Fixed Ranking and the 'Too Many Solutions' Problem

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CASTL Kick-off Conference
Tromsø
Friday October 3, 2003

1. Too Many Solutions

(1) The *Too Many Solutions* Problem
- Some problems are only ever resolved by a proper subset of possible solutions.

References: Lombardi (1995), Wilson (2000), Pater (2003)

(2) Examples
(a) Ban on voiced codas: resolved by neutralization; never by deletion or epenthesis (Lombardi 1995)
/ab/ → [ap]; ☠[a], ☠[a.bi]
(b) Requirement that nearby vowels agree in nasality: resolved by harmony; never by deletion (Pater 2003)
/mãwa/ → [mãwã]; ☠[mãw], ☠[mãã], etc.
(c) Tonal conditions can be resolved by changes in *tone* (change, shift, deletion, epenthesis), but never by changes in their sponsors.
/ábá/ → [ábà] (by OCP-H); ☠[áb], ☠[ábìá]

(3) The *Too many subsolutions* problem
Deletion in /C_1C_2/ always produces [C_2], never [C_1] (roughly speaking, see below) (Wilson 2000)

(4) The *Too many blockers* Problem
Many prosodic processes are never blocked by feature-based conditions
e.g. AGREE[voice] never blocks syncope:
/abiga/ → [abga], but /apiga/ → [apiga] because AGREE[voice] blocks *[apga].
(cf *prosodic conditions*, which can block syncope)

(5) Who faces this problem?
- Potentially any theory that decouples problem from solution (i.e. almost all constraint-based theories)

(6) Issues
(a) What generalizations lie behind these problems?
(i) Not hitherto addressed in a general way (~Pater 2003)
(b) How to do deal with them.

(7) Aims

(a) To identify the right generalizations [i.e. answer (6a)]

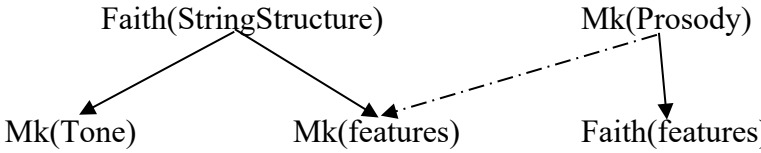
- Feature conditions cannot affect string structure or prosody
- Tone conditions cannot affect string structure; can affect prosody
- Sonority and prosodic conditions can affect string structure and prosody

(b) To provide a solution [i.e. answer (6b)]

☞ Universally fixed rankings

!! Important precursor: Pater 2003 **!!**

(8) The Prosodic Primacy Fixed Rankings (PPFR)



(i) Note: Faith(StringStructure) »» Mk(features) builds on Pater's fixed ranking of Faith(StringStructure) » Assimilation markedness constraints

(9) Structure

§2 The generalizations
§3 The proposal
§4 Case Studies & Predictions
§5 Homorganicty: Why not to worry about it
§6 Alternatives
§7 Conclusions

2. Generalizations

(10) Pater's Pessimism (Pater 2003: 16)

(a) "This observation [i.e. re. Fixed Ranking] however, is unlikely to form the basis of a workable account of possible repairs, because there are instances in which the typology of possible repairs for a given constraint often crosscuts the segmental/featural divide."

(b) "… not only are there broad schemas [like the ones proposed] … but there are also more parochial fixed rankings between particular markedness and faithfulness constraints."

(11) Representational Categories

(a) String Structure (= the number of segments in a candidate and their order)
(b) Sonority
(c) Prosodic Structure
(e) Tone
(f) Features (= subsegmental features)

- cf 'autosegmental planes' of the 1980's.

(12) Related constraints
(a) StrStruc: MAX, DEP, LINEARITY, CONTIGUITY (M&P 1995)
(b) Sonority: sonority-distance constraints
(c) Prosodic Structure: ONSET, NOCODA, FTBIN, etc.
(d) Tone: OCP(H), etc.
(e) Features: *+voice, AGREE[voice], etc.

