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Minimality, weight and melodic content: The view from French and Berber hypocoristics

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Abstract. This paper, mainly devoted to the French hypocoristic formations, offers a Strict CV account for word minimality. It argues that the shape of the truncated forms can be analyzed without appeal to any prosodic hierarchy. The template which the truncated forms use minimally consists of two CV units, which correspond to the minimal domain where Proper Government applies, hence the Minimal Word. In line with previous studies, prosodic weight is viewed as function of the number of vocalic positions each form contains. Moreover, it is claimed that complex onsets may contribute to weight, provided that their second consonant contains a closure element: obstruent+lateral behaves as a genuine cluster which enclose a metrically-active V position, while obstruent+rhotic forms one single segment. In support of the proposed analysis, a brief account for the structure of Tashlhiyt Berber hypocoristics is provided.

Keywords. Hypocoristics, French, Berber, word minimality, weight.

Introduction

A great deal of research has been devoted to hypocoristic (nickname) formations over the last four decades. One of the main aspects which has attracted the attention of researchers in phonological theory relates to the truncation process targeting the base form. Many attempts have been made in order to address this phenomenon in light of recent phonological theories, mobilizing among other devices fixed and minimum size templates as prosodic targets. Proponents of the prosodic hypothesis (McCarthy & Prince 1986 et seq., Nespor & Vogel 1986, Selkirk 1981) argue that truncation is driven by a minimality condition, which is defined in terms of the authentic units of prosody (μ, σ, Ft, ω). Under this condition, a well-formed prosodic word must contain at least one binary foot, either at the syllabic or moraic level, depending on the language (see among others Mester 1990

on Japanese; Plénat 1982, 1999 and Nelson 1998 on French; Colina 1996, Piñeros 2000, Plénat 2003 and Torres-Tamarit 2021 on Spanish).

Bisyllabic and bimoraic hypocoristics are by far the most attested type across languages, though monomoraic and trisyllabic forms may be found in some languages such as Portuguese (e.g. *Barnabé* > *Bé*, *Ána* > *Ná*, see Grau Sempere 2006: 125), Sardinian (e.g. *Servatore* > *Vatore*, *Margherita* > *Gherita*, see Cabré et al. 2021), and Spanish (e.g. *Jose María* > *Joséma*, *Catalína* > *Catína*, see Martinez-Patricio & Torres-Tamarit 2019). French hypocoristics do not depart from this trend, using truncation either alone or with reduplication (1a,b) in order to meet the minimal size requirement. However, like Portuguese, French has also developed monomoraic hypocoristics (1c).

(1) French hypocoristic formations (Plénat & Huerta 2006)

	Base	*Hypocoristic*		*Weight*
a.	ʃaʁlɔt	ʃaʃa	'Charlotte'	2σ, 2μ
	mikaɛl	mika	'Michael'	
	gabrijɛl	gabi	'Gabriel'	
b.	viktwaʁ	vik	'Victoire'	1σ, 2μ
	kχistjɑ̃	kχis	'Christian'	
	fχederik	fχɛd	'Frédérique'	
c.	florɑ̃s	flo[1]	'Florence'	1σ, 1μ
	klod	klo	'Claude'	
	ʒoanna	dʒo	'Joanna'	

Despite their relatively limited number, the forms of the type in (1c) challenge the Word Minimality hypothesis, since they contain only one light syllable whose onset though complex does not contribute to weight in its standard sense (see Hayman 1985, Hayes 1989, Morén 1999, *contra* Topinzi 2008, 2010, 2011).

This paper combines the strict CV approach to syllable structure (Lowenstamm 1996, Scheer 2004) with the Word Minimality hypothesis. It argues that all hypocoristics of the type in (1) are formed by means of a unique template which consists of two CV units, and which corresponds to the minimal domain where Proper Government holds.

[1] French song connoisseurs are referred to a famous song by Pierre Bachelet (1944-2005) and Florence Arthaud (1957-2015).

