Poznań Studies in Contemporary Linguistics 44(3), 2008, pp. 363–378

doi:10.2478/v10010-008-0018-7

NOVEL WORDS WITH FINAL COMBINING FORMS IN ENGLISH. A CASE FOR BLENDS IN WORD FORMATION

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ABSTRACT

Morphological theories that assume all word formation to consist in concatenation of morphemes run into difficulties stating the defining properties of the notion of *final combining forms* that can be used as constituents of novel words. The novel words under consideration are of two types: (a) nouns ending in forms like *-ology*, *-ography*, *-ometer*, *-crat*, *-naut*, *-phile*; (b) nouns ending in forms like *-(a)holic*, *-(a)thon*. Forms of type (b) are only roughly identifiable due to their indeterminable size of segmental material. In this paper the notion of *final combining form* is called into question and ultimately rejected on the grounds that words allegedly built with *final combining forms* of type (b), when analysed within the theory of universal, ranked and violable constraints in its OO Correspondence version, conform to the defining properties of blends.

KEYWORDS: blend (BL); source form (SF); prosodic structure; constraints; output-to-output (OO) correspondence relationships.

0. Introduction

Pre–Optimality-Theoretic studies of word blending (e.g. Cannon 1986; Fradin 2000; Kelly 1998; Lehrer1996) are mainly concerned with a variety of patterns of how the source words are spliced in the blend. In these studies, the attempts to sort out the patterns of word blending show blends to be a largely unpredictable category with no or very little observable regularity. The difficulties in classifying and explaining patterns of word blending stem from the assumption that the structure of a blend involves concatenation of chunks of words, such as truncated lexemes or clipped roots, with or without an overlapping part. In the earlier literature on blends, mentioned above, but also in more recent studies (e.g. Bauer 2006; Gries 2004; Plag 2003; Ronneberger-Sibold 2006) any classifiable regularities in word blending are taken to be a result of

manipulation of phonological constituents such as syllables in polysyllabic blends and segments in monosyllabic ones, the process being solely constrained by syllable constituency.

There have been attempts to describe intentional creation of blends as a process of prosodic morphology (Kubozono1990:15–16; Plag 2003: 123) and a rule like (1) has been assumed to underlie a productive process whereby the initial part of one source word combines with the final part of another.

(1) AB + CD → AD

This rule says nothing about the size of the constituents that are manipulated. For blends like *geep* (*goat* +*sheep*) and *boost* (*boom* + *hoist*), which on the above mentioned approach are analysed as monosyllabic, the splice occurs at different points, that is, between the onset and the rhyme and between the nucleus and the coda, respectively. For blends of a foot size, e.g. *boatel* (*boat* + *hotel*) two possible parses corresponding to AD are possible, both constrained by syllable constituency, i.e. either /b + əʊtel/ or /bəʊ + tel/. The splice /bəʊt + el/ is also available if one omits the fact that the final /t/ of *boat* is in an onset position of the syllable with the empty nucleus. This kind of indeterminacy concerns blends with a more or less extensive segmental overlap, irrespective of the syllable count, e.g. *guesstimate*, (*g* + *estimate*) or (*guess* +*timate*). Another problem appears in polysyllabic blends without an overlap, e.g. *stagflation*. Here, if we take the splice to be at the point after the initial syllable of both source words (*stag* + *flation*), we end up with a structure built of constituents from different levels of prosodic representation; A equals a syllable whereas D equals a foot. This is so because the information about the category or size of the units that make up a blend cannot be encoded in a rule like (1). Neither does the rule tell us anything about the order of source words in the blend. A similar kind of indeterminacy concerning the size of segmental material in units assumed to be concatenated can be found in Warren's (1990) analysis of a type of novel words that seemingly contain certain recurrent parts of lexemes, traditionally referred to as *final combining forms*.

