

Digital Archiving Technology Group

Project Leader

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Sound-Data Processing for Digital Archives of Noh and Other Types of Traditional Music

Digital Archive Technology Research Group

“Sound-Data Processing for Digital Archives of Noh and Other Types of Traditional Music”

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■ Research Purposes:

- Construct tagging support system for digital archives
 - The research subject is video recordings of Noh music performances.
 - Partial playbacks of video data based on time tags
 - Functions that make tagging easier:
 - Operations and interface specifically developed for Noh music
 - Automated tagging

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Tagging the *Shishō*

■ What is *shishō*?

- Scripts for Noh plays
- Add information regarding time and the roles in the Noh play to *shishō*
 - Useful for searching and replaying the recorded scenes

.....
 讃州志度の浦。」
 房前と申す所にて。」
 むなしくなり給ひぬと。」
 承りて候へば。」

Fig1: Shishō



.....
 -シテ 12345 - 456789 讃州志度の浦。」
 -子方 45678 - 78945 房前と申す所にて。」
 -子方 845612 - 878945 むなしくなり給ひぬと。」
 -シテ 1012345 - 1145678 承りて候へば。」

Fig2: Tagged shishō

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Tagging Support System Operation Screen

- (1) Tracking bar for displaying time
- (2) Shishō display
- (3) Tool buttons
- (4) Sound wave display
- (5) Listed shishō
- (6) Video data display



Fig 3: Tagging support system operation screen

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Automated Tagging

- For reduction of tagging tasks
- Two-step processing
 - Automatic detection of speech sections
 - Automatic linking of the *shishō* line and the speech section in the recordings

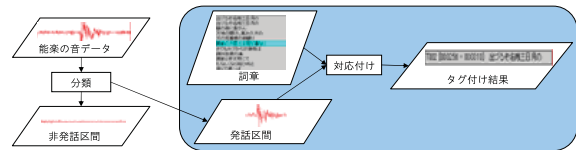


Fig 4: Flowchart of the process of the automated tagging on Noh music data

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Automatic detection of speech sections

■ Classify speech sections and non-speech sections based on data clustering

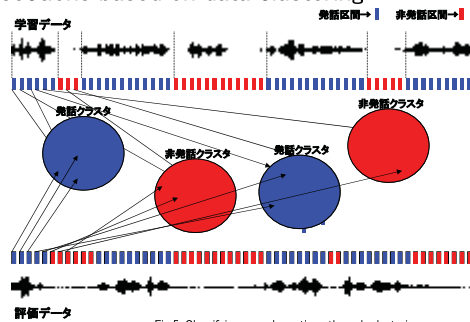


Fig 5: Classifying speech sections through clustering

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Linking the Shishō Line and the Speech Section in the recordings

■ Linking by using only the data on length

- Difficulty in recognizing the sounds of Noh speech
 - Unique vocal methods
 - Multi-layered instrumental performance
- Using data on the length of the speech section and the number of words contained in the line of the play
- Using DP matching for linking of the data

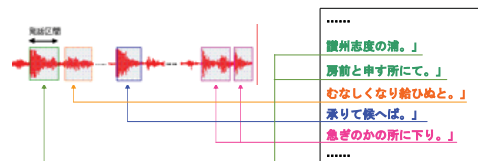


Fig 6: Linking speech sections and shishō

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