

Multimedia Analytics: ビデオアーカイブの調査のためのコンピュータビジョン

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どんな研究？

- 数年規模の巨大な映像アーカイブに如何にアクセスするか
- 映像ビッグデータからどのように有効な知識を発見するか
- 実世界との関連性をどう見つけるか

何がわかる？

最先端の技術でどこまで映像検索ができるのかがわかります

- 顔認識と検索
- 画像認識
- ニュース映像要約

状況設定

Data:

- ~5,000 hours of News data
- NHK-news7: 2001-2017
- NHK-news9: 2014-2017
- TVAsahi-hodost: 2014-2017

Analysis Techniques

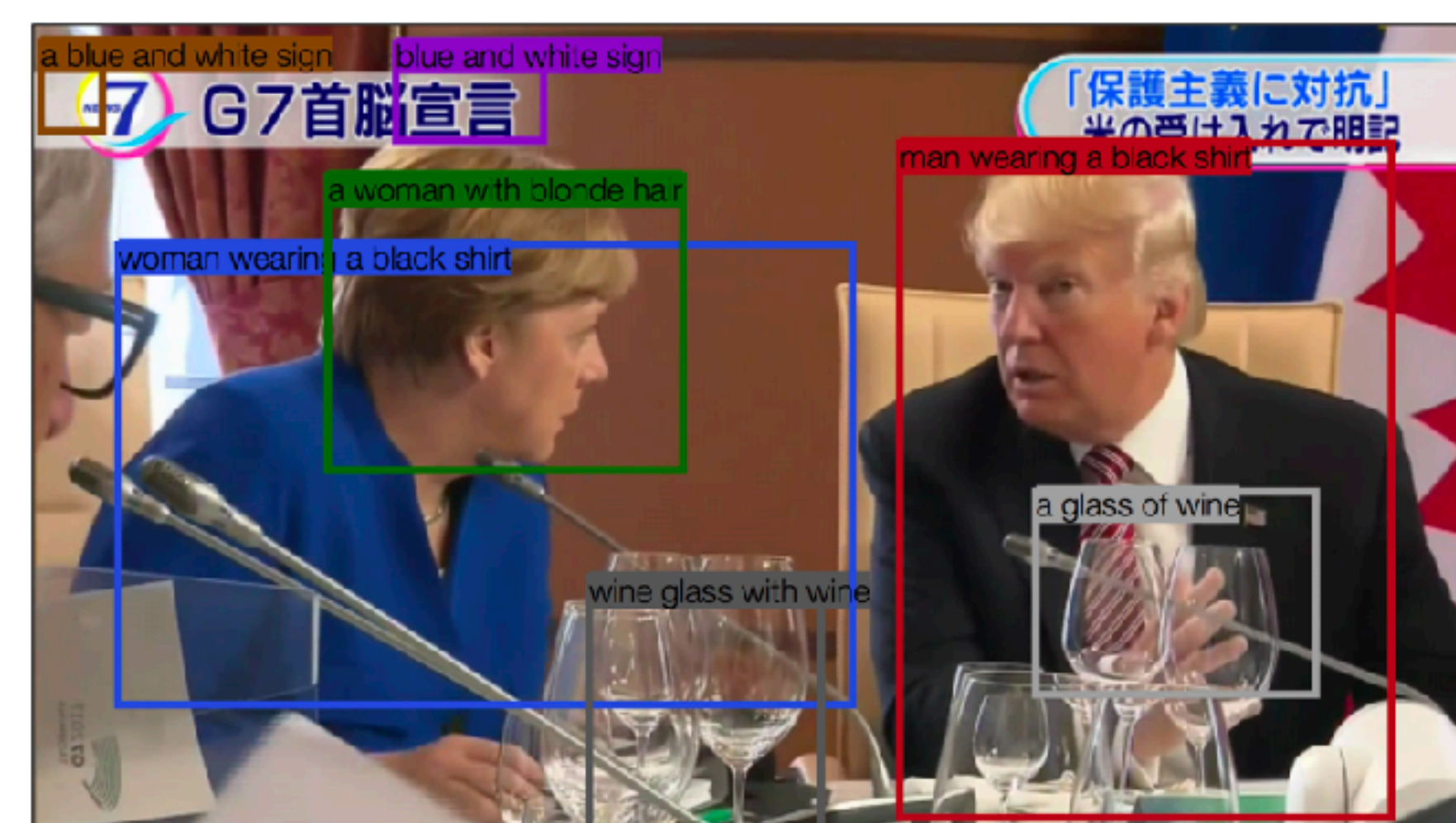
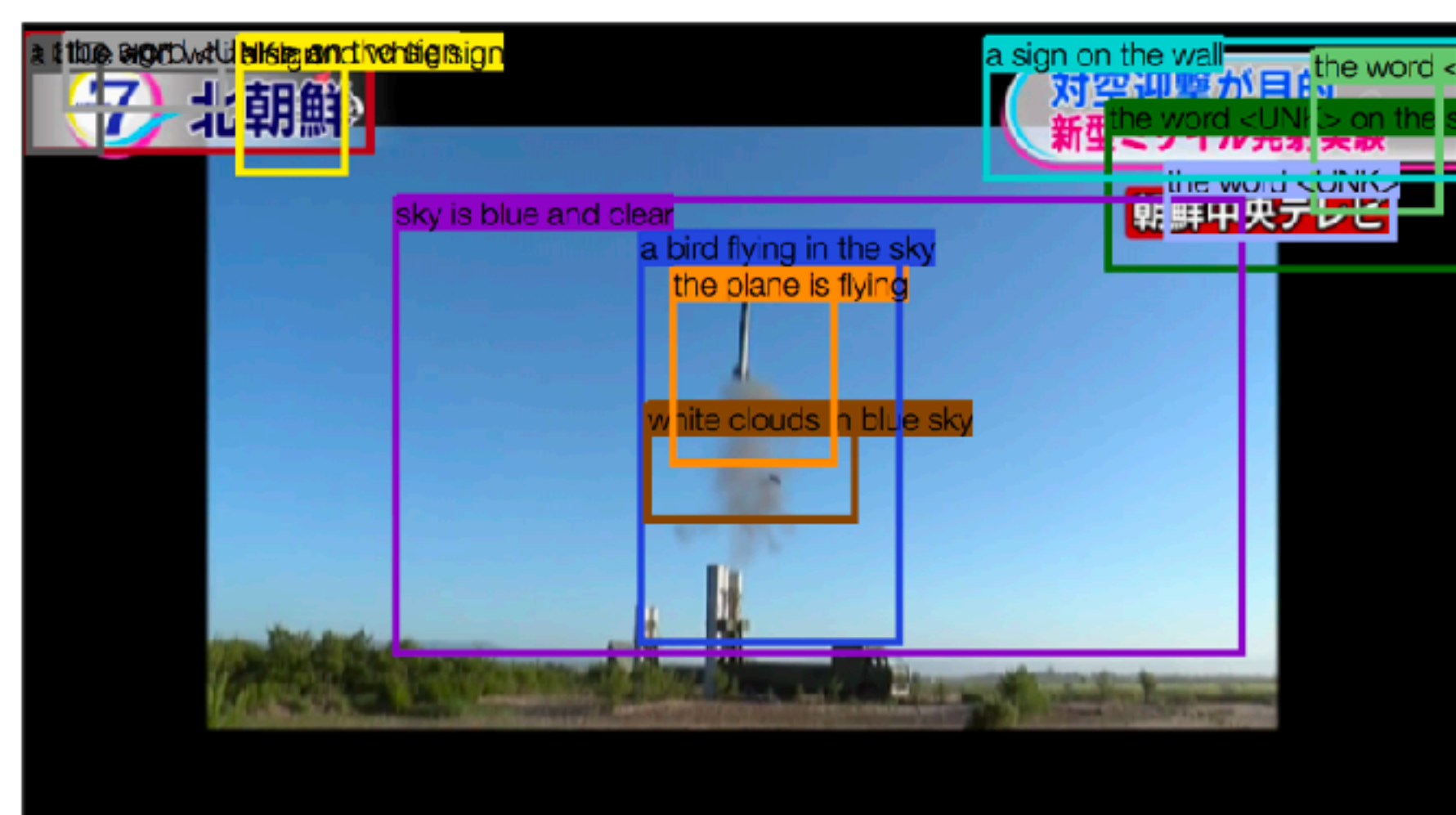
- Deep Learning OpenFace for face descriptor
- Deep Learning DenseCap for image captioning
- Topical analysis for News segmentation and keyword extraction
- Multiplex graph for heterogeneous data analysis