Research into the structure of blends carried out from an Optimality-Theoretic perspective (e.g. Bat-El 1996, 2000, 2006; Piñeros 2000, 2002) shows word blending, on the morpho-phonological side, to be a very straightforward phenomenon with readily observable regularities. In this paper I extend the Output-to-Output (henceforth OO) Faithfulness approach, which in the studies mentioned above has proved successful in explaining the structure of blends, to the study of novel words that have so far been assumed to contain shortened lexemes like *-(a)holic, -(a)thon, -(o)nomics*.

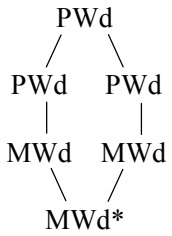
The paper is organized in two sections. In section 1, I show that the analytical tools of OT can be used as a device capable of explaining how two words are to be placed in the blend and they also provide us with a means to evaluate well-formedness of already existing blends. In section 2, the notion of *final combining form* is called into question and finally rejected as a morphological category because words like the ones ending in

-(a)holic conform to the defining features of blends, that is, their structure does not involve shortened lexemes but is based on correspondence relationships between the blend and its source words at both segmental and prosodic levels.

1. Regularities in word blending

On the OT approach, intentionally created blends are defined as a type of structures that "[...]exhibit some sort of structural fusion, where a single word is formed from two words and its meaning is thus contingent upon the semantic relation between the two base words"(Bat-El 2006:1). Structure-wise, blends are morphologically complex words, with an internal constituent structure similar to the structure of compounds, realized as a single phonological domain, i.e. the Prosodic Word (PWd) (Piñeros 2000: 4).

(2)



The optimality of the blend consists in its having a single layer of prosodic structure that satisfies the dominant markedness constraint in (3), adapted from Piñeros (2000: 5).

(3) No-PWd * *No Prosodic Word recursion*

In morphologically complex words such as compounds and blends the constraint in (3) is in conflict with the morphology-phonology interface constraint in (4) demanding that a member of the morphological category (MCat), that is, the Morphological Word (MWd) in the case of compounds and blends, corresponds to a prosodic word.

(4) LX = PR (Prince, Smolensky 1993: 45)

Blends satisfy the dominant constraint in (3) at the cost of falling in violation of the lower ranking constraint in (4).

The question whether the choice of the source words in word blending is syntax driven or is a result of semantic associations cannot be discussed within the limits of this short paper, as its main concern are phonological regularities in the output form of the blend, studied in relation to the phonological properties of both its inputs, i.e. its source words. In my analysis I use a version of OO Correspondence Theory (a subcomponent of

OT) that has been developed in Burzio (2000, 2002) to account for Latinate suffixation in English and the organization of the mental lexicon from an OT perspective.

1.1. Phonological structure of blends

Creation of a blend involves simultaneous implementation of its two source forms (henceforth SF) in a phonological representation of a simplex word. The forces triggering word blending are:

(5a) similarity of segmental material between SF1 and SF2
(5b) alignment of edges between the prosodic constituents of SF1 and SF2

Both (a) and (b) can be expressed as OO Faithfulness constraints on the blend as being related to its SFs. The segmental material from the inner edges that is not phonetically realised is not truncated but only concealed and can be recovered due to the blend having a certain number of correspondents in both its SFs. The relationship between the corresponding segments, studied in detail in Piñeros (2000, 2002), is of one-to-many type, which means that a given segment in the blend has two correspondents, each in the respective SF. The segments that participate in correspondence relationships need not be identical in their featural content.

