

# Suspended affixation with derivational suffixes and lexical integrity

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## 1. Introduction

The paper aims to contribute to the discussion of suspended affixation and argue that it might have implications for the lexical integrity through the investigation of not-so-commonly-found suspended affixation instances formed with derivational suffixes. In opposition to what has been commonly assumed in the literature, I will argue that these instances of suspended affixation (SA) are ‘rather uncommon to find, quite many to ignore’ in analogy to Kaufmann’s (2014) approach to embedded imperatives as ‘too rare to expect, too frequent to ban’.<sup>1</sup> Examples (1) and (2) illustrate the phenomenon this paper investigates, where a derivational suffix only appears on the rightmost conjunct, but takes scope over both of the conjuncts:

- (1) *Loto-dan kazan-dığı parayı beş lira ve on dolar-lık*  
lottery-ABL win-NMLZ-POSS money-ACC five lira and ten dollar-DER  
*banknot-lar hal-i-nde boz-dur-du.*<sup>2</sup>  
banknote-PL case-CM-LOC change-CAUS-PASS  
‘S/he had her lottery winnings changed into banknotes of 5 liras and 10 dollars.’
- (2) *Sıcak tut-ar-ken dön-üp bak-tır-t-acak bere*  
warm keep-AOR-CVB turn-and look- CAUS-CAUS-FUT cap  
*model-ler-i*  
model-PL-CM  
‘cap models which while keeping you warm will make others turn and look.’

As in (1) and (2), such cases are found both in the nominal and verbal domain. In this paper, I will try to show that such instances are more than just idiosyncrasies, and cannot be accounted for via Wälchli’s (2005) notion of ‘natural coordination’, *pace* Kabak (2007). Accordingly, I argue that this rather productive process calls for an explanation. I also suggest that SA, which has been traditionally considered as peripheral to the discussion of lexical integrity, could in fact constitute a significant piece of evidence for the interaction between syntax and morphology.

The paper is organized as follows: section 2 describes suspended affixation, whereas section 3 looks at the lexical integrity hypothesis and the relation of the suspended affixation to it. Section 4 summarizes the previous approaches to suspended affixation in Turkish, and

<sup>1</sup> Unless otherwise stated, examples of the suspended affixation with derivational suffixes are attested and come from the internet searches.

<sup>2</sup> The following abbreviations are used: ABL: ablative, ACC: accusative, AL: alienable, AOR: aorist, CAUS: causative, CM: compound marker, COP: copula, CVB: converb, DAT: dative, DER: derivation, FUT: future, GEN: genitive, INST: instrumental, LOC: locative, MOD: modal, NMLZ: nominalizer, NOM: nominative, PART: participle, PASS: passive, PAST: past, PL: plural, POSS: possessive, PROG: progressive, REL: relativizer, SG: singular.

shows how derivational suffixes have been treated, which sets the path for section 5. In section 5, I introduce the instances of suspended affixes constructed with derivational suffixes in both nominal and verbal domain, and argue that previous approaches fail to capture these empirical facts. Section 6 suggests two possible analyses for the phenomenon, and section 7 concludes the paper.

## 2. Suspended affixation

Lewis (1967: 35) characterizes suspended affixation as when “one grammatical ending serves two or more parallel words”.<sup>3</sup> Consider the sentences in (3) and (4), where the (a) sentences illustrate conjoined structures with suspended affixation. Only the final conjunct carries bound morphemes and has scope over the non-final conjuncts, as opposed to the (b) sentences, where both conjuncts are inflected for the same suffixes. It should be noted that discussion is limited to the Turkish coordination morphemes *ve* ‘and’ for verbal and nominal, and *-(y)Ip* for verbal coordination.

- (3) a. [*Zengin ve ünlü*]-*y-dü-m*.  
 rich and famous-COP-PAST-1SG  
 ‘I was rich and famous.’  
 b. *Zengin-Ø-di-m ve ünlü-y-dü-m*  
 rich-COP-PAST-1SG and famous-COP-PAST-1SG  
 ‘I was rich and famous.’
- (4) a. [*Gid-er, gör-ür ve al-ır*]-*Ø-ız*. (Kabak 2007: 314, example 3)  
 go-AOR see-AOR and buy-AOR-COP-1PL  
 ‘We go (there), see (it), and buy (it).’  
 b. *Gid-er-iz gör-ürüz ve al-ır-Ø-ız*.  
 go-AOR-1PL see-AOR-1PL and buy-AOR-COP-1PL  
 ‘We go (there), see (it), and buy (it).’

Suspended affixation is also found in the nominal domain, e.g. with the plural (5), and the case endings (6).

- (5) a. [*ev ve okul*]-*lar*  
 house and school-PL  
 ‘houses and schools’  
 b. *ev-ler ve okul-lar*  
 house-PL and school-PL  
 ‘houses and schools’
- (6) a. [*kitap ve defter*]-*i*  
 book and notebook-ACC  
 ‘the book and the notebook’

<sup>3</sup> Despite its important bearings on the syntax-morphology interface, suspended affixation has been rarely addressed in theoretical literature, and almost all the studies have dealt with suspended affixation formed with inflectional suffixes (e.g. Kornfilt 1996; Kahnemuyipour & Kornfilt 2011; Kenesei 2007; Pounder 2006; Kabak 2007; Johannessen 1998; Erschler 2012). Moreover, as both Stephen Anderson and Greg Stump pointed out to me on separate occasions, such examples could also be considered from the perspective of their implications for the definition of derivation as well.

