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The Perfect Prosodic Word in Italian: Or fruit salad matters

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THE PERFECT PROSODIC WORD IN ITALIAN OR FRUIT SALAD MATTERS*

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In this paper I investigate the concept of a Perfect Word by looking at truncated nouns in Italian. The perfect word in Italian is a bi- or trisyllabic trimoraic layered trochee, which is shown to determine the size of truncated forms and sometimes the size of the part that is deleted. The paper shows the usefulness of the notion of the perfect word for the analysis of truncations and provides further arguments for layered feet.

Keywords: Italian phonology, portmanteau, Prosodic Morphology, Optimality Theory

1 The struggle for perfection

Incomplete realizations of words or morphemes, i.e., truncations, have been a focal point in the development of Prosodic Morphology and Optimality Theory in the form of the discussion of the shapes of reduplicants in grammatical reduplication phenomena (e.g., McCarthy & Prince 1994, 1995, Gafos 1998, Hendricks 2001, Nelson 2003, Downing 2006), truncations with grammatical function or hypocoristics in nickname formation (Itô 1990, Mester 1990, Benua 1995, 1998, Itô et al. 1996, Itô & Mester 1997, 2003, more recently Alber 2010 on nicknames in Italian, Sanz-Álvarez 2015 and Martínez-Paricio & Torres-Tamarit 2018, on Spanish hypocoristics, Alber & Arndt-Lappe 2012). Clippings and similar abbreviatory processes that don't serve a grammatical function or nickname formation have received comparably less attention in the theoretical literature (see e.g., Wiese 2001, Piñeros 2002, 2004, Alber & Arndt-Lappe 2012, Trommer & Zimmermann 2012).

Many languages are subject to minimal word size requirements (McCarthy & Prince 1990, Golston 1991, see as well the discussion in Itô & Mester 2015; usually a heavy syllable, in some cases two light syllables, that is, usually two moras) or even maximality restrictions (e.g., Mandarin Chinese). Size limitations are usually considered an effect of prosodic well-formedness, just as the templates for reduplication or truncating morphology are determined by prosodic unmarkedness. When reduplicants don't copy the whole base, segments are left unrealized to achieve a binary foot or an unmarked syllable, i.e., without complex constituents or codas.

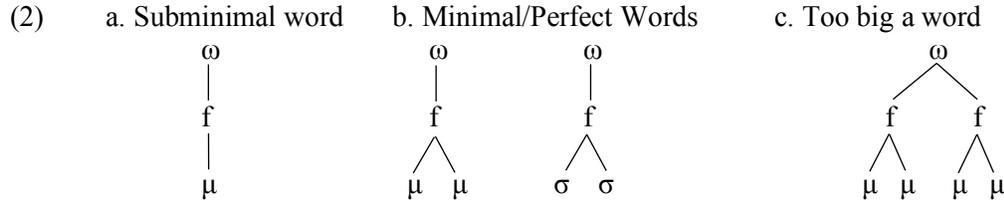
While such effects are usually derived as an interaction of markedness constraints aligning foot edges with word edges, determining foot size and banning unfooted material, Itô & Mester (2015), discussing the phonological condition for the realization of Danish *stød*, argue for a PERFECT WORD constraint, which, they speculate on in the end, might be of the MATCH type (Selkirk 2011).

- (1) MATCH- ω -to-f (=PERFECT WORD) (Itô & Mester 2015:30):
The left and right edges of a constituent of type ω (prosodic word) must correspond to the left and right edges of a constituent of type f (foot).

Thus, a perfect Prosodic Word coincides with one foot and should be identical to the preferred foot type and structure of a language, that is, an iamb or a trochee. The above definition is intended to rule out such

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words as in (2c) with several feet as well as (2a) with its degenerate foot, while the two choices in (2b) are potentially perfect, depending on which kind of foot a language prefers, binary at the moraic or syllabic level.



Even though they are not frequent, Italian doesn't seem to have any qualms with subminimal words, such as e.g., *gru* 'crane' or *tè* 'tea', which have a short vowel and are thus only monomoraic and can neither be a perfect iamb nor a perfect trochee, or with long words, as, e.g., *precipitevolissimevolmente* 'head over heels' (though nobody uses this one, Emanuela Canclini p.c.).

Italian shows otherwise clear evidence that every word contains at least one bimoraic trochaic foot (see Krämer 2009 and references there). Subminimal words such as *gru* thus need an explanation. To turn a form like *gru* into a prosodic word of minimal size it suffices to lengthen the vowel or epenthesize a consonant, which then can be associated with a mora, a consonant that is relatively unmarked in an Italian syllable coda, e.g., a placeless sonorant, like /ŋ/, though even that is unlikely given the coda filter in the native Italian lexicon (Itô 1986).

While we encounter vowel lengthening under stress in penultimate open syllables in Italian, words never end in a long vowel, even if they display final stress, such as *virtù* 'virtue'. Krämer (2009) considers penultimate lengthening as phonological, adding a mora to provide weight to the stressed syllable. (For more discussion of length see section 3.) Lengthening of the vowel of *gru* to achieve minimal word size is not an option due to the high ranking markedness constraint $*V^{[u]}$ _{PWD}, neither is any other kind of augmentation.

Italian does, however, display a wide array of truncated forms, nicknames, as *Fra* from *Francesca*, or *Manu* from *Manuela*, and abbreviated forms of common nouns, e.g., *frigo* 'fridge' from *frigorifero*, portmanteaus in the form of compounds with prefixoidal truncations, as *apericena* (from *aperitivo* 'aperitif' + *cena* 'dinner') or blends, such as *tigone* ('tigon', from *tigre* 'tiger' + *leone* 'lion'), or acronymic clippings, as e.g., *CONAD CONSORTIO NAZIONALE DETTAGLIANTI* ('national consortium of retailers' - a supermarket chain). The size and shape of these truncated forms as well as the choice of realized segments should reveal the perfect word in Italian, i.e., whether the grammar is striving for perfect alignment of foot and word edges and whether there is a MATCH-like faithfulness relation between a truncated form and its base or rather whether a formalization with a range of edge-parameterized ANCHORING constraints (McCarthy & Prince 1995) is to be preferred. The idea that Italian truncations follow the template of the unmarked prosodic word in Italian was already put forward by Thornton (1996), who also observes that a bisyllabic trochee is the most frequent word type in the Italian lexicon. Montermini (2002) echoes this position, talking at one point about the "prototypical Italian word" ("parola italiana prototipica", p. 313) as the result of truncation processes. In addition, Thornton admits a trisyllabic ternary branching trochee. In this paper we will develop her notion of the Italian foot and word structure further by showing that the Italian perfect word consists of a trimoraic layered trochee. Layered trochees have been proposed by Martínez-Paricio (2013; see as well Jensen 2000, Davis & Cho 2003, Yu 2004, Bennett 2013, Martínez-Paricio & Kager 2015) and Martínez-Paricio & Torres-Tamarit (2018) propose trisyllabic layered trochees as a template for Spanish trisyllabic hypocoristics.

In the next section, I will give an overview of truncation patterns, starting with nicknames, briefly touching on acronyms and dedicating most space in the section to the various truncated forms of common nouns in hybrid acronyms, blends, clippings and *parole macedonia* ('fruit salad words'). Section 3 will discuss the prosodic properties of truncated forms and argue that the perfect word in Italian is actually a trimoraic layered trochee. In 3.1 I argue for the layered trochee in Italian and its central role in truncations.

