



VISUAL AFFECT AROUND THE WORLD: A LARGE-SCALE VISUAL SENTIMENT ONTOLOGY

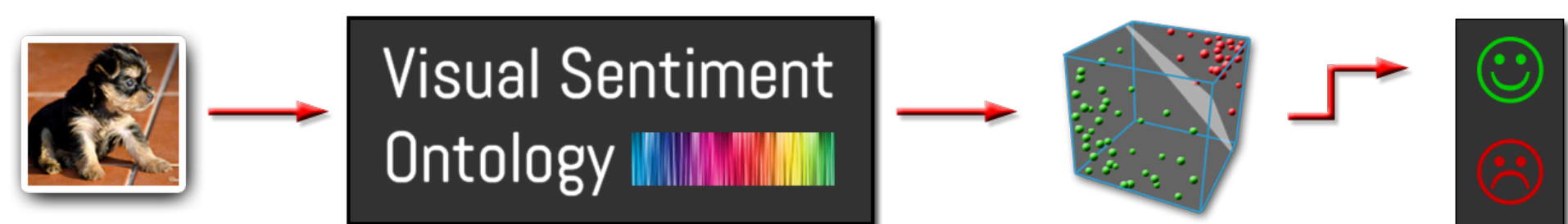
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MOTIVATION: SENTIMENT VS CULTURE

- Psychology Theories
Emotions: culture-specific or universal?
- Building culture-specific applications
Personalized affective image search and retrieval
- Literature: visual sentiment ontology



