Evolution of the lyrical output of the model

As the model is trained across multiple epochs and periodically tested, we observe the evolution of the output lyrics:

Stage 1 - Baby-like babbling

"i to do me i can't go do i the me i can't go do i the me"

Stage 2 - Middle-English-esque sentences

"ihe thourd my litgh and a fill mekper they re, i'm junt fell be the you tide wo lever ba, you geve"

Stage 3 - Sounds like something you could put a tune to:

"i say goodbye and i can't forget"

Sample output lyrics - the LSTM co-writes a song with the Beatles

- The first line is from the original Beatles song it provides a "seed" to the LSTM neural network
- The lines in brown are the lines from the original song
- The lines in blue are generated by the LSTM neural network
- Please click on the icon below to hear a professional musician's recording of the lyrics

(Lennon-McCartney-"Ronnie" the LSTM) 'Girl (Revisited)'

(Is there anybody going to listen to my story)

all about three cool chicks

(She's the kind of girl you want so much it makes you sorry)

to me you change the way things mean

(Ah girl, girl, girl)

Well you say goodbye when i had the night i can't forget that



Lyricality

- Western pop music lyrics typically use a 4/4 time signature of alternate strong and weak syllables
- The LSTM output lyrics were phonetically analyzed using a metrical phonological parser
- Below we see the LSTM generated lyrics alongside the lyrics in the original Beatles composition. The LSTM generated lyrics display a similar structure of alternating strong and weak syllables

```
ALL | ab | OUT | the | GIRL | who ALL | ab | OUT | three | COOL | chicks
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WHEN | i | THINK | of | ALL | the WELL | you | SAY | good | BYE | when
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