(13) Direct Influence Generalizations

	Structure				
Constraints	String	Prosody	Tone	Sonority	Features
Prosodic	✓	✓	✓	✓	✓
Tonal	×	✓	✓	×	×
Sonority	✓	✓	×	✓	✓
Featural	×	×	×	✓	✓

2.1 Prosody and Sonority

(14) Prosody and sonority: The heavyweights
Q: What responses can prosodic and sonority conditions force?
A: Anything.

(15) Prosody Example
(a) **Deletion** in Ladahki (Koshal 1979) through *COMPLEX
/bcu/ → [cu] 'ten' (cf /ŋə+bcu/ → [ŋəb.cu] '50')
/ʈuk+bcu/ → [ʈuk.cu] '60', *[ʈub.cu]
(b) **Epenthesis** in Harar Oromo (Owens 1985) through *COMPLEX
/dubr+ti/ → [dub̲arti:] 'girl-nom' (cf [dubr-a])
(c) **Feature change/neutralization**: glide formation through ONSET
/iuniti/ → [juniti] 'unit' (in Niuafo'ou – de Lacy 2000)

(16) Sonority example
(a) **Deletion** of high vowels in Arabic (Abu-Mansour 1987, Gouskova 2003)
/kibir-at/ → [kibrat] – due to *NUC/{i,u}
(b) **Epenthesis** to avoid 'syllable contact'
Nasal+Sonorant clusters provoke epenthesis in Balantak (Pater 2003)
/mɯŋ+memel/ → [meŋ̩ememel] 'to cool'
/mɯŋ+roŋor/ → [moŋ̩oroŋor] 'to hear'
cf /mɯŋ+bala/ → [mambala] 'to fence'
(c) **Feature change**
(i) Nasalization in Dakota codas
/xap/ → [xam] (cf [xa.p-a]) 'to be stripped'
/RED-ʔot-a/ → [ʔ̲on.ʔo.ta] 'be many'
(ii) Vowel sonorization/reduction
(many – Crosswhite 1999)
(iii) Desonorization in Kazakh (Davis 1998)
/murin-lar/ → [murin-dar] 'noses'

(d) Blocks **prosodic structure**:
blocks glide-formation in Niuafo'ou stressed syllables (de Lacy 2000)
/wafu/ → [u.á.fu] 'wharf', *[wá.fu], cf [ju.ní.ti] 'unit'

2.2 Features

(17) Features: The featherweight
Q: What responses can featural conditions trigger?
A: (a) Not deletion, epenthesis, etc.
(b) No changes in prosodic structure
(c) Changes in sonority.
(d) Cannot block prosodically-motivated processes

(18) Force sonority **change**
(a) Voice assimilation; manner assimilation
Korean nasal assim – Cho 1999:88)
/kak+mok/ → [kaŋ.mok] 'stick'
/nap+nita/ → [nam.nita] 'sprout'
(b) Dakota dissimilation: OCP(coronal) forces /l n/ → [k]
/red-zula/ → [zukzula] 'full, filled'
/red-zuta/ → [zukzuta] 'be upright'

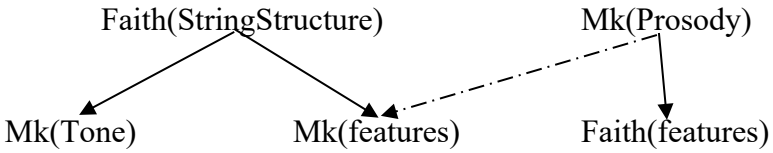
(19) Can **block** sonority neutralization
(a) Dakota nasalization
*ŋ blocks Dakota coda nasalization (cf examples above)
/ʃok/ → [ʃog] 'thick, solid' (cf [ʃok-a])
(b) Vowel neutralization
IDENT[round] blocks neutralization of /o u/ to [ə] in Bulgarian
[rábutə] 'work' cf [rəbótnik] 'worker' (Crosswhite 1999)

3. Proposal

(20) Leading Idea: Universally Fixed Rankings
- Fairly standard response to cases of non-interaction:
  Impose a fixed ranking between classes of constraints.
- However, somewhat rare to impose rankings between markedness and faithfulness constraints, or between classes defined on 'features' vs 'prosody'
  (i) cf Pater (2003), who has has StringStructure faithfulness outranking all assimilation constraints (see below)
  (ii) See Pater (2003§3.2) for discussion.

