I'd Like to Thank the Algorithm that Made this Film Possible

- *7/11/2016 by [Ariella Brown](#) 63*

Just under a year ago, I wrote about algorithms producing [producing rap lyrics](#) and said, "Perhaps the next project will be an algorithm that produces films." In fact, that project has arrived, and its name is Benjamin (formerly known as [Jetson](#)).

Benjamin is the self-chosen name of "the world's first automated screenwriter," according to its own [Facebook page](#). Benjamin's [site](#) gives a slightly longer description of the screenwriter as "a self-improving [LSTM RNN](#) [Long short-term memory recurrent neural network] machine intelligence trained on human screenplays."

Benjamin already has written a film entitled "[Sunspring](#)" with some prompting from [Ross Goodwin](#), "creative technologist, artist, hacker, data scientist," and the filmmaker [Oscar Sharp](#). To qualify for the [Sci-Fi London 48 Hour Film Challenge](#), the entire film was made from start to finish in just 48 hours with three human actors playing the roles.

It is available for your viewing pleasure on YouTube. As the [writer Neil Gaiman](#) tweeted, "Watch a short SF film gloriously fail the Turing Test."
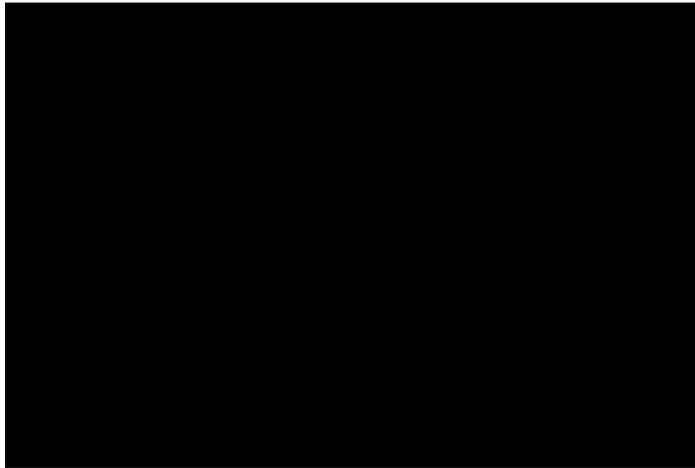
The lack of coherence between and within lines gives the film and script (posted [here](#)) is reminiscent of the dada movement. At one point, the main character (identified as H) declares: "It's a damn thing scared to say. Nothing is going to be a thing but I was the one that got on this rock with a child and then I left the other two." That is followed by the stage direction, "He is standing in the stars and sitting on the floor."

Benjamin, however, is not deliberately channeling [Hugo Ball](#) or [Tristan Tzara](#). He is merely composing what the algorithms dictate. As Goodwin explained in an emailed response to my question about the possibility of influencing the outcome of the algorithm:

The type of algorithm I used, an LSTM recurrent neural network, can be influenced in certain ways -- for example, by selecting only science fiction materials for the corpus, the output will have a science fiction feel to it. However, the way it generates text is by referencing a statistical model with millions of

parameters and predicting which letter comes next over and over again. That process doesn't lend itself to control over story structure or aspects like number of characters, etc.

Algorithms based on the model fed into Benjamin were also used for "Home on the Land," the song sung at the end of the film. Benjamin did not write the music, though. That was done by humans from [Tiger and Man](). The combination is not bad, though human creativity has to get at least some of the credit.

Whether or not one says the same for the film as a whole really depends on one's expectations. Certainly, I wouldn't have sat through all nine-plus minutes to watch the film if it were just a not-ready-for-primetime human production. But because it is an AI production, I was curious to see the results and had much more tolerance for its shortcomings. If it's viewed as a work-in-progress, it could be interesting to watch for improvements down the road as algorithms are adjusted to produce something closer to what we expect from human writers.

Goodman does believe that AI will eventually be able to achieve the level of coherence one expects from human-produced films. However, he does not consider that to signal the end of human creativity. He contends that we should be thinking about "how we intend to use such technology well in advance of its arrival." We should be considering in what way that technology can "augment our creativity" rather than rendering it irrelevant.

In light of that assessment, perhaps Benjamin's song is what best encapsulates the possibility for bringing together human and machine intelligence to produce something that makes the best of both. What do you think?