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Author

Nesheim, Elisabeth

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BODY of KNOWLEDGE

Physical sketching, abstract movements and creative processes - the promise of updating the body schema with haptics

Elisabeth Nesheim

What is at stake when the sense of touch, postures and gestures of the hand, aided by haptics become key players in a creative process of designing tools, services or even artistic works? Although haptic technologies are becoming more common we still do most of our everyday computing through screens. Such ocularcentric interface design offers an unbalanced mediation of the multisensory way we experience the world. The sense of touch has long been noted as a reality checking device in what I touch is real. By downplaying the role of touch and motor-sensory perception data in interface design, we ignore a vital source of information of the world — which in turn has its impact on our thinking about the world. This paper develops Mark Hansen’s claim that new media technologies can broaden the what he labels the pre-personal domain—“the organism–environment coupling operated by our nonconscious, deep embodiment” (2006, 20), as it offers us the option of translating the unobservable (or rather the pre-consciously perceivable) into the visual realm, granting us access to new multi-sensory and synesthetic experiences. I do so by unpacking the two points present in Hansen’s claim: 1) the notion that the pre-personal domain is extendible, and 2) that new media technologies (digital, haptic and sensor technologies) are in a distinct position to do so. Hansen’s idea has its roots in Merleau-Ponty’s notion of the body schema. By identifying the processes governing the extending, revising and preserving of the body schema—unpacking MP’s concept of abstract movements and investigating embodied cognition researcher David Kirsch’s hypothesis on physical sketching—we are given a clue as of how the pre-personal domain is expanded. Finally, I discuss a particular haptic technology (the data glove) and connected artistic practices, to see how such technologies are in unique position to extend our body schema.