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## A Discourse-Pragmatic Analysis of *amúgy* (~‘otherwise’)\*

### Abstract

The present paper aims at outlining the diachronic development of a Hungarian lexical item, *amúgy* (~‘otherwise’) into a discourse marker (henceforth DM). The brief historical analysis of the pragmaticalization processes of the item will be followed by a small-scale corpus-based study of its current DM uses in order to uncover its functional spectrum and identify its discourse-pragmatic properties in present-day spoken Hungarian. It will be presented that it is a highly multifunctional element with various procedural functions, and that it carries a wide range of DM features, such as weak clause association, optionality, connectivity, initial position, and orality. One of the major research questions is whether there is a relation between the position and the intonation pattern of the item. It was found that its position within the utterance has a significant impact on the relative proportion of pitch; however, there is no significant relation between pitch movement and the position of *amúgy* (~‘otherwise’) defined at clause-level.

*Keywords:* discourse markers, historical pragmatics, conversation analysis

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## 1 Introduction: research objectives and material

The objective of the paper is twofold: firstly, to outline the development of *amúgy* ('otherwise') into a discourse marker (henceforth DM); secondly, to uncover its roles in the management of interaction from a pragmatic perspective.

Concerning the terminology of the present research, DMs have been defined as "sequentially dependent elements which bracket units of talk" (Schiffrin 1987: 31), or metalinguistic items that provide information about the segmentation and operation of a discourse (Fraser 1999). I have chosen to use the term discourse marker because that category (as defined by Schiffrin 1987) is more inclusive as it includes nonverbal cues as well (such as vocal interjections or intentional gestures used for communicative purposes) that also play a crucial role in the management of conversation. Schiffrin (1987) describes the role of DMs as "providing contextual coordinates for ongoing talk" that indicate for the hearer how an utterance is to be interpreted. In short, DMs are multifunctional pragmatic elements expressing various metacommunicative and cognitive functions, which will be described in this paper using the examples of the DM uses of a Hungarian lexical item, *amúgy* (~'otherwise').

Broadly speaking, two fundamentally different uses of *amúgy* can be distinguished: (1) *amúgy* with propositional meaning (its original, adverb use), and (2) *amúgy* with procedural meaning (its DM use which is more recent than its use as an adverb). As mentioned above, this paper focuses on its present-day procedural meanings, as well as the possible ways these new meanings evolved from its original propositional meaning.

The diachronic development of this item has been tracked using some of the methods of historical pragmatics. Among the various branches of pragmatics, historical pragmatics is concerned with the diachronic analysis of the evolution of lexical items with propositional meaning into DMs (items used metacommunicatively). I have used various language resources in the diachronic analysis of the meaning variations of the item: primary sources, such as the occurrences of the item in texts of the Historical Corpus of Hungarian (Magyar Történeti Szövegtár) between 1772 and 2000 (Kiss et al. 2004); and secondary sources, such as entries in etymologic dictionaries (Benkő 1967-1984), historical dictionaries (Ballagi 1872, Szarvas & Simonyi 1893) and general contemporary dictionaries (Ittzés 2006, Puszta et al. 2003) as

well as historical linguistic volumes on the development of Hungarian grammar (Benkő 1992).

The synchronic description of its current usage is based on the analysis of *amúgy* (~'otherwise') tokens in the Hungarian HuComTech multimodal corpus (Hunyadi et al. 2012). The data of the synchronic analysis of the item comes from the recordings of 26 speakers in 50 interviews (25 formal and 25 informal conversations, including a constant interviewer and 25 different speakers) and analyzes 79 tokens of *amúgy* (~'otherwise') in multimodal corpora.

## **2 Two basic uses of *amúgy* (~'otherwise'): propositional meaning versus procedural function**

The two types of meaning, propositional and procedural, generally differ in the sense that most linguistic items have referential meaning; that is, they refer to or describe something in a real or imaginary world, based on which speakers conceive and create representations of them during their interpretation (cf. Abuczki 2015a). It is this type of meaning that provides the basis on which we can judge an utterance as true or false. On the other hand, items having procedural meaning do not have representations, rather, they operate on the representations of conceptual items (Rouchota 1998, quoted in Schirm 2011: 13). Among the semantic-pragmatic characteristics of DMs, Furkó (2007, 2011, 2012) emphasizes their non-propositional and procedural meaning. It is a widely accepted view that some DMs do not have an effect on the truth conditions of the sentence; that is, the propositional meaning of the host unit is not affected by them. They are also considered to have a procedural meaning (Fraser 1999: 944) and they function at textual or interpersonal levels (Furkó 2011: 42-43).

Now, let us see two utterances (examples 1 and 2) for the adverb uses of *amúgy* (~'otherwise'):

*example 1* (<http://youtu.be/InpYDzwuWlo>)

Meg hát emlékszem, ott állt az ablakba, és így cigizett, mer **amúgy** nem szokott a lakásba rágyújtani, de akkor annyira ideges volt, hogy muszáj volt neki.

(*And, well, I remember him standing at the window, smoking 'cause he doesn't ADV\_amúgy usually smoke in the house, but he was so stressed out that he just had to.*) (hucomtech informal)

*example 2* (<http://youtu.be/q7VB-cxa2mM>)

Akkor nem tudsz most viccet mondani?

Nem. Egyet se tudok. Hát ilyen megy a nyuszika az erdő szélén, és leesik, tehát ilyen fárasztó viccekben nagyon otthon vagyok, de **amúgy** nem.