Note: I exclude fixed rankings between constraints derived from the same harmonic scale (Prince 1997, de Lacy 2002a)

(21) The Prosodic Primacy Fixed Rankings (PPFR)



(a) Faith(StringStructure) = {MAX, DEP, LIN, CONTIG, UNIF, INTEG} (M&P'95)
(b) Faith(features) = all faithfulness constraints that refer to features (i.e. IDENT)
(c) Mk(Prosody) = all markedness constraints that refer to prosodic elements only (e.g. ONSET, NOCODA; not *CODA/+voice, *not* *ONS≤{sonority level})
(d) Mk(features) = all markedness constraints that refer to some feature
(e.g. *+voice, *CODA/+voice; *not* prosody-sonority constraints)
(e) Mk(Tone) = all markedness constraints that refer to tones.

(22) *Today's primary focus*: Prosody-Features interaction

4. Evidence

(23) Symbols
α «» β = α and β are freely permutable (α » β or β » α)
α »» β = α universally outranks β (i.e. α » β, never β » α)
☞ = winner and attested
☠ = winner and not attested
☹ = perpetual loser

(24) Fixed Rankings: Evidence
(a) Faith(StrStruc) »» Mk(features)
(b) Mk(Prosody) »» Faith(features)
(c) Mk(Prosody) »» Mk(Features)

(25) Free Ranking: Evidence (for the interesting cases)
(a) Faith(StrStruc) «» Faith(features)
(b) Sonority-related rankings

4.1 Faith(StrStruc) »» Mk(Features)

4.1.1 Too Many Subsolutions

(26) The C_1C_2 problem (McCarthy 1997, Wilson 2000)
/VC_1C_2V/ → [VC_2V], ☠[VC_1V]
- but featural markedness could favour [VC_1V]!
e.g. /atka/ → [ata] because of *DORSAL
- Further point: /$VC_1C_2C_3V$/ → [$VC_1.C_3V$], *[$VC_2.C_3V$]

(27) Example: Ladahki (Koshal 1979)
(a) /bcu/ → [cu] ‘ten’ (cf /ŋə+bcu/ → [ŋəb.cu] ‘50’)
(b) /ʈuk+bcu/ → [ʈuk.cu] ‘60’, *[ʈub.cu]

(28) Faithfulness
OI-CONTIG-σ “If (a) *x* is adjacent to *y* in the output
and (b) *x* and *y* are in the same syllable
then *x′* is adjacent to *y′* in the input.”
(after Lamontagne 1996, Pater 1997)
(i) This constraint favours /atka/ → [a.ka] over [a.ta]
(ii) There is no faithfulness constraint that favours the opposite.

(29) OT with Free Ranking

	/atka/	NOCODA	MAX	*DORSAL	OI-CONTIG-σ
	(a) at.ka	*!		*	
	(b) a.ka		*	*!	
☠	(c) a.ta		*		*

(30) Generalization
If a prosodic constraint can be satisfied by *n* possible resolutions, the winner is never chosen by a featural constraint.

(31) OT with PPFR: Faith(StrStruc) »» Mk(features) = OI-CONTIG-σ » *DORSAL

	/atka/	OI-CONTIG-σ	*DORSAL	NOCODA
☞	(a) at.ka		*	*
☞	(b) a.ka		*	
☹	(c) a.ta	*!		

