# T-to-C and overt marking of Counterfactuals: Syntactic and Semantic Implications<sup>1</sup>

#### Gülşat Aygen

#### **Reed College**

This paper discusses overtly marked counterfactual constructions in English and Turkish to provide a uniform syntactic account of counterfactual structures cross-linguistically. The grammatical ingredients of counterfactuals (Cf) in Turkish are investigated as a means to illustrate two claims:

- (i) Counterfactual interpretation involves the C(omplementizer) domain cross-linguistically;
- (ii) Iatridou's (2000) generalizations based on Indo-European languages hold for Turkic languages (Turkish, Tuvan, Kazakh, and Gagauz): "tense" morphology is interpreted as a counterfactual morpheme when it ranges over worlds within the semantic domain of conditionals.

The counter-factuality is overtly marked by a shift in the order of morphemes in Turkic languages, whereas it is overt only in Inverted Conditionals in English. In Turkish, this operation is morpho-syntactic, in English it is syntactic.

The usual disclaimers apply.

1

<sup>&</sup>lt;sup>1</sup> This is a revised version of a paper written for the Linguistic Structure course at MIT in Fall 1999, and presented at Harvard GSAS syntax workshop and Kentucky Foreign Languages Conference in 2000. I am grateful to Sabine Iatridou, Ken Hale, Greg Carlson, Maya Arad, Lynn Nichols, Adam Szczegniak, Gregory Stump, and the audiences at Harvard and University of Kentucky for their valuable comments.

Section (1) presents the core data under investigation in Turkish and English, as well as Turkish facts relevant to counterfactuals. Section (2) discusses the similar pattern in 'wish' and counterfactual constructions. Section (3) presents the proposed analysis. Section (4) discusses English Inverted Counterfactual Conditionals, and section (5) concludes the paper and presents issues for further research.

## I. Core data and the Turkish facts

The core data under analysis consist of counterfactual (henceforth Cf) and non-counterfactual (henceforth NCf) constructions presenting a minimal pair in Turkish conditionals (1&2), and the unavailability of a NCf constructions once T-to-C takes place in English (3&4). I will argue that Turkish marks Cfs overtly by a switch in the morpheme order and that English marks them via overt T-to-C.

Turkish exhibits an interesting switch in the order of inflectional morphemes, as may be observed in (1) and (2) below<sup>2</sup>:

#### (1) Counterfactual

Kürşat erken gel -sey -di, parti-ye gid-ecek-ti-k.

Kürşat early come -COND-"past" party-DAT go-FUT-PAST-1PL

'If Kürşat came early, we would go to the party.'

#### (2) Non-Counterfactual

Kürşat erken gel -di -yse, parti-ye gid-ebil-ir-iz.

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<sup>&</sup>lt;sup>2</sup> The only other language that I am aware of other than Turkic languages that exhibit this phenomenon is Navajo (Ken Hale, pc.).

Kürşat early come - "past" - COND party-DAT go-FUT-AOR-1PL 'If Kürsat came early, we can go to the party'

In English, inverted conditionals exhibit an overt T-to-C movement. Although not all inverted conditionals are Cfs, the following data allows us to observe that only Cfs allow the T-to-C in the structures where the *If*-clause is in past perfect. Consider (3&4) below, where a NCf consequent clause is not allowed when there is overt T-to-C.

In (3), the antecedent predicate is inflected with the Past Perfect: The consequent clause would be interpreted as a counterfactual if its predicate were modal + perfect. Interestingly, the consequent predicate is inflected with Past Tense morphology, and the NCf interpretation is allowed:

## (3) Counterfactual

If he had already handed in his paper, why did he continue to ask for help?