(*So you can't tell a joke right now?*

*No. I don't know any. Well, like little rabbit is walking by the forest and falls off...so I'm like familiar with these kinds of lame jokes, but ADV\_amúgy no.)* (hucomtech informal)

In examples 1 and 2 the meaning of *amúgy* (~‘otherwise’) can be glossed as ~ ‘in another way’, ‘in the opposite way’, ‘in other circumstances’. These *amúgy* (~‘otherwise’) tokens are not considered as DMs because (1) they are not optional, (2) they do have propositional meaning, and (3) omitting them would make the utterance illogical or would change its meaning. Furkó argues that “DMs are considered optional from the perspective of sentence meaning because their absence does not change the conditions under which the sentence is true ... secondly, they are optional in the sense that if a DM is omitted, the relationship it signals is still available to the hearer, though no longer explicitly cued” (2007: 57). In this respect, *amúgy* (~‘otherwise’) tokens in examples 1 and 2 are not considered optional. At the same time, there is some variation among the degree of propositional meaning of the meaning of *amúgy* (~‘otherwise’) items, since example 2 involves a higher degree of conceptual meaning than example 1. Taking all DM criteria (Furkó 2007: 73) into consideration, *amúgy* (~‘otherwise’) tokens in these examples fail most of the tests; therefore, they are not core DMs; rather, they function as sentence adverbs with a rather high degree of conceptual meaning.

### 3 A diachronic analysis of the emergence of procedural functions

As will be seen in the examples below *amúgy* used to serve and serves even today multiple functions. Its tokens in historical corpora seem to have predominantly been used and meant conceptually, while its uses in present-day corpora chiefly reflect its procedural use, performing discourse-pragmatic funtions. The question arises how to explain the shifts between the various meanings and their functional variations. This challenge will be addressed in the present section of the paper.

Grammaticalization theories (such as Traugott 1995) account for the multifunctional nature and the semantic changes of DMs using diachronic research. According to Traugott (1995), the origin and development of DMs<sup>1</sup> has led to explain the multifunctionality of DMs as a result of grammaticalization. Hopper & Traugott (2003) define grammaticalization as the systematic change whereby lexical items and constructions develop to serve grammatical functions. Traugott & Dasher (2002) draw the following line of development towards DM category membership:

truth conditional meaning → non-truth conditional meaning;  
content → content/procedural meaning → procedural meaning;  
non-subjective meaning → subjective meaning → intersubjective meaning;  
scope within proposition → scope over proposition → scope over discourse

Another term used to explain the semantic change of lexical elements with conceptual meaning from heterogeneous word classes into DMs is pragmatalization (Erman & Kotsinas 1993, Aijmer 2002). Pragmatalization involves gradual semantic bleaching (i.e. the loss of semantic meaning) and simultaneous pragmatic enrichment (i.e. gaining pragmatic functions).

In an attempt to account for the historical development of the propositional lexical item *amúgy* into a DM, diachronic and synchronic data as well as dictionary entries (that is, both primary and secondary sources) will be used in order to define the current state of the pragmatalization process in Traugott & Dasher's (2002) model of development (similarly as in Abuczki 2015b).

In this section, the etymology and the historical development of the word *amúgy* (~'otherwise', 'in a different way') will be described. According to Benkő (1967: 145-146), *amúgy* originates from the words *am* and *úgy* which were merged at sentence level at least before the 16<sup>th</sup> century. Its originally independent *am* prefix is presumably an allophone of *ám*, resulting from a word split. Functions of *ám* and *am* used to include emphasis, calling attention and contrast, all of which can be traced among the meanings of *amúgy* even today. As for the origin of its allophone, *ám*, it is assumed to have come about after the merge of two sentence words that used to co-occur. In other words, the

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<sup>1</sup> Traugott (1995) uses the term *pragmatic markers* to refer to the same class of pragmalinguistic elements as I call DMs.

deictic pronoun, *a* and a pronoun beginning with *m*, expressing a distinguishing role used to follow each other. After the merge, certain expressions used to commonly co-occur with *amúgy* around the 17<sup>th</sup>-18<sup>th</sup> century, such as *így .... amúgy* (~‘this way ... that way’), *úgy ... amúgy* (~‘that way ... in a different way’), shown in examples 3 and 4 below.

*example 3*

azon ígéket némellyek **úgy**, mások **amúgy** ejtik  
(certain verbs are pronounced **this way**, others are **in different ways\_adverb**) (Rájnis 1773/1781: 83)

*example 4*

A középső ugyan számba sem vette, de az elsőt és ezt az utolsót csak **imígy-amúgy** becsülte.

(Although the middle one was not taken notice of, the first and this last one were also appreciated **only a little bit\_adverb**)  
(Rettegi 1775/1970: 360)

The following fixed expressions below (presumably evolving in the 16<sup>th</sup> century) were all searched in the historical corpus material.<sup>2</sup> In the queries, the regular expression \w stands for a character or a word:

*így \w amúgy* (→ 31 occurrences)  
*úgy \w amúgy* (→ 12 occurrences)  
*imígy \w amúgy, imígy-amúgy* (→ 12 occurrences)

Although these must have been common expressions in earlier centuries, as they gave multiple results in the Hungarian Historical Corpus, none of them gave a result in my synchronic corpus material. Instead, as for collocational uses, I found many examples for *amúgy is* (~‘that way, too’, ‘anyway’, ‘otherwise’, ‘still’) and *amúgy se* (~‘neither that way’, ‘anyway’) in both my diachronic and synchronic corpora. Due to its pragmaticalization, the scope of *amúgy* has gradually increased to such an extent by now that it may even link large thematic units consisting of several utterances. Gradually developing a DM use after its use as an adverb and then a sentence adverb, it may also

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<sup>2</sup> The user interface and search options of the Hungarian Historical Corpus (Magyar Történeti Szövegtár) are available online at <http://www.nytud.hu/hhc/>.

mean ‘otherwise’ today where it is much broader in scope (see example 5).