Visual Analytics

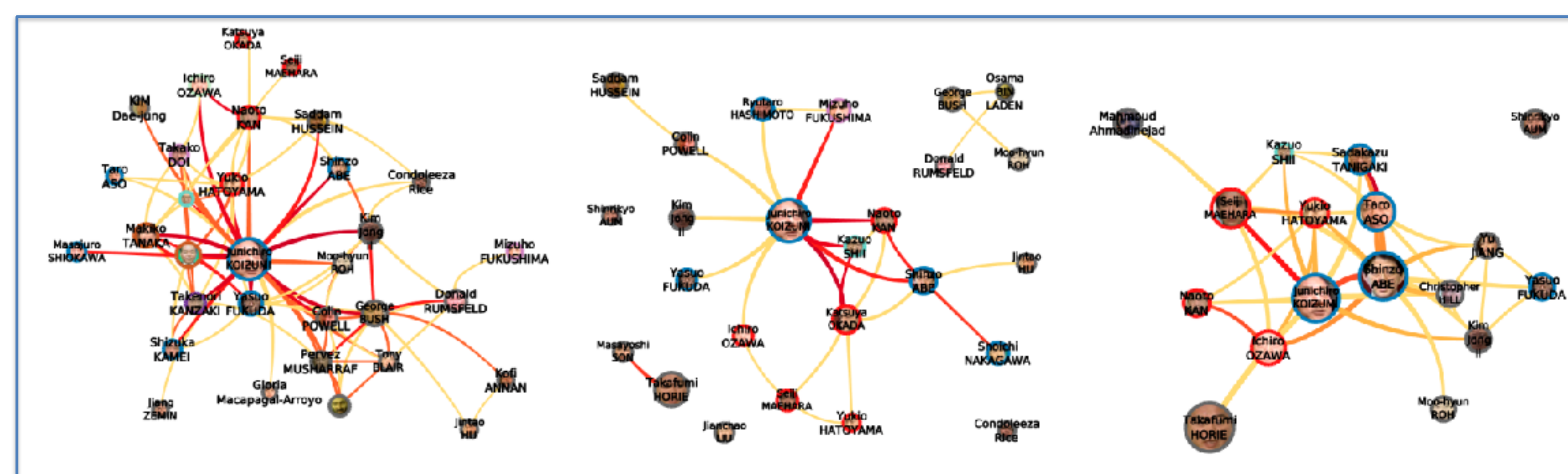
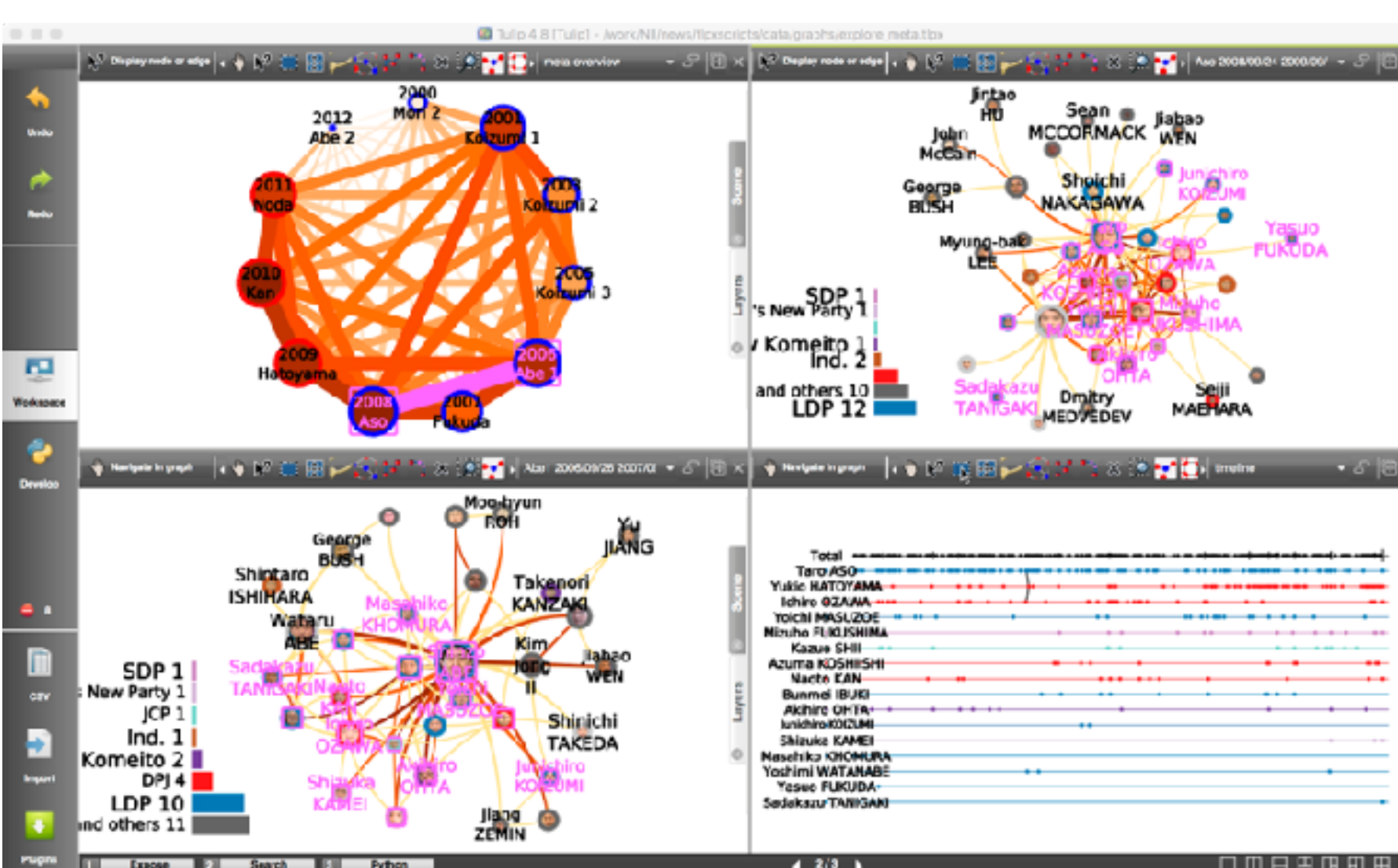
