French liaison: shape alternation, inflection, or both?

Olivier Bonami
Based on joint work with Anne Abeillé, Gilles Boyé, Elisabeth Delais-Roussarie, Danièle Godard, Jesse Tseng

U. Paris-Sorbonne,
UMR 7110 “Laboratoire de Linguistique Formelle”,
Institut Universitaire de France

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Defining French liaison

Many French words have two phonological forms such that:

- Form$_1$, the liaison form, is longer than form$_2$, the non-liaison form.
- The liaison form is used
  - In specific syntactic and/or prosodic contexts
  - When the following word is vowel initial
- The non-liaison form is used elsewhere

(1) a. petit ennui: pətitãɲi
   small.M.SG trouble[M]

b. petit problème: pətiproblɛm
   small.M.SG problem[M]

c. Paul est petit: pɔlɛpəti
   Paul is small.M.SG

NB1 There are word-internal sandhi phenomena related to liaison that we leave aside.

NB2 Weak form pronouns (je, tu, il, etc.) are best analysed as pronominal affixes
   (Stump, 1981; Miller, 1992; Bonami and Boyé, 2007)
   hence the notion of liaison does not (strictly) apply to them.
Today’s argument

- French liaison is traditionally described as a phonological phenomenon.
- There are good reasons to think that this is not the right analysis: in Modern French liaison is not (plain) phonology.
- Thus French liaison is best seen as a shape alternation: a choice of form that is (partly) based on phonological properties of the context.
- In the particular case of masculine singular adjectives, liaison interacts in a subtle way with inflection:
  - arguably, the Masculine Singular Liaison Form is a distinct cell in the paradigm.
- Consequence: the boundary between the ‘shape component’ (Zwicky 1985) and inflection proper is not that clearcut.
1. Describing liaison

2. Shape alternations in French

3. Liaison with M.SG adjectives

4. Conclusions
Extent of the phenomenon

- Words of all part of speech give rise to liaison
  - N e.g. *livres* (books.PL): *livr*, *livr̥ez*
  - V e.g. *mange-r-ont* (eat.FUT-3PL): *mã̃z̥t̥*, *mã̃z̥t̥t̥*
  - Adj e.g. *petit* (small.M.SG): *pëti*, *pëtit*
  - Adv e.g. *bien* (well): *bj̥*, *bjë̃n*
  - Prep e.g. *en* (in): *ā*, *ān*
  - Det e.g. *un* (INDF.M.SG): *ē*, *ēn*
  - Conj e.g. *mais* (but): *më*, *mëz*
  - Comp e.g. *quand* (when): *kã*, *kãt*
  - Pro e.g. *tout* (all): *tu*, *tut*

- Rough estimate: ~ 40% of French word forms
Liaison is not resyllabification

- In continuous speech, word-final consonants can be re-syllabified as onsets.
- Liaison consonants are often resyllabified, but:
  - Resyllabification is not limited to liaison consonant, but affects all word-final consonants.

  \[(2) \quad \text{a. } \text{ils sont très amis: } \text{ils} \text{.tœ.za.mi}
  \]
  \[
  \quad \text{they are very friends}
  \]
  \[
  \quad \text{‘They are good friends.’}
  \]
  \[
  \text{b. } \text{ils sont treize amis: } \text{ils} \text{.tœ.za.mi}
  \]
  \[
  \quad \text{they are thirteen friends}
  \]
- Liaison can occur without resyllabification (Encrevé, 1988)

  \[(3) \quad \text{ils sont amis: } \text{ils} \text{.tœ.ami}
  \]
  \[
  \quad \text{they are friends}
  \]
- Resyllabification is subject mostly to phonological constraints (rythm, speech rate, etc.). In particular, no lexical conditioning.
Three necessary conditions for liaison to happen:

- \( w_1 \) has to possess a distinct **liaison form**
- \( w_1 \) has to be in a **liaison context**, i.e. one of the following schematic syntactic configurations.
- \( w_2 \) has to be a **liaison trigger**
Liaison forms

- The existence of an alternation between a liaison and a non-liaison form is not predictable by looking at surface phonology.