(6)

shockumentary	(shock + documentary)	barkitecture	(bark + architecture)
fishetarian	(fish + vegetarian)	fiscalamity	(fiscal + calamity)
eatertainment	(eater + entertainment)	flexitarian	(flexible + vegetarian)
adultescent	(adult + adolescent)		
multidude	(multitude + dude)	collaboratory	(collaborative + laboratory)
stagflation	(stagnation + inflation)	irritainment	(irritation + entertainment)
flexicurity	(flexibility + security)	diabesity	(diabetes + obesity)
alphameric	(alphabetic + numeric)		

It can be seen from the examples of blends in (6) that correspondence relationships between the blend and its SFs may involve segments at either of the SFs edges, i.e. left, right, or segments inside the SFs, and as will be shown below, they determine the order of SFs in the blend. Accordingly the blends *boatel* and *guesstimate* discussed above will be analysed as follows:

(7)

bəʊt	ges	SF1
həʊtel	estɪmeɪt	SF2
bəʊtel	gestɪmeɪt	BL

1.2. Predictability of phonological structure of blends

The concepts of correspondence relationships, multiple correspondents and non-identical correspondents, as used in Piñeros (2000, 2002), allow a linguist to describe the structure of blends adequately enough to classify them. As for the phonological regularities in word blending, it can be easily shown that the ultimate phonetic shape of the blend is a result of constraints in conflicts, the conflicts being resolved in the usual way, i.e. by means of constraint ranking. The conflicting forces in word blending are:

(8a) a tendency for the blend to have a maximum number of segmental correspondents in both its source forms
(8b) the general markedness constraint No-PWd*

The tendency in (8a) can be expressed as OO Faithfulness constraint MAX(seg) BW-SF. The markedness constraint of (3), repeated for convenience as (8b) above, militates against structure by prohibiting recursion of Prosodic Word. Its requirements are satisfied in Latinate suffixed words, which may be morphologically complex but phonologically are simplex items (Burzio 1994: 305, 352). Additionally, simultaneous implementation of two PWds in a phonological representation of a simplex one, brings about interaction of some other OO Faithfulness constraints with various phonological markedness constraints as shown in the tableau below. This means that given two SFs of certain phonological properties the interaction of violable constraints, ranked as shown in Tableau 1, will determine the way SF1 and SF2 are placed in the blend so that higher ranking constraints are satisfied.

I:	(fĭʃ∅) + (vèdʒɪ)(téərɪə)n∅	PHON MARK	MC (suf)	MAX (pros) BL-SF$_2$	MAX (seg)		IDENT (F)
					BL-SF$_1$	BL-SF$_2$	
O:	(fìʃɪ)(téərɪə)n∅						f/v ʃ/dʒ e/ɪ
I:	(fléksɪ)bl∅ + (vèdʒɪ)(téərɪə)n∅						
O:☞	(flèksɪ)(téərɪə)n∅ (flèksɪ)blɪ(téərɪə)n∅	*		*	(*)	*	f/v k/dʒ f/v k/dʒ

It can be seen from Tableau 1 that correspondence relationships resulting from the superimposition of the entire phonological structure of the first SF *fish* upon the phonological structure of the second longer SF *vegetarian* hold over four, not three, segmental positions, which points to correspondents between the syllable constituents in the overlapping portions of the structures involved. Correspondence relationships at the level of syllable structure constituents enable the blend to replicate the prosodic structure of the second SF, which can be expressed as satisfaction of the OO Faithfulness constraint demanding identity of prosodic structure between the blend and its SFs, i.e. MAX(pros) BW-SF. It is also crucial for blends whose second SF is a Latinate suffixed word that the lexically specified metrical parse of the suffix is preserved. Metrical Consistency (MC) requirement postulated in Burzio (1994: 244, 2000:49) is an instance of OO Faithfulness constraint imposing metrical identity on related surface forms. It reflects a general property of morphemes and in most blends containing a Latinate suffix it accomplishes the same effect as the constraint MAX(pros) BW-SF2. However, examples of blends can be found where preservation of the metrical parse of the suffix cannot guarantee replication of the prosodic structure of the second SF. For example, satisfaction of MC of the Latinate suffix in output candidate (a), i.e. **o(pératho)n*∅ in Tableau 2, brings about remetrification at the left edge of the blend in the portion corresponding segmentally to the first SF. The metrical parse used in this paper is based on Burzio (1994: 83–87), where the range of well formed feet involves two types, i.e. (δ δ) and (δ L δ), with ternaries permitted only under exhaustive parsing and/or stress preservation (Burzio 1994: 166).

