Cross-training: Improve discourse parser using data generated by another parser

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Overview

• Target:

Improve existing discourse parsers



Problem

• Problem:

- Only very few positive training examples for some relations
- Labeled data are very expensive to get
- Labeled Data:
 - RST-DT (Carlson et al., 2001)
 - PDTB (Prasad et al. 2008)

Problem



Elaboration	Joint	Attribution	Same-Unit	Contrast	Explanation
Background	Temporal	Cause	Enablement	Comparison	Evaluation
Topic-Change	Topic-Comment	Condition	TextualOrganization	Manner-Means	Summary

• PDT

Level-1	Temporal	Contingency	Comparison	Expansion
	Synchrony	Cause	Contrast	Conjunction
	Asynchronous	Pragmatic Cause	Pragmatic Contrast	Instantiation
		Condition	Concession	Restatement
		Pragmatic Condition	Pragmatic Concession	Alternative
				Exception
				List

Problem



Original Plan

- Analyze how following factors affect parsing results
 - Quality of enriched training data
 - Size of enriched training data
 - Explicit/Implicit enriched training datas
- Analyze the impact of different factors on
 - Frequent/Infrequent relations

Change/Update

- Read relevant paper
- Understanding the code of one parser

What's done

- Experiments on this parser
 - Including analyzing the effect of different factors
 - Including performance on different relations

In process

- Read the paper and understand the code of the other parser
- Perform similar experiments on the other parser

