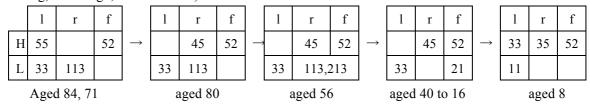
## Bidirectional change in tone: Evidence from Chinese

## Mitsuaki Endo (Aoyama Gakuin University)

This paper aims to examine the directionality of diachronic tone change, based on recent changes in a number of Chinese languages. Data is derived from two sources: contemporary data collected from multiple generations of speakers, and a comparison of documents bearing tonal transcriptions from the past 150 years.

Data collected from various generations of speakers of the Libo dialect (Guizhou province, China) show the following tonal changes: 1) 55>45>35; 2) 113>213>212>21>11. From a structural point of view, the changes may be treated as follows (1 stands for low, r for rising, f for falling, H for high, and L for low):



These charts indicate that a structural gap enables a tone to shift to the next slot.

The diagram below reflects analysis of a number of documents, and shows that tonal changes occur bi-directionally (numbers plus a/b are the tone categories of each place, M stands for middle):

Kaifeng 1b Suzhou 3a Jinan 1a Suzhou 1a Shanghai 1a f Hfr Hr HlHf512 45,35,24 53,41 51 55,44 Nanjing 1a Jinan 3 Yantai 4 Nanjing 4 Nanjing 1b Kaifeng 3 Yantai 4 Yantai 1a Ningbo 1b Beijing 4 Mf Ningbo 1a Kaifeng 3 42 Beijing 1a Yantai 1a Lf LongL Lr Yantai 1b 31 r 113 13 Shanghai 2b Suzhou 3b, Yantai 1a, Jinan 4 Ningbo 1b Shanghai 1b, Ningbo 4b Kaifeng 4 LlLfr Lrf 231 312 11