Once the antecedent clause undergoes T-to-C, the structure becomes unacceptable:

## (4) Non-Counterfactual

\*Had he already handed in his paper, why did he continue to ask for help?<sup>3</sup>

T-to-C seems to be incompatible with a NCf reading. I will try to account for the Turkish and English data in (1-4) by arguing that Cf reading is related to the C-domain:

3

<sup>&</sup>lt;sup>3</sup> The fact that this structure is an interrogative might contribute to the (un)availability of a NCf reading. I am leaving this issue for further research.

the surface switch in the morpheme order in Turkish, and the T-to-C in English are parametric manifestations of Counterfactuality connected to the C domain in syntax<sup>4</sup>.

## 1.2.1 The Verbal Complex in Turkish

Verb morphology in Turkish has the following paradigm<sup>5</sup>:

## (5) Turkish Verbal Morphology

A more complex structure would incorporate multiple modals and negatives. Note the hierarchy between the deontic and the epistemic modal<sup>6</sup>:

'I may not be able to come.'

In Turkish, three inflectional morphemes that would occur attached to the verbal stem have clitic forms: The "past" (or perfective and epistemic certainty marker) {-DI} <sup>7</sup>, the perfective marking uncertainty {-mIş}, and the conditional morpheme {-sE}.

<sup>&#</sup>x27;I have come.'

<sup>&</sup>lt;sup>4</sup> See Pesetsky and Torrego (2001) for a similar connection between modal interpretation and the availability of C in embedded contexts.

<sup>&</sup>lt;sup>5</sup> See Sezer (2002) for a thorough discussion and description. This paradigm cannot be generalized over Turkic languages other than Turkish because in other Turkic languages this paradigm is split with auxiliary verbs and light verbs, yielding a radically different phrase structure from Turkish. For the comparative verbal structure of Turkic languages, see Aygen (in preparation).

<sup>&</sup>lt;sup>6</sup> See Aygen -Tosun (1998a,b) for the phrase structure posited for Turkish, and Aygen (2002 a, b) for a cross-linguistic clausal architecture.

<sup>&</sup>lt;sup>7</sup> I assume this so-called "past tense" morpheme to be a perfect aspect or an epistemic modal morpheme denoting certainty, following the proposal that there is neither a T head nor tense morpheme in Turkish

(7)	bound morpheme	clitic	free form
	{-DI}	-ydI	idi
	{-sE}	-ysE	ise
	{-mIs}	-vmIs	imis

It is no coincidence that the first two are perfect morphemes, each denoting a different degree of commitment to the truth of the proposition in terms of certainty, and the third is the conditional morpheme. The corresponding clitics and free forms follow inflectional morphemes (i.e. aspect and modality) and they range over possible worlds. I propose that this set of inflectional morphemes and the corresponding clitics and free forms constitute a natural class of [+possible worlds]; the former deletes a feature on C by AGREE (Chomsky 2001), and the latter merges at C.

#### 1.3. Counterfactuals in Turkish

Conditional structures bear the conditional morpheme {-sE} in Turkish. Counterfactual and non-counterfactual conditionals in Turkish are distinguished by the difference in the sequence of conditional and the "past" morphemes. The "past" suffix following a conditional suffix (*se-ydi*) expresses counter-factuality whereas the opposite order (*di-yse*) expresses factuality:

(8) <u>CF construction</u>		NCF construction		
Antecedent	Consequent	Antecedent	Consequent	
V+Cond+Past	V+Aorist+Past	V+TNS/ASP+ Cond	V+Aor+(*Past)	

(Aygen 2002a,b, 2003). For other languages I argue that 'tense' is a *kind of epistemic modality* by definition (Lyons 1977, 1995). However, I will keep the term "past" for sake of simplicity.

$$[V + sE + YDI]$$
  $[V + Ir/Er + DI]$   $[V + DI - ysE]$   $[V + Ir/Er(+DI)]$ 

The Cf and NCf constructions are illustrated in (1&2) and repeated as (9 & 10) below:

# (9) Counterfactual

Kürşat erken gel -sey -di, parti-ye gid-ecek-ti-k.

Kürşat early come -COND -"past" party-DAT go-FUT-"past"-

1PL

'If Kürşat came early, we would go to the party.'

