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Floating Consonants in French: the need for the skeleton in input (and related issues)

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OT and GP don't seem to differ on the basic notion that phonology is, in its purest form, the science of how sound structure of the input (UR) is different from the sound structure of the output (SF). In GP, a floating consonant is a segment which is part of the lexical entry of a word but isn't attached to its skeletal point. If nothing changes the floating consonant will remain unattached and thus un-parsed. Phonology is change, thus a phonological effect, in this area, will result in the uncoupled segment coupling ('epenthesis') just as phonological effects can lead to a coupled segment uncoupling (deletion).

'Epenthesis' is in brackets because there is a conceptual difference between the insertion of phonological material into the output and the phonological material of the input surfacing in the output. The latter will be called *surficant* in this essay. Surficant segments are lexically specific and variant meanwhile epenthetic segments are stipulated by the grammar of the language and so will be identical in association with all lexical items[1]. In GP this is an unspoken tenet[2]. OT also views surficant consonants and epenthetic consonants as different with epenthetic consonants occurring with a lowly ranked DEP and floating consonants surfacing by a highly ranked PARSE-X (Prince and Smolensky 1993 and Tranel 1995, ms. respectively).

The difference between GP and OT in terms of floating consonants is that GP considers syllabification to be a feature of the lexeme itself and thus a feature of the lexicon. Syllabification in GP isn't a phonological process it is a phonological *status quo*. Conversely, in OT, syllabification is imposed on the lexical material (input) by constraints such as NO CODA. This difference of opinion is relevant to this essay in as much as these hypothesis help or hinder our understanding of floating consonants. The scope of this essay is not to compare and contrast GP and OT, rather, in order to understand floating consonants in OT we must understand two things, the nature of input and the nature of output, especially with respect to syllabification.

Section one will show how French floating consonants are problematic for a correspondence theory (McCarthy and Prince 1995) which makes two strong claims: there is only one step of derivation and the input is not syllabified. If input is not syllabified, the assumption that floating consonants are treated differently from non-floating consonants with regards to PARSE X has to be a consideration made *after* consonants have (or have not) been attached to skeletal points in the first place (in line with Tranel's assumptions (1992, 1993, 1995, ms.)). Section Two will show that the ideal one step derivation can still be maintained in containment theory (Prince and Smolensky 1993) but that what allows this approach to work is no different from Tranel's practice of introducing syllabification, at least partly (the skeleton) into the input, the significance and consequences of which are not at all discussed in Tranel (ms.). Section three will then ask itself the next logical question: if syllabification up the skeleton is in the realm of the lexicon and Goldrick (2000) shows how metrical structure can also be part of the input then should we understand (as Government Phonology does) that all basic syllabification is a characteristic of the lexicon and thus not a process but a *status quo*. Arguments promoting this are presented which include a brief discussion of Kenstowicz's Base-Identity constraint and its application to Spanish' /-ito/ vs. /-cito/.

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1 naturally these epenthetic consonants are not immune to phonological processes and constraints so there is, clearly, room for variation but this variation will be restricted by UG (more firmly) than with 'floating consonants' which are lexically specific

2 (French (A,I) epenthesis vs. schwa surfacing (Charette 1991)

Section One

Syllabification in OT

In containment and correspondence theories of OT, the input is simply a sequence of feature bundles which otherwise lack autosegmental information including syllabic information. The feature bundles are assigned their syllabification by language specific options in the ordering of constraints such as No Coda >> ONSET, this ranking would exclude */tat.a/ and select for /ta.ta/ (Kager 1999:95).

Optimality theory in its inception was a reaction against SPE rule-based systems which allowed for rule ordering and derivations (Prince and Smolensky 1993, McCarthy and Prince 1995). Perhaps more unconsciously OT was also reacting against representational theories of phonology which allowed the lexicon to house non-predictable and language specific information such as syllabification (Kaye et al. 1985, Kaye et al. 1990, Charette 1991).