There are forms (1a) which require that both CV units are entirely identified with their own segments, while others (1b,c) allow some slots, typically vocalic ones, to remain empty and phonetically unpronounced. On this view, prosodic weight is a mere function of the number of vocalic slots each form contains; complex onsets like any consonant cluster contribute to weight because they contain an empty nucleus which may project a weight unit (see Scheer & Zsigetvári 2005 and Faust & Ulfsbjorninn 2018 on how vocalic slots count in stress assignment).

Of further interest to our purpose here is the melodic content which complex onsets display. One can legitimately ask why forms like [kχistjɑ̃] and [fχederik] behave differently from the ones in (1c). Why aren't their hypocoristic forms simply *[kχi] and *[fχe]? Why do they need to display a postvocalic consonant if their initial cluster were a complex onset whose empty nucleus can be metrically active? Conversely, why are [flo] and [klo] acceptable forms? Is there any reason for their containing a metrically active nucleus? Building on previous work (Hirst 1985, Lowenstamm 2003, Rennison 1998, Rennison & Neubarth 2003, Ségéral & Scheer 2007, among others), I will assume that French hypocoristics display two types of so-called *mutæ cum liquidā* sequences: One of the form obstruent + rhotic, and one whose obstruent is followed by a lateral consonant. The first behaves as a complex segment, it is underlyingly monopositional; the latter is bipositional. The closure element |ʔ| present in /l/ but not in /r/ (see Harris 1990, 1994, Backley 2011, among others) requires the consonant to be associated to its own C-slot. Under this analysis, the reason why pre-vocalic obstruent+liquid in French hypocoristics may or not contribute to prosodic weight ceases to be puzzling: Only a subset of these sequences behaves as a genuine cluster, precisely the one whose liquid consonant contains a closure element.

The paper is organized as follows. Section 1 reviews standard approaches to prosodic weight. Section 2 turns to the French hypocoristics; a brief overview of previous accounts is provided. Section 3 presents a strict CV analysis of the truncated forms. Section 4 addresses the hypocoristic formations in Tashlhiyt Berber. They are analyzed in the same manner as in French.

1. Truncation as a prosodically-driven process

Roughly defined, truncation is the process by which the shape of an input form is reduced to a certain size, which is often argued to be determined by the authentic units of prosodic hierarchy, mainly the foot (Ft), the syllable (σ) and the mora (μ). The minimum size to which this process leads corresponds to a bisyllabic or bimoraic foot, according to standard analyses. Hypocoristic formations have been extensively used in support of this minimal parsing (i.e. the Minimal Word), and thereby as evidence for prosodic hierarchy (McCarthy & Prince 1986 et seq., Nespor & Vogel 1986, Selkirk 1981). The next subsection provides an overview of standard approaches to prosodic weight and word minimality, and discusses some of the issues they may raise.

1.1 Standard approaches to weight

The study of quantity-sensitive phenomena arose noticeably during the late seventies as part of a general theory of metrical structure (cf. Liberman 1975, Liberman & Prince 1977, Halle & Vergnaud 1980, Hayes 1981). The central idea was that certain linguistic phenomena such as stress assignment, poetic meter, reduplication, compensatory lengthening and word minimality rely on a core distinction between heavy and light syllables, which is dependent essentially on whether the syllable's internal constituents branch at the nuclear or rhymal level. Although there are various versions of metrical theory, a general consensus emerges on the relevance of syllable quantity in capturing a number of generalizations about several grammatical systems, and its ability to fit into larger structures such as prosodic hierarchy (McCarthy & Prince 1986, et sq.), metrical grids (Liberman 1975, Liberman & Prince 1977), and the like. The distinction between heavy and light syllables has for instance been of much importance in determining stress placement in English and Latin, to name but these two languages. In Latin, any syllable ending with a long vowel or with a vowel plus a coda consonant is viewed as heavy; all others are light. Words containing three or more syllables assign stress to the penultimate syllable if it is heavy (e.g. *amá:re* 'bitterly', *arísta* 'ear, spike'), otherwise the antepenultimate (e.g. *dígitus* 'finger'). Many scholars have capitalized on this kind of phenomena in order to introduce further levels of representations above and below the syllabic level.