*example 5*

NÁNDOR. Ilyen szó nincs.

SACI. Az egyszer tutti.

MILÁN. Hogyne lenne. Keresse ki az értelmezőből. (Megáll.) Mégis... igen... tudom már, mit állítok. Azt állítom, hogy alázsoborgott. (Az írógéphez ugrik, elragadtatottan, szinte dalolva, fennhangon ismételgeti meglelt igéjét.) Alázsoborgott, zsoborgott alá, alázsoborgott

NÁNDOR. Alázsoborgott. Abszurdum.

LÍDIA. **Amúgy** nem hangzik rosszul. Olyan mint a “dorombol”.

(NÁNDOR: *Burr?* *This cannot be true.*

LÍDIA: **Otherwise\_DM**, *it does not sound bad. It sounds like 'purr'.*) (Békés 1988: 83)

Concerning the definitions of the current meanings of *amúgy* (~‘otherwise’) in dictionary entries, it is first of all listed to have several related meanings as an indexical adverb of manner in Pusztai et al. (2003: 40), including (1) ‘in a different way’ (~‘in another way’), (2) ‘in a typical way’ (~‘typical of somebody or an activity’), and (3) ‘in an unusual way’. Besides these adverbial meanings, Ittzés (2006, volume II: 758) also lists its non-conceptual/DM use (third of all) that can be glossed as ‘otherwise’ and ‘besides this’. Second of all, it is also defined to be used to emphasize an adverb of manner, e.g. “*amúgy nyersen*” (~‘*amúgy\_adverb/very bluntly*’). The following adverbial sense listed in Ittzés (2006) seems to be related to the previous one: “typical of a place or typical of someone”, illustrated by example 6 below:

*example 6*

**amúgy** doktorosan ō is tud mosolyogni (*he can smile amúgy\_adverb as a doctor*) (Bartalus: 1882, cited in Ittzés 2006: 759)

Although the two adverbial meanings listed above (to emphasize an adverb of manner; typical of a place or of someone) are listed secondly in the analysed dictionary entries, I have not found instances of these

uses in my corpus, which suggests that these are rather archaic uses of the item.

All in all, based on the diachronic descriptions and examples, it is proposed that the development of the lexical item *amúgy* can be described on the following path from a merged word, an adverb into a DM:

merge of two sentence words, *a* and *m* → *am* / *ám* (*allophones*)  
 → *am(a)* + *úgy* → *amúgy* adverb → *amúgy* sentence adverb →  
*amúgy* DM

Finally, the limitations of the diachronic analysis must also be mentioned. I only consulted texts written after 1772, because these texts are available in the online historical corpus. Besides, naturally, I only had access to the spoken language of earlier times in the form of dialogues captured in novels and dramas. However, the thematic and interpersonal functions of DMs (including *amúgy*) would probably be found predominantly in spoken language.

#### **4 A discourse-pragmatic analysis of the current uses of *amúgy* (~‘otherwise’) as a DM**

The goal of this section is to map the functions and make explicit the features of the DM *amúgy* (~‘otherwise’) from a discourse-pragmatic perspective, based on empirical data. Altogether 79 tokens of *amúgy* (~‘otherwise’) can be found in 50 recordings of the HuComTech corpus analysed in the framework of this case study. Among these, 50 tokens are used by the interviewees, while 29 instances are uttered by the constant interviewer. 65 tokens can be analysed as DMs, expressing procedural meaning (as its most common use today), and 14 items are not DMs, but adverbs, adverbials or sentence adverbs.

##### **4.1 Methodology**

The tool used for the synchronic corpus analysis is the annotation software ELAN 4.5.1 (henceforth ELAN) (Brugman & Russel 2004: 2065-2068), which was used to segment, functionally tag, concordance and query the tokens of the lexical item under scrutiny. The research methodology combines quantitative and qualitative approaches. The tokens, along with their contexts and uses in the multimodal record-

ings, are analysed in a data-driven fashion from the perspectives of functional linguistics, pragmatics and conversation analysis (described in 4.2 and 4.3). Two of the major empirical research questions are (1) whether we can identify a typical pattern in its sequential left-context (in its surrounding, especially in its preceding lexical items), and (2) whether there is a significant relation between the (utterance-level and/or clause-level) position and the intonation pattern of the DM *amúgy* (described in 4.4).

## 4.2 Pragmatic functions

This section presents an interpretation of the pragmatic functions of DM *amúgy*, illustrated by examples taken from the HuComTech corpus. In examples 7-10 (in contrast with examples 1-6)<sup>3</sup>, *amúgy* (~'otherwise') is analysed as a DM because it is an optional, omittable item there (after omitting it, the meaning of the utterance does not change).