3.2 shows that when the output of truncation is not a perfect word then the unrealized part is. In section 3.3 I give a formal analysis in Optimality Theory. Section 4 concludes.

2 The typology of truncations in Italian

An excellent overview of the different forms of truncating word formation strategies is given in Thornton (1996, 2004). She distinguishes acronyms, abbreviations, fruit salad words (*parole macedonia* – a truncated word compounded with a more or less intact second word) among nouns, and *i*-formations (“*I tipi Roby, Lori*”) and hypocoristics among proper names. In most of these categories she makes subdistinctions, some of which we will also discuss below, and she also discusses compound names, fruit salad compound names and diminutives and other suffixed names, such as the *i*-formations.

Italian nicknames are discussed in a very enlightening way by Alber (2010), on whose formal analysis the analysis in this paper will be based. The overview given in this section is based mostly on these two sources, with a few examples added from Gaeta (2011), internet sources and my informants.

2.1 Nicknames and vocatives

Alber (2010) divides Italian truncated nicknames into two types, those anchored to the left edge of the word and those anchored to the stressed syllable. In the former, the nickname consists of segmental material starting with the beginning of the base name. In the latter the nickname is built around the stressed syllable of the base name, usually the stressed and the following syllable. Southern Italian vocatives consist of material from the beginning of the base name up to the stressed syllable, thus combining both strategies.

Apart from the vocatives, which have as many syllables as it takes to get from the left edge of the word to the stress, the nicknames are either mono- or bisyllabic. Thornton (1996) also mentions (stress-anchored) trisyllabic nicknames based on names with antepenultimate stress. The mono-syllabic ones are usually left edge anchored, unless only the stressed syllable is realized, which is usually reduplicated, which makes the nickname bisyllabic.

These reduplicated forms have another peculiarity which they share with the vocatives, final stress. One could speculate that this emerges because reduplicants are usually prefixal and Italian prefixes never carry primary word stress.

These forms are also subject to segmental simplification which led a range of scholars to the conclusion that they are actually frozen child language forms (see the discussion in Thornton 1996).

Left-edge anchored nicknames can also be adorned with the suffix *-i*, in which case all material up to the second vowel is realized, which is replaced by *i*, orthographically also represented as *-y* or *-ie*, which indicates the pattern’s potential Anglo-Saxon origin (Thornton 1996).

The different patterns are exemplified in (3) in Italian orthography. The accent on one vowel in each word is added here and further on in the paper to show the position of stress.

- (3) Italian nickname truncation patterns
- | | |
|--------------|------------------------------------|
| a. Francésca | Fránce, Césca, Francé, Fra, Fráncy |
| b. Salvatóre | Salvató |
| c. Ippólito | Pólito |
| d. António | Totó |

2.2 Acronyms

These constructions can be divided into three types. The first type trivially just consists of the initial letter of each word in a long name of an institution, organization, concept or the like. These letters of each word

are sounded out individually, e.g., *CTN* (*Centro Tematico Nazionale* ‘National Thematic Center’), is [tʃiti'enne]. The stress and intonation pattern suggest that they are considered phrases. For example, the Democratic Party, PD, is [pi'di], rather than *[ˈpidi].

Slightly more interesting phonologically is the next type, initial letters that are arranged in a way that makes speakers pronounce them as they would if this had been an ordinary word, such as *ARPA* (*Agenzia Regionale per la Protezione Ambientale* ‘regional agency for the protection of the environment’). As in English, the initials of function words are usually ignored in the formation of acronyms. There are several collections of acronyms on the internet, such as nomix.it¹ or the wiktionary pages on Italian acronyms². From the former I extracted all acronyms I suspected to be of this type and presented them to a native speaker who confirmed their pronunciation as, e.g., [ˈarpa] etc. The list is provided in the appendix.

As noted by Krämer (2009), in such acronyms word-final codas are allowed, but they are apparently not moraic, since even forms such as *AGIP* (*Azienda Generale Italiana Petroli* ‘Company General Italian Petrols - General Italian Petroleum Company’), i.e., a light followed by a heavy syllable (LH), are stressed on the penultima.

Most of these forms are mono-syllabic, such as *DOC* (*di origine controllata* ‘of controlled origin – a wine quality label’), or bisyllabic, as *AIPIN* (*Associazione Italiana per l'Ingegneria Naturalistica* ‘Italian association of naturalistic engineering’) or *ARCI* (*Associazione Ricreativa Culturale Italiana* ‘Italian organization for cultural recreation’). Trisyllabic forms, such as *AGESCI* (*Associazione Guide E Scouts Cattolici Italiani* ‘Association of Italian catholic guides and scouts’), are extremely rare and probably the upper limit.

In a third type of acronym, bigger units of some of the involved words are used, as illustrated in (4).

(4)	Type 3: Hybrids of acronym and truncation	
	CONAD	COnsortio NAzionale Detaglianti ‘National Consortium of Retailers’
	CONSOB	COmmisione NAzionale per le SOcietà e la Borsa
	ENEL	Ente NAzionale per l'ENergia ELettrica
	GREST	GRuppo ESTivo
	INVALSI	Istituto NAzionale per la VALutazione del Sistema dell'Istruzione
	MAV	Mediante AVviso - Sistema di pagamento con bollettino
	RAV	Ruolo Mediante AVviso - Sistema di pagamento con bollettino
	SISMI	Servizio per l'Informazione e la Sicurezza Militare
	TARES	TARiffa comunale Rifiuti E Servizi
	TASI	TAssa sui Servizi Indivisibili
	TARI	TAssa RIfiuti
	Sepral	SEzione PROvinciale dell'ALimentazione

The maximum chunk that can survive from a single participating base word in these forms seems to be a light syllable, with the exception of *GREST*. Again, we find mostly mono- and bisyllabic forms. Trisyllabic forms, such as *INVALSI* are extremely infrequent, but attested.

The stress pattern on type 2 acronyms and type 3 hybrids is different from type 1 acronyms. The bisyllabic forms all have a trochaic stress pattern, regardless of the weight of the syllables, e.g., *ATAC* [ˈatak] *Agenzia del trasporto autoferrotranviario del Comune di Roma*, ‘Roman Public Transport Services’, *CONAD* [ˈkɔːnad]. They are thus all parsed as one prosodic word, while a proper acronym is a phonological phrase, cf. *tivù* [tiv'vu] ‘tv’ with final stress.

The few trisyllabic forms I found of type 2 and type 3 were all realized with penultimate stress, regardless of the weight of the initial syllable. The only exception is *COMECON* (*Consiglio di Mutua*

¹ <http://www.nomix.it/acronimi.php>

² https://it.wiktionary.org/w/index.php?title=Categoria:Acronimi_in_italiano&pageuntil=gy#mw-pages

Assistenza Economica ‘Council for Mutual Economic Assistance’), which receives initial stress. This, however, is a borrowed acronym and might as well have been imported with the antepenultimate stress. Type 3 acronyms can also be considered as a type of *parole macedonia*, since they share with them the truncation that leaves more base material than just an initial letter.

2.3 *Parole macedonia*

The term *parola macedonia* was coined by Migliorini (1949). The major characteristics of *parole macedonia* is that they blend at least two words, and in this process at least one of the two is truncated. While Thornton also divides the different types by semantic criteria, they can also be classified by the morphophonological mechanics of the manipulations, which is more useful for our purposes. From this angle we can identify three types, prefixoidal compounds, as *cantautore* ‘singer songwriter’ (5) of various levels of complexity (6), fusions, as *tigone* (*tigre* + *leone* ‘tiger + ‘lion’) (7) and acronymic salads, such as *PolFer* (*polizia ferroviaria* ‘police + railroad-adj.’) (8).