Proponents of the subsyllabic level of representation argued that the mora (μ) is the relevant prosodic unit for weight calculation. As a weight-bearing unit, it redefines the light vs. heavy dichotomy as function of the number of moras the syllabic node dominates: A syllable with one mora counts as light, and a syllable with two moras is heavy (Hayman 1985, Hayes 1989, Zec 1988). Supra-syllabic levels include the foot and the prosodic word, the first of which served as a means to define the notion of minimal word and to distinguish among grammatical systems those which use iambs from those which are trochaic.

The minimal word hypothesis, of direct concern to us here, disallows prosodic words which consist of just one light syllable (equivalent to one mora). It states that "any instance of the category Prosodic Word (PrWd) must contain at least one foot" (McCarthy & Prince 1995: 323, which in turn consists of two syllables or moras (Foot Binarity, McCarthy & Prince 1995: 321).

With some noticeable exceptions, some of which are presented in the next sub-section, almost all generative studies of weight and quantity-sensitive phenomena come together on one and the same observation: Weight is a property of the nucleus and the coda (i.e. the rhyme). Onsets never contribute to it.

1.2 Onsets

Weight-by-Position (Hayes 1989: 258) explicitly states that "prevocalic consonants must be parsed as non-moraic onset elements and thus can never receive weight by position". All quantity-sensitive systems should comply with this statement; and if there were variation it is at the rhymal level that it should occur. Several cases have been reported in this respect, including languages where the coda consonant does not count in syllable weight (e.g. Lardil where a CVC syllable counts as light, Hayes 1989: 255, Hyman 1985: 8), and others where "only [+son] segments within the rime would be projected as weight-bearing" (Hyman 1985: 11). Since then, several studies have challenged the hypothesis that onsets are weightless. Topinzi (2010, 2011) provides a substantial survey in this respect. In addition to languages where the presence or absence of an onset seems to play a role in stress placement (e.g. in Arrernte, C-initial words assign stress to the first syllable, while V-initial stress the second syllable), she has argued that (initial) geminates can be moraic in languages such as Turkese and Pattani Malay, where "words must satisfy a bimoraic minimality criterion" (2008: 6). More recently,

Ryan (2014) has argued that complex onsets can affect weight in quantitative meter, and stress in English (distinguishing empty onsets from those with one, two and three consonants).

The present paper provides another piece of evidence in support of the idea that complex onsets may contribute to weight. It will be argued that certain French hypocoristics require their onsets to be weighted in order for them to meet the minimum size requirement. Contrary to the aforementioned studies, which rely on standard hierarchical versions of syllabic structure, and where the onset barely interacts with other constituents, I will show within Strict CV that only nuclei count in weight; any consonant cluster, whether it corresponds to a complex onset or to a coda+onset sequence, contains an empty nucleus which may project a weight unit.

2. French hypocoristics: An overview of previous accounts

The first studies of French hypocoristics within the generative phonology appeared in the early eighties. The accounts have constantly evolved in line with the theoretical innovations in the field, moving from standard syllabic to hierarchical prosodic analyses, and from representational to computational. Plénat (1982, 1984) proposed that truncated forms like *Toto*, *Fanfa*, *Totor* and *Guiguitte* use a disyllabic template of the form ONO(R), where O, N and R stand for Onset, Nucleus and Rime, respectively. The segmental identification of this template obeys standard association conventions, the basic tenets around which autosegmental representations were organized at that time; The (R) in brackets indicates the optional identification of the rimal position. Twenty years later, the author reinterprets in a joint work with Huerta (2006: 342) the disyllabic template as an emergent object, which results from the interaction of a set of constraints, including FOOT BINARITY, ANCHORING, CONTIGUITY and LINEARITY. These constraints explain, among other things, the size variation in the truncated forms (e.g. Dominique → Dom, Domi) and the choice of segments in the input forms (e.g. **Seb**astien vs. Ho**norine** vs. Em**manu**el, the bolded portion corresponds to the hypocoristic form).