I:	(ʧpərə) + (mǽrəθɒ)n∅	PHON MARK	MC (Lat. suf)	PSI (BL)	STRONG RETR	MAX (seg)	
						$BL\text{-}SF_1$	$BL\text{-}SF_2$
O: a.	ə(pérəθɒ)n∅			*		*	
b.	(ʧpərə)(θɒ̀n∅)		(*)		*		

An undesirable consequence of the restressing in output candidate (a) are changes in vowel quality (i.e. vowel reduction in the pre-stress syllable and spelling-driven pronunciation of the vowel /e/ in the foot initial syllable), which reduce the segmental correspondence relationships between the output and both its inputs. The output form for *operathon* can be only suboptimal as this blend is based on source words that do not "blend well" with each other for reasons which will be given below in section 1.3. Candidate (b) for the blend in question may appear roughly acceptable in American English to speakers who metrify *-thon*∅ as a weak foot, although generally its metrical parse is *-tho)n*∅ with the unreduced and unstressed vowel /ɒ/ (Burzio 1994: 117). Still, candi-

date (b) does not manage to replicate the prosodic structure of SF2 because it does not obey Strong Retraction Condition formulated in Burzio (1994: 166), whereby a final weak foot imposes a binary foot on the immediately preceding phonetic string. Such a foot is not available in *operathon* without causing deadly remetrification **o(péra)(thon∅)*.

It is notable in word blending that correspondence relationships involving prosodic structures have priority over segmental Maximization. Preservation of the second SF's prosodic structure in *flexitarian* is possible at the cost of non-preservation of some of the segments of *flexible*, the segmental loss being minimal in the sense that it does not disturb recoverability of the entire SF1.

The segmental material near the left edge of the illicit output **flexibletarian*, although faithful to the first SF, does not manage to have correspondents in the relevant portion of the second SF and its non-exhaustive parse of word-medial syllables incurs violation of constraints of phonological markedness type. The word-internal metrically-unparsed portion of the output in question either impinges on phonological well-formedness if its syllabic /l/ is preserved, or reduces its correspondence relationships with the first SF if the /l/ is phonetically realized in an onset position of a syllable with the overt vowel /ɪ/ in the nucleus.

Featural differences in the correspondent segments of *flexitarian* do not exceed one feature (f/v: voice, ʃ/-dʒ: manner, e/ɪ: height) so that the blend only minimally violates the IDENT (F) constraint , adapted here from Piñeros (2002: 26), requiring correspondent segments to agree in feature specifications.

1.3. Well-formedness of English blends

Although shared segmental material is a very frequent trigger in word blending, it will be shown in Tableau 3 below that it does not always contribute to OO Correspondence relationships between the blend and its source words.

I:	(spráʊtø) + (vèdʒɪ)(téərɪə)n∅	PHON MARK	MC (suf)	PSI (BL)	MAX (pros) BL-SFs	MAX (seg)	
						$BL\text{-}SF_1$	$BL\text{-}SF_2$
O:	a) (spráʊtə)(rìənˌ∅)		*		*		*
	b) (spráʊtø)(èərɪə)n∅	*					*
	c) (spràʊtɪ)(téəɪə)n∅	*					
☞	d) spraʊ(téərɪə)n∅			*	*		