(32) Featural Faithfulness
• Could featural *faithfulness* also influence the outcome?
A1: No, if IDENT[f] is the only type of featural faithfulness constraint (de Lacy 2002a§6.4.2)
From /akta/, IDENT[dorsal] is not violated by either [ata] or [aka].
A2: Yes, if MAX[f] exists.
|| NOCODA » MAX, MAX[dorsal] » OI-CONTIG-σ || will produce /akta/→☠[aka]; [ata] is blocked by MAX[dorsal].

(33) Further Predictions
(a) OI-CONTIG-σ favours /ʈuk+bcu/ → [ʈuk.cu]
(b) *Sonority* constraints should be able to influence the choice!
e.g. Sanskrit [cu-ʃcut] cf [ʃu-ʃru:ʂa] cf [a-ti-trasam]
i.e. || *MAR/*sonority* » OI-CONTIG-σ ||
(see Gnanadesikan 1995)
(c) /VC$_1$C$_2$V/ should be able to coalesce to [VC$_{1,2}$V]
If coalescence is total, we may get what looks like surface [VC$_1$V]
e.g. Chipewyan: /Vt+nV/ → [VtV]
(cf /Vt+xV/ → [VkV])
(i) cf Wilson 2000:61)

4.1.2 Too Many Solutions

(34) The ranking accounts for why featural conditions can only trigger neutralization.
(a) *coda/[+voice] and neutralization only (Lombardi 1995)
(b) Pater (2003): Suppose that [w] blocks nasal spread, then why can't AGREE[nasal] motivate deletion of [w]? /mãwo/ → [mãõ]
(or "Why does AGREE[nasal] only ever motivate assimilation?")

(35) OT with Free Ranking

/ab/	*coda/+voice	IDENT[voice]	MAX	DEP
☞ (a) ab	*			
☞ (b) ap		*		
☠ (c) a			*	
☠ (d) a.bi				*

(36) OT with PPFR
• F(StrStruc) » M(f)
Therefore || MAX, DEP » *CODA/+voice ||

/ab/	MAX	DEP	*coda/+voice	IDENT[voice]
☞ (a) ab			*	
☞ (b) ap				*
(c) a	*!			
(d) a.bi		*!		

(37) How do we know this result is general?
• Fixed Ranking harmonic bound: α is an FR harmonic bound for β if
(a) For all constraints C s.t. C(β>α), C is universally outranked by some constraint K s.t. K(α>β)
(b) There is no constraint Q s.t. Q(β>α) and Q may outrank K.
• MAX, DEP favour [ab], [ap] over [a], [abi]
• Is there any constraint that outranks MAX, DEP and favours [a] or [abi]?
(i) Featural markedness constraints are out (due to fixed ranking).
(ii) A featural *faithfulness* constraint (e.g. IDENT[voice]) may block [ap], but it cannot block the fully faithful form.
(iii) Another type of markedness constraint (e.g. prosodic) may eliminate [ab] (e.g. NOCODA), but then the deletion process would be a prosodically motivated one.

4.1.3 Too many blockers

(38) The effect of this ranking:
A featural markedness condition cannot block a prosodic process

(39) Hypothetical Example
(a) /bada/ → SYNCOPE [bdá]
(b) but AGREE[voice] and IDENT[voice] block it in
/pada/ → [padá], *[pdá]
• Compare with cases like Macushi Carib, where syncope is only blocked by *prosodic* conditions (i.e. a ban on complex onsets).

(40) OT with Free Ranking

	/pada/	AGREE[voice]	IDENT[voice]	SYNCOPE	MAX
☠	(a) padá			*	
	(b) pdá	*!			*
	(c) bdá		*!		*

(41) OT with PPFR

	/pada/	SYNCOPE	MAX	AGREE[voice]	IDENT[voice]
☹	(a) padá	*!			
☞	(b) pdá		*	*	
☞	(c) bdá		*		*

4.2 Faith(StrStruc) «» Faith(features)

(42) Suppose that Faith(StrStruc) »» Faith(features)
This fixed ranking predicts that:
"if a prosodic process can be resolved by neutralization, it will be."
• This is false.