In the same line of thought, Nelson (1998: 186) argued that the French "hypocoristic maps to a bi-syllabic foot", viewed as "an Emergence of the Unmarked effect (McCarthy & Prince 1994)". Her OT-based analysis further addresses the constraints underlying the mapping of the left or right edge of the base into the

hypocoristic form. Two constraints are used: ANCHOR LEFT and ANCHOR RIGHT, which in interaction with other constraints allow selecting the optimal candidates: e.g. Caroline → Caro, Dorothée → Doro, Elizabeth → Zabet, Emmanuel → Manu.

The common point to which these studies lead is that the analysis of the prosodic shape of French hypocoristics requires the use of prosodic hierarchy, through which the notion of minimal word is characterized.

While I remain agnostic as to whether the notion of minimal word has any phonological status *per se*, I will argue in the remainder of this section that there is no need for any hierarchical structure in order to account for the binary character (either syllabic or moraic) of French hypocoristics. I will subscribe to Scheer & Szigetvári's (2005) take that "nuclei and only nuclei" can contribute to weight, whether contentful or empty. The strict CV is one such theory in which both types of nuclei exist.

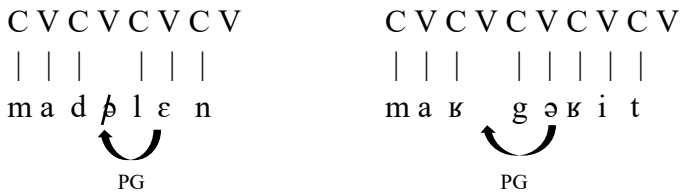
3. A Strict CV reanalysis

An outline of the basic tenets of the Strict CV model proves necessary before turning to the analysis of the French hypocoristics.

3.1 Strict CV representations

The strict CV model, which falls within the general framework of Government Phonology (Kaye et al. 1990), holds that syllable structure boils down to a strict alternation of C and V positions, i.e. onsets and nuclei, which interact laterally to derive various syllables types. Proper Government is one such type of interaction which regulates the distribution of empty nuclei. It allows a vocalic position to remain empty when followed by a vowel. The empty position is said to be properly governed by the following vowel. This proves interesting not only in analyzing the vowel/zero alternations found in many typologically unrelated languages (see Bafile 2019, Lahrouchi 2001, 2018, Scheer 1998, 2004: 81-86, 2015: 129, among others), but also in computing stress and prosodic weight (Scheer & Szigetvári 2005, Enguehard 2014, 2016, Ulfsbjorninn 2014, Faust & Torres-Tamarit 2017, Faust & Ulfsbjorninn 2018). In French, the optional omission of schwa in clusters made of no more than two consonants, is illustrated with *Madeleine* and *Marguerite*. Both given names display a medial schwa, but only the first one can be pronounced without it.

(2) a. [madlɛn] b. [maʁgəʁit] / *[maʁgʁit]



In both examples, word final V positions are licensed to remain empty because French is one such language where words can end in a consonant at the surface form, as opposed to Italian where words must end in a vowel (see Kaye 1990: 314 on domain-final V positions). In (2a), the schwa between /d/ and /l/ can be omitted, since its position is properly governed by the following vowel. In contrast, in (2b) the schwa between /g/ and /r/ resists deletion for it must govern the preceding empty vocalic position. Its deletion would have led to the form *[maʁgʁit], which displays an illicit three-consonant cluster, in reference to Grammont's law (Grammont 1933: 359).

The computation of empty positions proves also interesting in accounting for stress placement, particularly in systems which distinguish between light and heavy syllables. In languages like Latin where stress is traditionally said to fall on the penultimate if it is heavy, otherwise the antepenultimate, Scheer & Szigetvári (2005: 58) propose that "stress falls on the vowel that is associated with the third nucleus from the right edge of the word". This is because the coda consonant in standard syllable theory is represented within Strict CV as the onset of a syllable whose nucleus is empty. It is precisely this nucleus which counts in weight, and not the preceding consonant, as traditionally assumed under moraic analyses. On this view, *fácere* 'do' and *arísta* 'ear, spike', to take but these two examples, are uniformly stressed on the antepenultimate vocalic position (V_3), as shown in the representations in (3).