- b. *kitab-ı ve defter-i*  
 book-ACC and notebook-ACC  
 ‘the book and the notebook’

As Erschler (2012) points out, the “mirror image” structure is logically possible, but much less common cross-linguistically.

- (7) *s-jə-pçaçe-re      ɨʃ’ale-re      zezaox*      (Adyghe, Northwestern Caucasian)  
 1SG-AL-girl-and    boy-and      fight.each.other  
 ‘My son and daughter are fighting.’      (Erschler 2012: 154, example 2b)

Note also that suspended affixation can apply not only to words, as Lewis (1967) mentions, but also to units bigger than words, such as phrases, as shown in (8). Here the locative case takes scope over both preceding NPs.

- (8) [*Can’-in    divan-ı      ve    Orhan’-in    yatağ-in*]-*da    uyu-du-m*  
 Can-GEN    couch-3SG    and    Orhan-GEN    bed-3SG-LOC    sleep-PAST-1SG  
 ‘I slept on Can’s couch and Orhan’s bed.’

Examples like (8) raise problems for lexical integrity, as it is usually understood (Bresnan and Mchombo 1995; Bresnan 2001, see below), although a morphological solution may be possible, as will be dwelt upon later in the paper.

### 3. Suspended affixation and lexical integrity

This section looks at the several proposals with respect to the Lexical Integrity Hypothesis, and then explores the potential implications of suspended affixation for it.

#### 3.1 Lexical Integrity Hypothesis<sup>4</sup>

Starting from the generative morphology, the Lexical Integrity Hypothesis (LIH) was a widely accepted part of the landscape for morphologists. The LIH appeared in a number of different forms:

- (i) *The Word Structure Autonomy Condition* (Selkirk 1982: 70)  
 No deletion or movement transformation may involve categories of both W-structure and S-structure.
- (ii) *The Atomicity Thesis* (Di Sciullo and Williams 1987: 49, cited in Lieber and Scalise 2006)  
 Words are “atomic” at the level of phrasal syntax and phrasal semantics. The words have “features”, or properties, but these features have no structure, and the relation of these features to the internal composition of the word cannot be relevant in syntax – this is the thesis of the atomicity of words, or the lexical integrity hypothesis, or the strong lexicalist hypothesis (as in Lapointe 1980), or a version of the lexicalist hypothesis of Chomsky (1970), Williams (1978) and numerous others.

A distinction can be drawn between a Weak Lexicalist Hypothesis and a Strong Lexicalist Hypothesis, the former merely stating that transformations could not look into word structure

<sup>4</sup> This section draws freely from Lieber and Scalise (2006).

(i.e., derivation and compounding), the latter adding inflection to the domain of the LIH (Spencer 1991).

The notion that words are unanalyzable units persists in Bresnan and Mchombo's (1995: 181) formulation of the LIH.

- (iii) A fundamental generalization that morphologists have traditionally maintained is the *lexical integrity principle*, which states that words are built out of different structural elements and by different principles of composition than syntactic phrases. Specifically, the morphological constituents of words are lexical and sublexical categories – stems and affixes – while the syntactic constituents of phrases have words as the minimal, unanalyzable units; and syntactic ordering principles do not apply to morphemic structures.

It can be seen that despite slight differences in the formulations and the focus of the rationale behind the separation of morphology and syntax, all of these statements of LIH still have in common that they assume a firewall between morphology and syntax, in whatever form syntax takes.

The more recent statements of the LIH include Booij (2005) and Spencer (2005). Following in essence the formulation of LIH of Anderson: “the syntax neither manipulates nor has access to the internal structure of words” (Anderson 1992: 84, cited in Booij 2005: 1) proposes to split the LIH in two parts:

- (iv) a) Syntax cannot manipulate the internal structure of words.  
b) Syntax cannot enter into the internal structure of words.

Lieber and Scalise (2006) argue, on the basis of a number of various data which – according to their view – present strong challenges to the LIH, that 0 may be correct, while 0 cannot be. Lieber and Scalise's data include phrasal compounds in English, as shown in (9),<sup>5</sup> and the Italian *trasporto latte*-type constructions. These data pass the test of insertion/modification, which is traditionally the main test of cohesiveness, although they fail the other tests, or scope in Spanish prefixation, as in (10):

- (9) a *slept all day* look (Lieber and Scalise 2006: 4, example 8)  
a *pipe and slipper* husband  
over *the fence* gossip

- (10) a. *el* [*ex*-[*futbolista del Barça*]<sub>NP</sub>] (Lieber and Scalise 2006: 11, example 28)  
the *ex*- footballer of Barça  
'the former Barça footballer'  
b. *comisión* [*pro*-[*legalización de las drogas*]<sub>NP</sub>]  
committee *pro*- legalization of the drugs  
'*pro*- drug-legalization committee'

In (10), although phonologically prefixation takes place on the N head of an NP, semantically the prefix affects the whole NP.

<sup>5</sup> See e.g. Bağrıaçık and Ralli (2013), Göksel (2015) for phrasal compounds in Turkish.