## (10) Non-Counterfactual

Kürşat erken gel -di -yse, parti-ye gid-ebil-ir-iz.

Kürşat early come - MOD - COND party-DAT go-FUT-AOR-1PL

'If Kürşat came early, we can go to the party.'

Iatridou (2000) argues that an Exclusivity Feature (ExclF) marked by past tense marks counterfactuality rather than past tense in hypothetical environments. In brief, past morphology in hypothetical environments is an indicator of Cfs. Iatridou's generalization seems to hold in Turkish, too. The morpheme that marks the presence of the ExclF is not a tense but a modal morpheme; however, this does not change the analysis since it is the feature rather than the morpheme that is central to the analysis.

The switch in the order of the conditional and modal morphemes is observed in Cf wish constructions, too. Note that the morphology in CF wishes is identical to that of the predicate in CF antecedent clauses:

# (11) a. Cf-Present Wish

Keşke Tina burada ol -sa -ydI!

I wish Tina here be -COND -"past"

'I wish Tina were here'

## b. *Cf-Present Conditional*

Tina burada ol -sa -ydI, cok mutlu ol-ur-du-m.

Tina here be -COND -"past" very happy be-AOR – "past" -1SG

'If Tina were here, I would be very happy'

Counterfactual conditionals is not the only environment where the so-called "Past marker" {-DI} is non-past in Turkish:

(12) (O) Gel-di mi, hepimiz-i gül-dür-ür.

S/he come-past Q us all-acc laugh-caus-aorist

'Whenever he comes, he makes us all laugh'

The Q-Particle contributes a universal quantifier to the meaning in (12) (Aygen-Tosun 1999b); the so called "past" morpheme is interpreted as non-past under the universal operator<sup>8</sup>.

Within the domain of modals, the "past" morpheme ranges over possible worlds rather than times as well. Consider (13) and (14) below:

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<sup>&</sup>lt;sup>8</sup> The Q particle occurs in Yes/No questions where it functions as an existential operator. This seems to be an exceptional environment where it behaves as a universal one. For more discussion on this topic see Aygen-Tosun (1996b).

- (13) (O) gel -ebil -ir -di Cf

  S/he come -MOD -IMP -PAST

  'S/he could have come'.
- (14) (O) gel -meli -ydi Cf

  S/he come -MOD -PAST

  'S/he should have come'

It is now plausible to find the predicates in (13&14) as possible forms in consequent clauses of conditionals (15-16):

- (15) Ahmet iste-se-ydi, gel-ebil-ir-di. Cf

  Ahmet want-COND-PAST come-MOD-IMP-PAST

  'If Ahmet wanted to, he could have come'
- (16) Piyango-yu kazan-sa-ydı-n, harca-malı-ydı-n. Cf

  Lottery-ACC win-COND-PAST-2 Pr Sg spend-MOD-PAST

  'If you won the lottery, you should spend (it)'

Another piece of evidence indicating that the so-called "past" morphology in hypothetical environments seems to mark CF rather than Past Tense comes from the availability of present/past or future marking adverbs in the Cf constructions below:

(17) a. Yarın gid-ecek ol-sa-ydı-n.....
Tomorrow go-FUT be-COND-Past-2 Pr Sg
'If you were to go tomorrow......'
b. Şimdi gid-iyor ol-sa-ydı-n.....

Now go-PROG be-COND-Past-2 Pr Sg

'If you were going now .....'

c. Dün git-miş ol-sa-ydın.....

Yesterday go-PERF be-COND-Past-2 Pr Sg

'If you had gone yesterday.....'

# **1.4.** Aspect in Counterfactuals

Iatridou (2001) notes that in Modern Greek, counterfactual constructions differ in Aspect morphology as well.