(3) [fákere] vs. [arísta] (Scheer & Szigetvári 2005: 58)

a. b.



The reader is also referred to Faust & Ulfsbjorninn (2018) for a similar account for stress assignment in Palestinian Arabic. In this language, both contentful and empty nuclei are analyzed as metrically-significant, to the exclusion of domain-final empty

nuclei. Of particular interest is the ability of nuclei to project a metrical grid. Empty nuclei project to level 1, and contentful nuclei to level 2. An incorporation mechanism (Ulfsbjorninn 2014) allows grouping together a contentful nucleus and its neighboring empty nucleus in order to project a higher metrical line (Line 3), where stress is assigned.

The analysis presented in the next sub-section is a continuation of the effort to analyze weight as function of the number of vocalic positions rather than byproduct of prosodic hierarchy. No appeal will be made to feet, syllables or moras.

3.2 CVCV as the minimum size template

The data briefly presented in the introduction are repeated in (4) for the sake of convenience.

(4) French hypocoristics

	Base	*Hypocoristic*	*Weight*	
a.	ʃaʁlɔt	ʃaʃa	2σ, 2μ	"Mireille"
	ʒeʁaʁ	ʒeʒe		"Gérard"
	mikaɛl	mika		"Michael"
	gabʁijɛl	gabi		"Gabriel"
b.	viktwaʁ	vik	1σ, 2μ	"Victoire"
	kχistjɑ̃	kχis		"Christian"
	fχederik	fχɛd		"Frédérique"
	sebastjɛ̃	sɛb		"Sébastien"
c.	florɑ̃s	flo	1σ, 1μ	"Florence"
	klod	klo		"Claude"
	ʒoana	dʒo		"Joanna"

Hypocoristics of the type in (4a,b) are widely attested in French. They consist of either one heavy syllable or two light syllables (sometimes through reduplication of the base's initial syllable). Moraic theory assigns these hypocoristics two moras, under the assumption that nuclei and coda consonants project weight. Of further interest is the mechanism which underlies the selection of the truncated form from the base name. The careful reader will have noticed that all bases in (4) begin with a consonant, which is why

they copy the first syllable into the hypocoristic form (left anchor), Nelson (1998) and Plénat (1999) argue. This is in contrast to vowel-initial bases which resort to right anchor: e.g. *Amélie* → *méli*; *Emmanuel* → *manu*; *Élodie* → *lodi* (though *Elo* is also attested). I will not dwell much on the description of these hypocoristics (cf. section 2). Rather I will focus on their prosodic shape.

The proposal is as follows:

(5) *Minimal Template* (version 1)

> The minimum size template which French hypocoristics use consists of two CV units.

Under this hypothesis, the forms in (4a) and (4b) do not require any appeal to light and heavy syllables. As shown in the examples represented in (6), both types fit into the proposed template, except for [kχis] and [fχɛd] to which we will turn soon.

(6) a. b.



At this stage, the analysis makes the same predictions as moraic theory, except for one crucial thing: Unlike moraic analyses, Strict CV states that only nuclei project weight, whether contentful as in (6a) or empty as final V in (6b). There is no need to resort to the coda consonant as a weight-bearing unit (a thorough argument is provided in Scheer & Szigetvári 2005). As mentioned in section 3.1, French, like many other languages in which words can end in a consonant, allows word-final nuclei to remain empty.

The hypocoristics in (4c) display a complex onset, to which standard syllabic and moraic theories deny any contribution to weight. Within Strict CV, complex onsets are represented as a sequence of two simplex onsets which enclose an empty vocalic position. This position is licensed to remain empty since properly governed by the following vowel. In French, and possibly in other languages where similar phenomena are sensitive to onset quantity, the governee and the governor may equally contribute to weight. The representations in (7) illustrate the analysis.

(7) a. b.