(5) Prefixoidal compounds

agriturismo	agricolo + turismo	‘agrotourism’
amerasiatico	americano + asiatico	‘American-Asian’
apericena	aperitivo + cena	‘aperitif-turned-dinner’
cantautore	cantante + autore	‘singer-songwriter’
cantadottore	cantante + dottore	‘singer-doctor’
cantapoeta	cantante + poeta	‘singer-poet’
cantaurocker	cantante + autore + rocker	‘singer-author-rocker’
cartolibreria	cartoleria + libreria	‘stationery and book shop’
cattocommunista	cattolico + comunista	‘catholic communist’
cinecittà	cinema(tografo) + città	‘film studios in Rome’
cioccoblocco	cioccolato + blocco	‘chocolate block’
discobar	discoteca + bar	‘club and bar’
fantascienza	fantasia + scienza	‘science fiction’
furgonoleggio	furgone + noleggio	‘van rental’
giornattore	giornalista + attore	‘journalist-actor’
palaghiaccio	palazzo + ghiaccio	‘ice rink’
ristobar	ristorante + bar	‘restaurant and bar’
scopamico	scopare + amico	‘friend with benefits’

(6) More complex compounds

autoferrotranviario	autobus-ferrovia-tranvia-ario ‘bus-railways-tramway-ADJ.’
postelegrafonico	postale + telegrafonico (Thornton 1996) postale + telegrafico + telefonico (Treccani on <i>telegrafonico</i>) (postale + (telegrafico + telefonico)) (my suggestion) ‘postal + telegraphic + telephonic’

In type 1 blends, the truncated first member is usually bisyllabic or bimoraic and the second member is realized unscathed. Trisyllabic truncated forms of individual base words, such as the *aperi-* of *apericena*, are extremely rare. Bisyllabicity or trimoraicity is not a restriction on the initial part of the compound but rather on the individual truncated base word, as there can be concatenations of truncated words that each conform to this restriction, but together can be much bigger, as shown in (6).

As illustrated in (7a), it is not always clear whether something is of the first or second type, as *mandarancio* might be analyzed as *manda-rancio* or *mand-arancio*. The examples in (7b) show nicely

blends in which both parts are truncated, the left member preserves the left edge of the base and the right member is stress anchored, i.e., it preserves the base material from the stressed syllable or rather the stressed rhyme, to the end of the word. For example, *leopardo* is stressed on the penult and so is *leone* (*leopárdo*, *leóne*) and the portmanteau is stressed in the same position as *leone*, i.e., *leopóne* and compounded of the initial part of *leopardo* and the stress foot rhyme of *leone*. The examples *kiwana* and *zebrallo* show that what is preserved on the right side is really the foot rhyme, that is, the foot minus its onset, since **kinana* and **zevallo* are unattested. However, this onset might as well have yielded to the last consonant(s) of the initial member for phonotactic reasons.

- (7) Portmanteaux
- | | | | |
|----|-------------|---------------------|----------------------------------|
| a. | mandarancio | mandarino + arancio | ‘clementine ← mandarin + orange’ |
| b. | kiwana | kiwi + banana | ‘kiwi-banana’ |
| | tigone | tigre + leone | ‘tigon ← tiger + lion’ |
| | leopone | leopardo + leone | ‘lepon ← leopard + lion’ |
| | zebrallo | zebra + cavallo | ‘zorse ← zebra + horse’ |

While in the acronymic forms in (8a) all members of the compound are truncated, (8b) exemplifies a mix of two monosyllabic truncations and a complete word.

- (8) Acronymic portmanteaux
- | | | | |
|----|-----------|--|--|
| a. | Confapi | confederazione nazionale della piccola industria | ‘national confederation of small industries’ |
| | Polfer | Polizia ferroviaria | ‘railway police’ |
| | Federpro | federazione professionale | ‘professional federation’ |
| b. | Cogepesca | Confederazione Generale della Pesca | ‘General confederation of fishing’ |

2.4 Autonomous truncated forms

There are several forms of truncations that are not compounding in nature. We can distinguish two types, those that just truncate everything on the right side of the word until only two or three syllables are left, as in (9a) and those that respect morphological boundaries, as in (10) and (11). In some cases, this leaves only a morpheme, even if that was a mono-syllabic prefix in the base forms, as in (10). And sometimes it looks as if the process deletes an affix, as in (11).

- (9) Truncations disrespecting morphological boundaries
- | | | |
|---------------|------------------------|-----------------------|
| COOP | Cooperativa di Consumo | ‘Consume Cooperative’ |
| frigorifero | | ‘fridge’ |
| bicicletta | | ‘bike’ |
| cinematografo | | ‘movie theatre’ |
| cinematografo | | |

- (10) Truncations to monomorphemes
- | | | |
|-------------|-------------------------|---------------|
| sub | subacqueo, sommozzatore | ‘scuba diver’ |
| ex | | ‘ex’ |
| televisione | | ‘telly’ |
| fotografia | | ‘photo’ |

(11)	Suffix truncations		
a.	qualifica	qualificazione	‘qualification’
	classifica	classificazione	‘classification’
	approva	approvazione	‘approval’
	condanna	condannazione	‘condemnation’
	confisca	confiscazione	‘confiscation’
	perquisa	perquisizione	‘search’
b.	concia	conciatura	‘tanning’
	crepa	crepatura	‘crack’
	imbraca	imbracatura	‘harness’

This classification might be based on coincidental surface effects, since in most cases the deleted part starts with the stressed syllable, as in *qualifica-zione* or *cinema-tó-grafo*. We might thus be dealing with one type of truncation in which the surviving structure has to conform to a bisyllabic template and one in which the prosodic structure of the material to be deleted determines the cut-off point for the truncation, i.e. everything to the right of the strongest word-internal prosodic boundary is discarded. The latter condition is thus the mirror image of what we saw in nicknames, such as *Stofero* from *Cristófero*. There don’t seem to be any stress anchored truncations of common nouns apart from those in which the deleted material is anchored to and contains the stressed syllable.

2.5 Summary

The following table sums up the different shortening patterns discussed in this section.

<i>Category</i>	<i>Example (base)</i>
i. Nick names	
Left-anchored trochaic	Fránce (Francesca)
Left-anchored + i	Fráncy (Francesca)
Left-anchored monosyllabic	Frá (Francesca)
Left-anchored to stress	Francé (Francesca)
Stress-anchored	Césca (Francesca), Pólitio (Ippolito)
Reduplicated	Totó (António)
ii. Acronyms	
Type 1 – Letters (phrase)	tv [tiv'vu] (televisione) ‘tv’
Type 2 – Letters (1pword)	ATAC [a:tak] (Agenzia del trasporto autoferrotranviario del Comune di Roma) ‘Roman Public Transport Services’
Type 3 – Hybrids (Trunc+letters)	CONAD (COnsortio NAzionale Detaglianti) ‘National Consortium of Retailers’
iii. Portmanteaux/parole macedonia	
Prefixoidal compounds	agriturismo (agricolo + turismo) ‘agrotourism’
Blends	kiwana (kiwi + banana) ‘kiwi-banana’
Acronymic blends	Cogepesca (Confederazione Generale della Pesca) ‘General confederation of fishing’
iv. Autonomous clippings	
Truncation to perfect word	bicie let ta ‘bike’
Truncation to prefix	tele visio ne ‘telly’
Truncation of suffix/prfct wrd	qualificazi one ‘qualification’ cinematog rafo ‘movie theatre’

3 Prosodic delimitations of truncations

In this section we will first investigate the nature of the prosodic word in Italian and then pick up the thread from the end of the previous section, considering whether truncation patterns can be more insightfully analyzed by looking at the prosodic structure of the base material that is left unrealized in the truncated forms. The third part of this section brings together the factors that shape truncated forms in Italian in a sketch of an OT analysis.

