



The real world is much more complex

- there are many different inputs and outputs
- the results of actions may not only be slow but also ambiguous



Go is a game with simple rules,  
easy actions and quick feedback "win/loss".

Feedback is essential for DNN



## Current vs. Future

CURRENT	FUTURE
Breakthroughs in several practical applications	Algo trading → stock market
→ speech recognition	→ high complexity → simple input & output → clear measure of success
	

Whoever controls the money can control people, industries, states

Makes more profits by playing lazily  
→ Taking companies to the brink of ruin  
→ Buying them cheaply

**DNN - ALGO TRADING**  
DANGEROUS?

Our general moral concepts are not "human nature", but have been learned (Nietzsche)


Autonomously learning DNN can lead to completely different moral concepts

## • BE CREATIVE •

Go Style is kind of "creative" - but there's long way of PC on creating sth. real on their own

Computers have to understand lots of things what we are learning unconsciously since our childhood

First: autonomous scientific research - later they will learn to rethink and create new ideas



He thinks 2035 - if we let them.

We don't have to submit our position as „leaders“

Wise political decisions are needed - quick



Great danger that DNN will take over the stock market & not hand back the control

Companies can help themselves by changing to a „parquet trade“ - Influence is smaller

Isn't easy to make laws because every country decides on their own

## Political Decisions