  (4)  a. petit ‘small’: pəti vs. petit
       b. insolite ‘unusual’: ësolit
       c. joli ‘cute’: zoli

- Even orthography is unhelpful

  (5)  a. net ‘neat’: net
       b. et ‘and’: e
       c. discreet ‘discreet’: diskεs, diskεt

- Long tradition (starting with Schane, 1968) of postulating abstract phonology to make the alternation predictable. In particular: protective schwas
  - No surface evidence can support such an analysis (Dell, 1995).
  - All existing proposals are at least partly ad-hoc
Liaison triggers

Liaison triggers can not be characterized in surface phonological terms:

☞ Even orthography is not a reliable indicator of trigger status.

<table>
<thead>
<tr>
<th>VOWEL</th>
<th>GLIDE</th>
<th>CONSONANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIGGER</td>
<td>école ekɔl ‘school’</td>
<td>oiseau wazo ‘bird’</td>
</tr>
<tr>
<td></td>
<td>habit abi ‘clothing’</td>
<td>yeux jø ‘eyes’</td>
</tr>
<tr>
<td>NON-TRIGGER</td>
<td>onze 5z ‘eleven’</td>
<td>whisky wiski ‘whisky’</td>
</tr>
<tr>
<td></td>
<td>hache af ‘axe’</td>
<td>hyène jɛn ‘hyena’</td>
</tr>
</tbody>
</table>

- There is a long tradition of postulating an abstract consonant at the start of vowel-initial nontriggers (e.g. Dell, 1985; Pagliano, 2003)
- However, there is little evidence for such a move (e.g. Tranel, 1981)
- Bonami et al. (2004a): liaison trigger status is best seen as a global property of the word.
Types of liaison contexts

- Provided that $w_1$ is followed by a liaison trigger in a liaison context, three possible outcomes:
  - **Obligatory liaison**
    
    (6) Les= enfants arrive-ront à l’ heure
        the.PL child[M].PL arrive-FUT.3PL at the.SG hour[F]
        ‘The children will arrive on time.’
  - **Impossible liaison**
    
    (7) Les enfants ≠ arriveront à l’ heure
  - **Optional liaison**
    
    (8) Les enfants arriveront• à l’ heure

- Where liaison is optional, numerous factors influence its frequency:
  - syntactic construction, token frequency of $w_1$/$w_2$ the collocation of $w_1$ and $w_2$, prosody, rhythm, style, speech rate, register, etc.

- Here we focus on categorical constraints making liaison impossible, possible or obligatory.
Types of conditions

- Documented categorical conditions on liaison:
  - Lexical phonological properties of $w_1$: has to have a liaison form
  - Lexical phonological properties of $w_2$: has to be a trigger
  - Construction type instantiated by $X$
    - In particular, syntactic functions of $Y$ and $Z$
  - Construction type instantiated by $Y$
  - Syntactic category of $Y$
  - Morphosyntactic properties of $w_1$
Conditions on the construction: NPs

Sample of constraints on liaison from (Bonami and Delais-Roussarie, forthcoming):

- Obligatory after the specifier
  
  (9) trois= amis de Marie
  three= friend[M].PL of Marie

- Optional (but frequent; see Post, 2000) after a prenominal adjective
  
  (10) un charmant individu
       INDF.M.SG charming.M.SG individual[M].SG

- Optional (but rare) after the head noun
  
  (11) des amis intimes
       INDF.PL friend[M].PL intimate.PL

- Optional (but rare) among post-head constituents
  
  (12) des= hommes heureux insupportables
       INDF.PL man[M].PL happy.M insufferable.PL
Conditions on the construction: VPs

- In surface terms, the French VP can be divided in two zones, explicitly delimited by the past participle in periphrastic perfect forms.
  
  This is independently motivated, by word order and scope (see e.g. Abeillé and Godard, 2000; Bonami et al., 2004b)

(13) Paul [ a toujours tout expliqué à Marie]

Paul have.PRS.3SG always everything explain.PTCP to Marie carefully

‘Paul has always explained everything carefully to Marie.’