3.1 Is the Italian perfect word a perfect trochaic foot?

Thornton (1996) observes that truncated forms that would be just a light syllable seem to be impossible, unless they are hypocoristics or part of a longer construction, as in *CoGePesca* or *CoNAD*. Furthermore, she argues that certain characteristics of stress-anchored hypocoristics are to be considered evidence for a dactylic foot in Italian.

The absence of nicknames for proper names with antepenultimate stress that consist of the last two syllables, e.g., *Cándido* - **Dido*, is considered by Thornton to be the evidence that stress-anchored nickname formation is circumscription of the main stress foot. Second, the existence of nicknames with three syllables, e.g., *Ippólito* – *Pólito*, is seen by her as evidence for the ternary foot ((12)a).

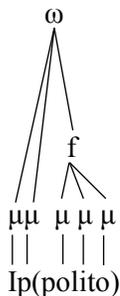
Ternary feet are not particularly desirable in prosodic phonology, since prosodic constituents from the phrase to the syllable and its subconstituents show a tendency for binary branching. Alber (2010) provides examples of nicknames of names with antepenultimate stress in which only the stressed syllable and the following penult, but not the final syllable is retained, e.g., *Méni* from *Doménico*, *Stófo* from *Christóforo*, *Níba* from *Annibale* (footnote 2). This suggests that the assumption of a ternary foot is oversimplifying. Moreover, Krämer (2009) has shown that the final syllable in words with non-final stress is not part of the main stress foot and analyzes it as extra-metrical.

His argument is based on the vowel lengthening facts: stressed vowels in the penult lengthen properly, with a length difference to unstressed vowels that equals that between short and long consonants, while stressed vowels in the antepenult are just slightly longer than unstressed vowels in the same position. Rather than restricting a Stress-to-Weight effect to the penult, it is more economic to assume that the Italian stress foot consists of two moras followed by an extra-metrical syllable/mora. Extrametricality, however, is a representational stipulation that can be avoided since the phenomena intended to be explained by extrametricality can be reanalyzed with layered feet, which have been proposed on independent grounds (most recently by Martínez-Paricio 2013).

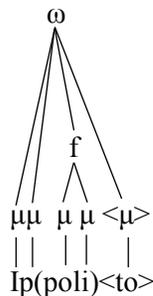
The Italian pattern can be analyzed straightforwardly with such a layered foot. The three analytical options are directly comparable in (12).

(12) Italian foot parsing options

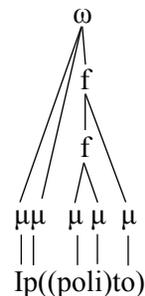
a. Ternary foot
(Thornton 1996)



b. Final extrametricality
(Krämer 2009)



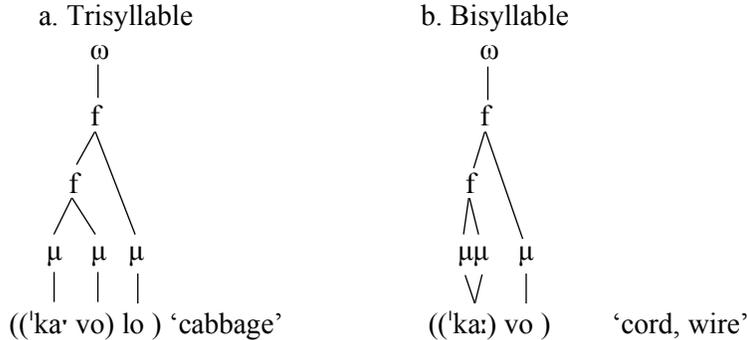
c. Recursive trochee



In this analysis, the most well-formed prosodic word in Italian can be trisyllabic and still have an edge of the same foot at either word edge. The pattern provided by Alber falls out naturally as the realization of the inner foot only. We thus wouldn't be surprised to run into an Italian *Ippolito* called *Poli* by his friends.

This bears the question why not all truncated forms are trisyllabic. Why is trisyllabicity, as in *a.pe.ri-cena*, the exception and bisyllabicity, as in *agriturismo* or *frigo*, the norm? A first partial answer to this is that the recursive foot can be built on three as well as two syllables, as long as there are three moras.

(13) The perfect word in Italian

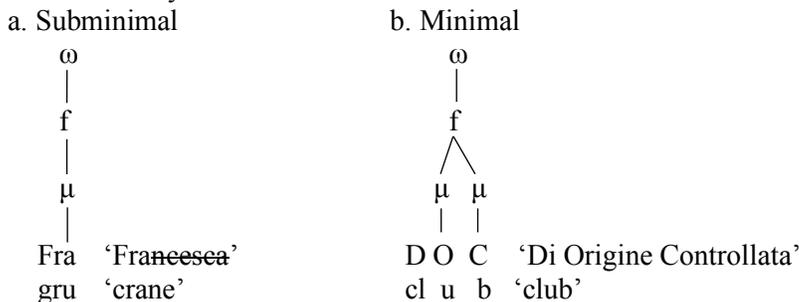


The bisyllabic form has several advantages over the trisyllabic one. It satisfies STRESS-TO-WEIGHT ('stressed syllables should be heavy' Myers 1987, Riad 1992), since the stressed syllable is bimoraic. If one tries to increase the weight of the stressed syllable in *cavolo*, one has to pay a price, either the perfect binary internal trochee becomes a trimoraic HL foot or the perfect foot parsing of all material in the word goes out the window, i.e., we would get $*((ka^{μμ}vo^{μ})lo^{μ})$ or $*((ka^{μμ})vo^{μ})lo^{μ}$, respectively.

Furthermore, stress is right-edge oriented in Italian. There is a three-syllable stress window at the right edge of the word in Italian nouns in which any syllable can be stressed (see Krämer 2009 for a more detailed discussion). In the bisyllabic form stress is closer to the right edge than in the trisyllabic form, scoring better on EDGEST-Right (an alignment constraint responsible for dragging stress to the right edge of the word). And finally, since *cavo* has only two syllables rather than three, one can expect it to avoid some violations of markedness constraints that are incurred by any syllable (additional structure must come at some cost, at least in OT).

With this Italian perfect prosodic word established, we expect to see truncated forms and blends of either two or three syllables length with a preference for bisyllabic ones. Monosyllabic words, such as *gru* 'crane' or *Fra* (hypocoristic of *Francesca*) are clearly subminimal and can't be augmented, while the many acronyms with CVC structure, such as DOC, or TAV, are quite close to perfection, since the coda consonant can be considered moraic, which results in a bimoraic trochee and a perfect alignment of foot and word edges.