To the examples discussed in Lieber and Scalise (2006), we can add the phrasal derivation observed in Turkish, along with various languages.

- (11) a. [*san-a tap-ıyor-um*]-*cu* *tutum*  
 you-DAT adore-PROG-1SG-DER attitude  
 Lit: ‘I adore you-ish attitude.’  
 b. [[*köpeğ-e evet, kedi-ye hayır*]-*ca*]-*lık*<sup>6</sup>  
 dog-DAT yes cat-DAT no-DER-DER  
 Lit: ‘yes to dog, no to cat-ism’

Ackema and Neeleman (2004: 11) also mention a case in Quechua where a particular affix attaches to phrases to nominalize them.

Only a look at the cases at hand gives the following picture according to the type of inter-component interaction that they imply:

- (v) Morphology has access to Syntax  
 a) syntactic phrases within words (phrasal compounds)  
 b) insertion/modification into *trasporto latte* constructions (Italian data)  
 c) Turkish and Quechua nominalizations on phrases

Syntax has access to Morphology

Quechua nominalizations: position of verb is dependent on whether VP is nominalized or not.<sup>7</sup>

The examples thus far point to an interaction between syntax and morphology, hence challenge the LIH. Next let us look at a common approach to suspended affixation with respect to the Lexical Integrity.

### 3.2 The relevance of suspended affixation to the LIH

After noting that the phenomenon *Gruppeninflection* or ‘suspended affixation’ is found in many languages, Spencer (2005) points out that “this is only possible when single words are coordinated, not phrases, and only when the coordinated elements form a ‘natural coordination’ (in an intuitive sense)” along the lines of Wälchli (2005).

Example (8), repeated here as (12), shows that Spencer’s point about only words being coordinated does not cover all the empirical facts:

- (12) [*Can’-in divan-ı ve Orhan’-in yatağ-ın*]-*da uyu-du-m*  
 Can-GEN couch-3SG and Orhan-GEN bed-3SG-LOC sleep-PAST-1SG  
 ‘I slept on Can’s couch and Orhan’s bed.’

Another counterexample can be given from the verbal domain, where two VPs are coordinated:

<sup>6</sup> Bağrıaçık and Ralli (2013) provide the example in and argue that these three suffixes are word-formation  $X^{\max}$  affixes that choose phrase levels, following Ackema and Neeleman (2004).

[<sub>DP</sub> *karşı* *dağ-ın* *ardındaki* *kasaba*]-*lı*  
 opposite mountain.GEN beyond.LOC.RTV town-DER  
 ‘from the town beyond the opposite mountain’

<sup>7</sup> See Lieber and Scalise (2006) for more examples and a detailed discussion of the interaction of different modules of grammar.

- (13) *Leyla [yemek yi-yor ve kitap oku-yor]-du.*  
 Leyla food eat-PROG and book read-PROG-PAST.3  
 ‘Leyla was having a meal and reading a book.’

I will discuss ‘natural coordination’ in the context of suspended affixation cases in Turkish later in the paper in section 5.1, but it should suffice to say that Lieber and Scalise (2006) state that “[cases of conjunction in English derivation and compounding] constitute a clear violation of the LIH, as do cases of so-called *Gruppeninflection* or ‘suspended affixation’ (Spencer 2005: 83) which seem to constitute a similar phenomenon, albeit concerned with inflection rather than word formation”.

Lieber and Scalise’s remarks represent the general intuition that the phenomenon could in principle be a strong challenge to the LIH, but with the way it is, it can only be peripheral to the discussion of syntax-morphology interaction.

#### 4. Previous treatment of suspended affixation in Turkish<sup>8</sup>

##### 4.1 Kabak (2007)

This article focuses on various constraints on suspended affixation, where Kabak proposes an account of suspended affixation based on the notion of morphological wordhood in Turkish. Investigating the type of material that can be left in nonfinal conjuncts in both verbal and nonverbal coordinate constructions, Kabak argues that suspension of affixes is legitimate if the bare conjunct constitutes a morphological word in Turkish. A morphological word is defined to be a form that is able to occur in isolation.

Kabak points out that although there seems to be a strict constraint on the suspension of derivational morphemes, derivational morphemes can be attached to certain tightly coordinated nouns, which on the surface may look like instances of affix suspension. Consider (14):

- (14) a. *ana (ve) baba-lık* (Kabak 2007: 336)  
 mother (and) father-DER  
 ‘parenthood’  
 b. *ay-yıldız-lı bayrak*  
 moon-star-DER flag  
 ‘moon-star flag’ (refers to the Turkish flag)  
 c. *sarı-kırmızı-lı takım*  
 yellow-red-DER team  
 ‘team in red and yellow’ (refers to the Galatasaray soccer team)

However, Kabak regards such cases as instances of co-compounds or natural coordination, which express stereotypically conjoined entities in the sense of Wälchli (2005), corroborated by the two well-known instances of antonomasia in (14) and (14). Arguably, such constructions involve coordination of items that are expected to co-occur, and behave as a single conceptual unit with the derivational morpheme attached to it. For these reasons, Kabak argues that they should not be considered as representative of affix suspension.