(43) ONSET can be resolved by
(a) feature change: /ia/ → [ja] (see Rosenthall 1994)
(b) epenthesis: /ia/ → [tita] (Asheninca Campa)
(c) deletion: /iaka/ → [ka]
• If MAX and DEP always outranked IDENT[f], then feature change should always take place!

(44) Ponapean (Rehg & Sohl 1981)
(a) Coronal + Non-Coronal: Assimilation
/nan/
[nam + par] 'in trade wind season'
[naŋ + kɛp] 'inlet'
(b) Labial + Non-Labial: Epenthesis
[lim + a + tip] 'slices, chips'
[lim + a + ka] 'rows, lines'

(45) Analysis
π, IDENT[labial] » DEP » IDENT[coronal] (Goodman 1995, de Lacy 2002a:ch.7)

(46) (a) Faith(features) » Faith(StrStr)

	/lim-tip/	π	IDENT[labial]	DEP	IDENT[coronal]
	(a) limtip	*!			
	(b) lintip		*!		
☞	(c) lima̲tip			*	

(b) Faith(StrStr) » Faith(features)

	/nan-par/	π	IDENT[labial]	DEP	IDENT[coronal]
	(a) nanpar	*!			
☞	(b) nampar				*
	(c) nana̲par			*!	

4.3 Mk(Prosody) »» Faith(Features)

(47) Problematic Implications? Indirect influence

Featural faithfulness could *indirectly* block a prosodic process.

- IDENT[round] prevents a sonority process: reduction of /u/ to [ə]
- This forces a violation of a prosodic constraint

(48) *Featural faithfulness and stress shift*

	/pato/	IDENT[round]	*ŏ/fullV	TROCHEE
	(a) (páto)		*!	
	(b) (pátə)	*!		
☞	(c) (pətó)			*

(i) Roundness-driven stress movement with reduction! [!Unattested!]

(49) *Featural faithfulness and stress shift*

	/pato/	TROCHEE	IDENT[round]
☞	(a) (páto)		
☞	(b) (pátə)		*
	(c) (pətó)	*!	

*ŏ/fullV
*

4.3.1 Positional Faithfulness and the Fixed Ranking

(50) Positional faithfulness and contrastive syllabification (Wilson 2000)

- positional faithfulness + featural constraints can force contrastive syllabification.
- Broader generalization:

Featural faithfulness cannot influence the outcome of a prosodic process

(51) OT with Free Ranking

/aba/	*+voice	onset-IDENT[voice]	ONSET
☞ (a) a.ba	*		
☹ (b) ab.a	*		*
☞ (c) a.pa		*	
☠ **(d) ap.a**			*

(i) cf /apa/ → [a.pa]; therefore, surface contrastive [a.pa] and [ap.a]

(52) OT with PPFR

• MK(π) »» MK(F) = ONSET » *[+VOICE]

/aba/	ONSET	*[+voice]	onset-IDENT[voice]
☞ (a) a.ba		*	
☹ (b) ab.a	*	*	
☞ (c) a.pa			*
☹ (d) ap.a	*		

(i) ☹ perpetual loser

4.4 Mk(Prosody) »» Mk(Features)

(53) Mk(Prosody) »» Mk(Features)
predicts that feature conditions cannot force a change in prosodic structure.

(54) *Markedness Examples*
A domain bounded featural markedness constraint can be satisfied by moving the domain boundary.
(a) e.g. *[$_{Ft}$C$^{[-aspirated]}$ means that /ati:/ → [at(í:)] while /at^{h}i:/ → [a(t^{h}i:)]
(b) AGREE[voice]$_{\sigma}$ means that /atra/ → [at.ra] while /adra/ → [a.dra]
(c) AGREE[nasal]$_{Ft}$ means that /ãha/ → [(ã)ha] while /ãhã/ → [(ãhã)]