Illicit output candidate (a) based on identical segment overlap effects remetrification of the entire prosodic structure of the blend *sproutarian*. Candidate (b) is a poor blend compared with *fishetarian* or *flexitarian* in Tableau 1 on account of its effecting a word-internal empty vowel nucleus, which in turn prevents integration of the SFs by syllable overlap. As a consequence the /t/ of *sproutarian* does not have a correspondent in SF2. Evidently, correspondence between prosodic positions is a better trigger in word blending than phonetic segment similarity because it enables the blend to integrate its SFs by syllable overlap. Prosodic faithfulness is taken care of by MC(suf) and Prosodic Syllable Integrity (PSI). The latter constraint is active as a morphology–phonology interface constraint in derived words prohibiting syllables to be split between two separate prosodic domains (Oostendorp 2004: 45). I have extended it to the context of blends, where it demands that the prosodic domains of corresponding segments must also be in a correspondence relationship. I also suggest that integration of source words in the blend by syllable overlap should be taken into account as a defining feature of English blends. Another suboptimal output, candidate (c), is discarded due to its haplological syllables that have resulted in place of identical segment overlap. The finalist in this evaluation, candidate (d), is also suboptimal because its corresponding segments are not in corresponding prosodic domains.

It follows from the ranking arguments presented in Tableau 2 and 3 as well as Tableau 4 (below) that replication of SF2 prosodic structure in the blend is a by-product of satisfaction of higher rank constraints MC(suf) and PSI. Therefore the constraint MAX(pros) BL-SF2, which after all is not operative in the grammar of natural languages, appears to be redundant. Tableau 4 shows the interaction of PSI with dominant PHON MARK constraints in predicting the optimal output form of the blend *fantabulous.* The overlapping portions from the source words in the winner candidate, i.e. output (c), involve similarity between prosodic structures, in spite of the inputs being segmentally identical at the left edge. In this way the blend respects PSI with a concomitant satisfaction of MC(suf) of SF2 and as a result its metrified portion *-(tabulou)s∅* replicates the prosodic structure of SF2, with only minimal violation of Metrical Alignment (MA) constraint, adapted here from Burzio (2000: 49). This constraint imposes alignment of metrical structure with phonetic edges and its violation in the blend *fantabulous* is a result of an extra-metrically unparsed syllable on the left.

I:	fæn(tæstɪkø) + (fǽbjʊlə)s∅	PHON MARK	MC (suf)	PSI (BL)	MAX (pros) BL-SF_2	MAX (seg)		MA
						BL-SF_1	BL-SF_2	
O:	a) (fǽnbjʊlə)s∅	*		*		*		
	b) (fǽnjʊlə)s∅			*		*	*	
☞	c) fæn(tǽbjʊlə)s∅							*

The present analysis shows that phonological structure of blends can be entirely accounted for in terms of standard constraints of OT interacting in the way that is found elsewhere in the grammar and there is no reason for treating them as structures created in a rather dubious, unspecifiable "extragrammatical" morphology resorting to constraints that are only distorted versions of constraints in natural languages.

2. *Final combining forms*: a nonexistent morphological category

Traditional morphological theories, which assume word formation to consist in concatenations of morphemes, run into difficulties stating the defining properties of *final combining forms*. Typology-wise, this notion ranges over: (1) final elements of neoclassical compounds (e.g. *-ology*, *-ography*, *-naut*, *-phile*; Bauer 1998: 404–406); (2) novel consonant-initial bound morphemes (e.g. *-gate*, *-ware*, *-scape*; Bauer 2001: 53; Fradin 2000: 37); (3) shortened lexemes (e.g. *-(a)holic*, *-(a)thon*, *-(o)nomics*; Bauer 1998: 407; Warren 1990: 129). While types (1) and (2) are phonologically well motivated, forms of type (3), which may seem to have a source in recurrent parts of blends (Bauer 2006: 503) are only roughly identifiable because it is not possible to define their exact size in terms of segmental material.

In the subsequent sections of this paper I examine the structure of novel words with type (1) forms and a subclass of type (3), such that a form in question contains a Latinate suffix. As a result, no supportive evidence is found for *final combining forms* as a morphological category.

2.1. Problematic identification of *final combining forms*

A number of descriptive problems arise from a large variety of novel words that are formed with *final combining forms*, as in Warren's analysis (1990), or are a type of neoclassical compounds, as in Bauer's account (1998). In these studies, both types are taken to be distinct from suffixation and native compounding in English. On the distributive criteria used in Warren (1990: 113), final combining forms are tacked to either incomplete words (shortened roots) or *initial combining forms*. Suffixes combine with complete words or bound roots that are allomorphs of complete words.