Kabak concludes that the Turkish morphological system exhibits a split behavior between derivational morphemes and inflectional ones: unlike inflectional morphemes, derivational morphemes cannot have scope over conjuncts and hence they cannot be suspended (see

<sup>8</sup> Naturally, the literature on suspended affixation in Turkish is more extensive (e.g. Yu and Good 2000; Hankamer 2012), but this paper focuses on those that deal with derivational suffixes.

Kornfilt 2012 for the same argument). This could be attributed to the fact that derivational affixes show closer lexical affinity to the stems that they are attached to. This, he argues, follows from the argument that inflection and derivation correspond to distinct systems in linguistic competence (e.g. Anderson 1992).

#### 4.2 Bozşahin (2007)

Bozşahin gives the following example of coordination in (15), cited in Kornfilt (2012), which is ambiguous between two potential readings:

- (15) *tuz ve limon-luk*  
 salt and lemon-container  
 a. ‘salt and lemon squeezer’ (Non-SA-reading)  
 b. ‘salt shaker and lemon squeezer’ (Apparent SA-reading)

Bozşahin (2007) claims that reading b. shows that SA does not distinguish between derivational and inflectional morphemes, and thus it can apply in the lexicon, too (under the assumption that the suffix *-LIK*, glossed as ‘instrument’ in Bozşahin and as ‘container’ here, is a derivational morpheme merged with the stem in the lexicon).

#### 4.3 Kornfilt (2012)

Although Kornfilt argues that Kabak’s definition of “morphological word” needs revisiting and may not account for all cases in her discussion of suspended affixation, she agrees with Kabak on stipulating that the crucial distinction is syntax versus the lexicon: those affixes that can be “suspended” are syntactic functional heads in phrasal or clausal architecture (i.e. they are merged syntactically). On the other hand, those affixes that are part of the lexical word formation cannot distribute. In other words, SA is a syntactic process that of course applies to syntactic constituents. Thus, only those affixes can be “suspended” that are syntactic heads, i.e. heads of functional projections.

Kornfilt takes Bozşahin’s *tuz ve limonluk* as a case study and discusses it further. She points out that the order of the conjuncts (with the “suspended” ‘instrument’-suffix on *tuz* ‘salt’) eliminates the distributed reading:

- (16) *limon ve tuz-luk*  
 lemon and salt-container  
 a. ‘lemon and salt shaker’ (Non-SA-reading)  
 b. \*‘lemon squeezer and salt shaker’ (The (apparent) SA-reading is not available)

She claims that only the “suspended affixation” reading for (16) with the “container” suffix interpreted as distributed over the two conjuncts, is apparent and what actually takes place is that pragmatically *salt* is used in reading B for *salt shaker*.

However, I suggest an alternative explanation, which is in fact in line with what one of the anonymous reviewers’ suggestion of Kornfilt (2012): *tuz* ‘salt’, being uncountable, requires a classifier: the object containing it. Salt would therefore be able to stand for ‘salt shaker’, while lemon, which is not uncountable, would therefore not need a classifier to be interpreted as a definite amount, and would therefore also not be able to stand for ‘lemon squeezer’ on its own. This suggestion predicts that a noun like *biberlik* ‘pepper shaker’, when combined with *tuzluk* ‘salt container’ should have a distributive reading in either order, which turns out to be correct as the google searches confirm:

- (17) *Coghlan's tuz ve biber-lik en iyi fiyat-la Hepsiburada'-da.*  
 Coghlan's salt and pepper-DER most good price-INST hepsiburada-LOC  
 'Coghlans's salt container and pepper shaker is at Hepsiburada(.com) for the best price!'
- (18) a. *2 ons cam biber ve tuz-luk kap, ücretsiz kargo.*  
 2 ounce glass pepper and salt-DER container free shipping  
 '2 ounce glass pepper shaker and salt container, free shipping.'
- b. *ön-ümüz-de dur-an biber ve tuz-luk ... garson*  
 before-1PL.POSS-LOC lie-REL pepper and salt-DER server  
*tarafından başka müşteri-ye ver-il-di.*  
 by other customer-DAT give-PASS-PAST  
 'The pepper shaker and salt container in front of us were given to another customer by the server.'

Given that pepper is uncountable similarly to salt, this shows that a purely pragmatic explanation, as that of Kornfilt, since a conjunct, as in (18), targeted by a modifier that modifies the whole phrase, by itself does not express the meaning it gets with the derivational suffix. Therefore, Kornfilt's explanation cannot suffice to account for (17) and (18) even when considering the relative difference in frequency effects for *limon ve tuzluk* and *biber ve tuzluk*. The next section introduces the instances of derivational suffixes that are used in suspended affixation, mainly from Turkish, as well as some examples from other languages.

## 5. Instances of suspended affixation with derivational suffixes

Although suspended affixation has been considered as peripheral to morphology-syntax interaction, as (Kornfilt and Whitman 2011) argue, it touches on the issue of syntax-lexicon dichotomy. The syntax-lexicon debate roots in the treatment of Japanese causatives. In the early days of the 60s and 70s, causative verbs are formed syntactically (via transformation). The 80s saw the advent of lexicalism, and whether Japanese causatives are formed in the syntax or the lexicon has been controversial.