- Liaison is optional within the first zone, impossible in the second zone

(14) a. Paul est• arrivé.
Paul is • arrived

b. Paul est souvent• arrivé à l’heure.
Paul is • often • arrived at the time

(15) a. Paul a expliqué ses succès ≠ à Marie
Paul has explained his successes to Marie

b. Paul a parlé souvent ≠ à Marie
Paul has spoken often • to Marie
Conditions on the construction: Ss

• Liaison is possible after a complementizer

(16)  a. Je viendrai quand• on m’ invitera.
     I come.FUT when one 1.SG invite.FUT

     b. une solution dont• il est fier.
        a solution of which he is proud

• Liaison is possible after a fronted wh-word

(17)  a. Quelles• ont été vos conclusions?
        which have been your conclusions
       ‘Which conclusion did you reach?’

• Liaison is possible after a syntactic subject, provided it is not phrasal

(18)  a. Tout• est calme.
       everything is calm

     b. Les enfants≠ arrivent
        the children arrive
Conditions on the construction: coordination

- Within a coordination, liaison is possible after the penultimate conjunct or after the conjunction, but not between two conjuncts

(19)  
  a. les hommes• et les femmes  
       the men and the women  
  b. Ils se sentent heureux• et fiers.  
       they REFL feel pleased and proud

(20)  
  Ils se sentent heureux mais• épuisés.  
       they REFL feel pleased but exhausted

(21)  
  Ils se sentent heureux ≠ habiles et fiers.  
       They REFL feel pleased, clever and proud
Conditions on the phrase embedding $w_1$

- If $w_1$ is embedded in a head-complement phrase, liaison is not possible.

\[(22)\] un livreur [de journaux] ≠ efficace
  a. delivery_man of newspaper efficient
     ‘an efficient newspaper delivery man’

- If $w_1$ is embedded in a clause, liaison is not possible.

\[(23)\] a. Ils viennent ≠ et ils repartent.
  they come and they leave again
     ‘They come and leave.’
  b. Entrez ≠ et fermez la porte!
  come_in and close the door
     ‘Come in and close the door.’
Morphosyntactic conditions on $w_1$

If $w_1$ is a singular noun, liaison is never possible.

(24) a. un cas ≠ intéressent
INDF.M.SG case[M].SG interesting.M.SG

b. des cas• intéressants
INDF.PL case[M].PL interesting.M.PL

Given our definitions, this is indistinguishable from saying that singular nouns have no liaison form.

* Still, it is striking that many nouns have a consonant-final stem that shows up in lexeme formation and would make for a perfectly good liaison form.

(25) cas ka ‘case’ > casuel kaz-подоб ‘case-related’

* Hence it is not a trivial property, and has to be stated somewhere in the grammar.
Interim conclusion:
liaison is not (plain) phonology

- From the preceding discussion it should be clear that liaison cannot be reduced to (plain) phonology.
  - The existence of a liaison form is not predictable from surface phonology
  - The presence of a liaison trigger is not predictable from surface phonology
  - The syntactic constraints on liaison are very intricate.
  - Although it is in principle possible to encode exactly the right syntactic distinctions in a prosodic tree, this seems entirely ad-hoc.
- Alternative: we are dealing with (widespread) shape alternation.
- Of course we still want an account for the fact that thousands of French words have a regular relation between the liaison form and the nonliaison form.
- This is a different issue; see Bonami et al. (2004a, 2005) for specific proposals.
1 Describing liaison

2 Shape alternations in French

3 Liaison with M.SG adjectives

4 Conclusions
Elision

- Some words lose their final vowel when followed by a vowel-initial word (in the right syntactic and/or prosodic context).
- Commonly described as complementary to liaison.
- This is a mistake, since elision is no unitary phenomenon.
  - Elision of the feminine definite article: obligatory, no conditions.
    (26) a. la femme: lafam
        the.F wife[F]
    b. l’ épouse: lepuz, *laepuz
        the.F spouse[F]
- Elision of *si ‘if/whether’: optional, only possible if the next morph is the weak form pronoun *il.
  (27) a. s’il vient: silvjē, siilvjē
       if he comes
  b. si Isabelle vient: siizabεlvjē, *sizabεlvjē
       if Isabelle comes
- Elision of *tu: optional, stylistic condition.
  (28) T’ arrives quand? : tǎivkǎ, tyǎivkǎ
       you arrive when
       ‘When will you be arriving?’
Anti-liaison

- A few items have an *anti-liaison* (Bonami and Delais-Roussarie (forthcoming)’s *contre-liaison*) form:
  - The liaison form is used in specific syntactic-prosodic contexts when the next segment is a vowel
  - The anti-liaison form is used in the same contexts when the next segment is a consonant
  - The non-liaison form is used elsewhere

(29) a. Paul achète *si* livres
    Paul buys six books

    b. Paul achète six *siz* oranges
    Paul buys six oranges

    c. Paul en *achète* *sis*
    Paul of-them buys six
    ‘Paul buys six of them.’