(9a) retrophilia, retrophile, macrology, plutography, (autopathography), autonaut, (gastronaut)

(9b) cyberphobia, pornophobia, technophobia, technophile, cyberphobe, cybernaut, infonaut, Eurocrat

(10a) carnography, garbology, celebriphilia

(10b) yankophile, cinephile, globophobe, econocrat, indocrat, securocrat, plastinaut, nastronaut
(10c) xerocracy, psytocracy, corpocracy

(11a) killology, webology, boxology, capology, poopology, hamburgerology
(11b) drunkometer, smellometer, snortometer
(11c) demoncrat, businesscrat, operaphile, potatogram, gorillagram, tarzangram
(11d) meritocracy, squatocracy, thugocracy, mobocracy,boobocracy, yabbocracy, aggressocracy

(12) warnography, infornography, folksonomy, autopathography, gastronaut, debtnocrat

It is not possible to work out any uniform criteria capable of accounting for the morphological complexity of the examples above. The words in (9) seem least problematic as their structure involves stacking together two neoclassical morphemes in (9a) or a combination of a conventional clipping with a neoclassical morpheme in (9b). Novel words ending in *-ology*, *-ometer* do not pose a problem if the forms in question are combined with complete words as they are in (11a–b) but this pattern does not always obtain, e.g. *garbology*. The same problem involves the words in (11c) and (10b). Phonologically, the structure of the words in (11a–c) is explained in terms of two recognizably consistent groups of English suffixes with the prosodic parse, such that their metrical structure forces them to have their own stress: (i) *-ology*, *-onomy*, *-ography*, *-ometer* forming a trisyllabic strong foot (LLW) (Burzio 1994: 177, 250); (ii) *-phile*, *-phobe*, *-phone*, *-naut*, *-scope*, *-gram(me)*, *-crat* forming a bisyllabic weak foot with the final null vowel metrified (HW) (Burzio 1994: 214). The descriptive problems in the examples (10a–b) concern the analysis of the so called "linking vowel *-o-*". The suggestion that the vowel is a part of the *final combining form* because this is how such forms combine with complete words, e.g. *adressograph*, *phraseograph* (Bauer 1998: 406) can be phonologically confirmed only in the case of *-ology*, *-onomy*, *-ograph*, *-ometer* words. Examples of words like *cinephile*, *plastinaut*, *celebriphilia*, *celebriphile* do not support the above suggestion either.

The descriptively problematic formations in (10c) and (11d) may seem to contain a final form that happens to be wrongly identified in some dictionaries as a suffix, i.e. *-ocracy* (e.g. McFedries, www.wordspy.com). Words ending in *-ocracy* are analysed in Burzio (1994: 257) as containing a sequence of two suffixes. That is the suffix *–crat* /krættØ/ of (HW) foot size is followed by the stress-assigning suffix *–y*, giving in effect the (LLW) foot size sequence /CV krəsı/ with the preceding vowel in the head syllable of the foot, e.g. (démo)(crättØ)/de(mócracy). Thus, if one assumes the words in (11d) to be formed with the sequence *-crat* + *-y* , there is no accounting for the "linking vowel" in them.

2.2. Recoverability of source forms

The examples in (12) are clearly blended words, with readily recoverable source forms, and so are the ones in (10) and (11b–d). On second thoughts, the latter must be recovered as blends, even though their independently-motivated suffixes seem to be attached to complete words.

(13)	war	go(rílla)	pa(thólogy)	SF1
	por(nógraphy)	(téle)(gràm)	(auto) bi(ógraphy)	SF2
	war(nógraphy)	go(rílla)(gràm)	(auto)pa(thógraphy)	BL
	thug	xero	xero	SF1
	de(mócracy)	de(mócracy)	bu(reáucracy)	SF2
	thu(gócracy)	xe(rócracy)	xe(rócracy)	BL

It can be noted that for *autopathography* 'writing about one's own diseases' and *gastronaut* 'an adventurous eater', two types of morphological analysis are available, i.e. a blend or a combination of neoclassical morphemes. Other easily recoverable source forms are given below.