(55) If Mk(prosody) »» Mk(features), this problem doesn't arrive.
(a') ONSET » *[$_{Ft}$C$^{[-aspirated]}$, so /ati:/ → [a(ti:)] or [a(t^{h}i:)]
(b') NOCODA » AGREE[voice]$_{\sigma}$, so /atra/ → [a.tra]
(c') FTBIN » AGREE[nasal]$_{Ft}$ means that /ãha/ → [(ãhã)]

5. Place of Articulation

(56) The proposals in here are based on de Lacy (2003)

(57) Place of Articulation
Can featural conditions on PoA change string structure?
e.g. Ponapean: AGREE[PoA] and IDENT[labial] trigger epenthesis
/lim-tip/ → [limatip]
e.g. Attic Greek: AGREE[PoA] triggers deletion
/RED+anut+k+a/ → [ɛːnuka] 'I have accomplished' (Steriade 1982:217)

(58) Generalizations
(a) PoA constraints *do not* trigger deletion/epenthesis
e.g. *dorsal doesn't trigger deletion
(b) All PoA-related changes are due to a requirement of ***homorganicity***.
(c) There's evidence that homorganic consonants are *prosodically* distinct from heterorganic ones (lenition, stress).

(59) Implication 1
HOMORGANICITY should trigger deletion and epenthesis
(i) This is roughly equivalent to CODACOND (Ito 1986);
see suggestions by Lombardi (1995) and Pater (2003:fn.8) that CODACOND is really what's responsible.

(60) Implication 2
As Mk(Prosody) »» Faith(features), featural faithfulness can never block HOMORGANIC (see Ponapean)

(61) Implication 3
Since HOMORGANIC makes no distinction between different PoAs, if one PoA undergoes deletion/epenthesis/neutralization, then all undergo some change.
e.g. There is no language like Ponapean, but where dorsals don't undergo change.

(62) Interfering with Implications 2 & 3
• AGREE[PoA] could also be a featural requirement!
So, we should expect languages like Catalan and Chukchi, where assimilation is *blocked* by featural concerns (de Lacy 2002a:ch.7)

6. Alternatives: Constraint FOrm

(63) Can constraint form solve the Too Many Solutions problem?
Lombardi (1995): *Yes* (at least for the ban on voiced codas)

(64) Schematically
Suppose that a process can be resolved by solution S_1,
but never S_2 or S_3 (e.g. *coda/+vd allows neutralization, but not deletion or epenthesis).
(a) Every featural 'process' is an interaction of Mk(f) and Faith(f)
(b) Mk(f) must disfavour the faithful candidate (F)
(c) Faith(f) favours the faithful candidate
(d) Either:
(i) *Pure Markedness solution*
(I) Mk(f) favours S_1 over S_2 & S_3 & F
(II) There is no Mk that favours non-S_1 over S_1

(ii) *Pure Faithfulness solution*
(I) Mk(f) favours all solutions over F
(II) Faith(f) favours solutions F & S_1 over all other solutions
(more accurately: for every not-S_1 S_x, there is a faithfulness constraint F s.t. F(S_1 > S_x))
(III) There is no constraint that favours non-S_1 over S_1
(iii) *Hybrid solution*
(I) Mk(f) favours S_1 & S_2 over S_3 & F
(II) Faith(f) favours S_3 & F over S_1 & S_2
(III) some other constraint favours S_1 over S_2
(IV) no other constraint favours S_2 over S_1

6.1 Pure Markedness and Faithfulness

(65) Is the Pure Markedness solution viable?
• Not in standard OT (cf Wilson 2000)
• For all featural constraints C_F, C_F would have to favour neutralization over deletion, epenthesis, and faithfulness.
☒ Rules out most (all?) featural markedness constraints so far proposed.
*coda/[+voice] [ap] > [a], [a.bi], [ap]
*[αF] must not be solvable by deletion.
• One big problem is how to produce neutralization without forcing deletion – how can ∅ not be neutralization?
• The other is how in domain-bounded constraints, movement outside the domain (through 'reprosodification' or epenthesis) cannot be a solution.
e.g. ASSIM[f] cannot be solved by deletion or epenthesis
• Suppose we had a constraint that favoured $C^{-vd}]_\sigma$ >∅, $_\sigma[C^{+vd}$, $C^{+vd}]_\sigma$
This would predict a language where codas are required (CODA!)
• Wilson's solution: /ab/→[ap] is noncomparable to /ap/→{[abi], [a]}
• Final issue: *why neutralization?* Why is it neutralization that is always possible? How does this follow from any restriction on constraint form?