I have found in the HuComTech-corpus that *amúgy* (~'otherwise') does play a crucial role in the topic control of conversations, as it is used to mark topic changes and introduce meta-comments. For instance, in the following example taken from the HuComTech-corpus *amúgy* (~'otherwise') marks topic elaboration and the shift of perspective of the speaker:

*example 7* (<http://youtu.be/OBH9LIf2uCs>)

Most sokan fognak rám haragudni szóval, hát, így a zsidó vallásba az nem, az nem tetszik, hogy ők a kiválasztott nép.  
Akkor o%, te magad amúgy vallásos vagy?

(*Many people will be angry with me now, so, well, so, in the Jewish religion I don't like it that they say that they are a chosen people. So, are you religious yourself?*) (hucomtech informal)

In example 7 *amúgy* (~'otherwise') could be glossed as 'by the way' in English. Besides marking thematic features, it is also used to express interpersonal functions, specifically, to decrease the face threatening force of the question.

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<sup>3</sup> The examples are also used for the illustration of conceptual meanings and procedural functions in Abuczki 2015a (dissertation).

*Amúgy (~‘otherwise’)* in example 8 and 9 signals that the communicated content is not so important and relevant; it is only an inserted comment (personal opinion) of the speaker.

*example 8* (<http://youtu.be/amQInGR78DM>)

Én tervezem egyébként, hogy Pestre költözzek. Tehát a suli az, ami itt [Debrecenben] tart csak. Imádom Pestet amúgy.

(*I'm planning to move to Pest. So, it's only school that keeps me here [in Debrecen]. I love Pest DM\_amúgy.*) (hucomtech informal)

*example 9* ([http://youtu.be/KV\\_zj8y4T7I](http://youtu.be/KV_zj8y4T7I))

Már két és fél éve itt lakom, de mit tudom én, nem voltam olyan sok helyen, Tornádóba voltam talán párszor. Annyira amúgy én nem vagyok ilyen buliember.

(*I've been living here for two and a half years, but, dunno, I haven't been out to a lot of places, I've been to Club Tornado a couple of times. But I'm DM\_amúgy not like such a party animal.*) (hucomtech informal)

The use of *amúgy* (~‘otherwise’) indicates the intention of the speaker to further elaborate on the topic; also, it is used to refer back to a previous sub-topic (to Pest and partying, respectively).

A different use of *amúgy* (~‘otherwise’) can be observed in the following example:

*example 10* (<http://youtu.be/e8Dju5tpXlk>)

Sajnos értettem angolul, hogy meg akar késelni. Egy kicsit úgy hátrahőköltem, nővérem így kettőt hátrahőkölt, és akkor mond-tuk, hogy hát de nincs nálunk pénz értse meg. Hát amúgy volt hatszáz font meg egy kétszázezer forintos notebook, tehát végül-is nem volt nálunk pénz, és akkor ott erősködött, hogy de igen.

(*Unfortunately, I understood in English that he wanted to stab me. I, like, backed off a little, my sister, like, backed off too, and then we said we didn't have money on us. Well, we did have six hundred pounds and a notebook worth 200,000 HUF, so we didn't actually have cash, and then he was like pressing that we give him more.*) (hucomtech informal)

In example 10 above *amúgy* (~‘otherwise’) can be glossed as ‘otherwise’ and it marks a concessive relation with the preceding

content. Additionally, it expresses some attitudinal features since it implies that the speaker is about to admit or reveal something (especially when interpreted jointly with the simultaneous facial expressions and gesticulation of the speaker).

According to my analysis based on 50 recordings of the HuComTech-corpus, the most common and salient function of *amúgy* (~'otherwise') is marking/introducing commentaries, personal opinions and side sequences. Its second most frequently assigned function is the introduction of explanatory sequences, while its third most common function is marking new information. Lastly, it can sometimes be seen as a meaningless filler word.

It can be highlighted as a critical remark that the role of *amúgy* in the thematic control and in the interpersonal domain of conversations is not mentioned in any of the dictionaries under scrutiny; however, nowadays it is commonly used to introduce topic shifts, to mark comments, commentaries, personal opinions, side sequences, and even concession.

#### **4.3 Lexical co-occurrences**

The present section describes the lexical context of DM uses and the word classes they are mostly preceded by. Tables 1 and 2 list the results of queries performed in ELAN (*N-gram within annotations: #amúgy*). Tables 1 and 2 display the distribution of lexical co-occurrences with *amúgy* (~'otherwise') as they are used by the interviewees (Table 1) and interviewer (Table 2) in the HuComTech corpus, respectively. The tables show only those items which preceded *amúgy* in at least two instances (but there are also few individual occurrences, such as *és amúgy* (~'and otherwise') in the interviewer's speech).

In the interviewees' speech, the DM *amúgy* (~'otherwise') follows a connective in approximately 42% of the cases. Table 1 shows patterns found in at least two instances, approximately 35% of all DM *amúgy* occurrences, but there are also few additional individual occurrences of *amúgy* with a connective. In contrast, it is used alone (without any other preceding connectives in collocation) in 58% of the cases uttered by the interviewees.

