Non-Concatenative Allomorphy and Realize Morpheme

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mfm 17, Manchester

		Non-Cont	Cont	
a.	*Metathesis*			
		q'p'ə́t	q'ə́p't	"patch"
		sx̣ə́t	sə́x̣t	"push"
		t'sə́t	tə́st	"break"
b.	*Reduplication*			
		qə́n	qə́qən	"steal"
		qʷə́l	qʷə́qʷəl	"say"
		kʷúl	kʷúkʷəl	"school"
c.	*/ʔ/-infixation*			
		ʔíɬən	ʔíʔɬən	"eat"
		ʔámət	ʔáʔmət	"sleep"
		wéqəs	wéʔqəs	"yawn"

	NON-CONT	CONT	
a.	*Reduplication*		
	wíqəs	wíwəqəs	"yawn"
	t'íləm	t'ítələm	"sing"
b.	*hə-epenthesis*		
	mə́qət	hə́mqət	"swallow"
	wə́q'ʷ	hə́wq'ʷ	"drown"
c.	*Vowel lengthening*		
	ʔ'imməx	ʔ'i:məx	"walk"
	há q'ʷət	há:q'ʷət	"smell"
d.	*Stress shift*		
	ca:lə́x'ʷəm	cá:ləx'ʷəm	"bleed"
	ɬəlqí	ɬə́lqi	"soak"

Main Claim

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→ different non-concatenative allomorphs = one (abstract) phonological representation for the morpheme

→ an alternative OT approach based on REALIZE MORPHEME (Kurisu, 2001) is:

1. neither necessary (reanalysis in terms of abstract prosodic entities: section 1)
2. nor adequate (empirical mispredictions: section 2)

(3)   *Context for allomorphs: Saanich*

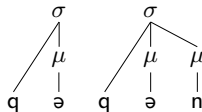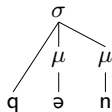| Non-Cont	Cont
Metathesis	
CCVC	CVCC
q'p'ə́t	q'ə́p't
Reduplication	
CVC(C)	CVCVC(C)
qə́n	qə́qən
/ʔ/-infixation	
elsewhere	
ʔíɬən	ʔíʔɬən

Mora affixation

→ different strategies to realize a morphemic mora, i.e. prosodic weight adjustment (e.g. Stonham (1994, 2007), Buckley (2002))
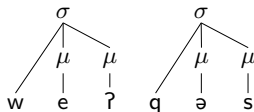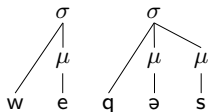
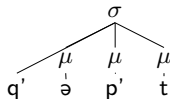# (4) *Mora affixation in Saanich*
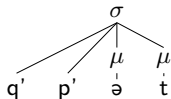

Non-Continuative	Continuative
Reduplication	
/ʔ/-infix	
Metathesis	

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  for certain bases: a less preferred allomorph surfaces

(5)

e.g. Saanich

(6)   Preference for allomorphs :
       ʔ-insertion ≫ reduplication ≫ metathesis

                ⟹ Ranking of faithfulness constraints:
                    LIN ≫ INTEG ≫ CONTIG

(7)   *Contexts for allomorphs in Upriver*

Non-Cont	Cont
Stress shifting	
Stress on non-initial σ	
ʎəwə́ls	ʎə́wəls
Reduplication	
#CV.	CV.CV.
wíqəs	wíwəqəs
hə-prefixing	
#C$_{[+son]}$ə	həC$_{[+son]}$
mə́qət	hə́mqət
Vowel lengthening	
#C$_{Laryngeal}$V	#C$_{Laryngeal}$V:
ʔ'iməx	ʔ'i:məx

Affixation of a morphological foot

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(8)

        a.

        b.

        c.

        d.

        e.

(9)   *Repair strategies to form an optimal foot*

λɛlqí	✔	(λɛ́l.qi)	
	✗	(λɛl.qí)	*RHT:T
wíqəs	✔	(wí.wə.)qəs	
	✗	(wí.qəs)	*WEIGHT-TO-STRESS FOOT
mə́qət	✔	(hə́m.)qət	
	✗	(mə́.qət)	*WEIGHT-TO-STRESS FOOT
ʔíməx	✔	(ʔíː.)məx	
	✗	(ʔí.məx)	WEIGHT-TO-STRESS FOOT

(10)

(10)

(11)

       a.
       b.

(12)   *An example: /hə/-insertion in Upriver*

mə́qət, ()_Ft	RʜT:T	FᴛBɪɴ	WᴛS	*ə́	IᴅL	Iɴᴛ	Dᴇᴘ
a. (mə́.qət)			*!	*			
b. (mə́.)qət		*!		*			
c. (mə́:.)qət				*	*!		
d. (mə́.mə.)qət				*		*!*	
☞ e. (hə́m)qət				*			**

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(13)   *Realize Morpheme*   (Kurisu, 2001)
         Let α be a morphological form, β be a morphological category, and $F(\alpha)$
         be the phonological form from which $F(\alpha+\beta)$ is derived to express a
         morphosyntactic category β. Then RM is satisified with respect to β iff
         $F(\alpha+\beta) \pm F(\alpha)$ phonologically.

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        morphosyntactic category β. Then RM is satisfied with respect to β iff
        F($\alpha+\beta$) $\pm$ F(α) phonologically.

➜ a morpheme can be realized by any conceivable phonological operation a language's phonology provides

- the choice for one (non-concatenative) allomorphs in a certain context follows from:
    1. a preference order for allomorphs
    2. markedness constrainst penalizing certain strategies for certain bases

(14)   *Example: epenthesis in Upriver*

mə́qət_Continuative	ALIGN	RM	IDLENGTH	*ə́	INT	DEP
a. mə́.qət		*!		*		
b. mə́:.qət			*!	*		
c. mə́.mə.qət				*	*!*	
☞ d. hə́mqət				*		**
e. mə.qə́t	*!			*		

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2. too many ways to reorder segments: unattested types of morphological metathesis

3. underlying representation (=impossible output form) can be crucial context for allomorphy-choice: impossible in Kurisu's system

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(15)   *Max-/ə/ must be ranked at least under Integ*

máqət_{Continuative}	INT	MC	MAX-ə	DEP
a. mə́.mə.qət	*!*			
☞ b. hə́m.qət			*	**
c. hə́.mə.qət		*!		**

- but then, deletion of /ə/ (= one strategy to "do anything" and therefore to satisfy RM) is predicted for some stems:

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(16)

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- but both kinds of unattested morphological metathesis are predicted to
  become exponents of the continuative in Saanich

(17)

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→ the choice for a continuative allomorph in Saanich depends on the lexical form of the stem, i.e. the context is masked in the non-continuative output form.

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- recall Kurisu's generalization for the metathesizing continuative allomorph:

(18)	surface form in the non-continuative:		continuative:
	CCVC	$\rightarrow$	CVCC
	(q'p'ə́t	$\rightarrow$	q'ə́p't)

(19)

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- some of those stems surface as CəC in the non-continuative (due to independent phonological process) – /ə/ -ephenthesis masks the context for metathesis

Summary

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➜ non-concatenative allomorphs are different strategies to realize a morphemic empty prosodic categories (mora, foot)

➜ this restricts allomorphs to certain phonological operations and avoids the mispredictions illustrated for a RM-based approach as in Kurisu (2001)