OT was designed to be a monotonic theory in which there was only one step of derivation thus rule ordering was automatically excluded. This restricted the theory considerably which is the aim of any scientific framework (Chomsky 1999, Kaye p.c). OT also chose to abolish as much information from the lexicon as possible opting for this to be encoded as a list of phonological faithfulness and markedness constraints. The result of these two decisions is that syllabification, reduplication, stress etc... are all understood to be processes running in parallel.

/ko arte/ [kor.te] (imaginary language a)
/ko art/ [ko.rte][3] (imaginary language b)

language a)

*V-V >> MAX-IO >> No Coda >> *COMPLEX^{ONS}

/ko arte/	*V-V	MAX-IO	No Coda	*COMPLEX^{ONS}
ko.ar.te	*!		*	
--> ko.rte		*!		*
kor.te		*	*!	
ko.te		**!		

language b)

*V-V >> MAX-IO >> *COMPLEX^{ONS} >> No Coda

/ko arte/	*V-V	MAX-IO	*COMPLEX^{ONS}	No Coda
ko.ar.te	*!			
ko.rte		*	*!	
--> kor.te		*		*
ko.te		**!		

What we see from these two tableauxs is that vowel deletion and syllabification are

3 sonorant-obstruent word initial sequences are rare but not unknown see Semitic clusters (Lowenstamm 1999))

contemporaneously processed in a one step derivation.

To maintain this this strong position, which restricts the theory, inherently leads to loosing data coverage. Speaking for syntax, Chomsky points out that this is not necessarily a negative consequence (Chomsky 1999) and it singularly allows universalisms to be stated (Chomsky p.c). This may well be correct, however, it stands as an extreme position. In the case of the one step derivation axiom and the field of phonology the excluded data set has been shown to be large. It should also be noted that the data sets within this list are not linked by anything other than being problematic for one step derivations: spirantisation in Tiberian Hebrew (Koontz-Garboden 2001), dipthongisation in Slovak (Kula 2006), directionality of tonal application in Hakha Lai (Hyman and VanBik 2002) and the interaction between the Yawelmani vowel harmony, lowering and shortening (in Stratal OT Baker ms.).

The above are frequently referred to as opacity effects these deriving from generative phonology bleeding and feeding orders commonly found across languages of the world (Kenstowicz and Kisseberth 1971, Trask 1997). If the strong position of the one step derivation hypothesis was to be maintained the above data sets and many more would be excluded from the field of phonology, deemed: 'not phonology'[4]. The question of 'how' we keep the above data has been the focus of much recent research with a number of theories proposed: Constraint Conjunction (Smolensky 1993), O-O Correspondence Theory (McCarthy 1995) Sympathy Theory (McCarthy 1998), Stratal OT (Kiparsky 2000), Candidate Comparison (McCarthy 2006) amongst others...

Floating consonants, this essay hopes to show, are inherently opaque, at least in certain languages, and thus these are problematic for the one-step derivation approach. Interestingly, it may be possible to explain this opacity as not being derivational at all, thus keeping the one step derivation concept. The price this names is a tolerance for more than just segmental information in the input: a move towards an annotated lexicon (cf. work on Turbidity (Goldrick 2000)). This is actually in tune with Tranel's OT research in floating consonants in French although not acknowledged. Any economy of representation, particularly in its layers is highly preferable and therefore if something akin to turbidity could work in OT it would be a better answer than resorting to the less economic solutions to other forms of opacity (named at the end of last paragraph). What I will want to show, however, is that my turbidity-like solution to the problem of floating consonants in French is essentially containment theory (Prince and Smolensky 1993).