Another outcome of the Strict CV analysis arises immediately: The minimum size template corresponds exactly to the minimal domain where Proper Government holds. There is no need to resort to any higher prosodic constituent such as the foot. The minimal word, which prosodic theories derive from foot binarity, is fully defined under the Strict CV analysis. It directly follows from Proper Government. The minimal template in (5) is restated as follows:

(8) *Minimal Template* (version 2)

> The minimal template which French hypocoristics utilize strictly corresponds to the domain where a Proper Government relation holds, viz. CVCV.

Let us now turn to the forms [kχistjɑ̃] and [fχedeʁik] in (4b). One question arises immediately:

- Why aren't their hypocoristic forms simply *[kχi] and *[fχɛ]?

The reason why these forms are unattested lies, I argue, in the underlying nature of the obstruent-rhotic cluster. This cluster behaves as a complex segment, which is associated to only C slot. This is not a new idea, as many scholars including Fujimura & Lovins (1978), Hirst (1985), Rennison (1998), Lowenstamm (2003), and Duanmu (2008) have already investigated this line of thought. In its most radical conception, a complex segment is viewed by Duanmu (2008: 26) as the result of the merger of two sounds, provided that the combination does not entail the repetition of one articulatory feature twice in the same sound. As to Lowenstamm (2003: 06), he claimed that the so-called *mutæ cum liquidā "make no difference in stress assignment because they are monosegmental"*. Under his analysis, /tr/ in English *attrition* [ətrɪʃn̩] "is no more a branching onset than that in addition [əˈdɪʃn̩]" (p. 8).

I take this view as a starting point, but I claim that in French only obstruent+rhotic sequences can merge into a single complex segment. On the contrary, Obstruent+lateral behave as genuine clusters. Their second member contains a [- Continuant] feature, which

allows distinguishing it from the rhotic consonant (Halle & Clements 1983). In Element theory (Harris 1990, 1994, Backley 2011, among others), the lateral consonant has a closure element, represented as |ʔ|, while the rhotic lacks it.[2] French requires the element |ʔ| to be associated to its own C- slot, as opposed to /r/ which may merge with the preceding obstruent to from a single segment. Under this view, the illformedness of *[kχi] and *[fχɛ] is ascribed to their failure to comply with the minimal CVCV template. The situation is depicted in (9).

(9) a. */fʳe/ b. /fʳɛd/ c. /flo/

C V	C V C V	C V C V
| |	| | |	| | |
fʳ e	fʳ ɛ d	f l o

The monopositional nature of the onset in /fʳe/ yields the identification of only one CV unit (9a). In order to meet the minimal template requirement, an additional segmental material is needed from the base name, hence the postvocalic /d/ (9b). The closure element |ʔ| present in the lateral consonant prevents it from merging with the preceding obstruent into a complex segment which would require only one C-slot (9c).

The role of closure, viewed here as a decisive feature, has been highlighted in hypocoristics other than French. It has been studied in several unrelated languages, such as Gadsup (Papua New Guinea), Soninke, and Tamazight Berber (see Ulfsbjorninn & Lahrouchi 2016), but has also been put forth in Spanish hypocoristics. Piñeros (2000) and Plénat (2003) noted the tendency for hypocoristic formations to change the base's fricative which appears in the onset position into a stop: For example, **f**ransisko, al**f**onso, del**f**ina, aw**ɣ**usto, and **x**asinto are truncated as **p**an**ʧ**o, **p**on**ʧ**o, **p**ina, **k**a**ʧ**o, and **k**uto, respectively (the affected segments are in bold). They analyze this within OT framework as the emergence of the unmarked.

4. An excursus into Berber

Berber has two types of hypocoristics: syllabic and templatic. By syllabic I mean truncated forms of the type discussed in French. Templatic ones use Semitic-like patterns,

[2] Although Backley's version of Element Theory slightly differs from the one proposed by Harris, both agree on the fact that the closure element |ʔ| is present in /l/ but not in /r/ (see Backley 2011: 169-177, Harris 1994: 171).

with an ordered sequence of consonantal and vocalic segments. Some examples of the latter type are given below in (10).