(66) Is the Pure Faithfulness solution viable?
• Not in standard OT.
• For *coda/+voice: this means that for every faithfulness constraint that assigns a violation to /ab/→[ap], it also assigns a violation to /ab/→{[a], [abi]}. How can /ab/→[abi] violate IDENT[voice]/MAX[voice]?

6.2 Hybrid Solution

(67) The Hybrid Solution
• This is Lombardi's (1995) solution
• e.g. Mk(f) = *+voice
favours neutralization and deletion over epenthesis and F
/ab/ → *+voice([ap] & [a] > [ab] & [abi])

- e.g. Faith(f) = MAX[voice]
  favours epenthesis and F over neutralization and deletion
  /ab/ → MAX[voice]([ab] & [abi] > [ap] & [a])
- "some other constraint favours S_1 over S_2"
  i.e. MAX, which favours [ap] over [a].
- "no other constraint favours S_2 over S_1"
  e.g. rules out IDENT[voice], which favours [a] over [ap].
- Also rules out all markedness constraints of the form *π/f:
  these constraints can be resolved by moving π; since this doesn't happen, and there are no faithfulness constraints to prosodic structure, it must be the case that there are no markedness constraints that favour *f* in prosodic position π_1 over *f* in prosodic position π_2.

(68)

	/ab/	*+voice	MAX[voice]	MAX
☞	(a) ab	*!		
	(b) ap		*	
	(c) a.bi	*!		
	(d) a		*	*!

(69) Is the Hybrid solution viable?

- Does it rule out markedness constraints that refer to a domain?
- i.e. $*[\alpha f...\beta f]_\delta$ = AGREE$[f]_\delta$
  Potential Solutions: $[\alpha f..\alpha f]_\delta$ (neutralization)
  $[\alpha f]_\delta$ (deletion)
  $[\alpha f\ldots]_\delta\ \beta f$ (domain alteration *or* epenthesis)
- How can Mk rule out $[[\alpha f\ldots]_\delta\ \beta f]$?
  e.g. How does Mk rule out /apga/ →[apiga] without ruling out /apiga/→[apiga]?
- Therefore, Faith must rule out epenthesis = the same problem as the Pure Faithfulness solution: how can IDENT[voice]/MAX[voice] rule out [apiga]?

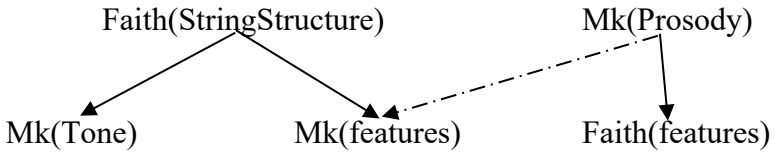
(70)

	/abka/	AGREE[voice]	MAX[voice]	DEP	MAX
☞	(a) abka	*			
☞	(b) apka		*		
☠	(c) abika			*	
	(d) aka		*		*

(71) Result: Constraint Form is not a comprehensive solution
(though it can provide *some* solutions: e.g. de Lacy (2002a§2.4.2)

7. Summary and Conclusions

(72) The Prosodic Primacy Fixed Rankings (PPFR)



(73) Predictions

(a) No feature constraint can trigger deletion or epenthesis

(b) All prosodic constraints should be able to trigger deletion, epenthesis, and neutralization (structural descriptions permitting).

(c) Prosodic processes can never be blocked by a featural markedness condition.

(d) Feature identity should be able to influence the outcome of a prosodic process.

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