How Floating Consonants are Opaque

The general problem raised by floating consonants is that they are treated differently from non-floating consonants by the phonology. In a representational theory of phonology this would be explained by positing differing underlying representations. That is the representation for /t/'s that behave in one way would be somehow different to the representation for the /t/'s that behave in another. OT also has this as an option in its grammar. If the vowel of a morpheme could either be tense or lax [a] or [æ], depending on harmony say, while vowels in the lexemes never 'switched' ie. in a word /pat/ the /a/ never, under any circumstances, was realised as [æ], we could say the following:

In the input a lexeme such as /pat/ is /p-a-t/ and this could be contrasted with the minimal pair /pæt/ which in the input would be /p-æ-t/. In the suffix, however, we could claim that, as its tense-lax feature varies with respect to its antecedent vowel, the vowel of the suffix is not specified for tense-lax and as such the suffix's input would be /-A/ (cf. underspecification Steriade 1987, Archangeli 1988).

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4 overlength before voiced obstruents in New York English was adamantly seen by GP as being 'phonetics' until this year by Markus Pöchtrager (Charette p.c).

Now consider a case where floating consonants delete word-finally in a language which also allows word-final consonants. In French words like 'net' (clear) retain their word-final /t/ in all contexts meanwhile words like 'petit' (small) loose their word-final /t/ in a number of contexts. The former have been referred to as fixed and latent 't' respectively (Tranel ms.).

OT cannot, this time, explain a seemingly unified element behaving differently due to their lexical specification. The two /t/'s of French are not acoustically different and are both clearly /t/, however, in 'net' the /t/ is treated differently from the /t/ in 'petit'.

No theory could claim that the word final /t/ in 'petit' was epenthetic intervocally as the same phenomena can be found with the word-final consonants of 'bon' [n], 'suis' [z]. It is clear that the word final consonants in 'petit', 'bon' and 'suis' are lexically specific (surficant), non predictable and thus not epenthesis.

So the surficant /t/ isn't epenthesis which is ruled purely by the general grammar of the language, thus the conclusion is that surficant /t/ should be part of the input. This claim, however, is fraught with danger for a one step derivation theory like Correspondence Theory.

Correspondence Theory and Floating Consonants

Correspondence Theory (McCarthy and Prince 1995) will not be able to account for the phonological behaviour of surficant /t/, it is clearly lexically specific but it isn't treated like the lexicaly specific /t/ in 'net'. The two /t/s should be said to have different underlying representations although correspondence theory disallows annotation of the input other than segmental.

If we posit that surficant /t/ is part of the input and it only surfaces in local cases of hiatus we should assume that all /t/s in such positions in the input are surficant. That is, 'petit' would be represented as /p-e-t-i-t/ with 'net' being represented /n-e-t/ and if this was all the information available at the input the phonology wouldn't differentiate the two.

The fact of the matter is that floating consonants cannot be analyzed in the same way as 'normal' segments of the input as their deferring behaviour evidences. Correspondence theory, with its strong claim of what the input is, fails because it is unable to incorporate into itself a way to render floating consonants as different from any other consonants.

Previous analyses have considered that the surficant /t/ of French was syllabified as an onset while fixed /t/ was syllabified as a coda (Morin and Kaye 1982). Although this theory creates could unify the floating consonants in that they could be targeted by an OT constraint such as *CODA# 'no coda morpheme finally' which could be ranked above MAX-IO and below *V-V.

A word like 'net' would have no trouble as having defined the word final /t/ as an onset it is invisible to *CODA# and thus as we see in the next tableux we obtain the desired results firstly with 'net' before a vowel and secondly 'net' before a consonant.

/net a/cou... /	*V-V	*CODA#	MAX-IO
ne a	*!		*
--> net a			
--> net cou...			
ne cou...			*!

Conversely in a word like 'petit' we would assume that the word final /t/ was a coda and thus its surfacing would only be allowed intervocally as is the case

/petit a/cou... /	*V-V	*CODA#	MAX-IO
peti ami	*!		*
--> petit ami		*!	
petit cou...		*!	
--> peti cou...			*!

The problem with the above analysis is that in order to make it work we've had to define *a priori* the syllabification of the word in question. This theoretically requires that we accept syllabification to be stored in the lexicon, that is children would acquire that the /t/ at the end of /petit/ was an onset while the /t/ at the end of 'net' was a coda, this information would be associated with the lexical entry (input).