The example in (19), where suspended affixation happens with the causative suffix, is nowadays widely recognized as a decisive argument against lexical approaches:<sup>9</sup>

- (19) *Hanako-ga Masao-ni [[uti-o soozisuru]-ka [heya-dai-o*  
 H.-NOM M.-DAT [[house-ACC clean]-or [room-rent-ACC  
*haraw]]-aseru koto ni sita*  
 pay]]-CAUS decided  
 'Hanako decided to make Masao clean the house or pay room rent.'  
 (Kuroda 2003: 455)<sup>10</sup>

In the context of Turkish, as discussed in the previous section, Kabak (2007) and Kornfilt (2012) explicitly argue that the nature of a suffix determines its ability in scoping over conjuncts and that instances with derivational suffixes are not true cases of affix suspension. However, I argue that these explanations fail to capture the wide range of well-formed instances that cannot be reduced to the accounts of co-compounds or pragmatics.

<sup>9</sup> For a recent semantic analysis of Japanese suspended affixation, see Fukushima (2015).

<sup>10</sup> Kuroda was one of the earliest proponents of syntactic treatment.



### 5.1 The nominal domain

The following are some of the examples obtained from internet searches from the nominal domain in Turkish (only the relevant parts glossed):

- (20) a. *Pijama, genellikle üst ve alt-lık gibi iki unsur-dan*  
 pajama usually top and bottom-DER like two part-ABL  
*mürekkep ... bir giysidir.*  
 comprised of a dress  
 ‘The pajama is a dress comprised of two pieces, namely top and bottom.’
- b. *Yanınıza gece için kalın alt ve üst-lük ... al-in.*  
 side-DAT night for thick bottom and top-DER take-2PL  
 Lit: ‘Bring with you a warm top and bottom for the night.’
- (21) *Balyoz konu-su-nda yaz-dığ-ım on-lar ve de*  
 sledgehammer topic-POSS-LOC write-NMLZ-1SG.POSS ten-PL and also  
*on-lar-ca yazı-ya ... (newspaper Radikal)*  
 ten-PL-DER article-DAT  
 Lit: ‘Despite the tens and tens of articles I have written on the Sledgehammer operation...’
- (22) *Loto-dan kazan-dığı parayı beş lira ve on dolar-lık*  
 lottery-ABL win-NMLZ-POSS money-ACC five lira and ten dollar-DER  
*banknot-lar hal-i-nde boz-dur-du.*  
 banknote-PL case-CM-LOC change-CAUS-PASS  
 ‘S/he had her lottery winnings changed into banknotes of 5 liras and 10 dollars.’
- (23) *kitabın giriş, bir ve yedi-nci bölüm-ler-i-ni...*  
 book-GEN introduction one and seven-DER chapter-PL-POSS-ACC  
 ‘the introduction, first, and seventh chapters of the book...’
- (24) a. *Bütün eğitim çalışmaları boyunca dost ve arkadaş-ça bir*  
 all training sessions during buddy and friend-DER an  
*hava ol-malı-dır*  
 atmosphere be-must-MOD  
 ‘There must be a friendly and intimate environment during the whole training session.’
- b. *... buna uy gundavranmak için arkadaş ve dost-ça*  
 this-DAT appropriate behave-NMLZ for friend and buddy-DER  
*gel-di-k.*  
 come-1PL-PAST  
 ‘Accordingly, we came in a friendly and intimate manner.’

The other derivational suffixes include *-ci*, *-leyin*, *-zede*, *-inci*, etc.

- (25) *İstanbul Valiliği tarafından organize ed-il-en Deprem ve*  
 Istanbul governorship by organize do-PASS-REL earthquake and  
*Afet-zede Anma Yürüyüşü...*  
 disaster-DER commemoration march  
 ‘Earthquake and Disaster-victims Commemoration March organized by the Istanbul Governorship...’

One could argue that these instances may be accountable by Kabak's (2007) explanation, following Wälchli's (2005) notion of 'natural coordination'. However, I argue that as idiosyncratic as they might be, these instances differ from the natural coordination examples Kabak provides for Turkish, for several reasons. First, note that conjuncts in Kabak (2007) have a fixed word order.

- (26) a. *ana* (ve) *baba-lık* (Kabak 2007: 336)  
 mother (and) father-DER  
 'parenthood'  
 b. \**baba* (ve) *ana-lık*  
 father (and) mother-DER
- (27) a. *ay-yıldız-li* *bayrak*  
 moon-star-DER flag  
 'moon-star flag'  
 b. \**yıldız-ay-li* *bayrak*  
 star-moon-DER flag

On the other hand, as examples (20) through (25) illustrate, these coordinations may have a free conjunct order, which poses a problem for a theory that attributes the possibility to their lexicalized nature.

Second, note that as the example (22) shows, the derivational suffix *-LIK* distributes over phrases, not just words, similar to other SA cases formed with inflectional morphemes (cf. (12) and (13)). This stands as a strong challenge to a purely lexical account and has a bearing on the morphology-syntax interaction similar to the Quechua nominalization cases.

Third, strictly speaking, some of the conjuncts are not items that are easily expected to occur together or are necessarily supposed to co-occur always. Accordingly, another item can replace one of the conjuncts, that is, there is no strict rule that allows only the present conjuncts to co-occur. For instance, in the case of (22) one can have a different conjunct, as illustrated in (28). This again does not go well with the argument that these conjuncts are tightly connected.

