

# Homework on Preference Change

Fenrong Liu

October 18, 2006

Please choose two questions from the following.

1. Read and understand the four possible ways of changing the constraint sequence. Are these operations sufficient to make any kind of change to the constraint sequence? Why? (You do not need to prove, a simple example would work.)
2. Look at Example 5.2 (preference changes via belief change) on Page 10 of the paper *Optimality, Belief and Preference*. We explained how this example works based on Definition 4.1. Can you give two scenarios and show how one changes one's preference using Definition 4.2 and Definition 4.3?
3. Consider the formula  $K_i\varphi \wedge \langle Pref \rangle_i \neg\varphi$ . How would you express it in natural language? Please give some concrete examples. Try to make a model in which this formula is true, and formulate the properties of your model.