Consider the Turkish data (18) is a NCf and (19) is a Cf construction:

(18) İlac-ı al-ır-sa, iyileş-ir. (NCf)

Medicine-ACC take-aorist-COND recover-Aorist

'If he takes the medicine, he will recover'

(19) İlac-ı al-sa-ydı, iyileş-ir-di (Cf)

Medicine-ACC take-COND-Past recover-Aorist-Past

'If he took the medicine, he would recover'

The Aspect marker, aorist occurs in both the antecedent and the consequent in NCF; but only in the consequent in NCf. The nature and the functions of the aorist in Turkish have long been an object of study (Yavaş 1980, Kuruoğlu 1984, Taylan 1996,1997, Aygen-Tosun 1998b, among others), It has been argued to express Tense, Aspect and Modality. It has a generic use and is interchangeably used with the progressive morpheme *-Iyor* in denoting habitual actions. These properties indicate its

Imperfective nature; yet, it is compatible with adverbs like "in a month", which is accepted to be a test for Perfectives:

(20) Îlac-ı bir saat içinde al-ır-sa, iyileş-ir. NCf

Medicine-ACC one hour in take-aorist-COND recover-Aorist

'If he takes the medicine in an hour, he will recover'

The aorist may as well be functioning as a future or modal marker in (18). Such morphemes are called "Fake Aspect" by Iatridou (2001). Fake Aspect seems to appear in NCf conditionals in Turkish. Further study might shed light on the environment in which such "fake" aspect morpheme is likely to appear. I think this has implications for clause structure in Turkish. In Turkish, Imperfect Aspect is *not* a necessary part of CF-morphology because other morphemes may introduce world variables but it appears in NCf conditionals, and generic/habitual sentences as predicted by Iatridou (2001). Interestingly, this morpheme (IMP/Aorist) can appear in structures where there is no habituality or genericity involved.

One such environment is the Free Relatives, where it appears with the conditional morpheme:

(21) Ne pişir-ir-se ye-r-im. FR
what cook-IMP/aorist-COND eat-IMP-1 Pr Sg
'I eat whatever [s/he] cooks'

Although there is only *ne* 'what' not *her ne* 'whatever' in the structure, the occurrence of the Imperfect agrist with the conditional seems to give the quantificational meaning to the FR.

# 2. Wishes, Cfs and Past Tense Morpheme

The morphology in CF wishes in Turkish is identical to that of the predicate in CF antecedent clauses.

(22) a. Keske **Tina burada ol-sa-ydI**! (CF-Present Wish)

I wish Tina here be-COND-Past

'I wish Tina were here'

b. **Tina burada ol-sa-ydI**, cok mutlu ol-ur-du-m. (CF-Present Conditional)

Tina here be-COND-Past very happy be-Aorist-Past-1 Pr Sg

'If Tina were here, I would be very happy'

Interestingly, the so-called "past" morpheme is interpreted as Past only when it precedes the conditional morpheme:

- (23) Piyango-yu kazan-sa-ydi-k, zengin ol-ur-du-k. (CF)

  Lottery-ACC win-COND-PAST-1 Pr Sg rich become-aorist-Past-1 Pr Sg

  'If we won the lottery, we would be rich'
- (24) Piyango-yu kazan-di-ysa-k, zengin ol-ur-uz. (NCf)

Lottery-ACC win-Past-COND, rich become-aorist-1 Pr Sg.

'If we won the lottery, we will be rich' (Present Conditional)

Note that (23) is a counterfactual and (24) is a NCf conditional. The only difference between them is the order of the conditional and the "Tense" morpheme which we have argued to be a fake one in counterfactuals in line with Iatridou's framework. This observation provides further evidence that it is indeed the case. The "past" tense morpheme in (23) is a fake one; it ranges over worlds and adds counterfactuality to the interpretation of the structure, whereas the "past" morpheme in (24) ranges over times and is interpreted as a past tense. In (24), the speaker is ignorant of the lottery results and speculates on the consequences of a hypothetical situation in which they have bought a ticket and won the lottery. The lottery results have been determined so they might have won it. The conditional is not counterfactual.

