1. Introduction
Is past language contact reflected in intonation patterns?

We address this question in a 3½ year project investigating Greek dialectal speech from (a) Crete, Corfu and Cyprus, where Greeks lived alongside Venetian speakers; (b) mainland Greece communities whose ancestors lived in present-day Turkey.

The tunes we investigate are declaratives, continuation rises and yes-no questions.

Two dimensions: (1) synchronic comparison of contact dialects of Greek with their contextual languages and Athenian (see section 3 below) (2) Diachronic comparison testing the robustness of contact effects over 4 generations, born 1900s-1990s (see section 4 below)

2. The corpora
Contemporary and archival audio corpora of 410 hours of speech from Asia Minor, Crete, Cyprus and Corfu, as well as Athens, Turkey and Veneto (see map).

Recordings: reading passages, dialogues, map tasks and interviews with single or multiple informants, converted to 16 kHz, monophonic, uncompressed PCM.wav files.

Informants’ ages: 20 to 94 years.


We thank Mark Janse, Petros Karatsareas and Dimitris Papazachariou for sharing their field recordings.

3. Synchrony: Turkish and Venetian traits in Greek regional speech
We use phonological landmarks (e.g. nuclear vowel, utterance boundary) of the standard Auto-segmental-Metrical model [6,7] to delimit the region of interest. The \( f_p \) is measured every 10ms with ESPS get function and the intonation curves are modelled fitting a 4th order Legendre polynomials [3]. This approach augments the abstract Auto-segmental-Metrical analysis, allowing comparisons of entire pitch curves rather than merely their pre-categories components such as pitch accents and edge tones.

Athenian is the exception with a fall-rise pattern L* LH [2], the nuclear syllable [i] has a trough followed by a rising boundary tone [tri’ada atoma mu’i’pane] ‘Thirty people told me…’

Cappadocian Greek [du ‘scufas kahumisti] ‘We sit in their shadow…’ displays a rise-fall-rise pattern, like Turkish, illustrated below in [ma’saja o tur’madan] ‘Before sitting at the table…’ Both have a H* on the nuclear vowel, [ka] and [tur] respectively, followed by a falling rising boundary tone LH-

Results at Baltazani at al’s talk [2], Aug 9, 9:45 (Prosody: Contact and bilingual

The start and end of a deep fall align with the nuclear vowel (V). The pre-nuclear vowel (P) has a

In contrast to Athenian, in Cretan and Venetian the fall starts earlier, with the beginning of the pre-nuclear vowel.

Polynomial modelling allows us to quantify the shape of the ‘fall’ category. The sharp slope of the Athenian fall has a larger negative coefficient of the linear term (\( \mu = 15.7; \alpha = 13.4 \)) than the Venetian slope (\( \mu = -29; \alpha = 13.4 ; p < .01 \)) or the Cretan slope (\( \mu = -3.7; \alpha = 29.2 \)) [1.

4. Diachrony: Cappadocian Greek over four generations
Following the Lausanne Treaty on population exchanges (1923), the ethnically Greek speakers of the dialect were expelled from Turkey. Their descendants settled in northern Greece, no longer in contact with Turkish. Cappadocian Greek, as spoken today by heritage speakers, will be compared with Turkish and Athenian to establish distance between the varieties. A longitudinal study of the robustness of contact effects will be carried out over 4 generations.

Rising slope [4,5] from the nucleus [jo] and [jo] followed by a final rise-fall.

Athenian: a downward slope from the nucleus (be) and an upward rise near the boundary.

No yes-no question particle.

\( \mu \) = 0.0148 · 1.04

5. Future plans
Compare 4 contact Greek dialects — 2 historically in contact with Turkish, 2 with Venetian — along chronological and synchronic axis.

Track diachronic changes in intonation by comparing contemporary and older recordings from the beginning, middle and late decades of the 20th century. Develop a model of longitudinal change in prosody, the findings might be applicable to other contact varieties.

The polymodelling of intonation allows less labour intensive/costly and more reliable analyses of large datasets, which is applicable to corpora work.

References