1. INTRODUCTION

1.1 OCCITAN AND FRENCH WITHIN ROMANCE

1.2 PROJECT “INTONATION IM SPRACHKONTAKT: OKTITANISCH UND FRANZÖSISCH”

Contact in Southern France: Occitan-French diglossia (Schlieben-Lange 1993)

- Occitan
  - main language until mid 20th century
  - no more transmission since
  - endangered minority language, no monolinguals

- French
  - only official language (since 15th century)
  - increased diffusion during 20th century
  - main language now, interferences with Occitan in the South

Our research project:

Study the prosodic consequences of this language contact

→ comparison between:

  NORTHERN FRENCH (NF), MERIDIONAL FRENCH (MF); OCCITAN (OC)

1.3 PROSODIC CHARACTERISTICS

1.3.1 PRIMARY ACCENT

French:

Position prosodically defined (Trubetzkoy 1939...)

\[(\alpha)^* \in \sigma \]

\[\text{potir} - \text{poti} - \text{larmes} - \text{de petites larmes}\]

Occitan:

Position lexically defined (Schultz-Dora 1924...)

\[(\alpha)^* \in \sigma \]

\[\text{potir} - \text{pot} - \text{logrema} - \text{'to suffer'} = \text{potato' = 'tear}\]

Southern Romance languages:

Position lexically defined (Bourcie 1967...)

\[(\alpha)^* \in \sigma \]

Catalan: \[\text{potir} - \text{pata} - \text{llogrinya}\]

1.3.2 SECONDARY ACCENT

French:

Non obligatory initial rises \[\sigma(\alpha)^* \in \sigma \]

de petites larmes

“accent d’insisténtial” (Feuchte 1996, Carton et al. 1978...)


left edge marker (Jun & Fosuenn 2000, 2002; Wolby 2006; Antelou et al. 2007...)

Occitan:

Initial rises similar to those of French \[\sigma(\alpha)^* \in \sigma \]

(Resjuelle 2003, 2004; Sichel-Bazin in press)

Ibero-Romance:

Secondary accents rare

journalistic, didactic, public speech

rhythmic function (Resjuelle 2007...)

1.4 THEORETICAL FRAMEWORK

1.4.1 AUTOSEGMENTAL METRICAL MODEL (Pierrehumbert 1980...)

Independent tonal tier, 2 discrete tonal levels:

- high tone H
- low tone L

Anchor points / targets on segmental tier: tones associate with

- metricaly strong syllables \[\text{Pitch accents}\]
  - monotonal \[H^*, L^*\]
  - bitonal \[HL^*, LH^*\]
- right edge of prosodic constituents \[\text{Boundary tones}\]
  - Intonation Phrase (IP) \[\text{T}\]
  - intermediate phrase (ip) \[\text{T}\]

Contour: interpolation between tonal targets

Downstep: natural FO downtrend in utterances

blocked by boundary tones

1.4.2 PROSODIC HIERARCHY

- Prosody structures discourse: phrasing
- Different levels of prosodic constituents (Selkirk 1984, Newson & Vogel 1995, Post 2000...)
  - Syllable
  - Foot
  - Prosodic word
  - PP Phonological Phrase
  - IP Intonation Phrase
  - U Utterance
- Other models, other constituents proposed
  - TU Tonal Unit (Di-Cristo 1998)
  - IP intermediate phrase (Pierrehumbert & Beckman 1988, D’Imperio & Michelau 2010)
- Strict Layer Hypothesis (Selkirk 1984...)

Prosodic units organized in a non recursive hierarchy
1.5 GOAL: PHRASING IN CROSS-LINGUISTIC COMPARISON

- How many and which prosodic constituents in OC, MF and NF?
- How to detect prosodic boundaries?
  - Develop criteria
  - Describe realization / different types?
  - Establish a hierarchy of constituents
- Hierarchy compatible for all 3 varieties
  - Model that enables cross-linguistic comparisons

2. METHODOLOGY

2.1 CORPUS

| Summary of Aesop fable “The North Wind and the Sun” after listening (Pa 1999) |
| Lille (F-59): 40 NF speakers recorded |
| → 4 representative speakers |
| Orléans (F-45): 40 NF speakers recorded |
| → 4 representative speakers |
| La Cauna (F-81): 40 bilinguals OC/FM |
| → 5 representative speakers |

Short texts (20 to 80 s), similar organization, shared lexical items...