<i>Connective preceding amúgy</i>	<i>Number of occurrences</i>	<i>Proportion (%)</i>
<i>de (~'but')</i>	12	26,67
<i>*mer (~'cause')</i>	2	4,44
<i>{b} de (breathing + ~'but')</i>	2	4,44

Table 1: Lexical co-occurrences with *amúgy* (~'otherwise') in the interviewees' speech

In the interviewer's speech, DM *amúgy* (~'otherwise') follows a connective in approximately 70% of the cases. In 57% of the cases it follows a connective in at least 5 occurrences, which we might consider a typical pattern of use, as opposed to single, one-time occurrences. The other remaining uses, not shown in Table 2, are individual, one-time occurrences with another connective, such as *és amúgy* (~'and otherwise'), uttered by the interviewer on only one occasion. Most typically, *amúgy* (~'otherwise') follows *\*mer* (~'cause') in 38,46% of the utterances, and it follows *de* (~'but') in 19,23% of the cases (shown in Table 2). In the interviewer's speech *de* (~'but') is typically used to introduce a new topic (e.g. *de amúgy térjünk át...*, meaning ~'but otherwise let's move on to ...'). Its frequent co-occurrence with the connectives *de* (~'but') and *mer* (~'cause') is not just the result of a coincidence; instead, these systematic, recurring patterns can also be seen to serve as an evidence for the DM membership of *amúgy*.

<i>Connective preceding amúgy</i>	<i>Number of occurrences</i>	<i>Proportion (%)</i>
<i>*mer (~'cause')</i>	10	38,46
<i>de (~'but')</i>	5	19,23

Table 2: Lexical co-occurrences with *amúgy* (~'otherwise') in the interviewer's speech

As seen in Tables 1 and 2, *amúgy* (~'otherwise') does not tend to form a DM cluster with other DMs. Moreover, it is preceded by a small set of connectives (only two connectives). Its relatively common co-occurrence with the subordinating connective *\*mer* (~'cause') strengthens its role in explanatory sequences, while its co-occurrence with the coordinating connective *de* (~'but') indicates the relation of contrast or concession between the linked segments (clauses, utterances and sometimes even larger thematic units).

As a limitation of the research, we must highlight it once again that the data of the research on the synchronic analysis of the item comes from the recordings of 26 speakers in 50 interviews and only analyzes 79 tokens of *amúgy* (~'otherwise') in multimodal corpora.

The small number of tokens analysed is a limitation of this case study; consequently, the findings must be analysed sceptically and not to be considered as conclusive evidence, because they may not prove universal in Hungarian language if we compare them to findings based on a larger material. Still, in order to make the study of *amúgy* more comprehensive, taking into account more modalities, I have included the findings of the small-scale prosodic analysis of *amúgy* (~'otherwise') in the next section, in 4.4.

#### **4.4 The relation of position and intonation**

The units DMs are considered to connect are different according to several approaches towards them. The majority of DM researchers agree that syntactical independence (Brinton 1996: 34) is one of DMs' defining formal traits. Jucker & Ziv (1998: 3) claim DMs are used outside syntactic structure, independent of (or in between) clauses, typically preceding independent clauses (Schiffrin 1987: 31); therefore, removing a DM from its initial position leaves sentence structure intact. While connectives are traditionally seen as elements used to signal the relationship between clauses and sentences (Rácz 1985), DMs are claimed to be used to make explicit the type of relationship between larger units of discourse such as utterances or topical units (Schiffrin 1987, Fraser 1990). The same applies to the DM uses of *amúgy* since it can be seen in several utterances of my corpus that *amúgy* can also mark transitions and changes between larger units, at the thematic level, too. Fraser (1990) also emphasizes the quasi-initiality of DMs, i.e. that they tend to occur utterance-initially. Besides, the position of DMs is also frequently defined at sentence level (Quirk et al. 1985, Fraser 1988), and they are typically claimed to appear sentence-initially (Brinton 1996, Dehé & Wichmann 2010). Therefore, I will perform both types of segmentation (clause-based and utterance-based) in the HuComTech corpus in order to compare the different distributions of positions and to attempt to identify if any types of the segmentations result in a significant relationship with the direction of pitch movement. Pitch movement, and in particular the relationship of position and pitch, has not been studied

a lot in the case of discourse markers, so this paper tries to fill the gap in this respect.

The main argument for the utterance-level, in other words, turn-level analysis (Schiffrin 1987, Fraser 1990) can be that it is difficult to reliably detect sentence and clause boundaries in speech since the syntactic structure of spoken language greatly differs from that of written language (Hunyadi et al. 2012). Due to ellipsis and the intercalation of structures, syntactic boundaries are quite obscure in spontaneous conversations. The discrepancy between syntactic units and the units of speech acts suggests that interactionally situated language use is sensitive to constraints rather independent of syntax (Schiffrin 1987: 32). As for my terminology, an early definition of the utterance has been borrowed from Harris (1951), who proposes that an utterance is “any stretch of talk by one person, before and after which there is silence on the part of that person” (1950:14). I use the terms *utterance* and *turn* as synonymous throughout the paper.

Following the segmentation of the DM tokens of *amúgy*, the co-occurrences of discourse labels (concerning position within the turn), syntactic labels (concerning position within the clause) and pitch movement in the host intonational unit of the DM were queried because I wanted to test my hypothesis claiming that there is a relation between these variables. I explored the directions of the pitch movement of the realizations of *amúgy* in relation to its position in the utterance, and position in the clause, respectively.

The analysed recordings included 79 occurrences of *amúgy*, of which 50 *amúgy* tokens are used by the interviewees, while 29 instances are uttered by the constant interviewer. Of the 79 occurrences, 65 tokens can be analysed as DMs, expressing procedural meaning (as its most common use today), and 14 items are not DMs, but adverbs, adverbials or sentence adverbs.

