PROTEST: Manual Annotation Guidelines
Version 1.0

1 February 2016

1 Introduction

PROTEST is a pronoun test suite, designed to enable researchers to evaluate their Machine Translation (MT) systems on the specific task of pronoun translation. The test suite comprises:

- A set of hand-selected pronoun tokens, categorised according to a number of features

- An automatic evaluation script

- A graphical user interface (GUI), which may be used to:
  - Browse the translations of the set of hand-selected pronoun tokens
  - Manually annotate those pronoun tokens which cannot be evaluated automatically

2 Getting started

To run the PROTEST manual annotation tool:

1. Open a terminal window

2. Navigate to the PROTEST directory

3. Run the command: **sh gui.sh**

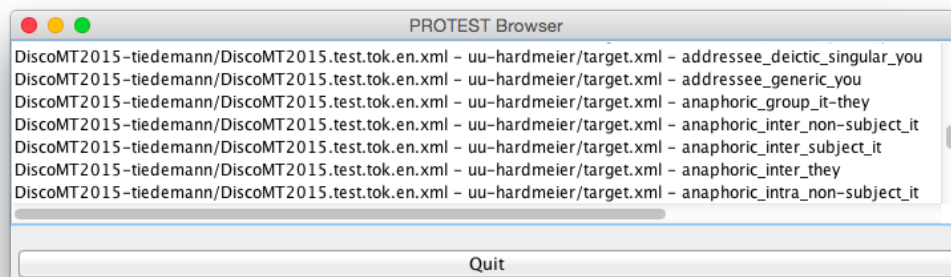This will open the **PROTEST Browser window** (see Figure 1).
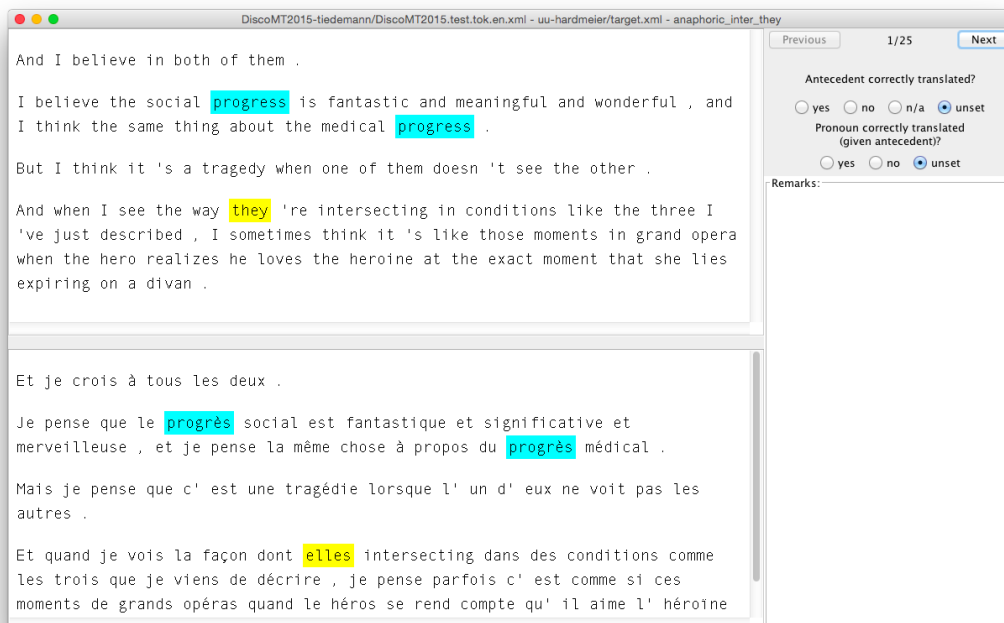

Figure 1: PROTEST Browser window

Figure 2: Manual Annotation window

Select on the system output + pronoun category combination entry that you wish to annotate. This will open the **Manual Annotation window** (see Figure 2).

Follow the annotation guidelines in Section 3 to complete the annotations. Your annotations will be saved automatically when you use the **Previous** and **Next** buttons to navigate between pronoun tokens in the set, or when you close the **Manual Annotation window**.

To exit the PROTEST manual annotation tool, click on the **Quit** button in the **PROTEST Browser window**.

3 Annotation Guidelines

Select a batch of pronoun tokens from the **PROTEST Browser window**, for the desired MT system and pronoun category. The **Manual Annotation window** will appear. For each highlighted pronoun token, read the source-language text (top frame) and the MT system output (bottom frame). Consider the translation of the source-language pronoun token that is highlighted in yellow. If the source-language pronoun was translated by the MT system, the translation (consisting of one or more tokens) in the MT system output will also be highlighted in yellow.

Complete the annotation of each pronoun instance using the following guidelines:

3.1 General Guidelines: All Pronouns

- Answer the question: "Pronoun Correctly Translated?" using the "yes/no" options in the **annotation panel** in the top right-hand corner of the **Manual Annotation window**

  – You should answer this question for all source-language pronouns, whether or not they are translated by the MT system

  – If a source-language pronoun is left untranslated by the MT system, use the "yes/no" options to mark whether this is correct/incorrect

– If you are unsure, you may use the default "unset" option and complete the annotation later. Please use the **remarks box** on the right-hand side of the **Manual Annotation window** to record any notes that may be useful to you later on

– You may come across incorrect translations. If you believe that it is possible to assess the translation of the pronoun, you should annotate as normal. If not, you should leave the pronoun instance un-annotated and add a comment to the **remarks box**

– Note: if the pronoun is anaphoric, follow the guidelines in Section 3.2

- Select the minimum number of yellow highlighted tokens that constitutes a correct translation of the source-language pronoun. To select a token, click on it. A green border will appear around the token indicating that it has been selected. You can select as many highlighted tokens as are required. It is not possible to select tokens that do not have a yellow highlight

- Please use the **remarks box** to record any issues that you would like to discuss, e.g. relating to any difficulties or problems that you encounter during the annotation of a given pronoun

- Once you have completed the annotation of the current pronoun instance, move to the next one using the **Next** button in the top right hand corner of the **Manual Annotation window**

  – If the annotations are conflicting, for example if you have indicated that the pronoun is correctly translated but none of the translated tokens has been selected, a warning will appear. You may choose to make a correction, or proceed to the next pronoun instance

3.2 Anaphoric Pronouns Only

If the pronoun is anaphoric, you will need to consider both the translation of the antecedent head and the pronoun. The *head* of the source-language pronoun's *antecedent* will be highlighted in blue. If the antecedent head has been translated by the MT system, the translation (consisting of one or more tokens) in the MT system output will also be highlighted in blue.

- First, answer the question: "Antecedent Correctly Translated?" using the "yes/no" options in the **annotation panel** in the top right-hand corner of the **Manual Annotation window**

- Select the minimum number of blue highlighted tokens that constitutes a correct translation of the source-language antecedent head. To select a token, click on it. A green border will appear around the token indicating that it has been selected. You can select as many highlighted tokens as are required. It is not possible to select tokens that do not have a blue highlight

- Second, answer the question: "Pronoun Correctly Translated (given antecedent)?" using the "yes/no" options in the **annotation panel**

  – A correctly translated pronoun is one that *is compatible* with the translation of the antecedent head, regardless of whether the antecedent is translated correctly

- Select the minimum number of yellow highlighted tokens that constitutes a correct translation of the source-language pronoun (given the antecedent)