→ Study phrasing organization

Prosodic analysis (Pratt: Boerema & Weenink 2010)
syllables, tones, prosodic boundaries, orthographic transcription

2.2 BOUNDARIES AND CONSTITUENTS: CRITERIA

- Prosodic boundary markers
  - Final lengthening
  - Tonal marking (pitch accent, boundary tone, blocked downstep)
  - Autonomy of the chunk (natural sounding when isolated?)
  - (Silent) pauses
  - No resyllabification

- Criteria for constituent inventory
  - Prosodic approach; no syntactic or semantic constraints a priori
  - Simplicity: as few constituent types as possible
  - Compatibility for all varieties → comparisons

3. RESULTS

3.1 ACCENTUAL PHRASE (AP)

Basic constituent of OC, MF and NF prosodic hierarchy

- Characterized by
  - Final pitch accent
  - Final lengthening
  - No resyllabification across APs
  - Prosodic autonomy and internal coherence
  - Tonal bipolarization: /LH/LH*/
  - No blocking of downstep
  - One or several lexical items per AP
    (phrasing varies as a function of speech rate, style...)

3.1 AP – INTERNAL STRUCTURE

MINIMAL AP: one (accented) monosyllabic lexical word; (L)H*
MAXIMAL AP: several lexical words, final accent only on the last one

Structure of Occitan and French APs:

\[ (((C)(Syl))(C)(Syl)(Syl)(Syl))(Syl)(Syl)) \]

\[ (((L)(H))(L)(H)) \]

\[ (((T)(T)) \]

\[ ((T)(T)*(T)(T)) \]

Possible features:
- Vowel lengthening
- Tonal movement
- Intensity peak
- Prosodic function: (obligatory) right edge marking
- Alignment with the last acceptable syllable

Accent types found:
- LH* rising
- (I)H* high
- L* low
- HL* falling
3.1.2 AP – INITIAL ACCENTS

\[(\text{Cl})(\text{SyI}) | (\text{Cl})(\text{SyI})(\text{SyI}) | \text{SyI}(\text{SyI}) \]

- Tonal movements on syllables that are not metrically strong
  (French traditional "accent d’insistance")
- Possible features:
  - Tonal rise: (L)Hi
  - Intensity peak
  - Strengthening of the initial consonant (emphasis)
- Prosodic function: optional left edge marking
  - on initial syllables of lexical words
  - even on clitics (more frequent in OC than in French)
- Generalized today?
  → Our corpus (OC, MF and NF): present, though not very frequent
  → Initial accents: a feature of Gallo-Romance

3.1.3 MINOR PROMINENCES WITHIN AP

\[(\text{Cl})(\text{SyI}) | (\text{Cl})(\text{SyI})(\text{SyI}) | \text{SyI}(\text{SyI}) \]

- Acoustic correlates of *
  - Small F0 and intensity peak, no lengthening
    → Rhythmic function
  - Lexically strong syllables within APs incompletely deaccented
    → Reminiscences of lexical accents as heads of feet
  - Frequency (and salience) of *
    - OC > MF > NF
  - Continuum of lexical word autonomy?
  - More work on feet needed: internal structure, prominence assignment rules, realization in the different varieties...

3.2 INTONATION PHRASE (IP)

Superior prosodic constituent, one or more APs, marked by:
- most prominent final accent (nuclear accent → work in progress)
- major final lengthening
- boundary tone: 1%
- often pause
- prosodic independence
- syntactic and semantic independence

3.3 INTERMEDIATE PHRASE (ip)?

- Unit between AP and IP? → Different approaches, open debate
  (For French: Michelas & D’imperio 2009, D’imperio & Michelas 2010)
- IntOcFr corpus (OC, MF, NF)
  - Boundaries perceived as stronger than AP- / weaker than IP-final
  - Chunks with intermediate prosodic autonomy
  - Boundary tones within IPs
    - OC, MF: easier to detect on the frequent post-accentual syllables
    - NF: less frequent schwa syllables → less detectable
      (tonal crowding on the accented syllable?)
  → ip: relevant unit in the Gallo-Romance prosodic hierarchy?
3.3 INTERMEDIATE PHRASE (ip)

- *boundary tone*
- *downstep blocking*

(usually not always apparent)

→ ip-internal APs interrelated

4. CONCLUSION

4.1 EVOLUTION OF WORD ACCENT IN GALLO-ROMANCE

- Tendency to weaken certain word accents with respect to others
  - Words grouped into APs: final pitch accent + lengthening
  - Medial lexical accents persist (but are less marked)
  - Optional initial accents
  - Pragmatic origin?
  - Delimitative function: marks left edge of AP
  - Prosodic feature shared by all Gallo-Romance varieties

4.2 Meridional French

- Reminiscences of AP-internal word accents as rather regular rhythmic beats

4.3 Northern French

- Complete loss of lexical accent, only rare reminiscences

→ Gallo-Romance diatopy reflects French diachrony

References