(10) **Berber templatic hypocoristics** (Taïfi 1991: 878, and Boudlal & Yeou 2019: 58)

ʕisa	ʕ$^{(ə)}$ssu
hmad	ħ$^{(ə)}$mmu
ʕbdˤullah	ʕ$^{(ə)}$bbu
χadiʒ	χ$^{(ə)}$dduʒ
rqijja	r$^{(ə)}$qquʃ
m$^{(ə)}$ħfudˤ	ħ$^{(ə)}$ffu

The superscript and bracketed schwa is either omitted as in Tahslhiyt or realized as in Tamazight. All forms in (10) display the same prosodic pattern of the form $C_1^{(ə)}C_2C_2u$, the last vowel of which is followed by a consonant in the case the base noun is triconsonantal. Formations of this type are also found in Arabic: e.g. *basma* → *bassuːm*, *hasan* → *hassuːn*, *salmaːn* → *salluːm*, *riːma* → *ramruːm*, *zaki* → *zakzuːk* (see Davis & Zawaydeh 1999, Prunet & Idrissi 2014, and Boudlal & Yeou 2019 for further data and analysis).

The other type of hypocoristics is found in many Berber varieties including Tashlhiyt (see Boudlal & Yeou 2019 for similar data in Tamazight[3]). It exhibits the same minimal size as in French. Tashlhiyt, the variety investigated here, is well-known for its extensive use of consonant clusters, resulting in utterances without any vocalic segment. Since the mid 1980's, it has been proposed that in this variety any segment, even a voiceless obstruent, can be syllabic (see Dell & Elmedlaoui 1985, 2002, and Boukous 1987). This hypothesis has been taken up by several scholars in the analysis of various prosodic phenomena, such as in the imperfective and the causative formations (see Jebbour 1999, and Bensoukas 2001, and Hammane 2010). It will be of paramount interest to us in the analysis of the hypocoristic forms given in (11).

[3] The authors present similar data from the Tamazight variety of Figuig, in Eastern Morocco: e.g. rˤabiʕa → biʕa, lmadani → dani, ʕiʃa → ʃʃa, χadiʒa → χχa.

(11)	*Base name*	*Hypocoristic*
a.	brahim	bihi
	fadˤna	fadˤn
	zajna	zajn
	ʕbdˤollah	ʕabd
b.	muħmmad	muħ
	ʕiʃa	ʕiʃ
	lħusajn	hus
c.	blʕid	blʕ
	blqasm	blq
	ʕbdˤollah	ʕbl
	rqijja	rqq

The examples are sorted into three classes based on whether they display a mono- or bisyllabic foot. Within the standard syllabic theory, the forms in (11a) display two light syllables, the second of which may have a syllabic consonant. Those in (11b,c) display one heavy syllable. Under the strict CV analysis, all of these forms uniformly fit into a two-CV template, except for the form *rqq*, whose geminate requires an additional C slot.

Analyses diverge as to whether syllabic consonant are monopositional, associated to one V position, or bipositional, branching into VC (left-branching) or CV (right-branching). The reader is referred to Blaho (2004), and Scheer (2004: 302) for details and analysis within the framework of Government Phonology and Strict CV. For the purpose of the present study, I adopt the following ideas put forth in Hammane (2010): (i) Tashlhiyt syllabic consonants attach only to one vocalic position, and (ii) sonorants take precedence over obstruents in the competition for the syllabic position (referred to as SonPriority below). In addition, I assume that final nuclei may remain empty in Tashlhiyt (see Lahrouchi 2001, 2018, among other works). The representations in (12) illustrate the analysis.

(12) a. ʕabd b. muħ c. blq d. ʕbl e. rqq

C V C V	C V C V	C V C V	C V C V	C V C V C V
| | | |	| | |	| | |	| | |	| \ /
ʕ a b d	m u ħ	b l q	ʕ b l	r q

The final V in (12a) and (12b) is licensed to remain empty. SonPriority allows the association of /l/ to the final V in (12d) and to the medial V in (12c). This proves necessary especially in (12c), since it determines which of /q/ and /l/ is syllabic. As to the form in (12e), it shows how an extra CV is need for the association of geminated /q/. This does not really challenge the analysis, since the proposed CVCV template stands for the minimum size, which hypocoristic forms may display. Tashlhiyt, like many other languages, does not disallow hypocoristics that exceed the minimum size requirement: e.g. *lħusajn* → *lħus*, *mrjam* → *mrim*, *blqasm* → *blqs* (in variation with *blq*), *ʕbdlqadr* → *ʕblq*.