(14) Eurocrat (Euro + democrat)
securocrat (security + bureaucrat)
debtnocrat (debt + technocrat)
folksonomy (folk+ taxonomy)

In the blends of (15) below recoverability of one of the source words may be disturbed due to an excessive loss of segments.

(15) psytocracy (psychological + autocracy)
meritocracy (merit + aristocracy)
agressocracy (aggressive + democracy)
corpocracy (corporate + democracy)
particracy (particular + democracy)
indocrat (independent + democrat)

2.3. Arguments against secreted morphemes

Some linguists assume forms like *-(a)holic*, *-(a)thon*, *-(o)nomics* to be novel (secreted) morphemes. e.g.:

> [...] repeated blends with a particular word can give rise to a recurrent splinter, which may later be accepted as a full blown word forming unit, e.g. *-scape*, *-(e)teria*, *-(o)nomics*.
>
> (Bauer 2006: 503)

> Blends are a major source of new combining forms.
>
> (Cannon 1996: 362)

> [...] in secreting new morphemes we save so much of a word as we feel is necessary for it to provoke the right associations and to have the phonological characteristics of a morpheme to be a word component.
>
> (Warren 1990: 117–118)

In this section the question whether words like the ones in (16) below are formed with the novel secreted morpheme *-(a)holic* will be finally reconsidered.

(16a) workaholic, spendaholic, shopaholic, milkaholic, sodaholic, foodaholic, rageaholic

(16b) negaholic, chocoholic, surgiholic

(16c) chocoholism

(16d) warnography

(16e) carnography, infonography

(16f) caponomics, freakonomics, petonomics, Thatchernomics, Rogernomics/Douglasnomics1

(16g) Clintonomics, Reaganomics, Enronomics, Nixonomics

Answering the question set at the beginning of this section the following facts must be taken into account. Firstly, the problematic vowel *-o-* may appear phonetically as either /ə/ or /ɪ/, e.g. *surgiholic.*

Secondly, it is questionable whether the vowel at all belongs together with *-holic*, so it appears that the size of the items under consideration can vary in the sense that they are not always vowel-initial. Moreover, two differing realizations of *-onomics* are found, as in *freak-onomics* and *Cinton-omics.* Still worse, the suffix *-ography* appears as *-nography* in (16d–e).

[1] Roger Douglas – New Zealand's Minister of Finance.

Another kind of evidence against considering the items in question as novel morphemes comes from a dubious morphological status of the segmental material with which they seem to combine. Productive suffixation in English is word-based, so the only possible way for such novel morphemes to be productive is to attach to complete words, as in examples (11a–b). Productivity usually correlates with stable word-internal boundary effects as in the case of consonant initial noncohering suffixes (Raffelsiefen 2005: 136). But on the other hand, even though the words in (11a–b) do not display boundary effects because of the high rank of the constraint ONSET in English phonology, their regular morphology and semantic compositionality correlate with productivity. Words in (16b,e) do not meet the above regularities.

The strongest argument against secretion of novel morphemes like *-(a)holic* and *-(on)omics* comes from their falling in violation of Structure-transparency Principle, adapted here from Burzio (1994: 354), forbidding a structure with a degree of compositionality *n* to contain a structure with a degree of compositionality greater than *n*. Using evidence from both phonology and semantics, Burzio shows Latinate affixation to be of a lower degree of compositionality than word-level affixation (Burzio 1994: 352). In other words, were the items in question suffixes, they would have to appear outside Latinate suffixes which cannot be morphologically parsed due to their lack of morphological boundary effects.

