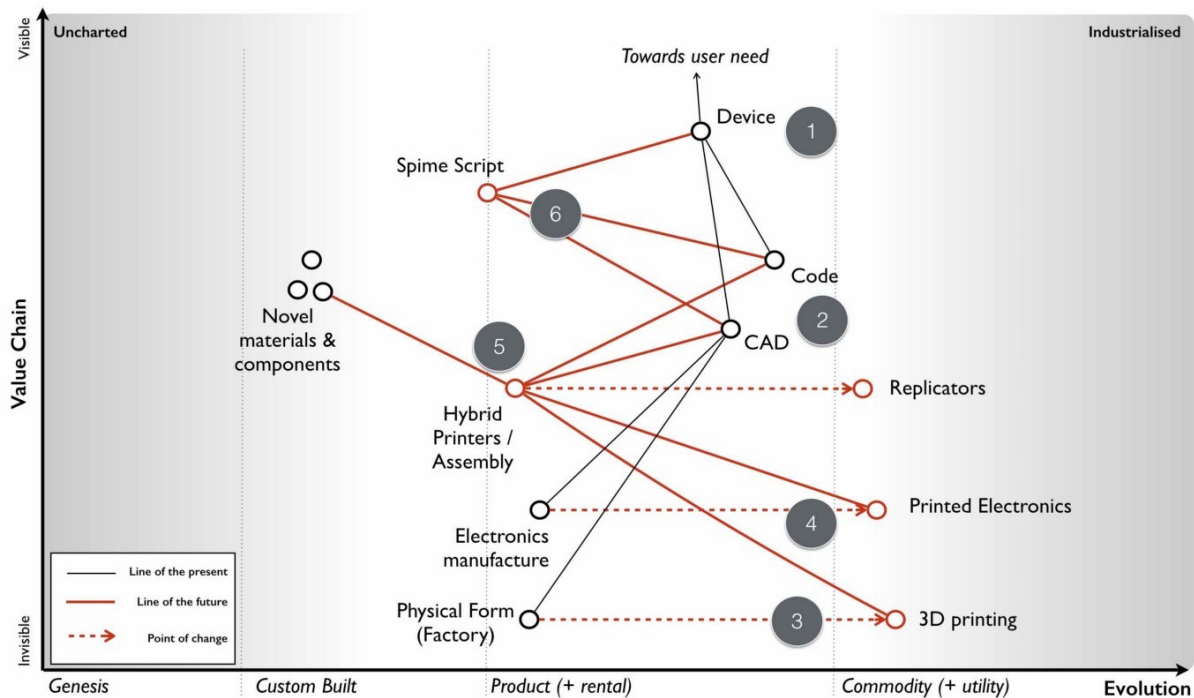


Figure 53 — The near, the far and the crazy



First let us start with the user need for some device (*Point 1*). I'll leave it as generic because I want to cover manufacturing itself and not the specific use of one device over another. Our device would have physical elements including electronics along with any software that would interact with it. The physical and electronic elements are commonly described through some form of computer aided design (CAD) diagram which provides instructions on what to build and this is combined with our software which is simply our code (*Point 2*).

The physical form would normally be manufactured by a factory which generally used common machinery involved in significant custom processes. However, this was starting to change with concepts such as digital factories and even 3D printers which were becoming less magical and more common (*Point 3*). This promised a future world of