Correspondence theory does not allow this to be the case. Containment theory, on the other hand, which also syllabifies its inputs with constraints (ie. during EVAL) seems to have a tidy solution to the problem. I will show in the next section, however, that this solution is nothing other than positing what Tranel (ms.) proposes without understanding the theoretical consequences of the action.

Section Two

Containment Theory and Floating Consonants

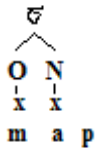
Containment theory would deal with floating consonants by representing them differently from other segments in the input. The hypothesis being that segments in the output are never deleted they are merely unparsed:

> "*No element may literally removed from the input form. The input is contained in every candidate form.*"
>
> (Prince and Smolensky 1993)

In this system the words 'net' and 'petit' would in the input be /n-e-t/ and /p-e-t-i-<t>/. PARSE(-IO) would be a faithfulness constraint which would force all segments of the input to be expressed in the output (in Kager 1999:100). If however, PARSE was ranked beneath a markedness constraint such as *V-V and below *CODA#, then, in intervocal position we would see the unparsed segments surfacing but not before consonants.

/peti<t> ami/cou.../	*V-V	*CODA#	PARSE-IO
--> petit ami		*	
peti< > ami	*!		*
petit cou...		*!	
--> peti< > cou...			*

The above system works but it has an underlying conceit, namely, that <t> means anything more than 'extrasyllabic' or 'unattached to x (against PARSE-X (Tranel ms.). Elements within angle brackets such as /ma<p>/ are seen in Kager as unparsed segments appearing unattached to the syllable they could belong to (Kager 1999:100):



Of course Kager's diagram represent a floating consonant and its lexeme after EVAL, however, it remains the case that in an input such as /peti<t>/ PARSE-IO being overridden by other constraints is only applicable to elements within the angle brackets. The other segments are parsed automatically. Therefore the angle brackets themselves state that the segments within them should only be parsed if other conditions allow them to, or from the other angle: they shouldn't be parsed *unless* other conditions require them to. The case for French is that an intervocalic environment will force the coda to surface, that is, considering the elements within the angle brackets to be unparsed the situation that this results in /V+V is disallowed by *V-V and as such the floating consonant is attached to the syllable of the lexeme and blocks the hiatus. That is, material found within angle brackets in inputs of containment theory is *expected* not to be parsed and will only be syllabified under certain circumstances. The surficant /t/ in 'peti<t>', therefore, is inherently un-syllabifiable whereas the other segments are inherently syllabifiable.

Tranel (1992, 1993, 1995, ms.) sees the above not in terms of potential syllabification but as actual 'syllabification'.

> "*I assume that latent consonants in French are floating with respect to the skeletal tier*"
> (Tranel ms.:3)

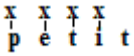
Although Tranel (ms.) doesn't explore the implications of this statement the claim is rather radical. The skeleton is a property of syllabification, it is a mediant stage between the melodic and the constituent layers (Kaye and Lowenstamm 1984, Levin 1985). Although of course this is not full syllabification to assume that in the input segments are attached to an autosegmental entity is already a massive innovation to the standard correspondence theory which Tranel (ms.) works in.

I would suggest that Tranel (1992, 1993, 1995, ms.) is right in his instinct that the floating consonants should be lexically unattached to the skeletal layer unlike the other segments. The idea is not new to him and was standardly used in Charette (1988, 1991) for the same French data. What Tranel (ms.)'s work suggests is the answer to what '< >' actually means in containment theory. The material in angle brackets has been shown to be inherently unattached to the lexeme or at least treated differently from the other segments that is not attached to a skeletal point unlike the other segments. The argument being that OT must accept, at least this, autosegmental information to be part of the lexical entry and thus the input.

An adjective like 'net' therefore would have its skeletal associations expressed as a feature of the lexicon while another adjective like 'petit' would have its word final 't' marked as unattached to a skeletal point.

