### Summary of Facts

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#### Context

- Itô & Mester—counteranalysis
- McCarthy's E. MA linking
- McCarthy's E. MA intrusion
- Varis's Boston linking
- Varis's Boston intrusion
- Itô & Mester's Cockney/Norwich intrusion
- Gick's PA intrusion
- tapping

#### No r

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#### Word-func

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#### Word-suffix

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#### Summary of Facts

(1) I&M analysis of McCarthy
- $r$ not allowed unless onset $(a, b)$ (CODA|CONDITION)
- underlying $r$ freely resyllabifiable as onset $(h, k)$ or ambisyllabic $(c, d, e, f, g, i, j)$ if $V$ follows
- at beginning of maximal p-word, root node inserted to provide onset, spreads place from previous $V$ $(c, g)$: $\text{ONSET}(\omega_{\text{max}}) >> \text{DEP-root}(\omega-\text{init})$
- at beginning of onsetless syllable that doesn’t initiate a p-word, also root insertion $(f, h, i, j)$: $\text{ONSET} >> \text{DEP-root}$
- otherwise (at beginning of submaximal p-words) root node can’t be inserted $(d, e)$: $\text{DEP-root}(\omega-\text{init}) >> \text{ONSET}$

(2) I&M analysis of Cockney/Norwich pattern
- same as for McCarthy’s E. MA, except root node can be inserted anywhere $(d, e)$: $\text{ONSET} >> \text{DEP-root}(\omega-\text{init})$

(3) How could I&M analyze the Varis data?
- Root node can’t be inserted at beginning of any p-word, maximal or sub-: $\text{DEP-root} >> \text{ONSET}(\omega_{\text{max}}), \text{ONSET}$
  - but that means the and of law and order has to prosodify with the preceding word: $(\text{law}[r] \text{ and}) \text{ order}$ (mismatch to where a pause would naturally be inserted)
- Varis’s analysis: driving constraint is $^{(*}(...V.V...)_{\omega},$ and its domain is the p-word
  - again, means $(\text{law}[r] \text{ and}) \text{ order}$
  - also means $^{(*}(\text{gonna} \text{ eat}),$ but instead $(\text{gonna} \text{ (eat)})$ or $(\text{gonna}) \text{ (eat)}$
- A hybrid possibility:
  - driving constraint is $^{(*}(...V.V...)_{\omega},$ hence no need to insert $r$ in $(f)$
  - with a prohibition against inserting a root node at the beginning of a minimal (innermost) p-word, hence no $r$-intrusion in $(c, d),$
  - this makes a probably-wrong prediction, though: there should be $r$-intrusion in $(e)$.

(4) A potential problem for the prosodic analysis
It seems strange to me to treat portmanteau function words like gonna as true clitics, since they normally bear stress (although not when super-reduced, as in I’m leave now).

If the prosody is $(\text{gonna}) \text{ (eat)},$ then it’s just like $(\text{saw}) \text{ (Ann),}$ and we can’t get the McCarthy dialect.

(5) Counteranalysis—kernel
V-initial function words and suffixes have $r$-epenthesized allomorphs (used after certain vowels), by a Hayesian (1990) rule.

$$
\emptyset \rightarrow r / [\_\_V\_]_{\text{Frame1}}
$$
Frame 1: [+syll] $[\_\_][\_\_]_{[-N,-V]}$

Thus, for and, the lexicon produces and and $[\text{rand}]_{\text{Frame1}}$

In the context babies __ toddlers, and is inserted; in the context law __ order, rand is inserted.
We also need underlying r to get deleted sometimes. We don’t have full data for all the dialects on this, but at least for McCarthy’s data, we can say that r-deletion is a postlexical rule that applies whenever the r is nonprevocalic.

Now come the problems and solutions/kludges...

(6) Problem: suffixes
Suffixes aren’t supposed to go through the lexical phonology on their own! Perhaps they should be dealt with separately, through a word-internal hiatus-resolving rule within the lexical phonology. (And, as noted above, intrusive r with suffixes is supposed to be more stigmatized than cross-word intrusive r)

(7) Problem: Varis has no r-intrusion in p-phrase-boundary cases
e.g., I said I was gonna_and I did

If we can define this set of cases syntactically, then we can redefine Frame 1 for this dialect to take care of them:

Varis Frame 1: \([\text{CP}...X...[+\text{syl}] [\_\_][-_N,-V] ...]_{\text{CP}}\) i.e., not clause-initially

(8) Problem: McCarthy has r-intrusion at X-word boundaries
...except at func-func boundaries that aren’t separated by a p-phrase boundary.

So we can have a general r-insertion rule (at we could have rewritten it to be word-final instead of word-initial), but exempt from it the func-func sequences...

McCarthy Frame 1: \([...[+\text{syl}]][-_N,-V] [\_\_][-_N,-V]\) (juncture of two function words)

... unless a clause juncture intervenes

McCarthy Frame 2: \([+\text{syl}]\)_{\text{CP}} \[CP [\_\_][-_N,-V]\] (clause juncture)

The rule has to say something like

Ø \rightarrow r/ [___V...] unless Frame 1, unless Frame 2

This might be easier to state if the lexical phonology is governed by constraints:

\text{INSERT}_{\text{Frame2}} \gg \text{DON’T INSERT}_{\text{Frame1}} \gg \text{INSERT}

“Clause juncture” is consistent with the p-phrase-juncture examples in McCarthy (I think—didn’t double-check them all), but we might also be able to exploit the fact that in all the p-phrase-juncture cases, the first word, if a function word, is a portmanteau like gonna or didja. As McCarthy explains, this is because solo function words (to, you) don’t get reduced when p-phrase-final, so they don’t end with the right vowel.
(9) Predictions of making r-insertion lexical à la Hayes
- Different words could have different rates of r-intrusion. Testable only with a big corpus.
- There could be outright exceptions. Seems implausible given the loan, nonce, and foreign-accent data given.
- Other dialects could make finer syntactic distinctions, caring about VPs vs. NPs, for instance.
- Could be sensitive to empty categories: Who, was it you saw ti at the beach? I don’t speak one of these dialects, but I suspect you get r-insertion there despite the trace.
- Can’t follow (derivationally) a postlexical phenomenon. At least in McCarthy’s data, r-insertion is fed by, e.g., h-deletion, but that’s presumably lexical too (applies only to selected functions words).
- Hayes speculates that such rules should be sensitive to inserted pauses or speaking rate. The speaking-rate prediction is muddied in the U.S. case by interference from standard dialect, use of which is probably correlated with slower speaking rate (both are more likely in more-careful situations).

So this case certainly isn’t a poster child for precompilation.

(10) Possible research topics, though data probably challenging to get
- environments of l-intrusion: where does it apply? (Gick describes how difficult it was to get any data on l-intrusion—requires an extremely relaxed style; you probably need family or close friends who do this in order to study it)
- corpus studies of r-intrusion:
  - What’s the effect of frequency (word1 and word2)?
  - Is there a gradient effect of prosodic boundary strength (p-phrase vs. ip vs. utterance)?
  - Does syntax matter, beyond what would be expected by prosodic hierarchy (e.g., does Cockney/Norwich differentiate the X vs. to/for X, à la Hiawatha)? (Does there exist a phonetically transcribed corpus that contains enough non-rhotic speakers?)
- sociolinguistic study of r variation within a speech community: is there are hierarchy of contexts of r intrusion apparent in variation within individuals according to context, and across individuals? If so, can we make any grammatical sense out of that hierarchy—e.g., express it in terms of re-ranking some constraint?