- (28) ... [*yirmi şekel ve on dolar*]-lık *banknotlar*  
 twenty shekel and ten dollar-DER banknotes  
 'banknotes of 20 shekels and 10 dollars...'

Fourth, natural coordinations are not expected to allow another conjunct since they are assumed to express stereotypically conjoined entities and to behave as a single conceptual unit with the derivational morpheme attached to it. However, in cases at hand, it is possible to have a third conjunct. Consider (29), where the addition of another conjunct to (23) is possible.

- (29) *kitabın giriş, bir, yedi ve yirmi bir-inci bölüm-ler-i-ni...*  
 book-GEN introduction one seven and twenty one-DER chapters-POSS-ACC  
 'the introduction, first, seventh and twenty first chapters of the book...'

Finally, maybe as a not very strong point, it could also be said that the possibility of this wide range of derivational suffixes allowed in this operation is not exactly in favor of a lexicon-oriented account.

Therefore, the instances at hand are at best somewhere between the natural coordination cases and fully productive cases of suspended affixation in Turkish.

Moreover, these cases are not compatible with Kornfilt's (2012) understanding of pragmatics either, since for her the possibility of saying *tuz ve limonluk* 'salt shaker and lemon squeezer' is because of the pragmatic use of *salt* for *salt shaker*. Let's take examples in (24). In the example (a) the whole affixed phrase *dost ve arkadaşça* [buddy and friend-Der] functions as an adjective modifying the noun *hava* 'air', therefore, the pragmatic use of *dost* 'buddy' in an adjective function to modify the noun fails here. The same point extends to the (b) example too. The point is essentially that a conjunct by itself does not express the meaning it gets with the derivational suffix.

Brazilian Portuguese is another language where suspended affixation with the derivational suffix *-mente* can be observed, as shown in (30). Note that Brazilian Portuguese also allows free order of conjuncts, although the slight degradation in (30) could be due to phonological reasons.<sup>11</sup>

- (30) a. *feliz a vagarosa-mente* (Manu Quadros, pers. comm.)  
           happy and slow-ly  
           'happy and slowly' (as in *He finished his homework happily and slowly*)  
       b. *?vagarosa a feliz-mente*  
           slow and happy-ly

In addition to the examples in the nominal domain, it is possible to find natural data online in the verbal domain too.

## 5.2 The verbal domain

Note that example (19) from Japanese, repeated here as (31), is an illustration of suspended affixation with the causative suffix, and has been taken as a strong argument for the syntactic analysis (e.g. Nishiyama 2012).

- (31) *Hanako-ga Masao-ni [[uti-o soozisuru]-ka [heya-dai-o*  
       H.-NOM M.-DAT [[house-ACC clean]-or [room-rent-ACC  
       *haraw]]-aseru koto ni sita*  
       pay]]-CAUS decided  
       'Hanako decided to make Masao clean the house or pay room rent.'  
       (Kuroda 2003: 455)

Turkish also has instances of SA constructed with both the causative and passive suffixes, two types of suffix traditionally taken to be derivational in the Turkish literature (Kornfilt 1997; Göksel and Kerslake 2005).

- (32) Causative  
       *Sıcak tut-ar-ken dön-üp bak-tır-t-acak bere model-ler-i*  
       warm keep-AOR-CVB turn-and look- CAUS-CAUS-FUT cap model-PL-CM  
       'cap models which while keeping you warm will make others turn and look.'

<sup>11</sup> In fact, Kayne (2005) suggests that certain derivational suffixes in English such as *-less, -ful, -ish, -y*; also *-th* as in *two hundred and fiftieth*, suggest a strongly syntactic approach. To Kayne's list, one can add *-wise*, as in *format and content-wise*. The latter is like the mirror image of the *pro- and anti-revolution* cases that Lieber and Scalise (2006) deal with.

(33) Causative

*Ömür*      *gerçekten*      *yetenekli.*      *Hazır cevaplı espriler-i*      *ile salonu*  
 Ömür      really      talented      witted      jokes-POSS      with hall

***gül-üp kır-dır-dı.***  
 laugh-and      break-CAUS-PAST

‘Ömür is really talented. He cracked up the whole hall with laughter.’

(34) Passive

... *Nice aile-ler, ocak-lar yak-ıp yok ed-il-di.*  
 score family-PL home-PL burn-and destroy-PASS-PAST

‘Scores of families, homes were burned and destroyed.’

(35) Passive

*Depo polis tarafından bas-ıp yık-ıl-dı.*  
 warehouse police by raid-and destroy-PASS-PAST

‘The warehouse was raided and destroyed by the police.’

These examples also speak against a purely lexicon-based account and call for some sort of syntactic involvement.<sup>12</sup>

Bhili of Khandesi provides another instance of suspended affixation in the verbal domain that is formed via a derivational suffix (Grierson 1907: 152). Consider (36), where the conjunctive participle suffix *-san* scopes over two verbs:

(36) a. *khai-san*

eat-PART  
 ‘having eaten’

b. *khai-pii-san*

eat-drink-PART  
 ‘having eaten and drunk’

In the next section, I will entertain two possible accounts for this phenomenon.