It is also worth noticing that if we accept the novel morpheme *-(a)holic* secreted from *alcoholic* as suggested in Warren (1990: 117), with nouns like *chocoholism*, *workaholism*, we would have to allow another novel morpheme, namely *-(a)holism*. The analysis of *chocoholism* as a blend of *chocolate* and *alcoholism* is suggested in McFedries (www.wordspy.com).

Finally, there are arguments supported by prosodic evidence that the complex words in (16) are blends. In some blends a swap in prominence relations between the initial weak foot and the final strong one has been reported, e.g. (*fícto*)(*mèrcial*) *fiction* + *commercial,* (*míli*)(*tàinment*) *military* + *entertainment,* (*mált∅*)(*èrnative*) *malt* + *alternative* (www.m-w.com). Preservation of the strong stress of SF1 and positioning the strong foot at the left periphery boosts the interpretation of these novel words as blends by pointing to their compound like morphological source. The same stress pattern has been reported for (*súrgi*)(*hòlic∅*) 'one who seeks plastic surgery from head to toe and is never satisfied', a blend based on *surgical* and *alcoholic* (www.wordspy.com).

More examples of blends based on recurrent words as their SF2, e.g. *marathon*, *exercise*, *aerobic*, *pharmaceutical*, *anorexia*, *dialogue* are given below. Alternatively, we can consider the words in (17) to be blends based on already existing blends.

(17a) telethon, walkathon, spellathon, swimmathon, operathon
(17b) cosmeceutical, nutriceutical
(17c) tanorexia, bigotexia, drunkorexia
(17d) dancercise, jazzercise, boxercise, sexercise
(17e) biologue, magalogue/magalog
(17f) chairobics, strollerobics

2.4. Conclusions

It has been shown above that descriptive problems connected with identification and definition of the so called *final combining forms* are totally irrelevant as the words considered in this paper turn out to be cases of either Latinate suffixation or blends. The structure of blends, when analysed within the theory of universal, ranked and violable constraints in its OO Correspondence version, appears as completely regular and grammar-predictable. Creation of blends can be subsumed within the concept of the mental lexicon based on word to word relations. The OT lexicon (on the conception developed in Burzio 2002 to handle morphological relatedness and word formation), in addition to the standard sets of IO Faithfulness and Markedness constraints, has an associative component, i.e. OO Faithfulness. Associativity works in a multidimensional space involving segmental structure, stress and semantics of words (Burzio 2002: 144). Accordingly, calculation of an individual word structure and meaning presupposes taking into account the rest of the lexicon (Burzio 2002: 151).

The paper provides negative evidence for secreted morphemes. Secretion, a procedure whereby one creates a novel morpheme only because they want to build a new word with it, is an uneconomical and counter-intuitive process. Word blending is economical because, as first noted in Piñeros (2000: 17), blends save structure both segmentally and prosodically and probably this property makes blends become more and more common in various areas of language use. A constantly increasing number of blends based on certain recurring words, like the blends in (17), or the recently-coined *Iraqunophobia*, *Baracknophobia*, *mancation*, *staycation*, support word associativity operating as a trigger in word blending. Enough evidence has been presented to put forward a claim that blends generate blends rather than "splinters" or secreted morphemes.

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APPENDIX

Well-formedness of some of the discussed blends evaluated in a form of the abbreviated tableau below. The input forms are not shown in the tableau.

OUTPUTS	PHON MARK	MC (suf)	PSI (BL)	STRONG RETRACTION	MAX (seg)	
					$BL\text{-}SF_1$	$BL\text{-}SF_2$
1. e(cóno)(cràt∅)						
2. (índo)(cràt∅)					*	
3. (démo)n∅(cràt∅)	*					
4. (búsines)s∅(cràt∅)	*					
5. (cíne)(phìle)						
6. (ópera)(phìle)				*		
7. ag(grèss∅)(ócracy)	*					
8. (súrgi)(hòlic∅)						
9. (bío)(lògue)					*	*
10. (còsme)(ceútica)l∅			*			