

### 6.1.1. Translation Problems

**A. Translate** the following sentences into the expanded formal language (including your **translation key**.)

1. Letitia likes Lucretia.
2. Letitia likes Lucretia more than Kitty
3. Elvis is older than Trixie, but he's not wiser than her.
4. Both Neko and Jack live with Rex.
5. If Barstow is between San Diego and Las Vegas then Suki will brunch there.

**B.** Our translation of the following argument into the language of Chapter Five was shown to be formally invalid.

1. Jack's a person, and he scaled the Cathedral of Learning.
2. The Cathedral of Learning is a skyscraper.

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∴ Someone scaled a skyscraper.

But suppose a critic suggests that the argument would fare better in terms of validity by instead using this next Chapter Five translation key.

<b>a:</b> Jack	<b>b:</b> The Cathedral of Learning
<b>G:</b> ___ is a person	<b>H:</b> Jack scaled ___
<b>I:</b> ___ is a skyscraper	<b>J:</b> Someone scaled ___

**Translate** the argument using **this translation key**, then build a **model** to show that the resulting formal argument is **invalid**.

**C.** The following argument is intuitively **valid**. Show that, even though the argument contains a proper name (“Letitia”) and a two-place relation phrase (“\_\_ owns \_\_”), it can be translated into the language of Chapter Five (**without using name letters or relation letters**) yielding a formal argument that a Chapter Five test of validity judges **valid**. (Use your favorite Chapter Five method for show that the argument is valid.)

**G:** \_\_ is a unicorn      **H:** Letitia owns\_\_

1. Unicorns don’t exist.

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∴ Letitia doesn’t own a unicorn.

**D.** For each of the following intuitively valid arguments, supply a Chapter Five **translation key** (**without** using **relation letters**) that makes the argument come out **valid** in a formal test of validity. (Use your favorite Chapter Five method to show that the argument is valid.) (*Hint: for 2 – 5, don’t use a name letter for every proper name.*)

1. Jack’s sitting on a surfboard. ∴ Something’s sitting on a surfboard.
2. Jack owns a surfboard. ∴ There is a surfboard.
3. Everything looks good to Letitia. ∴ Both Suki and Neko look good to her.
4. Jack climbed the Cathedral of Learning. The Cathedral of Learning is a skyscraper. ∴ Jack climbed a skyscraper.
5. Kitty bought either a watch or a necklace. She didn’t buy a watch. ∴ She bought a necklace.

**E.** Give a Chapter Two translation of argument (D5) that comes out valid in a formal test of validity.

**F.** How would the arguments from (D) be **translated** using **relation letters**?