## 6. Two possible accounts

One view of morphology might argue that these cases are far too idiosyncratic to find a place in the syntactic system. However, as the arguments in section 5.1 show, I believe, the level of the idiosyncrasy one finds with these instances is not more severe than the idiosyncrasy. In fact, one finds with all sorts of elements that no one would deny are part of the syntactic system, in the sense that they are generated in unique phrase-structural positions and subject to syntactic constraints (Wood 2015). In other words, certain degree of conventionalized use or pragmatics does not rule out the structure, e.g. *attend church* or *going to prom*-type examples where due to conventional use, the definite article is dropped, but still canonically a structure is still assumed.

Rather than taking the path where it is syntax-all-the-way, I assume a system, such as Lieber and Scalise’s (2006) *The Limited Access Principle* or the analysis presented in Ackema

<sup>12</sup> Certain instances of suspended affixation in nominal derivation is observed in Korean as well (e.g. Yoon 2008):

[20-il-ina 21-il]-kkey      manna-ca  
 20-day-or 21-day-around      meet-prop  
 ‘Let’s meet on the 20<sup>th</sup> or the 21<sup>st</sup> of next month.’

and Neeleman (2004). The two approaches fall within the realm of Minimalist Framework and might give two options. The former allows the interaction between morphology and syntax in a limited way.

*The Limited Access Principle* (Lieber and Scalise 2006: 21)

Morphological Merge can select on a language specific basis to merge with a phrasal/sentential unit. There is no Syntactic Merge below the word level.

In this system, limited intermodular access may be allowed by virtue of allowing configurations like:

- (37) a.  $[[XP] Y]_Y / [Y [XP]]_Y$   
 b.  $[[XP] [Y]]_Y / [[Y] [XP]]_Y$   
 c.  $[[XP] Y]_X / [Y [XP]]_X$   
 d.  $[[XP] [Y]]_X / [[Y] [XP]]_X$

In this system, the morphological merger, together with the Limited Access Principle, would yield the sorts of structures highlighted in (v). It seems possible to place Turkish suspended affixation cases in (22) into the structure in (37), along with Quechua nominalizations.

The other option would be to follow Ackema and Neeleman (2004), who propose that the grammar is constituted by three modules (syntax, semantics and phonology), but each of these modules contains “a submodule that generates phrasal representations and a submodule that generates word-level representations” (2004: 3). The main idea is that morphology is a “set of submodels within these bigger modules” (2004: 6).

Morphology and syntax can thus share common principles, for example, a vocabulary of features and a process of merger, but they can at the same time be based on different principles. Nevertheless, Ackema and Neeleman argue that there can be a number of different types of intramodular interactions between morphology and syntax: first, words and sentences consist of a certain amount of shared vocabulary (certain features, the notion of Merge, etc.); second, word syntax and phrasal syntax are in competition (2004: 9); and finally, the process of insertion works both ways between morphology and syntax: words can of course be inserted into syntactic structures, but it is also possible for phrases to be inserted into words (2004: 10).<sup>13</sup>

The last point in Ackema and Neeleman could account for the Turkish instances, in that affixes choose phrase level.

## 7. Conclusion

This paper has argued that Turkish (and potentially several other languages) exhibits certain instances of suspended affixation formed with derivational suffixes both in the nominal and verbal domains. I have argued that these instances cannot be reduced to Wälchli's (2005) natural coordination since they differ from the examples Kabak (2007) provides.

This observation undermines a purely pragmatic account, and points to the relevance of derivational suffixes to the interaction of morphology and syntax. I also noted that one could employ the accounts of Lieber and Scalise (2006) or Ackema and Neeleman (2004) in order to give an explanation to such instances.

<sup>13</sup> A third option not discussed here would be a DM-style analysis. Also Erschler's (2012) phonological deletion account seems applicable.