* six ‘six’, *huit* ‘eight’, *dix* ‘ten’, *plus* ‘more’
Portmanteaux with shape conditions

Celebrated portmanteau words of French:

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Article</th>
<th>Liaison Type</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>à</td>
<td>le</td>
<td>DEF.M.SG</td>
<td>au</td>
</tr>
<tr>
<td>at/to</td>
<td>DEF.M.SG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>à</td>
<td>les</td>
<td>DEF.PL</td>
<td>aux</td>
</tr>
<tr>
<td>at/to</td>
<td>DEF.PL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>de</td>
<td>le</td>
<td></td>
<td>du</td>
</tr>
<tr>
<td>of/from</td>
<td>DEF.M.SG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>de</td>
<td>les</td>
<td></td>
<td>des</td>
</tr>
<tr>
<td>of/from</td>
<td>DEF.PL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>à</td>
<td>la</td>
<td></td>
<td>en</td>
</tr>
<tr>
<td>at/to</td>
<td>DEF.F.SG</td>
<td>(restricted to place names)</td>
<td></td>
</tr>
</tbody>
</table>

- The analysis of such forms is quite uncertain/disputed (Miller, 1992; Abeillé et al., 2006; Wescoat, 2007; Cabredo Hofherr, to appear)

- Empirical observations:
  - *aux, des* are definitely words, not shapes: they have a further distinction between a liaison and a nonliaison form.
  - *en* behaves like a liaison form: normally followed by a vowel.
  - *au, du* behave like anti-liaison forms: normally followed by a consonant.
1. Describing liaison
2. Shape alternations in French
3. Liaison with M.SG adjectives
4. Conclusions
## The classical generative analysis

<table>
<thead>
<tr>
<th>lexeme trans.</th>
<th>M.SG</th>
<th>F.SG</th>
<th>M.PL</th>
<th>F.PL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>nonliaison</td>
<td>liaison</td>
<td>nonliaison</td>
<td>liaison</td>
</tr>
<tr>
<td>RAPIDE ‘fast’</td>
<td>бapid</td>
<td>бapid</td>
<td>бapid</td>
<td>бapidz</td>
</tr>
<tr>
<td>PETIT ‘small’</td>
<td>р@ти</td>
<td>р@ти</td>
<td>р@ти</td>
<td>р@тиз</td>
</tr>
<tr>
<td>BREF ‘brief’</td>
<td>б@вф</td>
<td>б@вф</td>
<td>б@ев</td>
<td>б@евз</td>
</tr>
<tr>
<td>PLEIN ‘full’</td>
<td>пл@н</td>
<td>плен</td>
<td>пл@н</td>
<td>пленз</td>
</tr>
</tbody>
</table>

- Classical, abstract phonology analysis (e.g. Dell, 1985): uniform exponents, unitary underlying forms

<table>
<thead>
<tr>
<th>Underlying forms</th>
<th>Exponents</th>
<th>Phonological rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAPIDE</td>
<td>бapidэ</td>
<td>C → @ / ___ #</td>
</tr>
<tr>
<td>PETIT</td>
<td>р@ти</td>
<td>v → f / ___ #</td>
</tr>
<tr>
<td>BREF</td>
<td>б@ев</td>
<td>VN → V / ___ #</td>
</tr>
<tr>
<td>PLEIN</td>
<td>плен</td>
<td>Optionally, э → @ / ___ #</td>
</tr>
</tbody>
</table>

- Although the technical details have been updated, most phonologists still assume the same basic analysis.
Problem 1: suppletion

- When a lexeme is suppletive, the M.SG liaison form uses the otherwise feminine stem.