The representations in (12) may raise, I have to admit, one problem with regard to the way syllabic consonant are selected. SonPriority may be seen as a kind of constraint which appeals to sonority in order to identify among segments the ones which sit in the nucleus position (see Dell & Elmedlaoui 2002: 73 for Tashlhiyt). It is used in order to achieve the same syllabification patterns as in the model proposed by Dell & Elmedlaoui.

The relevant literature highlights two pieces of evidence in favor of Dell & Elmedlaoui's model, namely (i) gemination in the imperfective stem and (i) poetic meter. The sonority-driven syllabification their analysis promotes proves interesting in predicting which of the initial or medial consonant sits in the onset. This position is then triggered by gemination in the imperfective, the authors argue (Dell & Elmedlaoui 1988). From this point of view, Tashlhiyt appears as an extremely rare typological case because, as far as know, no other language has been reported with a morphological operation that triggers the syllable onset. As to poetry, the authors argue that their syllabic algorithm allows determining the nature and the number of syllables required by the meter (Dell & Elmedlaoui 2002: 339).

An alternative to the authors' account for gemination in the imperfective is proposed in Lahrouchi (2010). It is claimed that vowelless verbs, the ones which typically resort to gemination in the imperfective, display a binary head-complement structure,

where the head consonant (equivalent the onset in Dell & Elmeldaoui's 1988 analysis) is the target of gemination in the imperfective.

In Government Phonology and Strict CV, sonority has no phonological status; it is a derived category rather than a phonological prime, according to Scheer (2004: 51). A thorough discussion of this issue will stray from the main subject of this paper. Whether sonority is used or not does not affect the analysis proposed here. In either case, the Tashlhiyt hypocoristics fit into exactly two CV units.

One way to address the problem of syllabification in Tashlhiyt within Strict CV is to simply use Proper Government as a means to identify the syllabic consonant. We leave it to future work the question of which of the standard syllabic or the strict CV approach yields the accurate syllabification in the language. The representations in (12) are restated in (13), without recourse to sonority.

(13) a. ʕabd b. muħ c. blq d. ʕbl e. rqq

a. ʕabd	b. muħ	c. blq	d. ʕbl	e. rqq
C V C V	C V C V	C V C V	C V C V	C V C V C V
| | | |	| | |	| | |	| | |	| \ /
ʕ a b d	m u ħ	b l q	ʕ b l	r q

As shown in (13a,c,d), ungoverned empty positions host syllabic consonants. These consonants function as vowels, as they can govern the preceding empty V (13c,d). In the end, only the syllabification of the form in (13c) changes in comparison with (12c): /l/ is syllabic in (12c), while in (13c) it is /q/ which appears in the nucleus position.

Conclusion

In this paper, largely devoted to the hypocoristic formations in French, I have argued that the minimum size which these formations display corresponds to two CV units, which constitutes the exact domain within which Proper Government applies. Prosodic weight is calculated based on the number of the vocalic each form contains; there is no need to appeal to any prosodic hierarchy, neither subsyllabic nor suprasyllabic.

I have further proposed that among the obstruent-liquid clusters, only those which contain a lateral consonant behave as complex onsets; the empty V slot they contain counts as a weight-bearing unit. On the other hand, I have claimed that obstruent-rhotic sequences underlyingly form one single segment, which is associated to one C slot. The

closure element present in melodic structure of the lateral explains why this consonant cannot merge with the preceding obstruent to form a single segment.

In support of the proposed analysis, I have provided a brief account for the structure of Tashlhiyt Berber hypocoristics. I have suggested that they fit into the same template as in French, provided syllabic consonants are used.

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