tendency seems, then, to be the following: Given that the action of the leading verb tends to produce, or naturally produces, the result indicated in the result clause, it is possible that it produces that result in the present case as well.

So, as we noted at the beginning of this section, the sense of possibility invoked in the claim that natural result clauses express possibilities, is not the most transparent one. But we have now made this sense of possibility explicit and we can now reformulate the traditional distinction between actual and natural result clauses as follows: *An actual result clause expresses the result as one that in fact occurs or occurred, whereas a natural result clause expresses the result as one that tends to occur.*

Nevertheless, in the next section I argue that this view does not capture the central distinction between natural and actual result clauses.

3. Criticism of the Traditional Account

3.1 The Natural Tendency is a Presupposition

In this section I argue that the traditional view of natural result clauses as expressing possible occurrences or natural tendencies is problematic both because (i) such natural tendencies are not assertions of natural result clauses, but rather are presupposed by them; and (ii) they are presupposed equally by actual result clauses and hence cannot be used to distinguish the two types of clause.

We can show that the relevant natural tendency (or possible occurrence) is a presupposition, by invoking a classic test for identifying the presuppositions of a statement: the constancy-under-negation test. In Levinson's description of the test, we "[s]imply take a sentence, negate it, and see what inferences survive – i.e., are shared by both the positive and negative sentence" (Levinson 1983).

Let us apply this test to the natural result clause in example (9):

(9) *She was so hungry as to eat the whole pie.*

In this sentence a quasi-causal connection is made between extent of hunger and extent of pie eating, such that an increase in hunger, leads to an increase in amount of pie consumed, and in the limit case, to the consumption of the whole pie. In other words, we may say: as a person's hunger increases, there is a natural tendency for the person to eat more, in the present case, of the pie, and if hunger increases sufficiently, for it to result in the eating of the whole pie.

But if we now negate the sentence:

(10) *She was not so hungry as to eat the whole pie,*

the quasi-causal connection between an increase in hunger and an increase in pie-eating behavior is maintained. The negated version of the sentence also claims that there is a natural tendency for more pie-eating to occur as one's hunger increases and for the whole pie to be eaten if hunger increases sufficiently. The negated version of the sentence simply denies that a sufficient degree of hunger is present.

The claim that there is a natural tendency for an increase in hunger to result in an increase in amount of pie eaten is an inference that survives the constancy under negation test. It is therefore a presupposition rather than an assertion of the natural result clause expressed in (9) above. And we may say, more generally, that the natural tendencies associated with natural result clauses are presuppositions of such clauses rather than assertions.

It is important to recognize what triggers the presupposition in statements such as the above. It is the form of the statement, and specifically, the formula *οὕτως X, ὥστε Y* (*so X, as to Y*).

We can make this clear by substituting a different result in our example sentence:

(11) *She was so hungry as to solve all the problems.*

The sentence makes little sense precisely because there is no natural tendency for a high degree of hunger to be associated with a high level of problem-solving ability. Indeed, to the extent that such a sentence does makes sense, it is because we posit a context which supplies a plausible connection between the state of being hungry and the act of problem-solving: such as one in which solving all the problems leads to receiving food. The important point here is that it is in virtue of the formula *οὕτως X, ὥστε Y* (*so X, as to Y*) that the sentence requires positing an additional context for it to make sense. In other words, it is in virtue of the form of the statement that a quasi-causal connection, or natural tendency, between hunger and problem-solving ability is assumed.

We can summarize what has been argued so far as follows: (i) the traditional view that natural result clauses express possible results is intended as the claim that natural result clauses express a natural tendency of one event or state to result in another; (ii) this natural tendency is not, however, what natural result clauses express or assert, but something they presuppose; and (iii) this presupposition holds in virtue of the form of such statements - the form *οὕτως X, ὥστε Y* (*so X, as to Y*).

3.2 Actual Result Clauses Have the Same Presupposition

The points summarized above would amount to simply clarifying the traditional view of how natural result clauses differ from actual result clauses were it not for the fact that actual result clauses have the

same form and trigger the same presupposition. It is true that the English gloss of the formula *οὕτως X, ὥστε Y* would be different for an actual result clause (*so X, that Y* instead of *so X, as to Y*) but this makes no difference to the formula's status as a presupposition trigger.

(12) *Positive: She was so hungry that she ate the whole pie.*
Presupposes that increased hunger naturally tends to produce increased eating.