Considering the utterance-level positions of the DM *amúgy* tokens (65 altogether), as it can be read in Figure 1, *amúgy* as a DM is most frequently used turn-internally (=utterance-initially), with 33 tokens (51% of the cases), although the difference between the distribution of turn-internal (51%) and -initial (43%) positions is not significant. In the light of this small dataset, the idea of the quasi-initiality of DMs (Fraser 1990) is evidently challenged by these findings concerning Hungarian *amúgy* DM tokens.

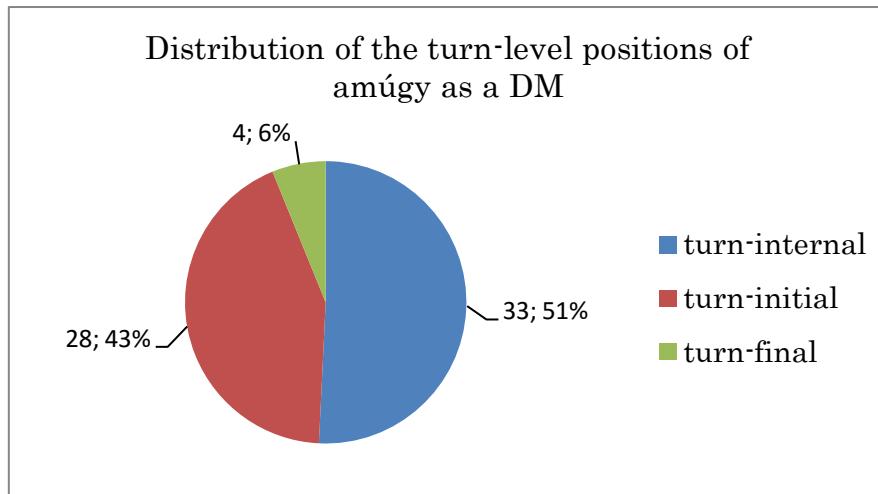


Figure 1: Distributions of the DM *amúgy* (~'otherwise') positions at turn-level

The picture is more subtle if we look at the distribution of positions defined at clause-level (illustrated by Figure 2) since in that case we find more initial than internal tokens. This finding supports the idea of Brinton (1996) and Dehé & Wichmann (2010), according to which DMs typically appear sentence-initially. In this small corpus, 36 *amúgy* DM tokens (55% of all tokens) were used clause-initially, while 23 tokens (36%) clause-internally, and 6 tokens (9%) clause-finally.

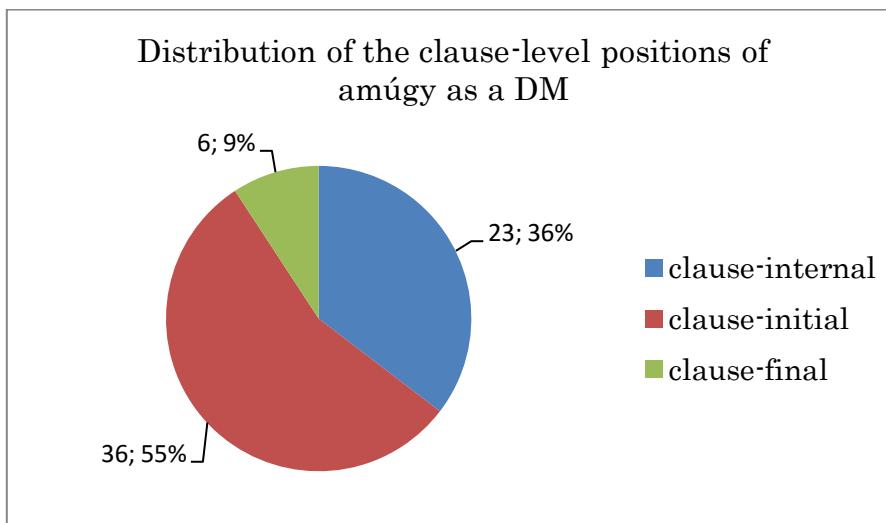


Figure 2: Distributions of the DM *amúgy* (~'otherwise') positions at clause-level

In addition, automatic pitch movement annotation has also been performed on all the 79 *amúgy* (~‘otherwise’) tokens and their host units in the 50 recordings of the HuComTech corpus analysed in this research. However, the automatic pitch movement annotation of the DMs used by only the interviewees were manually checked by me in only 30 recordings; therefore, the results shown here pertain to only 37 *amúgy* (~‘otherwise’) tokens. (In these 30 recordings, only 37 *amúgy* (~‘otherwise’) instances were uttered by the interviewees).

Since the HuComTech-project aims to illustrate the perceived intonation characterized by long stretches of smooth F0-movements rather than frequent significant momentary excursions of the actual measured F0 data, the stylization of F0 curves is performed on the extracted pitch data (Hunyadi et al. 2012, Szekrényes 2014).<sup>4</sup> The standard deviation of the pitch values is used as a threshold to classify the movement progress using five simple categories: *rise*, *fall*, *upward*, *descending* and *stagnant* (see Figure 3). The results of the queries will be described below in Figures 4 and 5.