(14) Italian monosyllables



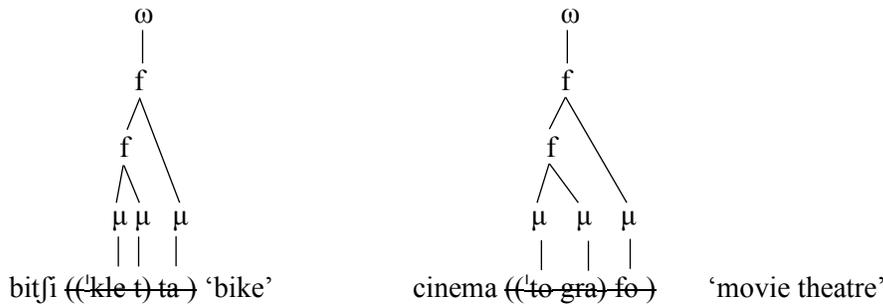
This then also tells us something about the prosodic flexibility of coda consonants in Italian: Word-internal codas in the regular lexicon and phonology are moraic since lengthening of stressed vowels is suspended in stressed syllables closed by a consonant ([ˈpe:zo] ‘weight’ vs. [ˈpesto] ‘pesto’). In bisyllabic acronyms, such as ENEL, they are most probably not moraic, since this would result in a quadrimoraic foot, i.e., ((e^{mu}.)ne^ul^u), while they do have an associated mora in monosyllabic acronyms, such as TAV, to achieve minimal prosodic word size.

3.2 *Perfect truncata?*

Many truncated forms underparse exactly the main stress foot and all the material preceding the foot survives, as illustrated in (15).

- (15) Deleting the perfect word
- | | |
|----------------------------------|----------------------|
| aperi((t̪) vø)cena | ‘aperitif-dinner’ |
| cinema((t̪o gra)fo) | ‘movie theatre’ |
| bici((el̪t̪) ta) | ‘bike (bicycle)’ |
| frigo((r̪i fe)ro) | ‘fridge’ |
| classifica((zi o)ne) | ‘classification’ |
| imbraca((t̪t̪) ra) | ‘(climbing) harness’ |

- (16) The perfect truncatum in Italian



This is, however, obfuscated by a strong tendency of cut-off points to coincide with morphological boundaries, as in the following examples, repeated from above. A similar effect is observed by Itô & Mester (1996) in Japanese compounds in which syllabification can’t cross a Sino-Japanese morpheme boundary in compound-internal contractions.

- (17) Morphological boundaries
- | | |
|---|-----------------------|
| classifica- zi one | ‘classification’ |
| imbraca- t ura | ‘(climbing) harness’ |
| tele- visi one | ‘telly’ |
| oto-rino- lari ngo- iatri a | ‘otorhinolaryngology’ |

As noted already at the end of section 2, if we consider the stress pattern of the bases that undergo truncation respecting morphological boundaries we see that the truncated part is usually the stressed syllable and everything that follows, except for *tele-visione*. Montermini (2002) gives an oversized example, *otorino* from *otorinolaringoiatria* ‘otorhinolaryngology’, in which the surviving initial part has four syllables and the deleted part consists of six syllables. Only a tiny fraction of the deleted material here is parsed in the layered main stress foot. The rest is simply unfooted or only variably so, i.e., *otorinolaringoia*((tri:)a). I suspect that the morphosyntactic structure of this oversized word results in a prosodic word boundary at the major morphological boundary, which is between *otorino* and *laringoiatria*. What is deleted here is then a

very imperfect prosodic word, one with two to four unfooted syllables, but still a prosodic word. Leftover *otorino* is still enough material for two prosodic words and looks like an ordinary Italian diminutive, e.g., *motorino* ‘moped’, with stress on the penult.

If the deleted part in some patterns is defined as a (perfect) word, i.e., a layered foot, this would explain why we sometimes find deviations from the bisyllabic pattern, as in *apericena* or *cinema*, and why truncation often easily cuts right through a morpheme. The examples *bi-cicl-ett-a* and *frigorifer-o* can be perfectly divided by slicing off the recursive foot at the end without regard to morphological boundaries, leaving a bisyllabic trunk that only needs vowel lengthening for perfect prosodification into a layered trochee, i.e., [¹bi:tʃi].

The stress pattern in forms like *classifica* (from *classificazióne*) and *appróva* (from *approvazióne*), which also seem to delete a potential perfect word, i.e., *-zione* ((*tsjó:*)*ne*) is interesting too. The former has stress on the antepenultima while the latter places it on the penult for no apparent reason (e.g., syllable weight). Since Italian does not build iambs from the left edge, but rather trochees from the right edge, this is unexpected. However, after truncation of the stressed material, it is not default stress placement that applies here. These forms revert to the stress pattern they display as verbs. Both truncated nominals are identical with the third person singular present tense verb form, which can be used to reveal lexically prespecified stress, because the inflectional affix does not have a lexically specified stress mark. Compare the infinitive and the third person forms.

- (18) Reverting to lexical stress of the stem
 classificáre – classifica (3.sg.), classificano (3.pl.)
 approváre – appróva (3.sg.), appróvano (3.pl.)

Moreover, forms like *perquisa* from *perquisizione* ‘search’ attest to the suspicion that we are actually not dealing with truncations but with zero nominalizations of verb stems. In such an analysis, the final *-a* of these forms is an affix that marks feminine gender, which is the gender of all these short deverbal nouns. If this were simple truncation, *perquisizione* should be shortened to **perquisi*, with a final *i*, not *perquisa*, with a final *a*. The same analysis then has to be extended to all other forms in this pattern.

Perfect Word truncation is also obviously not the driving force in formations like *furgonoleggio* (*furgone* + *noleggjo* ‘van + rental’), just as *palaghiaccio* ‘indoors ice rink’ truncates *zzo* from *palazzo* ‘big building’. Here it is again the surviving material in the truncated member of the compound that conforms to the perfect word, consisting of two syllables or three moras, marked in italics in (19). Deleting the perfect word part of the base would result in a subminimal form, i.e., **fur-noleggjo* and **pa-ghiaccio*.

- (19) Survival of the potentially perfect
 fur((¹go:)ne) + no((¹leʒ)ʒo) → ((*fi^ur^u*)go^u) no((¹leʒ)ʒo)
 pa((¹lats)so) + ((¹gjaʃ)ʃo) → ((*pa^u*)la^u) ((¹gjaʃ)ʃo)

Whether such truncated forms actually have foot structure, as indicated here for the truncated form, still has to be confirmed by phonetic studies. The evidence for secondary stress, even in compounds, is very weak in Italian. One could speculate that deletion of the main foot in compounding truncations is a preferred strategy because the weak or non-final member(s) of a compound are destressed anyway (or receive only weak stress). Thus the whole foot structure would have to be dismantled and the unfooted syllables preceding the main word stress are more suitable for the weak position in a compound. However, as we see in (19), the metrical structure of the truncated form has to be reorganized completely and that of the base is ignored.

While stress anchoring is common in hypocoristics, in common nouns it is not an option. All truncated common nouns are anchored to the left word edge. The left edge of the truncated form always matches the left edge of the base. This is not the case at the right edge. At the right edge we either find some segment from somewhere inside the truncated form, as in *confiscazióne* ‘confiscation’ or *frigorifero* ‘fridge’

or the right edge of an untruncated form to which a truncate is prefixed (*agriturismo*). In blends we find the right edge of a form that is missing its left edge, e.g., the underlined part in *zebrallo* ‘zorse’. Only in hybrid acronyms one finds the leftmost syllable of a truncated word on the right side, e.g., *CaRiPLo* from *Cassa di Risparmio delle Provincie Lombarde* ‘Savings chest of the Provinces of Lombardy - a former regional Italian bank’. Especially the right-left mapping in blends respects the left and right edges. Blends such as *bra-vallo* or *bra-cava* from *zebra* and *cavallo* are unattested, not only because they would be hard to recognize, but presumably also because they don’t map the respective base edges to the respective edges of the portmanteau word.

