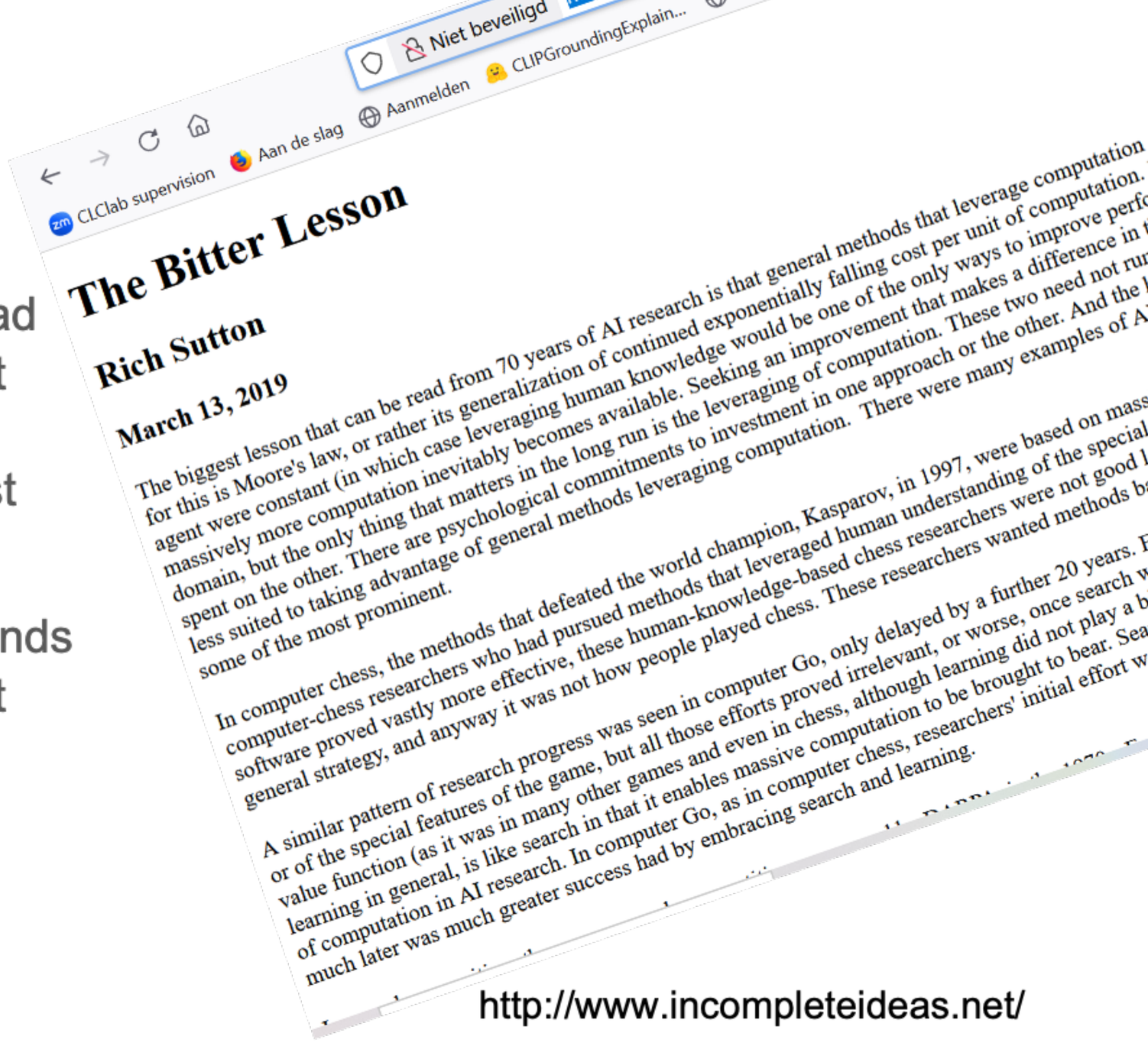
The Bitter Lesson

"The biggest lesson that can be read from 70 years of AI research is that general methods that leverage computation are ultimately the most effective, and by a large margin…

the human-knowledge approach tends to complicate methods in ways that make them less suited to taking advantage of general methods leveraging computation."



http://www.incompleteideas.net/

1.
Speech technology will (also) in the future be dominated by machine-learned, blackbox models. Posthoc Interpretability will be an essential aspect of its responsible deployment.

Interpretability is challenging

End-to-end deep learning is so successful, because it allows models to develop ‘meso-scale’ representations, involving non-linear transforms and interactions between input features, from training on gigantic datasets.

Scale, nonlinearities, feature interactions are exactly what makes posthoc interpretability challenging

Success depends on isolating the nonlinear feature interactions, but the best way to do this will not trivially become apparent by bottom-up techniques

2.
No Success Without Engaging in Earnest with Theory and without Elaborate Reasoning

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The No-SWEETER lesson!

3.
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