

Homework #5,  
Information Integration, CSCI 6967-01  
Due March 27, 2008 at 2pm

**Question 1.** You are given the source and target schemas in the set notation in Figure 1 as well as the mappings between attributes.

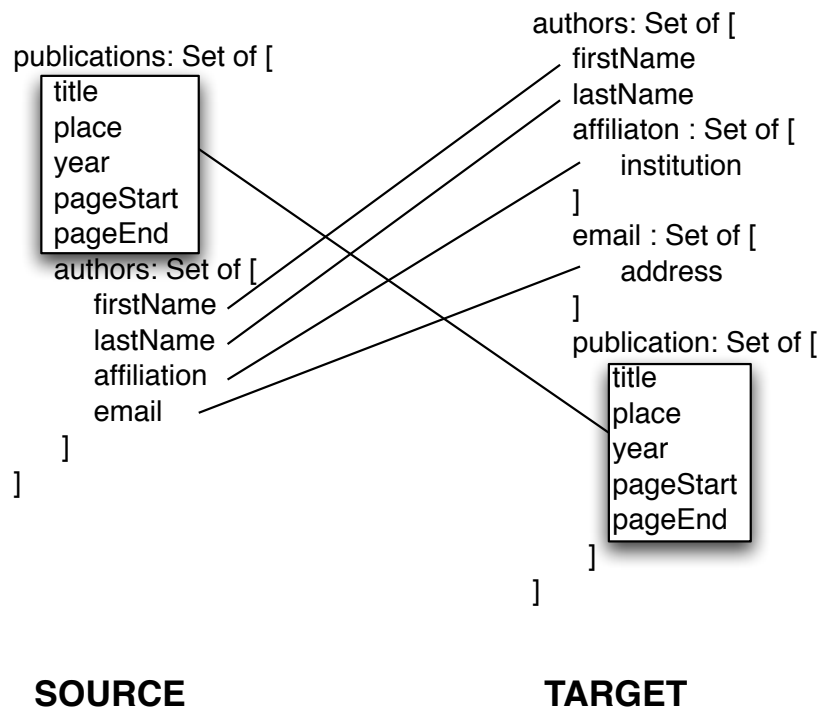


Figure 1: Use this figure to answer Question 1

- a. Write the tableaux for source and target.
- b. Find all mappings between the tableaux from part a. Prune these using the rules described in class to find the minimal set of mappings.
- c. Indicate which mappings can be nested under which mappings.
- d. Given the nested mappings from part c, describe the mappings using Skolem functions.
- e. Given the Skolemized mappings, create a nested query to compute target relation using source using the syntax given in the paper (titled: Nested Mappings: Schema Mapping Reloaded.)