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<sup>4</sup> Now let me briefly describe the procedure of automatic pitch movement annotation applied on the HuComTech-corpus. There is an existing stylization method available which is theoretically founded and has a widely-tested application called Prosogram (d’Alessandro & Mertens 2004, Mertens 2004). The Prosogram application was further developed within the speech processing subproject of the HuComTech research group (Szekrényes et al. 2011) and was implemented as a Praat script, called ProsoTool, for automatic F0 stylization (Szekrényes 2014). As Szekrényes (2014) explains, extremely high or low values were dropped from the stylization using the 10th and the 90th percentile value as a threshold. The Prosogram stores stylization in PitchTier files, and later the textual transcriptions of the recordings are also added to the graphical output. Dynamic, speaker-dependent pitch range is used to extract F0 data, and a stylization method is also employed to calculate more holistic trend-lines from stylizations to describe the movement of pitch. Along trend-lines pitch movement can be segmented into blocks for labelling: *rise*, *fall*, *upward*, *descending* and *stagnant* (Szekrényes 2014). In order to automatically perform prosodic annotation, the first necessary step is to export .eaf annotation files from .eaf file format (from ELAN) into Praat TextGrids. We can simultaneously export multiple files as Praat TextGrids, so the procedure of this conversion can be instantly performed. Finally, Pitch Tier Files can be exported into several other softwares, such as ELAN, for further queries.

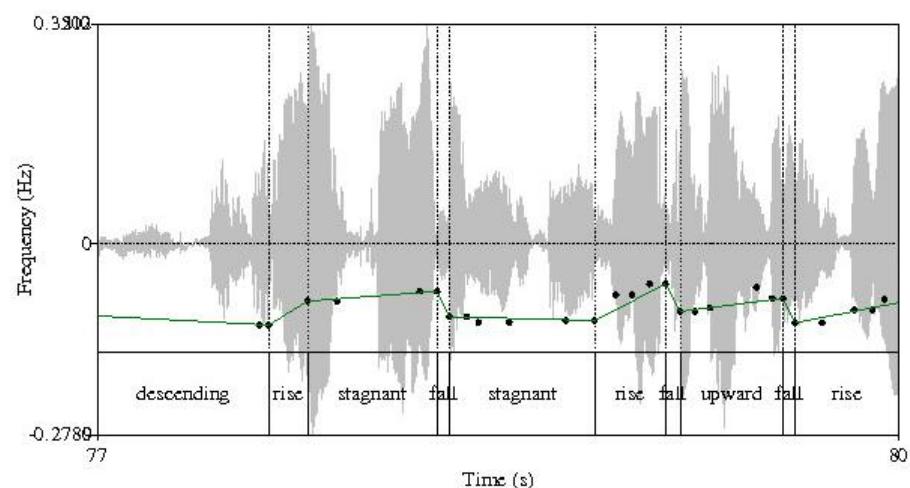


Figure 3: Segmentation and classification of pitch movements using Prosotool  
(Szekrényes 2014)

Concerning pitch movement, stagnant intonation is the most frequent type in all positions (see Figures 4 and 5). On the other hand, upward, rising, falling and descending pitch movement direction types are very rare.

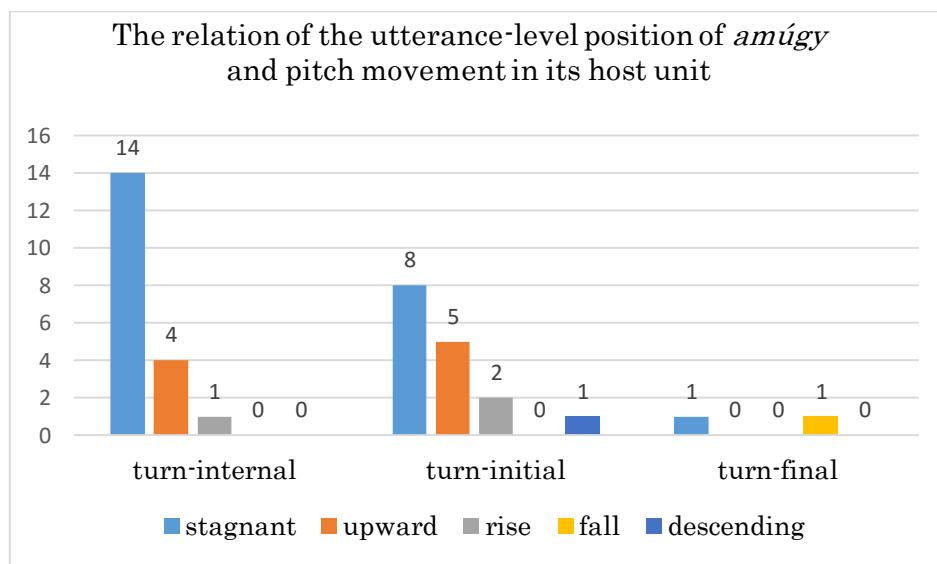


Figure 4: Cross-tabulation of the turn-level position and intonation of *amúgy*

Fisher's exact test performed on the query results (in Figure 4) suggest that position in the utterance has a significant impact on the relative proportion of pitch ( $p=0.006$ ). Therefore, my initial hypothesis, which expected to find a relation between the two variables (turn-level position and the direction of pitch movement), can be confirmed.

On the other hand, I found that there is no significant relation ( $p=0.365$ ) between the relative proportion of pitch annotation and the position defined at clause-level (presented in Figure 5).