Covering English-Only Images

RESEARCH QUESTIONS

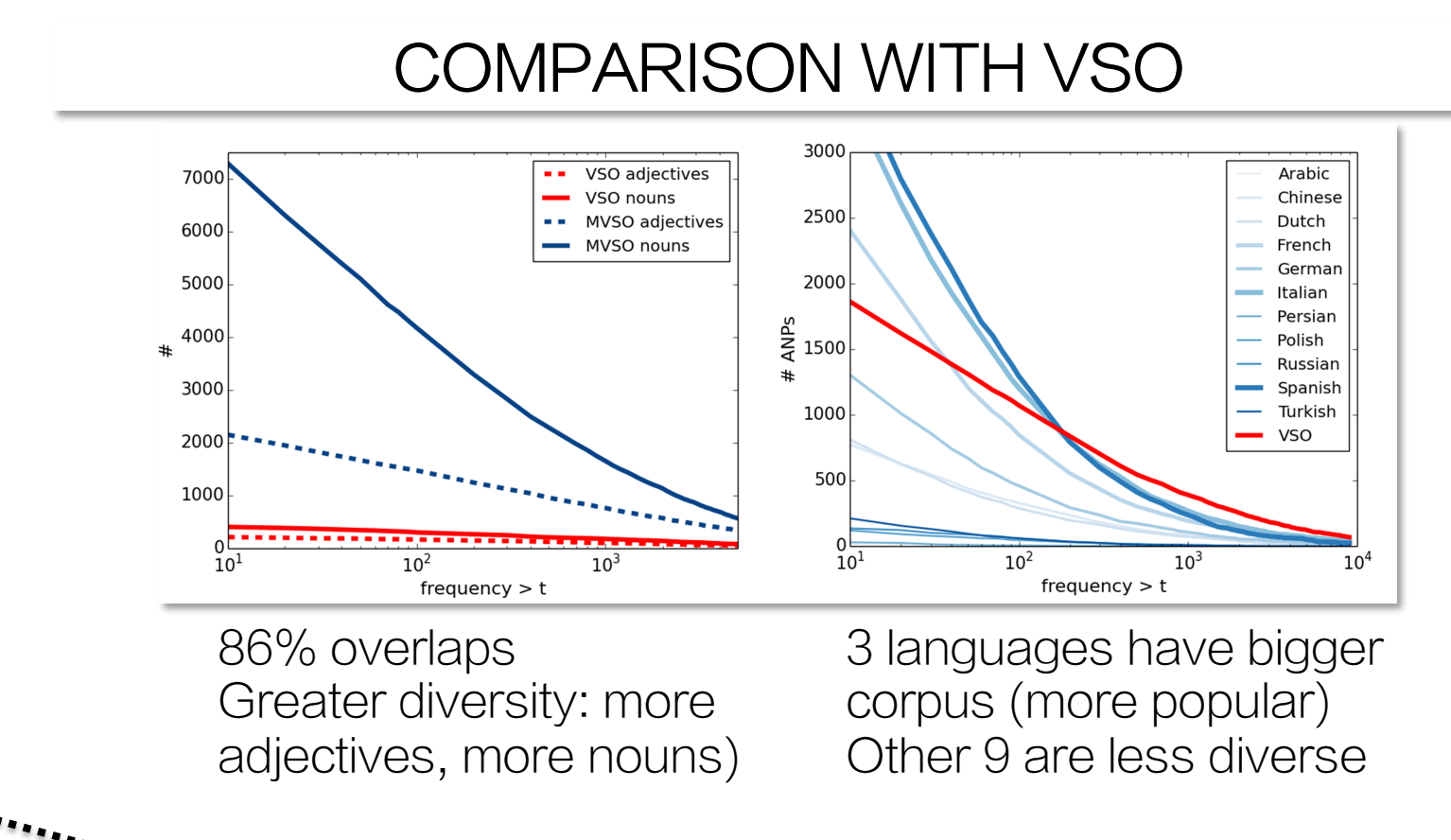
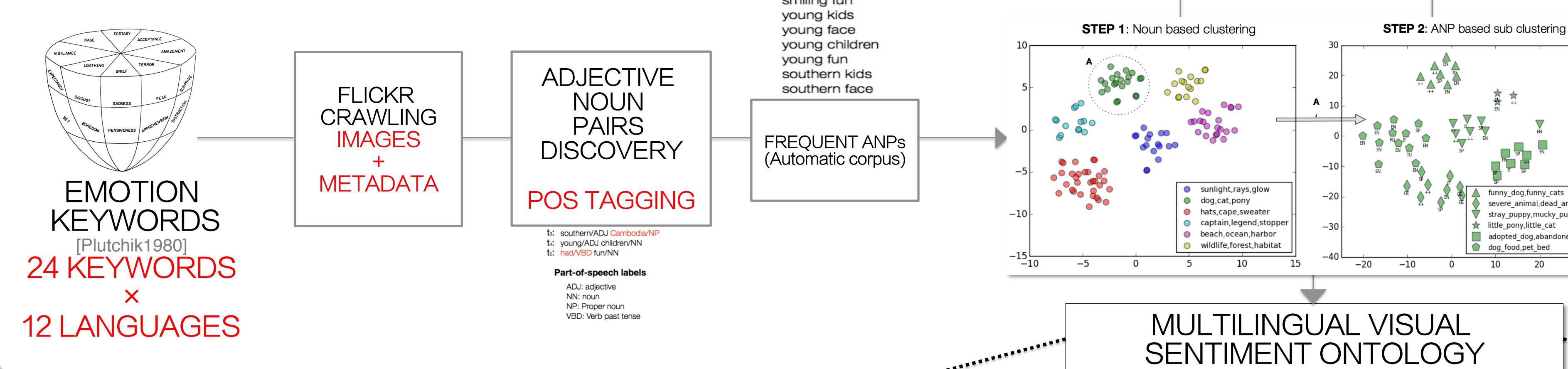
- 1) How do different cultures use images to express sentiment and emotions?
- 2) How similar are different cultures when expressing visual emotions?

CONTRIBUTIONS:

- Context-aware pipeline for designing a multilingual visual sentiment ontology
- Multilingual Visual Sentiment Ontology mined from social multimedia data
- Multilingual sentiment-driven visual concept detector bank
- Multilingual and cross-lingual sentiment predictors.

