

Class 37 - Translation Using Identity Theory

I. Introduction to the Identity Predicate

The identity predicate is a special predicate, with a special logic

Consider the following logical derivation:

- | | |
|----------------------------|-----|
| 1. Superman can fly. | Fs |
| 2. Superman is Clark Kent. | ??? |
| So, Clark Kent can fly. | Fc |

Identity, as in premise 2, is a relation among individuals.

We could write it 'Esc'.

But, identity has special logical properties, so we give it its own symbol, '='.

Identity sentences thus look a little different from other dyadic relations.

Clark Kent is Superman	c=s
Mary Ann Evans is George Eliot	m=g

But, they are just two-place relations.

To deny an identity, we can write either ' $\sim a=b$ ' or ' $a \neq b$ '.

Negation applies to the identity predicate, and not to the objects related by that predicate.

We will discuss the special properties of the identity predicate on Monday.

Today, we will learn a bit of translating, using a group exercise called a jigsaw.

II. The Jigsaw

Overview:

- Organize your base groups and divide tasks. (10 minutes)
- Go to work groups and learn something. (10 minutes)
- Go back to base groups and teach what you learned in the work groups to the other members of your base group. (25 minutes, 5 minutes per topic)

Before groups

Overview:

- Organize your base groups and divide tasks. (10 minutes)
 - Go to work groups and learn something. (10 minutes)
 - Go back to base groups and teach what you learned in the work groups to the other members of your base group. (25 minutes, 5 minutes per topic)
- Hand out base-group puzzle pieces to establish base groups.
- There should be five or six people in each base group.
 - There will be seven base groups for 35-39 people.
 - I will need seven puzzles, some with five pieces, some with six.
 - If there are 34 people, I can fill-in the missing piece.
 - If there are 30-33 people, we can go with six base groups of five or six people each.

Step 1: Base groups, Part I (5 minutes)

This is a very brief meeting of base groups to assign work groups.

Find the other four (or five) members of your base group.
Remember the other members of your base group, so you can get back together easily.
Write down their names.
Trade your base-group puzzle pieces for a new packet of work-group puzzle pieces.
This second packet of puzzle pieces determines each person's work group.
These pieces will not match each other.
Each of the work-group puzzle pieces has a picture on the front and a topic name on the back:

1. Only
2. Except
3. Superlatives
4. At least
5. At most

There will be two sets of work groups for each topic
Divide responsibilities among the five topics, using new jigsaw puzzle pieces.
If your group has six people, then two people must share one of the five pieces, and one task.
The best topic to share is superlatives, I think.

Step 2: Work groups (10 minutes)

Find the other two or three members of your work group.
Get a set of work sheets from the table in front of the class.
There will be at least 19 of these sheets in each packet, enough for the three or four members the work group and each person in each of their base groups.
Each work sheet has a few paradigm translations, and then some more for your group to solve.
Each person in the work group must be able to teach the task to the other members of his/her base group.
Take work sheets to give to the other members of your base group, when you return to them.

Step 3: Base groups, Part II (25 minutes)

Taking turns, hand out the work sheets from your work groups.
Show the rest of the group how to do the problems on the sheets.
A few new samples, together in base groups?

Identity Jigsaw Group Sizes

Students	Base Groups	Work Groups
10	2@5	Superlatives: 1@2 Except: 1@2 Only: 1@2 At Least: 1@2 At Most: 1@2
11	1@5 1@6	Superlatives: 1@3 Except: 1@2 Only: 1@2 At Least: 1@2 At Most: 1@2
12	2@6	Superlatives: 1@3 Except: 1@3 Only: 1@2 At Least: 1@2 At Most: 1@2

13	1@6 1@7	Superlatives: 1@3 Except: 1@3 Only: 1@3 At Least: 1@2 At Most: 1@2
14	2@7	Superlatives: 1@3 Except: 1@3 Only: 1@3 At Least: 1@3 At Most: 1@2
15	3@5	Superlatives: 1@3 Except: 1@3 Only: 1@3 At Least: 1@3 At Most: 1@3
16	2@5 1@6	Superlatives: 1@4 Except: 1@3 Only: 1@3 At Least: 1@3 At Most: 1@3

