Using Vocabularies to Collaboratively Create Better Plans For Writing Tasks

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Motivation

Having an action plan for how to do a task has benefits:
- Higher Efficiency
- Better Interruptibility
- Higher Quality Output

Problem:

People do not want to make plans for their tasks. How do we outsource plan creation?

Potential Solutions:

Crowd workers can only make plans for independent tasks

Asking collaborators can have social costs and affect plan quality

We mitigate the costs of planning for people who can help plan for others’ tasks (e.g., crowd workers or collaborators)

Methods

To aid in plan creation, we use a data-driven vocabulary of functions related to writing tasks

Phase 1: Vocabulary Creation

20 Documents:

264 Plans with Inter-Rater Reliability:

Cohen’s Kappa: 0.72

Phase 2: Plan Creation

32 Documents

Unstructured Planning

Vocabulary-Based Planning

Results

Generated Plans for 768 comments using our 18-function vocabulary

Comment

"This topic should be divided into two sections, re-entry and unilateral revocation and each elaborated on further"

Unstructured Plan

1. Separate into two paragraphs
2. Add more details on 're-entry and unilateral revocation'

Vocabulary-Based Plan

1. List a few things about the procedures for former EU countries to re-enter the Union
2. Add a sentence about the information from step 1
3. Move the new paragraph under a new section heading called "Re-entry"
4. Add sentence summarizing the paragraph about reentry
5. Add a sentence summarizing the paragraph about unilateral revocation
6. Read everything to ensure it makes sense

Significantly less time and effort required to make plans with a vocabulary!