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## References

- Ackema, P. & A. Neeleman (2004) *Beyond Morphology: Interface Conditions on Word Formation*. Oxford: Oxford University Press.
- Anderson, S. (1992) *A-Morphous Morphology*. Cambridge: Cambridge University Press.
- Bağrıaçık, M. & A. Ralli (2013) N+ N-sI (n) Concatenations in Turkish and the Morphology-Syntax Interface. In: U. Ozge (Ed.), *Proceedings of the 8<sup>th</sup> Workshop on Altaic Formal Linguistics (WAFL8)* (MIT Working papers in Linguistics 67). MIT Press, 13-24.
- Booij, G. (2005) Construction-Dependent Morphology. *Lingue E Linguaggio* 4 (2): 163-178.
- Bozşahin, C. (2007) *Lexical Integrity and Type Dependence of Language*. Manuscript. METU, Ankara.
- Bresnan, J. (2001) *Lexical-Functional Syntax*. Oxford: Wiley-Blackwell.
- Bresnan, J. & S. A. Mchombo (1995) The Lexical Integrity Principle: Evidence from Bantu. *Natural Language and Linguistic Theory* 13 (2): 181-254.
- Chomsky, N. (1970) Remarks on Nominalization. In: R. Jacobs & P. Rosenbaum (Eds.), *Readings in English Transformational Grammar*. Waltham (MA): Blaisdell, 184-221.
- Di Sciullo, A.-M. & E. Williams (1987) *On the Definition of Word*. Cambridge: Massachusetts: MIT Press.
- Erschler, D. (2012) Suspended affixation in Ossetic and the structure of the syntax-morphology interface. *Acta Linguistica Hungarica* 59: 153-175.
- Fukushima, K. (2015) Compositionality, lexical integrity, and agglutinative morphology. *Language Sciences* 51: 67-85.
- Göksel, A. (2015). Phrasal Compounds in Turkish: Distinguishing Citations from Quotations. *STUF Language Typology and Universals* 68 (3)-*Special Issue: Phrasal compounds from a typological and theoretical perspective* (Issue Editors: C. Trips and J. Kornfilt): 359-394.
- Göksel, A. & C. Kerslake (2005) *Turkish: A Comprehensive Grammar*. London: Routledge.
- Grierson, G. A. (1907) *Linguistic Survey of India*. Vol. IX, Part III. India: Office of the Superintendent of Government Printing.
- Hankamer, J. (2012) Ad-Phrasal Affixes and Suspended Affixation. Talk presented at the *Workshop on Suspended Affixation* (Cornell University, October 26-27, 2012).
- Johannessen, J. B. (1998) *Coordination*. Oxford: Oxford University Press.
- Kabak, B. (2007) Turkish Suspended Affixation. *Linguistics* 45 (2): 311-347.
- Kahnemuyipour, A. & J. Kornfilt (2011) The syntax and prosody of Turkish “pre-stressing” suffixes. In: R. Folli, and C. Ulbrich (Eds.), *Interfaces in linguistics: New research perspectives*. Oxford: Oxford University Press, 205-221.
- Kaufmann, M. (2014) Embedded imperatives across languages: Too rare to expect, too frequent to ban. Talk presented at the *Colloquium Stony Brook* (April 4, 2014; updated on April 11, 2014).
- Kayne, R. (2005) Some notes on comparative syntax, with special reference to English and French. In: G. Cinque & R. S. Kayne (Eds.), *The Oxford handbook of comparative syntax*. New York: Oxford University Press, 3-69.
- Kenesei, I. (2007) Semiwords and affixoids: The territory between word and affix. *Acta Linguistica Hungarica* 54: 263-293
- Kornfilt, J. (1996) On some copular clitics in Turkish. *ZAS Papers in Linguistics* 6: 96-114.
- Kornfilt, J. (1997) *Turkish*. New York: Routledge.
- Kornfilt, J. (2012) Revisiting ‘Suspended Affixation’ and Other Coordinate Mysteries. In: L. Brugé, A. Cardinaletti, G. Giusti, N. Munaro, and C. Poletto (Eds.), *Functional Heads: The Cartography of Syntactic Structures 7*. Oxford: Oxford University Press, 181-196.
- Kornfilt, J. & J. Whitman (2011) Introduction: Nominalizations in Syntactic Theory. *Lingua* 121 (7): 1160-1163.
- Kuroda, S.-Y. (2003) Complex Predicates and Predicate Raising. *Lingua* 113 (4): 447-480.
- Lapointe, S. (1980) *A Theory of Grammatical Agreement*. PhD Thesis. UMass.
- Lewis, G. L. (1967) *Turkish Grammar*. Oxford: Oxford University Press.
- Lieber, R. & S. Scalise (2006) The Lexical Integrity Hypothesis in a New Theoretical Universe. *Lingue E Linguaggio* 1: 7-32.
- Nishiyama, K. (2012) Japanese Verbal Morphology in Coordination. Talk presented at the *Workshop on Suspended Affixation* (Cornell University, October 26-27, 2012).

- Pounder, A. (2006) Broken forms in morphology. In: C. Gurski, and M. Radisic (Eds.), *Proceedings of the 2006 Annual Conference of the Canadian Linguistics Association*. Available at: <http://westernlinguistics.ca/Publications/CLA2006/Pounder.pdf>
- Selkirk, E. (1982) *The Syntax of Words*. Cambridge/Massachusetts: MIT Press.
- Spencer, A. (1991) *Morphological Theory: An Introduction to Word Structure in Generative Grammar*. Oxford: Wiley-Blackwell.
- Spencer, A. (2005) Word-Formation and Syntax. In: P. Štekauer & R. Lieber (Eds.), *Handbook of Word-Formation*. Amsterdam: Springer, 73-97.
- Wälchli, B. (2005) *Co-Compounds and Natural Coordination*. New York: Oxford University Press.
- Williams, E. (1978) Across-the-Board Rule Application. *Linguistic Inquiry* 9 (1): 31-43.
- Wood, J. (2015) *Icelandic Morphosyntax and Argument Structure* (Studies in Natural Language and Linguistic Theory Vol. 90). Switzerland: Springer.
- Yoon, J. HS. (2008) The Lexicalist Hypothesis and Korean Morphosyntax. Talk presented at the 16<sup>th</sup> International Circle of Korean Linguistics Conference (Cornell University, June 26-28, 2008).
- Yu, A. C. & J. C. Good (2000) Morphosyntax of Two Turkish Subject Pronominal Paradigms. In: M. Hirotani et al. (Eds.), *Proceedings of the 30<sup>th</sup> North Eastern Linguistics Society*. Amherst, MA: GLSA, 759-774.