A companion to the <u>scaling laws</u> is the scaling hypothesis. Here is a <u>description from gwern</u>:

Scaling Hypothesis

The *strong scaling hypothesis* is that, once we find a scalable architecture like self-attention or convolutions, [...] we can simply train ever larger [neural networks] and ever more sophisticated behavior will emerge naturally as the easiest way to optimize for all the tasks & data. The scaling laws, if the above hypothesis holds, become highly relevant to safety insofar capability gains become conceptually easier to achieve: no need for clever designs to solve a given task, just throw more processing at it and it will eventually yield.

Related

- What are "scaling laws" and how are they relevant to safety?
- What is the weak scaling hypothesis?