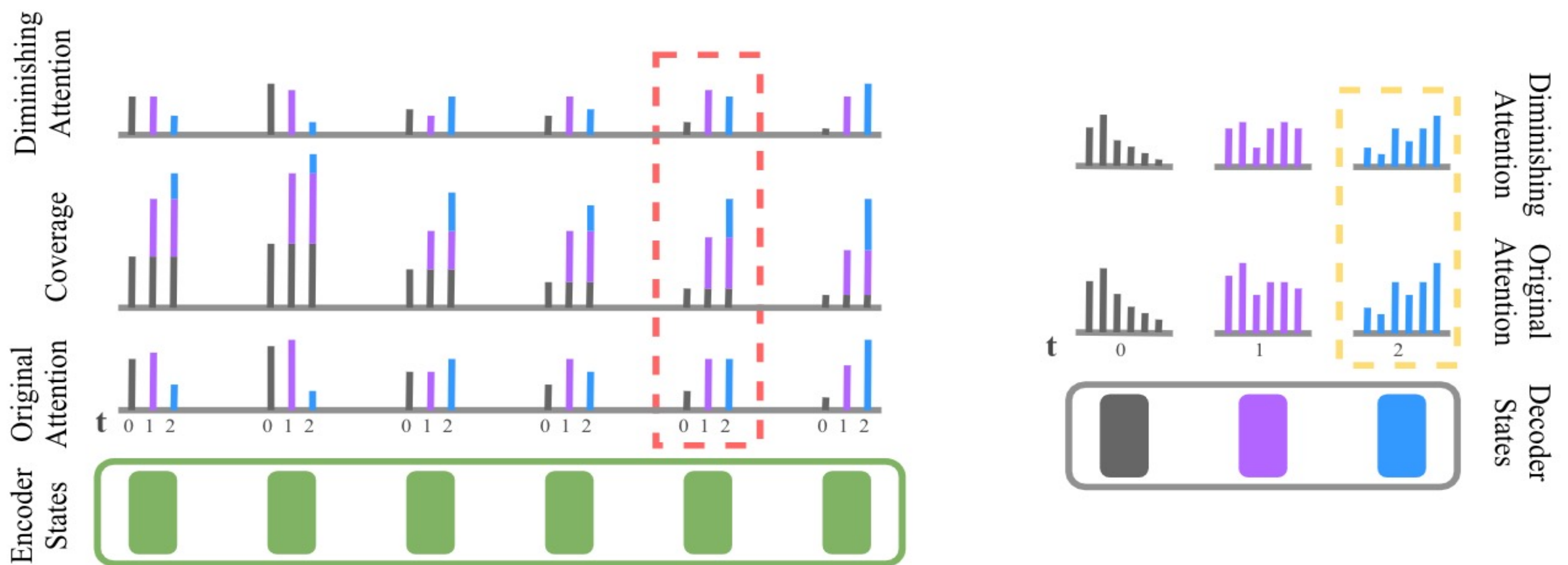# Advancing Neural Text Generation

Architecture-Oriented and Data-Oriented Methods

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Project Objectives:

Bearing in mind the objective of improving the current neural text generation systems, we systematically surveyed the current systems and proposed two methods:

- An attention module which offers an architecturally simple and empirically effective method to improve the coverage of neural text generation.

- A general method for fine-tuning pretrained models for summarization in an unsupervised, dataset-specific manner and introduce data augmentation techniques for text summarization.

Project Results:

- We achieve state-of-the-art results on multiple text generation tasks.
- WikiTransfer achieves state-of-the-art zero-shot results on CNNDM.

The improvements from our model

Target Dataset	WikiTransfer			Other Transfer			
CNNDM	**39.11**	**17.25**	**35.73**	36.81	14.18	32.62	(Reddit)
XSum	**31.85**	**10.44**	**23.75**	24.04	6.43	18.99	(Reddit)
Reddit	**21.47**	4.10	17.62	21.37	**4.14**	**17.76**	(CNNDM)
BigPatent	**35.58**	**10.91**	**31.53**	33.57	9.34	25.76	(CNNDM)