(13) *Negative: She was not so hungry that she ate the whole pie.*
Presupposes that increased hunger naturally tends to produce increased eating.

It is here that the problem for the traditional view becomes clear. The difference between natural and actual result clauses cannot be the difference between asserting a possible occurrence and asserting a factual occurrence, as the traditional view maintains, not simply because natural result clauses presuppose rather than assert possible occurrences (in the form of "natural tendencies"), but because actual result clauses have the same presupposition. In other words: this cannot be the basis for the distinction because it does not distinguish them.

4. Towards a Revised View of Natural Result Clauses

4.1 Hypothesis

From what has been said thus far we seem poised to state the difference between natural and actual result clauses in the following terms: While all result clauses presuppose a quasi-causal connection ("natural tendency") between the event or state identified in the introductory clause and the event or state expressed in the result clause, actual result clauses additionally state that this connection or tendency is realized in the present case, while natural result clauses make no such additional assertion.

The difficulty with this way of putting the distinction, though, is that it suggests that natural result clauses are simply agnostic about whether the expected result is in fact realized, and this is simply too weak an interpretation. For even in traditional descriptions, there is an acknowledgement that a natural result clause may (after all) indicate a factual occurrence. Smyth, for example, says: "The infinitive may therefore denote a fact..." (Smyth 1984, sec. 2258)

Here and elsewhere such claims are tempered by subsequent statements:

> The infinitive may therefore denote a fact, but does not explicitly state this to be the case (Smyth 1984, sec. 2258).
>
> [T]he actual occurrence of the result is not stated, and is to be inferred only(Smyth 1984, sec. 2260).
>
> Whether or not the consequence actually came about is not explicitly indicated.
> (Rijksbaron 2002,63)

In these statements we seem to have the basis for a more nuanced account of the difference between natural and actual result clauses. The difference between the two clause types, according to the present hypothesis is not whether the statement implies that the result is factual, but rather whether this inference is defeasible. That is, the assumption is assumed to be true or factual, but further information might reverse, or defeat this assumption. While we may say:

(14) *She was hungry enough to eat the whole pie, but she didn't eat the whole pie,*

it is a contradiction to say:

(15) **She was so hungry she ate the whole pie, but she didn't eat the whole pie.*

On the current interpretation, then, we can say that the difference between the two clauses is whether the result is logically implied (in actual result clauses) or defeasible (in natural result clauses). This interpretation seems to be a way to accommodate the intuition embodied in the traditional view that natural result clauses make a weaker claim than actual result clauses do, while also acknowledging that natural result clauses often imply factual results.

4.2 Textual Investigation

Unfortunately, empirical examination of result clauses in the corpus of Lysias's *Speeches*, did not support the above interpretation. In fact, there was virtually no evidence that natural result clauses were used in cases where it was necessary or desirable to preserve the possibility that the implied result was not the result, in fact. The strongest evidence of this sort would be an example along the lines of (14) above, where subsequent statements force a re-evaluation of the claim that the result, in fact, occurred. But there were no examples of this sort.

Instead, for the most part, the natural result clauses seemed to fall into two classes. In one class of cases, they seemed indistinguishable from correlative actual result clauses. In this class of cases, the use of an infinitive in the result clause did not seem to indicate any possibility that the result was not factual. These examples were relatively few, but include (16) and (17) below.

(16) *πρὸς τὸν ἀδελφὸν δ' **οὕτως** ἐνειμάμην **ὥστ'** ἐκεῖνον πλέον ὁμολογεῖν **ἔχειν** ἐμοῦ τῶν πατρῴων*
*to my brother I allowed **such** a portion **as made him** acknowledge that he had got a larger share of our patrimony than I had* (Lysias 16.10).

(17) *οὗτος δὲ ἀπέδειξε δυοῖν δεούσας πεντήκοντα μνᾶς ἀνηλωκέναι, **ὥστε** τούτοις **λελογίσθαι** ὅσονπερ ὅλον τὸ ἀνάλωμα αὐτῷ γεγένηται.*
*But the expenditure that he showed was forty-eight minae, **so that** the children **have been charged** exactly the total of what he has spent* (Lysias 32.27).

In (16) it is conceivable that the amount the speaker gave to his brother, though sufficient to make his brother acknowledge the larger share, did not in fact result is his brother being made to acknowledge the larger share. But the context makes clear that the speaker is referring to an actual event. So the choice of infinitive over finite verb may simply be due to a desire to emphasize the event in the main clause -– the speaker's action.