# 3. The Proposed Analysis

The interpretation of multifunctional morphemes depends on the semantic environment in which they occur. The "label" on the functional head that bears the syntactic features corresponding to those on the verbal complex is irrelevant. The so called "Tense/Aspect" morpheme Past, which has recently been analyzed Aygen (2002a,b,c) as a perfect aspect and epistemic certainty morpheme is interpreted as Cf at C; as a perfect +certainty morpheme , i.e. "Past tense" at the T/Mod $_E$  head . The aorist is interpreted as a modal in Cf consequent clauses.

## 3.1. Interpretation of Tense

This analysis would predict that temporality *cannot* be marked on the antecedent clauses in Turkish counterfactuals since for a structure to be CF, the "tense" morpheme should follow the conditional morpheme where it ranges over worlds and cannot be interpreted as past. For a tense morpheme to appear in a conditional it has to occur before the conditional morpheme but such a structure would not be a counterfactual.

(25) \*Hasan git-ti-yse-ydi ......

H.Nom go-PAST-COND-PAST

b. \*Ahmet yarin

If the proposed analysis is correct, we would expect the availability of a non-past adverb in NCf constructions, which is attested in (26b) below:

(26) a. Ahmet okul-a git-ti-yse, Ayse-yi gor-ur. NCf

A-Nom school-dat go-past-cond -acc see-aor

'If Ahmet went to the school, he will/would see Ayse.'

okul-a

A-Nom tomorrow school-dat go-past-cond -acc see-perf-epistemic marker

git-ti-yse,

Ayse-yi

gor-ur.

Adverbs with any time reference can appear in antecedent clauses of Cfs, indicating that the antecedent clause is neutral/unspecified with respect to tense, as predicted by the proposed analysis:

(27) Bugun/Yarin/Dun git-se-ydi-n, vaktinde var-ir-di-n (Cf)

Today/Tomorrow/Yesterday go-COND-"past"-2 Sg on time arrive-aorist-"past"-2 Sg

'If you went today/tomorrow/yesterday, you would arrive on time'

#### 3.2 Non-conditional conditionals!

There are non-conditional conditionals where the adjunct predicate is identical to that of a conditional but the matrix predicate is factive because past does not range over worlds:

- (28) Kek yap-ti-ysa, misafir-ler icin yap-ti (senin icin degil)

  cake make-PAST-COND guest-plu for make-PAST

  'If s/he baked a cake, s/he baked it for the guests (not for you)'
- (28) illustrates the observation that conditionals cannot be adjuncts of factive matrix clauses, that is clauses with predicates in the "past" that do not range over worlds. When the morpheme preceding the past form has a modal interpretation (depending on where it checks its feature) it introduces a world variable over which the "past" ranges, as in (29):
- (29) Kek yap-ti-ysa, misafir-ler icin yap-mis-tir (senin icin degil) NCf cake make-PAST-COND guest-plu for make-PAST-epistemic marker 'If s/he baked a cake, s/he must have baked it for the guests (not for you)'

In this respect Turkish has a parallel structure in the consequent clause with that of the English counterparts in that there has to be a modal. What allows the TAM morphemes to be interpreted as modals is where their features are checked. I would like to argue that it is the Complementizer Phrase, for the time being where the and the evidential is checked.

In fact the fake conditional clause in (28) is a factive matrix not an adjunct despite the similarity in the morpheme complex, which in turn has implications for the internal structure of adjuncts and matrix clauses.

# 3.2. Excorporation or a filled C

There are two possible ways of analyzing these observations, both of which involve the C domain. The first involves a morphological excorporation. Watanabe argues that in the configuration below, where all features of Z are checked and Y still has a feature to be checked via adjunction to X, Y must excorporate and adjoin alone to X.