'net' adj., xn xe xt

'petit' adj., xp xe xt xi t



Tranel's (ms.) assumption, which I have argued is directly analogous to containment theory's tool 'the angle brackets', are essential to understand the difference in behaviour between the surficant and the fixed codas of French. PARSE-X would take the above and treat the word final /t/s differently in exactly the way we would want, if PARSE-X is outranked by *V-V then we obtain the full facts: the floating consonant surfacing.

The first pair of tableaux shows 'net' and 'petit' and how PARSE-X handles them differently.

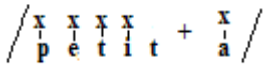
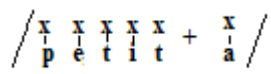
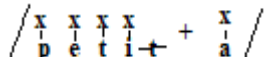
/x x x/ n e t	PARSE-X
--> net	
ne< >	*!

/x x x x x/ p e t i t	PARSE-X
a) petit	*!
--> peti<t >	

The above tableaux shows us also that PARSE-X has a reading which is not simply 'parse all x's' but 'parse only x's'. If the former reading is employed PARSE-X wouldn't select against candidate (a) as in it all x's *are* parsed. This also allows us to understand why *V-V and PARSE-X are antagonistic constraints with regards 'petit' but not 'net':

/x x x + x/ n e t a	*V-V	PARSE-X
/x x x + x/ n e t a -->		
/x x x + x/ n e a	*!	*

The above shows that *V-V and PARSE-X are not contradictory all segments are attached to x's so PARSE is essentially a constant and not active in the above tableaux. In 'petit' however, we see that PARSE-X can be superseded by *V-V:

	*V-V	PARSE-X
 -->		*
	*!	

Section Three

Skeletal Syllabification and OT

The above is essentially similar to turbidity (Goldrick 2000). A totally lexically specific feature should be expressed as part of the lexical entry and thus the input despite what form this phonological feature takes. It could be floating consonants, empty syllabic and morae (Goldrick 2000), stress placement (Revithiadou ms.). As we saw in the previous section it is false to assume we can account for floating consonants in French without resorting to annotating the input (lexicon) this and the heterogeneity of what has been allowed to be part of the input begs an important question. Should syllabification itself be part of the input.

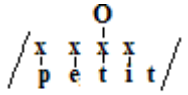
Attachment to the skeletal tier is the first conceptual step in syllabification, if we know this occurs in the lexicon (at least in French)[5] then it is possible that other stages of syllabification could also be features of the lexicon.

Optimality of Theory

A feature which is always universally attested will not need to be expressed by a process. The constraints are akin to phonological processes but this is seemingly redundant. That is, if onsets *always* maximise over codas then an intervocal consonant word-medially will *always* be an onset (Kager 1999:95). To attribute this consonant to an onset by the use of freely rankable constraints is redundant and generally flawed as it would be nothing else in the universe anyway. Kager makes the point by showing that in a tableaux of ONSET, NO CODA there will never be a ranking which will favour [bab.a] over [ba.ba]. This should be no surprise as to a series of segments such as /b-a-b-a/ either of the two constraints outputs in isolation will produce the same result excluding /bab.a/ (Kager 1999:95). With regards the intervocalic consonant one of these two constraints is redundant to it, or better, the two constraints are one constraint, or even better: underlyingly the intervocalic consonant is an onset. As no ranking of constraints can impede the intervocalic consonant from being an onset to have this restriction in constraint terms is redundant. We can simply say that the onset is syllabified in the input. An optimal theory would eliminate redundancy of description and simply list the intervocal consonant which is always an onset, lexically, as an onset. That is the fact

5 in French we see UG allowing syllabification (up to the skeleton) in the input, lexicon. We would not want to exclude other languages from these findings in the same way as the phonological apparatus should be identical in all languages. That is EVAL and GEN and their functions should be universal, the language variation should come from details of configurations (such as the constraints) not from the mechanism itself (Charette p.c. Chomsky p.c, Kaye p.c)

that the intervocal consonant is attached to an onset is a *status quo* not the end point of a process.



lexical form of 'petit' from above dicussion

Similarly, the attachment of vowels to nuclei is so predictable that it should also be a feature of the lexicon. As far as I'm aware there isn't a syllabification constraint for vowels, OT seems to accept that a singleton vowel is so naturally going to associate with a nucleus that the job of doing this should not fall on constraints (which are prototypically freely ranked and thus for every constraint its opposite ranking is a possible grammar). If attachment of vowels to nuclei is not a function of the constraints then we should assume that singleton vowels are always, inherently and thus underlyingly attached to nuclei. This is another area which could be delegated to the lexicon.