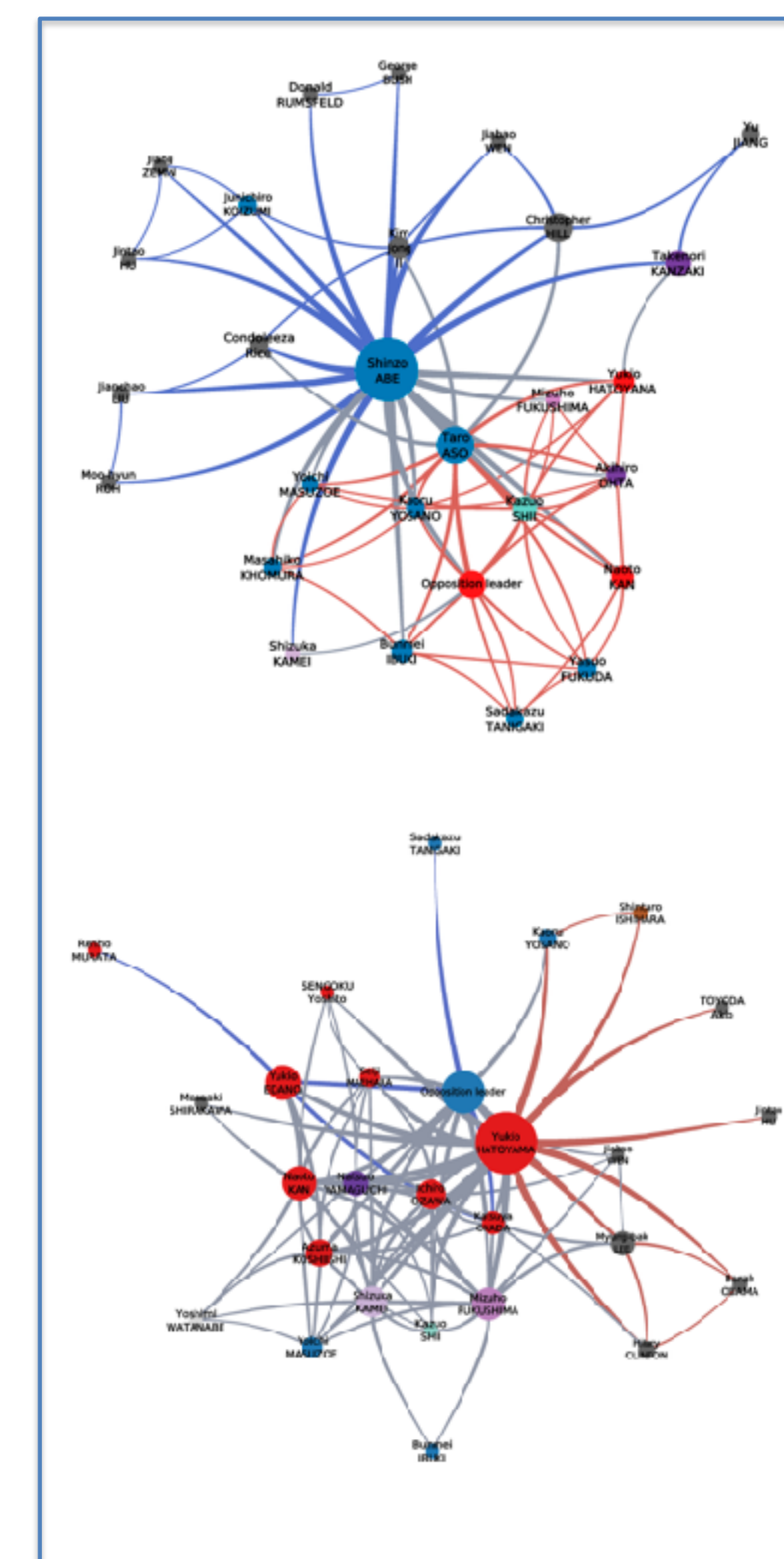
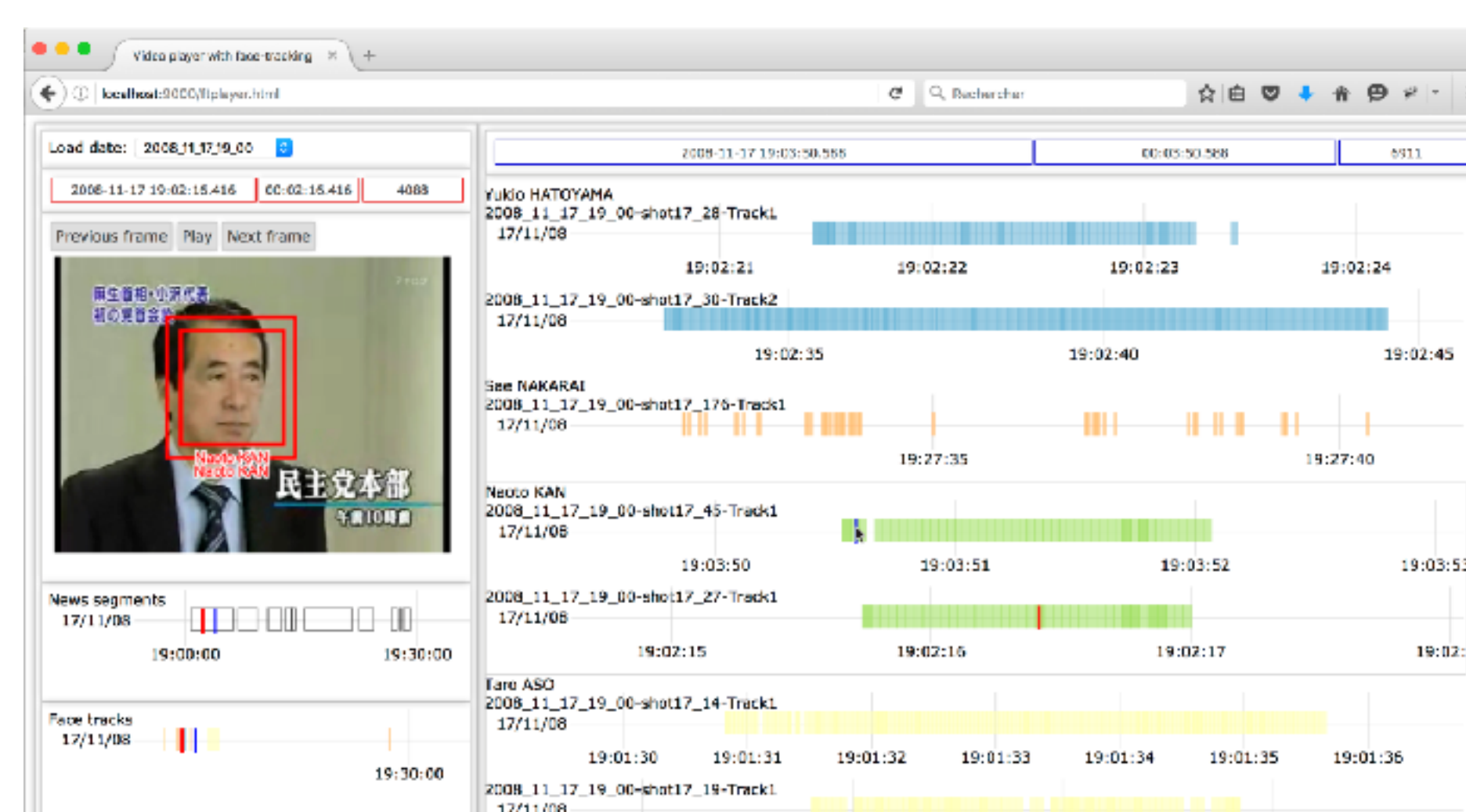
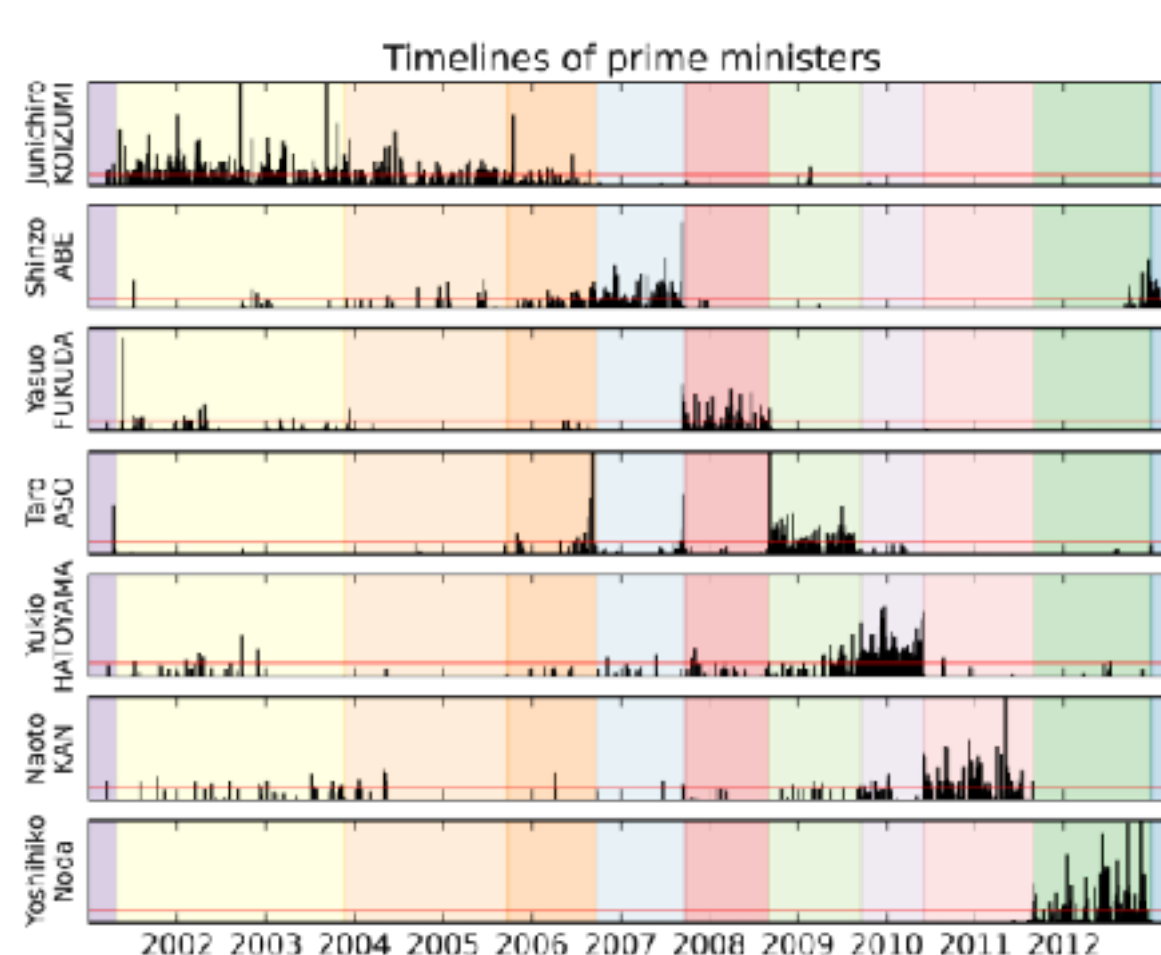