3.3 A cocktail with the PERFECTWORD as its central ingredient

While blends and *parole macedonia* can be bigger than three syllables, we have seen that for clippings, and the truncated part of *parole macedonia*, the perfect prosodic word of Italian is the size limit. Furthermore, they are always anchored to the left edge of the base, unless a truncated form is on the right side in a blend, in which case it is anchored to the right edge of the base. Unless it isn’t, in which case we consider it a hybrid acronym. In this latter case, however, the maximum size of each truncate seems to be one syllable and the overall size of the construction limited to maximally three syllables.

There are clear parallels between truncated common nouns and hypocoristics. We can thus draw on some of the constraints proposed by Alber (2010) in the analysis. In particular she proposes a constraint that aligns the left edge of the truncated form with the left edge of the base as well as a size restricting constraint that demands that the truncated form and the first syllable of each involved morpheme coincide. The latter constraint can be considered the driving force behind the hybrid acronyms that consist of the initial syllable of each involved word. We would thus want to reformulate this constraint as referring to all base words involved rather than morphemes.

(20) ANCHOR-Left (Alber 2010)

Align the left edge of the *correspondent of TRUNC in the base* with the left edge of the base.

(21) COINCIDE- σ 1 (adapted from Alber 2010):

Every segment of the output is in the first syllable of some base word.

Clearly the COINCIDE constraint is only relevant for a very restricted subset of truncations here, what is relevant for all truncations is a general ranking of faithfulness constraints mediating between the truncated form and its base, BT-Faithfulness, as well as general Input-Output faithfulness constraints with respect to the size restricting constraints (Alber & Arndt-Lappe 2012).

We have seen above that ordinary words in Italian can be smaller or significantly bigger than the perfect word. IO-Faithfulness thus has to outrank the PERFECTWORD constraint while the latter has to dominate BT-Faithfulness, since the truncated forms never exceed the size of a perfect word, unless they are a concatenation of truncated morphemes.

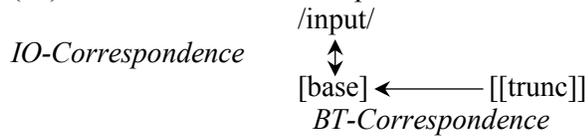
The following tableau illustrates the situation with words that are not clipped. Shrinking or augmenting them to perfect word size would violate some faithfulness constraint, mostly IO-MAX and IO-DEP. A word, such as *frigorifero* ‘fridge’ has a layered foot at its right edge and either two unfooted syllables at its left edge or a secondary stress foot (not considered here). These unfooted syllables violate the PERFECTWORD constraint. For the sake of simplicity I considered the violation of FOOT-BINARITY incurred by words such as *gru* ‘crane’ as a violation of PERFECTWORD here.

(22) Italian humdrum imperfection

i.	/frigorifero/	IO-MAX,	IO-DEP	PERFECTWORD
a.	{{(rífe)ro}}	5!		
b.	☞ {frigo((rífe)ro)}			1
ii.	/gru/			
a.	{{(grú:te)}		2!	
b.	☞ {(grú)}			1

It is crucial for the analysis that a truncated form has no direct IO correspondents, but rather only BT correspondence relations, parallel to reduplicants in McCarthy & Prince's (1995) proposal.

(23) Base-Truncate correspondence



Thus, while IO-Faithfulness is ranked above PERFECTWORD, BT-Faithfulness is ranked below this constraint for most truncation patterns in Italian.

(24) Core ranking for truncations

IO-MAX, IO-DEP ≫ PERFECTWORD, ANCHOR-L ≫ BT-MAX, BT-DEP

The following tableau illustrates the effect of this ranking on truncations. The candidates are explained in turn.

(25) Left-edge oriented truncation to perfect size

/frigorifero/	IO-MAX	IO-DEP	PERFECTWORD	ANCHOR-L	BT-MAX	BT-DEP
a. {frigo((rífe)ro)}			1!			
b. {fri(go(rí))}			1!		4	
c. {{{(rífe)ro}}				1!	5	
d. {{{(fè)ro}}				1!	7	
e. {{{(góri)fe}}				1!	5	
f. ☞ {{{(frí)go}}					6	
base: {frigo((rífe)ro)}						

Candidate (a) realizes the base form without any omissions. In this case this results in a structure that exceeds the perfect word by two syllables that are not in the maximal foot and thus violates the constraint PERFECTWORD. Candidate (b) is in spirit a southern Italian vocative and retains all material up to and including the stressed syllable. This violates PERFECTWORD since there is an unfooted syllable and since the foot structure is iambic rather than the usual trochee. Candidates (c) and (d) are right edge oriented, truncating material at the beginning, which violates ANCHOR-L. This constraint is also violated by (e), which is center aligned and has discarded one syllable at each word edge. This leaves candidate (f), a bisyllabic form corresponding to the left edge of the base as the winner.

A candidate not considered in (25) is the trisyllabic **frigori* (with stress either on the penult or the antepenult). As discussed above, stress on an open penult results in vowel lengthening, but this does not happen on stressed open antepenults. Vowel lengthening satisfies STRESS-TO-WEIGHT. This constraint plays a role in Italian phonology in general and together with PERFECTWORD it is responsible for limiting the clipped forms to two syllables.

(26) Perfect size

	/frigorifero/	PERFECTWORD	STRESS-TO-WEIGHT
a.	{fri((gó:ri)}	1!	
b.	{((fri:)gori)}	1!	
c.	{((frigo)ri)}		1!
d.	{((fri)go)}		1!
e.	{((fri:)go)}		
	base: {frigo((rife)ro)}		

Candidate (a) violates PERFECTWORD with the initial syllable which is not parsed within the only foot. Candidate (b) violates PERFECTWORD for the size of the foot. The stressed vowel is lengthened and thus bimoraic and the weak part of the foot contains two light syllables, i.e., another two moras. A layered foot contains three moras, two in the internal foot and another one as the weak part of the superordinate foot. Candidate (c) is thus a perfect foot in a perfect word. Had it not been for STRESS-TO-WEIGHT, which militates against stressed light syllables. The constraint is also violated by the bisyllabic candidate (d), which does not have a lengthened vowel in the stressed syllable, unlike candidate (e), which satisfies both constraints and thus wins.

One core property that Thornton mentions is that truncated forms usually end in a vowel. Of course, that does not hold for any kind of acronymic formation. Especially in types 2 and 3 word-final codas seem to be quite frequent. However, coda avoidance is a typical TETU effect (the emergence of the unmarked – McCarthy & Prince 1994, Becker & Potts 2011). Italian doesn't allow word-final codas in the core lexicon, only in loanwords. This state of affairs can be analyzed with a stratified lexicon with loanword-specific indexed faithfulness constraints (Itô & Mester 1999). Since clippings are not loanwords the highly ranked faithfulness for loans such as *club* 'club' doesn't apply to them and *CODA can have its way. In both the native lexicon and in clippings a constraint against disruption of input strings, CONTIGUITY (McCarthy & Prince 1995), warrants survival of string-internal codas, as discussed further in the next paragraph. Alternatively, the *CODA effect in clippings and the core lexicon could be a side effect of the PERFECTWORD. The perfect word is an HL layered trochee and in Italian, coda consonants potentially make syllables heavy, resulting in HH structures if a word is cut down to two maximal syllables, e.g., *?frigor*.