Base Identity and Syllabification in the Lexicon

The Base-Identity constraint proposed by Kenstowicz (ms.) brings about proof that to avoid some opacity effects (in the form of O-input syllabic correspondence) we should imagine the lexicon and input to be syllabified.

The principle of base identity is that the constraint Base-Identity takes the candidates and compares them to existing words of the lexicon. What Kenstowicz doesn't highlight (possibly for good reasons) is that this constraint matches candidates to outputs not inputs. Whether their own inputs or other inputs this doesn't seem to matter for our purposes, the point is that this constraint has access to the outputs of the entire lexicon. In processing terms this seems grandiose. Also, it destroys the notion of parallel processing, in Kenstowicz's model we have the output of a form decided by the already processed outputs of other forms. What is more believable is that the Base-Identity constraint has access to all the forms of the lexicon, that is the inputs. Otherwise we have to ask where all the outputs to our forms are stored and if they are so stored then why aren't they freely accessible by the brain thus without recurse to GEN and EVAL every time we produce a word.

The case of Spanish diminutive morpheme selection makes this point clearly. In Spanish there are two allomorphs for the diminutive suffix, /-ito/ and /-cito/.

perro	perrito	*percito	'dog'
gato	gatito	*gatcito	'cat'
amor	*amorito	amorcito	'love.N'
raton	*ratonito	ratoncito	'mouse'

Although of course it is true that the suffix /-ito/ occurs after words ending in vowels while /-cito/ co-occurs with words ending in consonants this is purely a description and says nothing about why such a thing would happen. A credible explanation as to why the above happens was suggested in our UCL 'Advanced Phonological Theory A' tutorial as being a type of base identity effect.

The word-final consonants in the derived candidates where understood to be compared to the syllabification of the outputs of their derivators. If the /t/ in the root /gat-/ of the output form /gato/ was an onset then the candidates in which this analogous /t/ was placed in a coda would be automatically excluded by Base-Identity. If, however, the analogous consonant to the analogous consonant was a coda then to put it in onset position would similarly be violating base identity.

Of course what the above entails is that there is direct access of output forms by a constraint which itself is choosing an output form. That is, in order to derive /amorcito/ you must first derive /amor/

then and only then is EVAL able to select /amorcito/ as the winner. This isn't any different to cyclicity one needs step one to get to step two.

Another idea could be that Base-Identity is actually comparing the /amorcito/ candidate with a list of 'ready made' output forms. If this is the case, however, we must ask where these output forms are stored (if not the lexicon) and why they aren't directly accessible by the morpho-syntax every time they themselves are required. Essentially, what base in Base-Identity?

If we allow ourselves however, to syllabify the input of the Spanish /amorcito/ and /gatito/ we can perform the whole of what we did above with Base-Identity without leaving one step of derivation.

If we assume that the input /gato/ had the /t/ in an onset then there would be no requirement for EVAL to check the output of /gato/ for the syllabification of the corresponding /t/s. Base-Identity would still the be the constraint but it would be, in this case, a faithfulness constraint which compared candidates for syllabification faith with the input. Once this has been achieved what appears to be a cyclicity or comparing 'separate outputs' (Kenstowicz ms.:29) would be nothing but another type of I-O faithfulness constraint.

