**Extracting Temporal and Causal Relations between Events**

**Abstract**

**英文原文**

A notably challenging problem related to event processing is recognizing the relations holding between events in a text, in particular temporal and causal relations. While there has been some research on temporal relations, the aspect of causality between events from a Natural Language Processing (NLP) perspective has hardly been touched. We propose an annotation scheme to cover different types of causality between events, techniques for extracting such relations and an investigation into the connection between temporal and causal relations. In this thesis work we aim to focus especially on the latter, because causality is presumed to have a temporal constraint. We conjecture that injecting this presumption may be beneficial for the recognition of both temporal and causal relations.

**中文译文**

在文本的事件处理的研究中有一个非常具有挑战性的问题，它就是识别文本中各个事件之间的关系，尤其是时间和因果关系。虽然当前的已经有很多关于事件时序关系的研究，但从自然语言处理的角度来看事件因果关系方面的研究却几乎未被触及。我们提出一种注释方案来包含事件之间的所有不同类型的因果关系，并研究这种关系的提取技术以及调研事件之间的时间因果关系的联系。在这篇论文的工作中，我们把因果关系作为研究的主要目标，因为因果关系是被假设有时序限制的。我们还推测，引入这种假设是对时间和因果关系的识别都有利的。