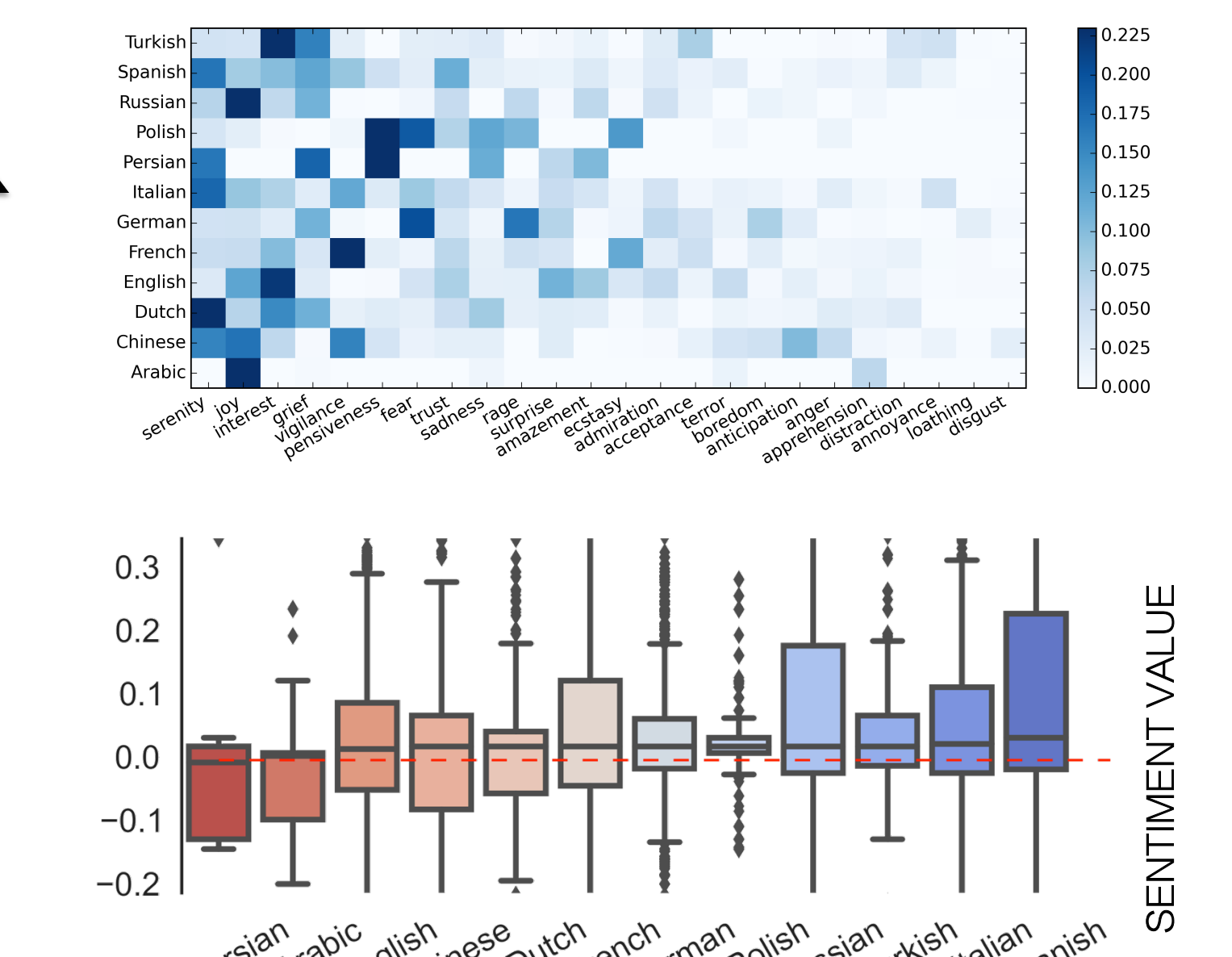
MULTILINGUAL VISUAL SENTIMENT ONTOLOGY

- ◆ 7M+ Flickr Images
- ◆ 12 Languages
- ◆ ~16K Adjective Noun Pairs (ANPs)
- ◆ Sentiment Values
- ◆ Emotion Keywords

