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**Machine Learning with Python-From Linear Models to Deep Learning**[Course](#)[Progress](#)[Dates](#)[Discussion](#)[Resources](#)[Course](#) / [Unit 3. Neural networks \(2.5 wee...](#) / [Lecture 11. Recurrent Neural Ne](#)[< Previous](#)

## 5. RNN Decoding

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Exercises due Mar 29, 2023 08:59 -03 Past due

## Decoding





▶ 0:00 / 0:00

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### Video

 [Download video file](#)

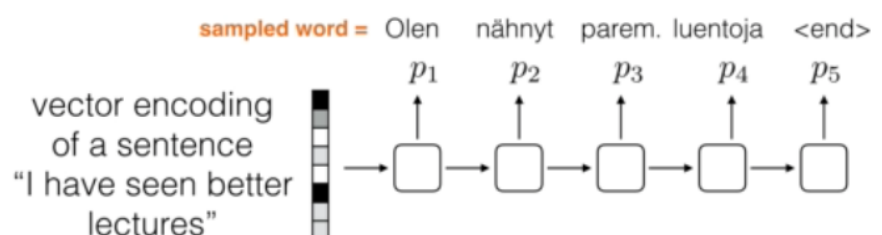
### Transcripts

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## Decoding with RNN

1 point possible (graded)

Now, we would like to decode a feature vector with RNN's. The picture below illustrates how the English sentence "I have seen better lectures" is translated into a sentence of a Finnish lecture.



Unlike in encoding, at each step, an output distribution  $p_t$  is produced in a decoding RNN.

Now, which of the following is true about decoding RNNs?  
(Choose all those apply.)

- ☐ In the translating example above, the output probability distribution is fed as a step
- ☐ The probability distribution is the same at each step, just like how parameters steps
- ☐ In the first image, the foreign word "Olen" in the above picture is a "sampled" result of the RNN produced.

Submit

You have used 0 of 2 attempts

## Predictions

1 point possible (graded)

Suppose we are building an RNN model to translate images into sentences, as described in the video. Which of the following is only done in generating the predictions of sentences from a trained RNN model on images but **not** in the training process?

- ☐ Feeding the sampled output as part of the input to the next time step
- ☐ Calculating what percentage of words the RNN correctly generated
- ☐ Feeding the sampled output as part of the input to the next time step

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? questions about the lecture

I must admit that this lecture is not clear to me. Probably too quick? here some questions.. 1) what does it mean

? I am trying to understand the problem given in the lecture

So the problem is the image is converted to a vector and this vector is used to predict a sentence? Then how

💬 Why sampling for the predictions?

Why should I use sampling to get the predicted words? Why not simply taking the one with largest probability

💬 The last question (...Predictions...)

I am not going to mention the "correct" answer to the last question, of course. But to me, it seems incorrect!

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