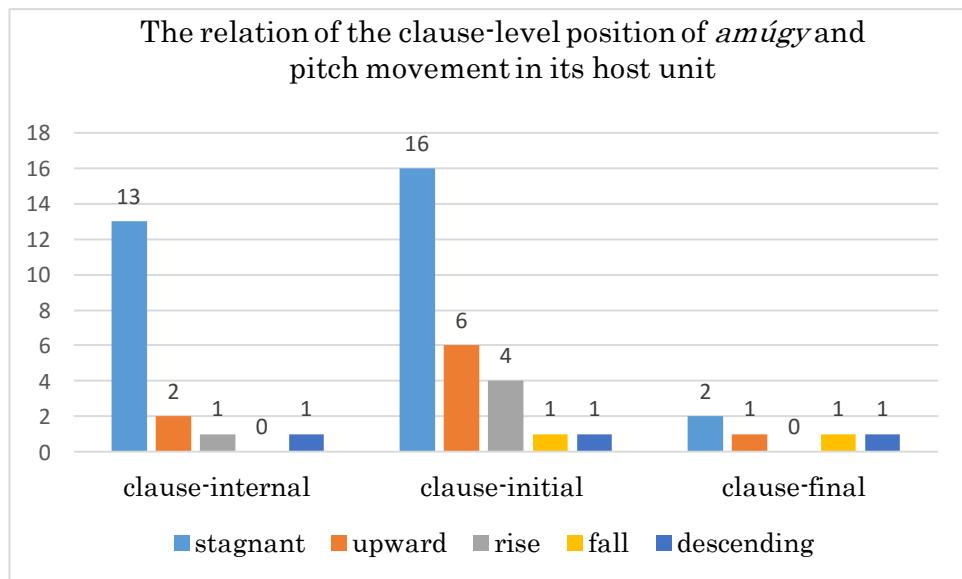


Figure 5 :Cross-tabulation of the clause-level position and intonation of *amúgy*

In comparison, as opposed to my findings about *mondjuk* (~'say') and *ugye* (~'is that so?') (described in Abuczki 2015a and 2015b), the position of *amúgy* (~'otherwise') defined at clause-level, surprisingly, does not seem to determine the direction of pitch movement in the host unit of the lexical item based on my dataset.

Let me emphasize that I am aware that plausible consequences cannot be drawn from this prosodic analysis. Due to the significant variation in the typical intonation patterns and pausing features among speakers, the modelling of the relation between DMs and pitch movement involves great complexity; however, this is the first attempt to explore the relationship between these variables.

## 5 Limitations

This study only concerns a single Hungarian lexical item; however, the same methodology can be applied to the analysis of any other DM. Furthermore, besides intonation, other nonverbal expressions such as hand movements, gaze direction and posture changes are also expected to play a communicative role in interaction and should be taken into account in multimodal conversation analysis. As Goodwin (1981) argues, even sentences are interactionally constructed and syntactic boundaries are marked by nonverbal-visual signals as well (such as gaze) besides verbal and acoustic ones. Therefore, as a future step, the segmentation of *amúgy* tokens will be supplemented with the annotation of nonverbal signals as well in my prospective analysis.

## 6 Conclusions

It can be concluded from the analysis of the material presented that despite the rather peripheral status of *amúgy* (~'otherwise') as a DM, it currently displays a whole range of the (formal, functional and prosodic) properties of the category of DMs in present-day Hungarian, namely:

- non-propositionality: *amúgy* (~'otherwise') as a DM is non-propositional
- non-conceptual, procedural meaning (marking topic changes and the introduction of comments and explanatory sequences)
- multifunctionality (it can mark either topic change, topic elaboration, turn-taking, unrequested commentaries or side sequences)
- optionality: the use of *amúgy* (~'otherwise') as a DM is optional and can be omitted without changing the meaning of its host utterance
- weak clause association
- mostly clause-initial position (in 55% of the analysed tokens)
- sequentiality, connectivity, textuality: it marks that its host utterance introduces a new aspect or topic, it connects loosely related topics or it introduces side sequences or commentaries
- medium frequency in colloquial conversations: its frequency is lower than that of more prototypical DMs, such as *hát* (~'well'), *akkor* (~'then, so'), or *mondjuk* (~'let's say')

- orality (as a DM, it is predominantly used in informal settings in spoken interaction).

Moreover, we could also see that *amúgy* DMs often appear after particular connectives and there is a significant relation between the utterance-level position and the intonation pattern of *amúgy* DMs as well as their host units. These typical, recurring patterns of use also confirm the DM-status of *amúgy* in present-day Hungarian.

As the examples from the HuComTech corpus of spontaneous speech suggest, the various interconnected senses of *amúgy* (~‘otherwise’) as a DM in present-day Hungarian include:

- (1) *amúgy1* (core function) used to mark/introduce comments, unrequested opinions and side sequences in narratives;
- (2) *amúgy2* used to introduce explanations;
- (3) *amúgy3* used to mark new information.

The above threefold classification of the discourse-pragmatic functions of *amúgy* might provide guidelines for refining the contemporary dictionary entries of the item, while the outlined annotation and querying methodology might serve as a springboard for performing further annotations of the procedural uses of this item as well as other DMs.

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***Sources of diachronic data***

Hungarian Historical Corpus (Magyar Történeti Szövegtár):  
<http://www.nytud.hu/hhc/>

***Source of synchronic data***

HuComTech corpus:  
<http://lingua.arts.unideb.hu/hucomtech-database/>

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