(30) Watanabe (1993):

$$X = [Y+Z]$$
, where  $X, Y, Z$  are heads

In a Counterfactual structure such as (31) below, one could argue that, -ydi "past" has to check its counterfactuality at C and incorporates. In a NCf structure, such as (32) below, the conditional excorporates and moves to C to satisfy V-to-C requirement. "past" would already be deleted at T.

- (31) Gel-se-ydi
  - Come-cond-past

'If he had come, ...'

(32) Gel-di-yse

Come-past-cond

'If he came, ...'

The major problems with this analysis are the following: First, excorporation is not independently motivated in Turkish; secondly, excorporation takes place at the expense of a Head Movement Constraint violation.

An alternative analysis is to assume that Counterfactuality involves the Comp position bearing an Exclusive feature (Iatridou 2001) is either filled by a lexical head or the verbal complex bears a morpheme that agrees and deletes the uninterpretable "non-factivity" feature in C. Naturally, only a set of morphemes and lexical heads that bears such a feature, namely those that refer to the evidential, counterfactual and conditional in Turkish.

#### 3.3. Free forms-lexical heads

Note that the "past" {-DI}, the evidential {-mIş} and the conditional {-(y)sE} morphemes have free forms. In such structures they behave as lexical heads (31 and 32 are repeated here as 33a-b):

- (33) a. Gel-se idi
  - Come-cond "past"
  - 'If he had come, ...'
  - b. Gel-di ise
    - Come-"past" cond
    - 'If he came, ...'
  - c. Gel -iyor imiş
    - Come -Prog -Evidential
    - '[apparently]He is coming.' Or "He is said to be coming.'

Since they are lexical heads they should be at C, V should remain lower (at T or in situ). One way to test the position of these lexical heads is the following: If they are at C(omp), post-verbal scrambling should not be allowed since a lexical head would block head movement. Note that when the form is a morpheme attached to the verbal complex, such a post-verbal scrambling is allowed (34a), but not when the form is a lexical head (34b):

- (34) a. Ben t<sub>i</sub> kir-sa-ydi-m vazo-yu<sub>i</sub>, parasini verirdi-m.
  - I break-cond-past-1sg vase-acc money-pos-acc give-aor-past-1asg 'If I had broken the vase, I would have paid for it'
  - b. \*Ben t<sub>i</sub> kir-sa idi-m vazo-yu<sub>i</sub>, para-si-ni ver-irdi-m.
    - I break-cond past-1agr vase-acc money-pos-acc give-aor-past-1agr

The ungrammaticality of (34b) indicates that post-verbal scrambling, that is, adjunction to CP is not allowed when there is a lexical head intervening. Another difference between (34a) and (34b) is that the affixed conditional is not stressed in (32a) whereas the free form bears the word stress in (34b). In (34b), the free form has a focal stress, which indicates that it is at a higher head. Such a construction does not allow adjunction to a higher site by blocking movement.

Based on the evidence above, I argue that these forms are located at C.

## 4. Conditional Inversion in English Counterfactuals

Consider the English Counterfactual in (35):

(35) If he had come early, he would have called us.

Iatridou (2001) argues that "a pluperfect, which is commonly assumed to contain two levels of past, uses one of its "past" layers for counterfactual purposes and the other for temporal purposes". If this is indeed the case, then we would have to say that Cf are marked on the antecedent clauses of at least one type, the past perfect in English.

Note that inversion is possible in both Cf and NCf constructions in English. Iatridou and Embick (199?) argue that inverted antecedents are old information whereas non-inverted ones are not. Let's consider some inversion patterns:

- (36) Were she to come, we would be prepared.
- (37) Had he come earlier, we could have solved the problem.

Both (36) and (37) illustrate T-to-C and are counterfactuals. Note that a structure like (38a), where there is no T-to-C, allows a non-past antecedent verb, whereas a structure with T-to-C (38b) does not:

- (38) a. If she came, we'll pick her up at the airport.
  - b. \*Were she to come, we'll pick her up at the airport.