<table>
<thead>
<tr>
<th>lexeme</th>
<th>trans.</th>
<th>M.SG</th>
<th>F.SG</th>
<th>M.PL</th>
<th>F.PL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>nonliaison</td>
<td>liaison</td>
<td>nonliaison</td>
<td>liaison</td>
</tr>
<tr>
<td>BEAU</td>
<td>‘beautiful’</td>
<td>bo</td>
<td>bèl</td>
<td>bèl</td>
<td>bo</td>
</tr>
<tr>
<td>NOUVEAU</td>
<td>‘new’</td>
<td>nuvo</td>
<td>nuvèl</td>
<td>nuvèl</td>
<td>nuvo</td>
</tr>
<tr>
<td>VIEUX</td>
<td>‘old’</td>
<td>vjø</td>
<td>vjëj</td>
<td>vjëj</td>
<td>vjø</td>
</tr>
</tbody>
</table>

See Bonami and Boyé (2003) on the failure of attempts to account for these in OT terms as competition between phonology and agreement (Tranel, 1996; Perlmutter, 1998; Steriade, 1999).
Problem 2: non-alternations

- Some adjectives do not alternate despite the existence of a feminine form distinct from the masculine.

<table>
<thead>
<tr>
<th>lexeme trans.</th>
<th>M.SG</th>
<th>F.SG</th>
<th>M.PL</th>
<th>F.PL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>nonliaison</td>
<td>liaison</td>
<td>nonliaison</td>
<td>liaison</td>
</tr>
<tr>
<td>COURT 'short'</td>
<td>קִיק</td>
<td>קִיק</td>
<td>קִיקט</td>
<td>קִיק</td>
</tr>
<tr>
<td>ÉPARS 'scattered'</td>
<td>ēраא</td>
<td>ēраא</td>
<td>ēраאס</td>
<td>ēраא</td>
</tr>
</tbody>
</table>

- Littré’s law (Plénat, 1980): liaison forms do not end in a consonant cluster.

- In fact, Littré’s law only applies to M.SG adjectives.

(30) a. un קִיק/*קִיקט accent
    a strong accent

b. C’est קִיק/*קִיקט intéressant
    it is very interesting

(31) de קִיק/*קִיקז accents
     INDF.PL strong.PL accent.PL
Problem 3: productive non-alternations

- Productive lexeme formation rules creating adjectives with a stem allomorphy between M.SG and F.SG

<table>
<thead>
<tr>
<th>base</th>
<th>adjective</th>
<th>M stem</th>
<th>F stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>RÊVER ‘dream’</td>
<td>RÊVEUR ‘dreamy’</td>
<td>ɛvœk</td>
<td>ɛvøz</td>
</tr>
<tr>
<td>BATAILLER ‘fight’</td>
<td>BATAILLEUR ‘agressive’</td>
<td>batajœk</td>
<td>batajøz</td>
</tr>
<tr>
<td>TROMPER ‘deceive’</td>
<td>TROMPEUR ‘deceiving’</td>
<td>tɔɔrœk</td>
<td>tɔɔrpøz</td>
</tr>
</tbody>
</table>

- For this whole open class of adjectives, the M.SG is unexpectedly nonalternating.

(32) le trompeur טֹוּרַפֹץ/*טֹוּרַפּוֹز ami
the deceiving friend
Paradigm-based shape selection?

- A possible solution:
  - The context of use of the M.SG form is determined by a shape condition.
  - The existence of an alternation is determined by a paradigm-based rule.

If the ordinary M.SG form ends in a consonant, there is no liaison alternation in the M.SG. If it ends in a vowel, there is a liaison alternation, and the liaison form is identical to the F.SG.

<table>
<thead>
<tr>
<th>lexeme</th>
<th>M.SG nonliaison</th>
<th>M.SG liaison</th>
<th>F.SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAPIDE</td>
<td>rapid</td>
<td></td>
<td>rapid</td>
</tr>
<tr>
<td>PETIT</td>
<td>petit</td>
<td></td>
<td>petit</td>
</tr>
<tr>
<td>BEAU</td>
<td>bel</td>
<td></td>
<td>bel</td>
</tr>
<tr>
<td>VIF</td>
<td>vif</td>
<td></td>
<td>viv</td>
</tr>
<tr>
<td>FORT</td>
<td>fort</td>
<td></td>
<td>fort</td>
</tr>
<tr>
<td>RÊVEUR</td>
<td>vœz</td>
<td></td>
<td>vœz</td>
</tr>
</tbody>
</table>
Problem 4: irregularity

- A few lexemes have an unpredictable masculine singular liaison form.

