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Blog Jens Jäger



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Why a human workforce will become obsolete

Right on Wednesday, the conference hadn't even fully taken off, it was Philipp Theisen's talk that already brought what I found to be one of the most decisive questions on the agenda: In the future, will proceeding automation render a human workforce obsolete? From my perspective, Theisen cleverly illuminated the problem from a point of view of literary and social studies. His working hypothesis read that, yes, future economy will rely exclusively on machines as the provider of all goods and services. Of course, bold view don't come unopposed---and, in this regard, the ensuing plenary Q&A session didn't prove any different. Several good points in favour of Theisen's hypothesis, I felt, haven't been given the credit they deserve. This brief interjection shall be an attempt to fix that.

In my view, the most compelling argument for Theisen's hypothesis seems to be a historic one. It is brilliantly laid out in a YouTube clip, made and hosted by the channel CGP Grey, that features a fictive conversation between two horses bewildered by the ramifications of the industrial revolution. The whole piece gives a very illustrative yet digestible account of how the day will come when "for most jobs, [humans need not apply](#)". Seriously, if you haven't watched the clip already, stop reading, click the link and right the wrong. It's worth it.

So, what is left to say? Well, thanks to the video's good work not too much. To illustrate why the video's account is so plausible in the first place, however, the following basic thoughts might help: While it soon became pretty clear that machines can easily outcompete humans at virtually any physical task the case might not seem as clear when it comes to mental functions. With ever ongoing advances in neuroscience, however, we are slowly becoming more familiar with how the brain works, con-



firming one hypothesis, while discarding the other. One longstanding and basic observation stands the test of scientific progress: Brain functions arise purely from [computations](#) made within neural networks. Since any kind of computational process can, in principle, be realized within conventional computers there is no fundamental limit to how well brain functions could be remodeled in an AI.

Accepting this established premise the only real obstacle separating society from its first fully-functional hair styling machine, its first robotic elementary teacher, or even its first androidal novelist, is time. If history has taught us one lesson, it is that human adventurism hardly knows fixed limits. The progression of artificial intelligence won't prove one either.