/amor/ --> /amorcito/

/a.mor. i.to/	Base-Ident	DEP-IO
a) a.mo.ri.to	*!	
--> b) a.mor.ci.to		*

/gato/ --> /gatito/

/ga.to i.to/	Base-Ident	DEP-IO
--> a) ga.ti.to		
b) gat.ci.to	*!	*

Assuming the above argument is favourable then it would be evidence for a possible syllabification of the lexicon. This doesn't at all preclude constraints from having effects to syllabification it would simply relegate the constraints to being involved with changing the syllabification of in the input into the output (or not, depending on individual rankings). For instance, re-syllabification on Korean morpheme boundaries would have to be done with constraints changing the syllabification of two inputs /root affix/ *not* the syllabification of two outputs. In short, to allow syllabification in the lexicon in many cases brings OT back to its one step derivation roots.

Conclusion

This essay has shown that correspondence theory (McCarthy and Prince 1995) and two of its major assumptions: 'one step derivation' and 'no autosegmental material in the input', are questioned by floating consonants in French. French floating consonants are troublesome for a theory of impoverished inputs because French allows codas which in all respects (apart from behaviour) are identical to the floating consonants (Tranel 1992, 1993, 1995, ms.). We saw that the two French adjectives 'net' and 'petit' had differences in behaviour of their morpheme final /t/ and it was suggested that in correspondence theory no ranking of constraints could differentiate the behaviours of one from the other. This, along with the notion that the floating consonants are truly lexically specific led to the forced assumption that the floating consonants of French are parts of the input and of the lexicon. Although this in itself doesn't seem radical the assumption one makes from it is

that where in a correspondence-theory-input all segments are equal in French it is clear that some input segments are more equal than others. The essay then shows that it was possible to understand the asymmetries of the data iff we took a containment theory (Prince and Smolensky 1993) view of things. It was then shown that what seemed to be straightforeward was actually itself rather radical; the essay asked what was the exact meaning of the angle brackets in /peti<t>/. It was then suggested that this notation was identical to Charette (1988, 1991) and Tranel's (1992, 1993, 1995, ms.) view of floating consonants in which /<t>/ meant: not attached to a skeletal point in the input. We therefore had to accept that attachment to the skeleton, the first step of syllabification (Kaye and Lowenstamm 1984) was actually part of the lexicon and thus the input (essentially turbidity (Goldrick 2000)). This view of PARSE-X and the input being syllabified for X was shown to output the correct data. The next logical question was that if the beginning of syllabification occurs in the lexicon and studies in turbidity have shown that the lexicon/input can also be annotated for metrical structure (Goldrick 2000, Revithiadou ms.) then possibly all basic/predictable syllabification occurs in the lexicon, this theory would be in tune with Government Phonology and any representational theory from Khan (1976) onwards. Some arguments for syllabification occurring in the lexicon were proposed. Firstly, it was shown that for optimality of theory if we know that consonants will always, universally, be expressed as onsets between two vowels (of the same lexeme) (Kager 1999) then this characteristic is not a process it is a *status quo* and thus belongs in the lexicon. Identically if singleton vowels are always attached to nuclei then this as well is a *status quo* and deserving of the lexicon. Finally it was shown that the Base-Identity constraint (Kenstowicz ms.) was violating a highly valuable restriction to the generally permissive OT, one step derivations. It was shown with Spanish morpheme selection that the output of /amorcito/ was completely dependent on matching the syllabic attachment (category) of the /r/ to its derivator /amor/. If syllabification occurs post EVAL and thus only in the output form we have Base-Identity referring to the state of the output of a form to derive the output of another form. That is, the output /amorcito/ can only be decided after the output for /amor/ has been decided. Base-Identity which was supposed to replace cyclicity, in this data and respect, is indistinguishable from stratal theories as one derivation *must* occur for the second to occur. If, however, we opt for understanding the input as syllabified (in the lexicon) we can keep Base-Identity as a faithfulness constraint which (standardly) matches the output with the input. All this with one step of derivation. Similarly to the floating consonants which if we are not ready to accept their (at least) partial syllabification in the input we cannot understand them in terms of a one step phonological derivation.

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