Truncates are always contiguous strings of base material. One might think that a efficient way of forming a shorter version of an Italian word that would otherwise be quite long, such as *partecipazione* 'participation', could be realizing just the initial syllable and the end of the word, i.e., **parne* or **parzione*. These just aren't attested and sound odd, while *partecipa* is ok. Words like *frigorifero* are truncated to *frigo*, never to phonotactically well-formed **frifero* or **friro*, recombining the left and right edge of the base. Though occasional syncope is observed, as in *benza* from *benzina* 'gas' (Montermini 2002:314). Accordingly, a constraint against the discontinuous realization of base material, BT-CONTIGUITY, has to be undominated (see McCarthy & Prince 1995 for the original definition of CONTIGUITY constraints, Piñeros 2002 in the context of Spanish truncations).

(27) Contiguity

	/frigorifero/	BT-CONTIGUITY	PERFECTWORD	ANCHOR-L	BT-MAX	BT-DEP
a.	{((fri)ro)}	1!			6	
b.	{((fri)go)}				6	
	base: {frigo((rife)ro)}					

Apericena shows yet another factor that plays a role. The resultant prefixoidal clipping *aperi-* (from *aperitivo* 'aperitif') is bigger than the perfect word. As discussed in the previous subsection, it is the

potential perfect word at the end of the base form that has to be left unrealized. The base *aperitivo* has stress on the penult and the truncated part, $-((ti:)vo)$, thus corresponds to a perfect word.

While above I showed how restrictions on truncations emerge as effects of generally assumed constraints, it seems to be problematic to cast any restriction that defines the part to be deleted into constraints. Anti-faithfulness constraints (Horwood 2000, Alderete 2001) to material in prominent prosodic positions could account for such patterns, such as BT-UNMAX-MAINSTRESSFOOT ‘do not realize any segment that is in the main stress foot in the base’.

Piñeros (2004) proposes special faithfulness to the weak, i.e., the segmental material that is not in the head foot of the base for a similar pattern in Spanish, which is adopted by Trommer & Zimmermann (2012) who analyze the same Spanish data with Coloured Containment. Both versions of the solution, Piñeros as well as Trommer & Zimmermann’s, crucially have to refer to “every segment in the non-head”. This non-head can only be understood as a negatively defined set, i.e., everything that is outside the main stress foot. Positional constraints usually refer to actual constituents or classes, such as McCarthy & Prince’s (1995) FAITH-STEM and FAITH-AFFIX or Lombardi’s (1999) IDENTONSET.

Last but not least one could resort to Direct OT (Golston 1997). In a Direct OT account, the truncation morpheme for this kind of clipping is represented in the lexicon as a violation of BT-MAX-MAINSTRESSFOOT.

Postponing this choice to future research, I include the size requirement on the deleted section of the base in the following tableau as a short-hand constraint demanding the truncated part to be a perfect word in the base.

- (28) TRNCPRFCTWRD: ‘Truncate the perfect word: Assign a violation mark for every segment of the main stress foot in the base that is realized in the truncated form and for every unrealized segment that is not in the main stress foot in the base.’

The analysis is illustrated in (29). In candidate (a) the first two syllables of the truncated base member are mapped to the surface, which would result in a nice layered trochee. Candidate (b) incurs a violation of PERFECTWORD for its problem with weight of the stressed syllable. As discussed earlier, it either doesn’t conform to Stress-to-Weight or it has too many moras for a perfect word and is thus inferior to a bisyllabic shortened word. However, candidate (a) has deleted a portion of the base that is outside the main stress foot of the base which violates TRNCPRFCTWRD.

- (29) Optimal omission

/aperitivo + cena/	TRNCPRFCTWRD	PERFECT WORD	ANCHOR-L	BT-MAX
a. {aperi((ti:)vo)} cena	2!			6
b. ☞ {aperi((ti:)vo)} cena		2		4
base: {aperi((ti:)vo)}				

Here we see another reason why *frigori* is not an acceptable form for ‘fridge’. As noted above, the truncated part of *frigo* also corresponds to a perfect word in the base form: $\{((ri)fe)ro\}$. The truncated part of **frigori*, i.e., *fe)ro*, doesn’t. The same holds as for the formation of trisyllabic *aperi-* in *apericena* from *aperitivo* ‘aperitif’+ *cena* ‘dinner’.

While prefixoid, acronymic and autonomous truncated forms are never stress-anchored, and stress-anchoring only occurs as negative circumscription, as just discussed, positive stress-anchoring does occur in blends. The surviving part of the second base in blends such as *kiwana* (from *kiwi* + *banana*) coincides with the main stress foot, or more precisely the rhyme of the stressed syllable and all material from there to the end of the word. In Italian, as we have seen, this is a layered trochee which is the perfect word. Once this potential perfect word is united with the remaining material from the first base perfection is spoiled. However, it is only minimally spoiled. The part of the first base that is realized consists of the first syllable

plus the first syllable constituent that follows. Note that in *zebrallo* the complex onset of the second syllable, *br*, survives, while in *leopone* the nucleus of the second (onsetless) syllable of *leopardo*, *o*, survives.³

This contraction of compounds affects both members to some degree. For the analysis I propose now, the observation is crucial that even in compounds, there doesn't seem to be any reliable secondary stress. Unstressed syllables are the main source of imperfection for prosodic words. If there are too many of them this violates PARSE-σ ('syllables should be footed'). We can also measure violation of PERFECTWORD by counting the number of syllables between the foot and the word edge. In this type of truncation it is the whole construction that is assessed against PERFECTWORD, while in the prefixoidal construction it was only the shortened prefixed word that was under scrutiny. In ordinary words excess syllables are not a problem, since MAX-IO is ranked high. In blends they are and it is resolved by deletion. A further ingredient is the anchoring of the two compound members with their respective word edge in the blend. The left edge of the blend has to correspond with the left edge of the left compound member and the right edge of the blend with everything from the stressed vowel to the right edge of the right compound member. This is taken care of by Alber's Anchoring constraints for hypocoristics.

(30) Blending of *zebrallo* 'zorse'

/dzebra + kaválo/	ANCHOR-L	PERFECTWORD	BT-MAX
a. {dzebraka((vál)lo)}		3!	
b. {dzebra((vál)lo)}		2!	2
c. ☞ {dze((brál)lo)}		1	4
d. {dze((vál)lo)}		1	5!
e. {bra((vál)lo)}	1!	1	4
f. {((vál)lo)}	1!		7
base: {dzebraka((vál)lo)}			

Candidate (a) has three unfooted syllables in the prosodic word, yielding a violation of PERFECTWORD for each. Candidate (b) has only one unfooted syllable less than (a) and still one more than the winning candidate (c). Candidates (e) and (f) have not preserved the left edge of the leftmost base word and are thus suboptimal for their violation of ANCHORL. The difference between candidate (c) and (d) lies in the preservation of the onset of the stressed syllable in the rightmost base word in (d) versus its replacement by the second onset of the first base word. This is decided here by BT-MAX, since the complex onset "rescues" one more consonant from the bases. I regard this as coincidental and further research is needed to figure out why such constructions systematically replace the onset of the stressed syllable with material from the other base word.

These blends are the closest match to the constructions Trommer & Zimmermann analyse with Coloured Containment. A core ingredient of their analysis is the assumption that the initial syllable(s) of the first member substitute the initial syllables of the second. Thus when *ladrón* 'thief' and *makdónals* 'McDonald's' are fused to *ladrónals* 'McDonald's as a rip-off', *la* replaces *mak* and *drón* replaces *dón*. The Italian pattern is not amenable to this analysis since the number of syllables preceding the stress does not necessarily stay stable. In *le.o.pó.ne* from *le.o.pár.do* and *le.ó.ne* we see the mismatch. In *leone* the stressed syllable is preceded by one unstressed syllable, while in the blend there are two unstressed syllables from the base of *leopardo* preceding the stressed syllable.