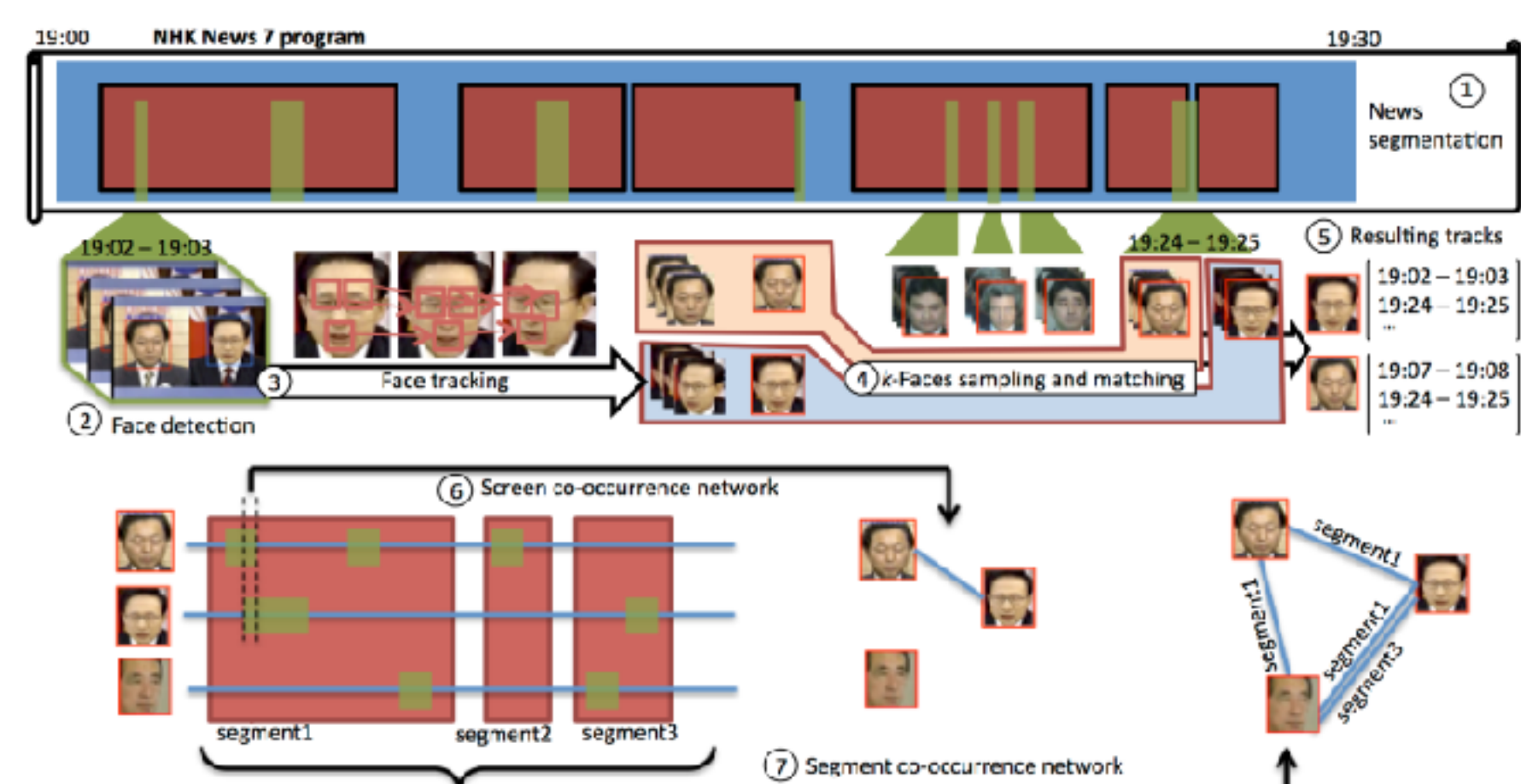
- Find *Who? When? and What?* happened in the news
- Web-based visualization using D3, canvas and Tulip
- Multiplex network visualization

研究内容

Scene Description using Dense Captioning



Face-tracking for News Analysis



Multiplex Networks for Interactive Visualization

