



# LING 101, 10:10 Discussion Section: Intro + First steps toward Assignment 1

Nir Segal

February 6, 2026

Attendance:



[PollEv.com/nirsegal243](https://PollEv.com/nirsegal243)

## Welcome!

The plan for today:

Introducing ourselves

Organizational bits

Starting to make our way to Assignment 1



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Hi, How Are You?

My name is:

(Optional) My pronouns are:

I study:

I'm a native speaker of:

Attendance:



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## Who? Where? When? What? Why?

- TA: Nir (as in "not far") Segal
- My Email: [nirsegal@umass.edu](mailto:nirsegal@umass.edu)
  - I only reply to emails during working hours (9am-5pm)
  - Check the syllabus and all other available materials before emailing
- My office hours: Tuesday 2:30-4:00pm; ILC, N421C
  - Feel free to visit Magda's or other TAs' office hours!
- DS website w/ materials: [segal-nir.github.io/101](https://segal-nir.github.io/101)

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## Who? Where? When? What? Why?

- In the section, we will:

- Review lectures and assignments
- Ask questions and provide answers
- Help each other put our thoughts together in writing

- We take attendance

- Contact us regarding any issues

- Go over the syllabus for more details re grading etc.



Questions?

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# Assignment 1

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## The assignment

≤500-word essay answering the question: Can animals learn a human language?

- Crucially, your answer must include information from:
  - Terrace, H.S. (1979) "How Nim Chimpsky changed my mind". *Psychology Today*, November.
  - Kaminski, Juliane et al. (2005) "Word learning in a domestic dog: Evidence for 'fast mapping'". *Science* June 11.
- Otherwise, use what you learned about *human language* in the Unit 1 lectures.

## Assignment 1: Breakdown

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- In order to properly answer the general question, your essay must:
  1. Address the two following subquestions.
  2. Draw a comparison between the answers to those questions.

### The assignment

≤500-word essay answering the question: Can animals learn a human language?

#### Subquestion 1

What does it mean to know a human language?

#### Subquestion 2

What were the animals in the experiments able to do?  
/ What weren't they able to do?

## Subquestion 1

What does it mean to know a human language?

- Recall two components of language that children show knowledge of:



(Hint: G \_\_\_\_\_ /R \_\_\_ and W \_\_\_)

- Can you back up your answer with some evidence that we discussed in the lecture?
- What influence does direct teaching have on language acquisition in babies?

### Subquestion 2

What were the animals in the experiments able to do? /  
What weren't they able to do?

- Go over the reading and highlight excerpts where you can find answers to the above question.
- Paraphrase that information in a way that cites the resources rather than quoting it.
- Compare those answers to the answers for the previous subquestion.

## Assignment 1: Breakdown

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- Not sure how to paraphrase? Consult the instructions for the assignment on Canvas; another useful resource is the following [They say, I say](#) templates.
- In addition, you should go over the *grading form* for this assignment on Canvas. It shows you exactly how your essay will be graded.

$$S(s) = \sum_{n=1}^{\infty} \frac{1}{n^s} = \pi \sqrt{\left(\frac{1}{s-1}\right)} S = \text{const} \quad s > 1$$

fact:  $\pi^{-\frac{s}{2}} \Gamma\left(\frac{s}{2}\right) = \Gamma\left(\frac{1-s}{2}\right) \Gamma\left(\frac{1}{2}\right)$

$$\frac{1}{S(s)} = \sum_{n=1}^{\infty} \frac{\ln(n)}{n^s} = \frac{1}{(s-1)^2} \sum_{n=1}^{\infty} \left( \ln\left(\frac{n}{s-1}\right) - \ln\left(\frac{1}{s-1}\right) \right) (0)$$
$$\frac{1}{1} + \frac{q_1}{1} + \frac{q_2}{2} + \frac{q_3}{3} + \dots = \frac{1}{(s-1)^2} \left( \ln\left(\frac{1}{s-1}\right) + \frac{1}{2} \ln^2\left(\frac{1}{s-1}\right) + \dots \right)$$

$$\text{Pf: } \Rightarrow Q(x) = x \cdot \left( \frac{1}{x} \cdot \ln\left(\frac{1}{x}\right) \right)$$
$$Q(x) = x \cdot \left( \frac{1}{x} \cdot \ln\left(\frac{1}{x}\right) \right)$$
$$\text{def: } Q(x) = \sum_{n=1}^{\infty} \frac{\ln(n)}{n^x}$$
$$T(x) = \sum_{n=1}^{\infty} \frac{1}{n^{x+1}}$$
$$S(1-x) = \sum_{n=1}^{\infty} \frac{1}{n^{1-x}}$$

$$\begin{aligned} P(x) &= K \cdot \left( \frac{1}{x} \cdot e^{-\frac{x}{1-x}} \right) \\ T(x) &= K \cdot \left( \frac{1}{x} \cdot e^{-\frac{x}{1-x}} \right) \\ \text{def: } f(x) &= P(x) - T(x) \\ \Rightarrow f(x) &= \frac{1}{x} \cdot \left( e^{-\frac{x}{1-x}} - 1 \right) \\ \text{def: } \tilde{f}(x) &= \frac{1}{x} \cdot \left( 1 - e^{-\frac{x}{1-x}} \right) \\ \text{def: } \tilde{g}(x) &= \frac{1}{x} \cdot \left( 1 - e^{-\frac{x}{1-x}} \right)^2 \\ \tilde{g}(x) &\rightarrow 0, \quad \tilde{f}(x) \rightarrow 0 \end{aligned}$$

See you next time for peer review!