<table>
<thead>
<tr>
<th>lexeme</th>
<th>trans.</th>
<th>M.SG</th>
<th>F.SG</th>
<th>M.PL</th>
<th>F.PL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>nonliaison</td>
<td>liaison</td>
<td>nonliaison</td>
<td>liaison</td>
</tr>
<tr>
<td>GRAND</td>
<td>‘large’</td>
<td>g̣ā</td>
<td>g̣āt</td>
<td>g̣ād</td>
<td>g̣ā</td>
</tr>
<tr>
<td>GROS</td>
<td>‘big’</td>
<td>g̣o</td>
<td>g̣oz</td>
<td>g̣os</td>
<td>g̣o</td>
</tr>
<tr>
<td>COMMUN</td>
<td>‘common’</td>
<td>koṃe</td>
<td>koṃen</td>
<td>komyn</td>
<td>koṃe</td>
</tr>
</tbody>
</table>

- Over the years, many attempts to derive these alternations as phonology.
- In fact there are
  - 4 alternating adjectives in s ~ z
  - 3 alternating adjectives in d ~ t
  - Commun is a unique case
Problem 5: defectivity

As Morin (1992) notes, for many adjectives speakers avoid using a M.SG form

(33) a. un entretien chaud
   INDF.M.SG interview[M].SG hot.M.SG
   ‘a difficult interview’
   b. *un chaud entretien

(34) a. des entretiens chauds
   a. INDF.PL interview[M].PL hot.M.PL
   ‘difficult interviews’
   b. de chauds=entretiens

(35) a. une entrevue chaude
   INDF.F.SG interview[F].SG hot.F.SG
   ‘a difficult interview’
   b. *une chaude entrevue

☞ The extent of the phenomenon is hard to evaluate in the absence of large spontaneous speech corpora. At least a few dozen adjectives are concerned.
Problem 6: limited distribution

- Where a M.SG liaison form exists, it has a more limited distribution than one might expect.
  - Restricted to prenominal contexts:

  (36) a. un vieil=ami
      INDF.M.SG old.M.SG=friend.\[M]\ sg

  b. *un ami vieil=et charmant
      INDF.M.SG friend.\[M]\ sg old.M.SG=and charming.M.SG

  c. des amis vieux=et charmants
      INDF.PL friend.\[M]\ pl old.M.PL=and charming.M.PL

- Parallelism in coordination:

  (37) a. un nouvel=et charmant=ami
      INDF.M.SG new.M.SG=and charming.M.SG=friend.\[M]\ sg

  b. *un nouvel=et charmant copain
      INDF.M.SG new.M.SG=and charming.M.SG mate.\[M]\ sg

  c. *un nouvel mais charmant=ami
      INDF.M.SG new.M.SG but charming.M.SG=friend.\[M]\ sg
The solution: paradigm integration

- Morin (1992): French adjective paradigms do not have 4, but 5 cells: the M.SG liaison form has been morphologized as part of the paradigm.
  - accounts for the possibility of individual irregularity and defectivity
- The MSLF paradigm cell comes with its own featural description, as any paradigm cell (Bonami and Boyé, 2003).
  - In that particular case the condition on context is partly morphosyntactic, partly phonological.
- The form filling the MSLF cell is determined by an implicative rule making reference to the rest of the paradigm (Bonami and Boyé, 2005):
  - If the M.SG cell ends in a consonant, it is syncretic with the MSLF cell. Otherwise the MSLF cell is syncretic with the F.SG cell.
1. Describing liaison
2. Shape alternations in French
3. Liaison with M.SG adjectives
4. Conclusions
Conclusions

On the basis of a reexamination of the relevant data, I have argued that:

- French liaison is not (plain) phonology: it is best seen as a surprisingly productive case of shape alternation.
- However, in the more interesting case of M.SG adjectives, the liaison alternation has been integrated in the inflectional system.
- This calls into question whether the contextual requirements of paradigm cells and shapes are of a distinct nature:
  - Conditions on general liaison are partly syntactic, partly phonological
  - Conditions on the MSLF go a bit further away from surface phonology, but still involve a kind of shape condition.
Selected references