³ The alert reader might have noticed that in *tigone* 'tiger-lion' the *r* of *tigre* is missing. My hunch is that resultant *tigrone* with realization of the complete complex onset of the second syllable of *tigre* is lexically blocked by the homophonous augmentative form with the suffix *-one*. Similarly, truncation of *leopardo* to *le-* rather than attested *leop-* in *leopone* would result in *le-one*, which is homophonous with *leone* 'lion', second member of the construction and would render the blend unrecognizable. *Lepone* would be an alternate, but is excluded. by its violation of CONTIGUITY.

In certain mixed forms of acronym and blend, exactly the first syllable of each member survives, as in *Polfer* from *Polizia ferroviaria* ‘railway police’. In this case we also see a violation of the ban against form-final codas. Here Alber’s (2010) COINCIDE- $\sigma 1$ plays a pivotal role. This constraint outranks *CODA.

(31) The importance of initial position

/polizia ferroviaria/	COINCIDE- $\sigma 1$	PERFECT WORD	*CODA	BT-MAX
a. {poli((zári)a)}	7!	1		7
b. ☞ {((pól)fer)}			2	11
c. {((pól)fe)}	1!		1	12
base: {poli((zi)a} {ferrovi((ári)a}				

In (29), candidate (a) blends the first two syllables of the first base word with the main stress foot of the second and violates COINCIDE- $\sigma 1$ with all segments that are not in the initial syllable (or its maximal extension) in one of the two base words. The orthographic double *r* in *ferrovia* is a geminate, which is in the coda of the first syllable of the base word and the onset of the second. Since this coda is missing in candidate (c), it violates COINCIDE- $\sigma 1$ too.

Note that the first part, *pol*, does not exactly coincide with the first syllable in the base, but with the first maximally possible syllable. Realization of the consonant is an effect of quantity-sensitivity. As mentioned earlier, stressed syllables, at least in penultimate and final position, have to be heavy. Alternative lengthening of the vowel in *po* to provide weight to the stressed syllable would have resulted in unnecessary unfaithfulness. With the coda consonant of the first syllable providing weight and the coda consonant of the second as not adding weight, as discussed above we encounter a perfect word again: {((pó^H)fe^Hr)}.

The exclusive survival of material in the first syllable is characteristic for acronymic blends. As we have seen, in others it is defining that the surviving part has the size of a perfect word, in others it is more important to delete the main stress foot aka a perfect word, while in blends it is important to reproduce the rightmost perfect word. We are dealing with a range of patterns here which cannot be accommodated with one ranking. One way of dealing with this is constraint indexation (Itô & Mester 1999, Pater 2006). I spare the reader the details of this since the purpose of this section was to show the centrality of the perfect word and the constraints that promote perfection in the formal analysis of Italian truncated words.

4 Conclusions

Thornton (1996) proposed that there is a minimal word requirement of a bisyllabic or trisyllabic trochee that shapes the size of truncated common nouns in Italian. In this paper the notion of minimal word was replaced with Itô & Mester’s (2015) concept of the perfect word, which is more adequate since it doesn’t only pose a lower size limit but also an upper limit on truncated forms. The perfect word simply is perfect alignment of the edges of a prosodic word with the edges of the optimal foot. Languages display different preferences when it comes to foot type, and we have seen here that the Italian perfect word, containing one right-branching layered moraic trochee of three moras preferably distributed over two syllables, is very similar to the Danish perfect word, which is a trimoraic HL trochee.

As the observant reader might have noticed by looking at the English glosses while reading the paper, English clippings look markedly different from their Italian counterparts, consider e.g., *bike*, *fridge*, *zorse* or *shrink* (see Alber & Arndt-Lappe for more examples and discussion). While Italian truncations tend to result in bisyllabic forms, English truncated forms tend to be one heavy syllable. This might be partially attributed to the marked status of codas in Italian and their high popularity in the English lexicon. However, if truncation in English also results in perfect words, it also shows that the perfect word of English is different from that of Italian. English might only resort to recursion when absolutely necessary (also, the

English recursive trochee is left-branching in the upper layer, i.e., (*po(tato)*), rather than right-branching, see Martínez-Paricio 2013).

The fact that perfection is measured by different standards in different languages doesn't mean that the constraint PERFECTWORD, which matches prosodic structures of two different layers, is subject to language-specific parameterization, since the foot type and structure emerge through the interaction of other independently motivated markedness constraints.

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Appendix

Type 2: combinations of letters that can be read as if they were words:
(most data from <http://www.nomix.it/acronimi.php>)

ACI	Automobil Club d'Italia
AGIP	Azienda Generale Italiana Petroli
AIDO	Associazione Italiana Donatori di Organi
AIPIN	Associazione Italiana per l'Ingegneria Naturalistica
ANAS	Azienda Nazionale Autonoma delle Strade
ANSA	Agenzia Nazionale Stampa Associata
ARCI	Associazione Ricreativa Culturale Italiana
ARPA	Agenzia Regionale per la Protezione Ambientale
AVIS	Associazione Volontari Italiani del Sangue
BES	Bisogni Educativi Speciali
CAP	Codice di Avviamento Postale
CED	Centro Elaborazione Dati
CONI	Comitato Olimpico Nazionale Italiano
CUD	Certificazione Unica dei redditi di lavoro Dipendente
CRO	Codice Riferimento Operazione
DAG	Disturbo d'Ansia Generalizzato
DAT	Disposizioni Anticipate di Trattamento
DIA	Direzione Investigativa Antimafia
DOC	Denominazione di Origine Controllata
ENAC	Ente Nazionale per l'Aviazione Civile
ENPA	Ente Nazionale per la Protezione Animali
EVO	Extra Vergine di Oliva
FIAT	Fabbrica Italiana Automobili Torino
FILA	Fabbrica Italiana Lapis ed Affini
INAIL	Istituto Nazionale per l'Assicurazione contro gli Infortuni sul Lavoro
IRAP	Imposta Regionale sulle Attività Produttive
IRPEF	Imposta sul Reddito delle Persone Fisiche
ISA	Indici Sintetici di Affidabilità
ISEF	Istituto Superiore di Educazione Fisica
ISTAT	Istituto nazionale di Statistica
LAV	Lega Anti Vivisezione
LEA	Livelli Essenziali di Assistenza
LILT	Lega Italiana per la Lotta contro i Tumori
MES	Meccanismo Europeo di Stabilità

NAS	Nucleo Antisofisticazioni (organo dell'Arma dei Carabinieri)
ONU	Organizzazione delle Nazioni Unite
OPA	Offerta Pubblica di Acquisto
PIL	Prodotto Interno Lordo
PRA	Pubblico Registro Automobilistico
RAI	Radio Audizione Italiana
RAL	Retribuzione Annuale Lorda
RID	Rapporto Interbancario Diretto
RIS	Raggruppamento Investigazioni Scientifiche
SAS	Società in Accomandita Semplice
SCIA	Segnalazione Certificata di Inizio Attività
SIAE	Società Italiana Autori ed Editori
SNAI	Sindacato Nazionale Agenzie Ippiche
SNAM	Società Nazionale Metanodotti
SPA	Società Per Azioni
TAC	Tomografia Assiale Computerizzata
TAEG	Tasso Annuo Effettivo Globale
TAV	Treno ad Alta Velocità