Similarly, in example (17), the speaker is arguing precisely that the event stated in the result clause -–the children being charged an amount equal to what the guardian has spent -– is indeed a fact. The context here is a lawsuit against a guardian -– Diogeiton -–who is accused of cheating the children out of their inheritance. In the above passage, the claim is he charged 100% of an expenditure to the children when he was allowed to charge them only 50%. The cost was 48 minae, so he was allowed to charge only 24 minae to the children. However, he entered 48 minae into the ledger: with the result that the children were charged the whole amount. The facts of the case against the guardian are being presented here, as fact.

Examples such as these make it difficult to endorse Goodwin's claim that: "These two constructions [natural and actual result clauses] are essentially distinct in their nature, even when it is indifferent to the general sense which is used in a given case" (Goodwin 1894, sec. 1451).

The second classes of cases is both more numerous and more interesting. In these cases, the event or state in the result clause is distinguished by the fact that it is in some way non-actual. However, the non-actuality in these cases is not a function of epistemic possibility, or probability, but rather of the event specified in the result clause occurring in a counter-factual context, or having a negative subject. In other words, the non-actuality attaches to the event or state itself, not to the statement reporting the event.

An example of a natural result clause occurring in the context of a counterfactual statement is the following:

(18) ***τοιαῦτα** γάρ ἐστιν, **ὥστ' εἰ** καὶ **μηδὲν** αὐτῷ ἄλλο **ἡμάρτητο**, διὰ μόνα ταῦτα δίκαιον **εἶναι** ἀποδοκιμασθῆναι.*
*For the facts are **of such a sort**, **that** even if he had not erred in any other matter, on account of these facts alone, **it would be** just for him to be rejected* (Lysias 31.20, translation my own).

Following ὥστ', but before the subordinate result clause, is a protasis of a counterfactual condition signaled by the particle εἰ and the verb ἁμαρτάνω in the indicative (here, the pluperfect). The counterfactual clause assumes that other wrongdoings have in fact been committed, with the implication that the case for rejecting the man is even stronger than it would have been had there been no additional wrongful deeds. But for present purposes what is important is that εἶναι in the phrase δίκαιον εἶναι is in the infinitive, not because the speaker has any doubt about whether there are

currently grounds for rejecting the man, but because the clause is making a claim about the justice of rejecting him in a counterfactual state of affairs - one in which the decision to approve or reject the man is made in the absence of additional wrongdoings. There is no way for this clause to be formulated as an actual result, but not because the state identified in the result clause -– it being just to reject the man -– is only a possible consequence. On the contrary, it is certain -– certain that it is not a consequence, because the antecedent of the clause is counterfactual.

Example (5) above, repeated here as (19) contains a natural result clause with a negative subject:

(19) ***οὕτω*** *διετέθημεν πάντες οἱ παρόντες ὑπὸ τῶν τούτῳ πεπραγμένων καὶ τῶν λόγων τῶν ἐκείνης ...**ὥστε**... **μηδένα** τῶν παρόντων **δύνασθαι** φθέγξασθαι...*
*all of us present were **so** moved by the deeds done by this man and by her words,...**so as** for**no** one among us present **to be able** to utter a sound...* (Lysias 32.18, translation my own).

In this case, it is clear from what follows that what is being reported is not merely a possible occurrence:

(20) *...ἀλλὰ καὶ δακρύοντας μὴ ἧττον τῶν πεπονθότων ἀπιόντας οἴχεσθαι σιωπῇ.*
...we could only weep as sadly as the sufferers, and go our ways in silence (Lysias 32.18)

Yet what is reported is the *absence* of an event-– the absence of anyone uttering a word. What seems to be crucial in this case and other cases of this sort, is not so much that a particular individual failed to perform a particular action (for there are many *actual* result clauses of this sort), but that there is no individual specified in definite terms to perform -– or even fail to perform -– the action. In (19), the subject of the introductory clause is the group of individuals present, but the subject of the result clause is "no one" (*μηδένα*).

It is clear that the examples and analysis provided in this section represent only a preliminary attempt to characterize in positive terms, the different functional yields of natural and actual result clauses in Ancient Greek. Yet I hope enough has been said so as to justify the conclusion that more analysis is needed.

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