In a certain discourse environment, (38a) is a grammatical structure with a NCf interpretation. Once T-to-C takes place, the structure is not acceptable (38b), indicating that inversion marks Cf and the consequent clause that lacks an ExclF to range over possible worlds rules out the structure.

The question I would like to pose concerns the occurrence of a past perfect in a non-inverted conditional marks Cfs in English.

Consider (39) below where a past perfect antecedent clause is followed by Past Tense and the conditional is not a counterfactual:

(39) If he had already handed in his paper, why did he continue to ask for help?<sup>9</sup>

If there are two ExclFs, one ranging over times and the other over worlds in the make up of Past Perfect, how come a non-counterfactual interpretation is the only available one in (39)? The point is that the past perfect in the antecedent clause is not necessarily responsible for the Cf readings in structures like (39); it is occurrence of possible worlds introduced by the modal in the consequent clause.

## (40) She could have been Miss Universe. (Palmer 1986)

When there is no conditional antecedent such as in (40), counterfactual interpretation is still possible, so long as there is an ExclF ranging over worlds introduced by the modal.

If we are on the right track, such a NCf should not be available in a conditional structure with an inverted antecedent and Past Tense in the consequent clause, which is indeed the case:

(41) a. \*Had he already handed in his paper, why did he continue to ask for help?

b. Had he already handed in his paper, he would not be still racking his brains at home.

<sup>&</sup>lt;sup>9</sup> Since (i) below is not allowed, the semantics of questions must be involved in the grammaticality of (37a) but I will leave this issue for further research.

<sup>(</sup>i) \*If he had already handed in his paper, he did it when I was not in the office.

The prediction is borne out by the ungrammaticality of (41a). In (41b), however, one ExclF is now high enough in the structure to range over worlds, and the other ranges over times in the antecedent; in the consequent clause, too, there are two ExclFs, one ranging over worlds and the other over times. In (41b), the antecedent clause is marked for Cf overtly.

In English, then, inversion allows marking Cf in antecedent clauses. There is another inversion pattern in English that is not a Cf:

(42) Should he finish the work on time, we will throw a party for him.

On the other hand, there is a non-inverted form that is always a Cf:

(43) If I were a rich man, .....

These two forms may be collapsed under "subjunctives' and may be accounted for in other terms. I'm leaving the issue for further research.

#### 4.Conclusion

Evidence from Turkish supports Iatridou's proposal that "the same syntactic/semantic feature can receive either the past temporal or counterfactual interpretation" and that this is a cross-linguistic phenomenon.

We have seen the presence of "past" morphology without past interpretation in various constructions and counterfactuals, and its compatibility with non-past adverbials in Turkish. This phenomenon is observed in Turkish in addition to the Indo-European languages, and Korean, Japanese, Hebrew and Uto-Aztecan, noted in Iatridou (2001).

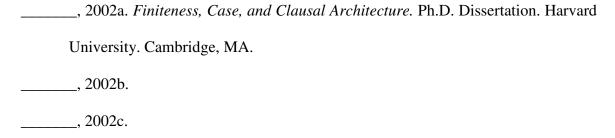
We have also seen in this study that Turkish provides various environments in which Imperfective seems to behave as a default Aspect.

The peculiar pattern of "tense" and conditional morphemes in marking counter-factuality versus non-counterfactuality in Turkish is accounted for by Iatridou's ExcIF ranging over times or worlds, depending on the immediate semantic environment. When the past tense morpheme precedes the conditional it ranges over times and is interpreted as Past Tense; when it follows the conditional morpheme it ranges over worlds. The same phenomenon is observed in the syntactic T-to-C movement in inverted conditionals in English. English marks Cfs by this overt movement in the antecedent clause. It is regularly marked on the consequent clause by the occurrence of a modal + a past participle.

In both English and Turkish consequent clauses the occurrence of modals is obligatory. The the very same morpheme in the same verbal complex either as aspect/tense or modal in Turkish is given as evidence for the claim that the functional head the features of these morphemes are checked are in fact different.

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