Students	Base Groups	Work Groups
17	1@5 2@6	Superlatives: 1@4 Except: 1@4 Only: 1@3 At Least: 1@3 At Most: 1@3
18	3@6	Superlatives: 1@4 Except: 1@4 Only: 1@4 At Least: 1@3 At Most: 1@3 or Superlatives: 2@3 Except: 1@3 Only: 1@3 At Least: 1@3 At Most: 1@3
19	2@6 1@7	Superlatives: 1@4 Except: 1@4 Only: 1@4 At Least: 1@4 At Most: 1@3 or Superlatives: 2@3 Except: 1@4 Only: 1@3 At Least: 1@3 At Most: 1@3
20	4@5	Superlatives: 1@4 Except: 1@4 Only: 1@4 At Least: 1@4 At Most: 1@4
21	3@5 1@6	Superlatives: 1@3, 1@2 Except: 1@4 Only: 1@4 At Least: 1@4 At Most: 1@4
22	2@5 2@6	Superlatives: 1@3, 1@2 Except: 1@3, 1@2 Only: 1@4 At Least: 1@4 At Most: 1@4 or Superlatives: 2@3 Except: 1@4 Only: 1@4 At Least: 1@4 At Most: 1@4

23	3@6 1@5	Superlatives: 1@3, 1@2 Except: 2@3 Only: 1@4 At Least: 1@4 At Most: 1@4 or Superlatives: 1@4, 1@3 Except: 1@4 Only: 1@4 At Least: 1@4 At Most: 1@4
24	4@6	Superlatives: 2@3 Except: 2@3 Only: 1@4 At Least: 1@4 At Most: 1@4
25	5@5	Superlatives: 1@3, 1@2 Except: 1@3, 1@2 Only: 1@3, 1@2 At Least: 1@3, 1@2 At Most: 1@3, 1@2
26	4@5 1@6	Superlatives: 2@3 Except: 1@3, 1@2 Only: 1@3, 1@2 At Least: 1@3, 1@2 At Most: 1@3, 1@2
27	3@5 2@6	Superlatives: 2@3 Except: 2@3 Only: 1@3, 1@2 At Least: 1@3, 1@2 At Most: 1@3, 1@2
28	2@5 3@6	Superlatives: 2@3 Except: 2@3 Only: 2@3 At Least: 1@3, 1@2 At Most: 1@3, 1@2
29	1@5 4@6	Superlatives: 2@3 Except: 2@3 Only: 2@3 At Least: 2@3 At Most: 1@3, 1@2
30	6@5	Superlatives: 2@3 Except: 2@3 Only: 2@3 At Least: 2@3 At Most: 2@3

Students	Base Groups	Work Groups
31	5@5 1@6	Superlatives: 1@4, 1@3 Except: 2@3 Only: 2@3 At Least: 2@3 At Most: 2@3
32	4@5 2@6	Superlatives: 1@4, 1@3 Except: 1@4, 1@3 Only: 2@3 At Least: 2@3 At Most: 2@3
33	3@5 3@6	Superlatives: 1@4, 1@3 Except: 1@4, 1@3 Only: 1@4, 1@3 At Least: 2@3 At Most: 2@3
34	2@5 4@6	Superlatives: 1@4, 1@3 Except: 1@4, 1@3 Only: 1@4, 1@3 At Least: 1@4, 1@3 At Most: 2@3
35	7@5	Superlatives: 1@4, 1@3 Except: 1@4, 1@3 Only: 1@4, 1@3 At Least: 1@4, 1@3 At Most: 1@4, 1@3

36	6@5 1@6	Superlatives: 2@4 Except: 1@4, 1@3 Only: 1@4, 1@3 At Least: 1@4, 1@3 At Most: 1@4, 1@3
37	5@5 2@6	Superlatives: 2@4 Except: 2@4 Only: 1@4, 1@3 At Least: 1@4, 1@3 At Most: 1@4, 1@3
38	4@5 3@6	Superlatives: 2@4 Except: 2@4 Only: 2@4 At Least: 1@4, 1@3 At Most: 1@4, 1@3
39	3@5 4@6	Superlatives: 2@4 Except: 2@4 Only: 2@4 At Least: 2@4 At Most: 1@4, 1@3
40	8@5	Superlatives: 2@4 Except: 2@4 Only: 2@4 At Least: 2@4 At Most: 2@4