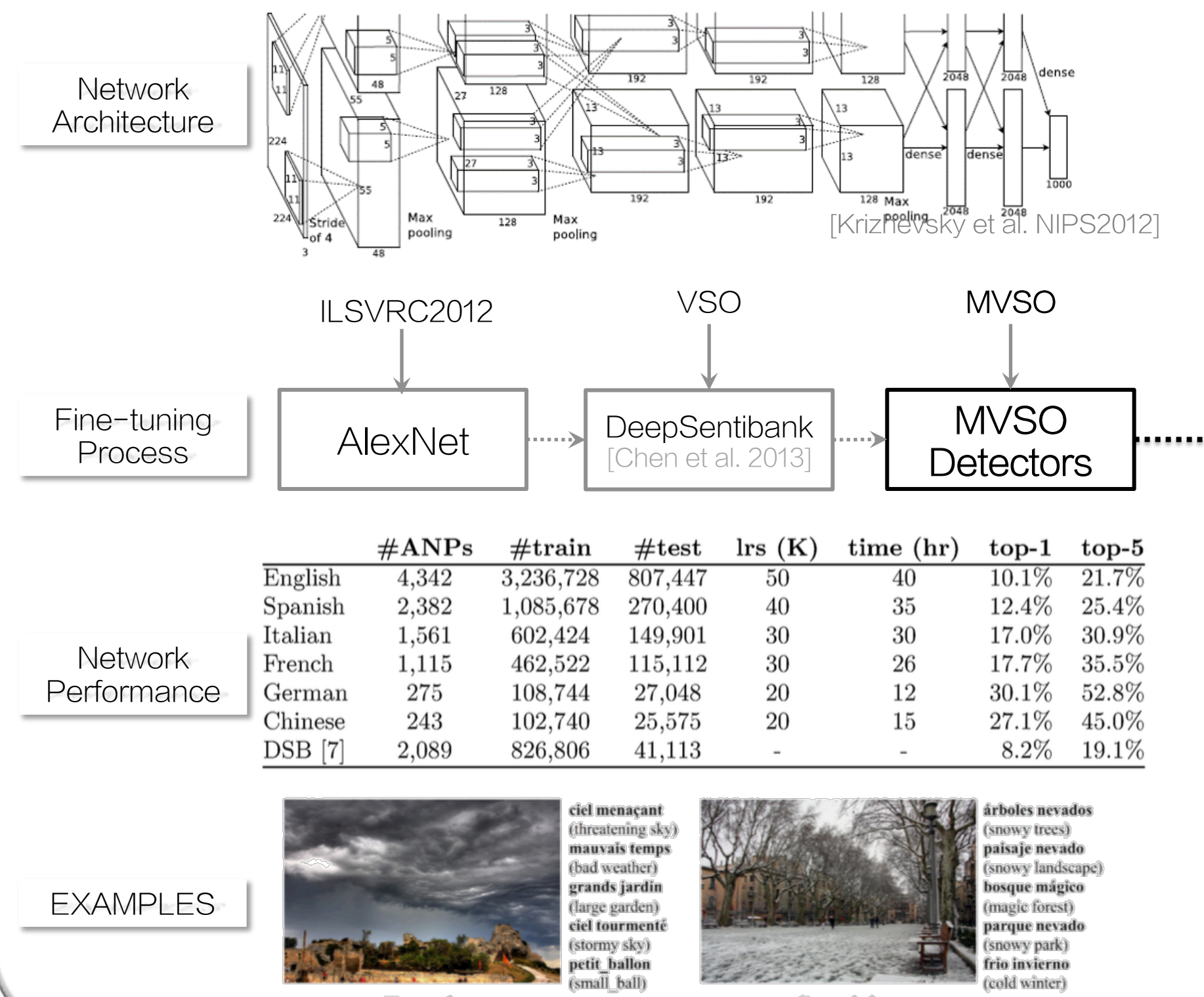


MULTILINGUAL SENTIMENT ANALYSIS

WHICH SENTIMENTS/EMOTIONS OCCUR MOST FREQUENTLY ACROSS LANGUAGES?
Understanding how visual sentiment are expressed in different languages based on emotion/sentiment values on ANPs



MULTILINGUAL AFFECTIVE CONCEPT BANKS



CROSS-LINGUAL SENTIMENT PREDICTORS

