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6.1. Digital design cognition

Firstly, digital design cognition is discussed. As a result of the new way of thinking about architecture and shift of paradigm, the current design cognition studies have to accommodate these changes also. Major changes are entailed from the way we study designers, the “designerly way of knowing” as Cross elaborated [15]. What is prominent in this shift is the relational value between designers and digital tools. (Analogue) design cognition studies such issues as ways designers utilise pen and paper or how physical model making traditionally focused the exploration in the designer’s mind. The digital design cognition taxonomy may possibly be more suitable to view using the *embodied cognition lens*. This research program challenges the long known cognitive science; by suggesting that cognitive processes are deeply rooted in the body’s interaction with the world [16-18]. In other words, designing can be perceived as an embodied experience [19], a dialogue which is distributed across mind, body and design environment. Instead of asking “how do designers design”; the new question could be “What is the dialogue between designers and (digital) design tools in the ideation process?” ...

Moreover, digital design cognition perhaps needs to be distinguished between computer-aided design cognition and computational design cognition. As mentioned previously, on one hand the two approaches share similarities in terms of the use of technology; on the other hand they possess significant differences in terms of the nature of how technology is used. In the latter approach, technology and design tools serve as vehicles for exploration which are highly related to taking advantage of computer power.