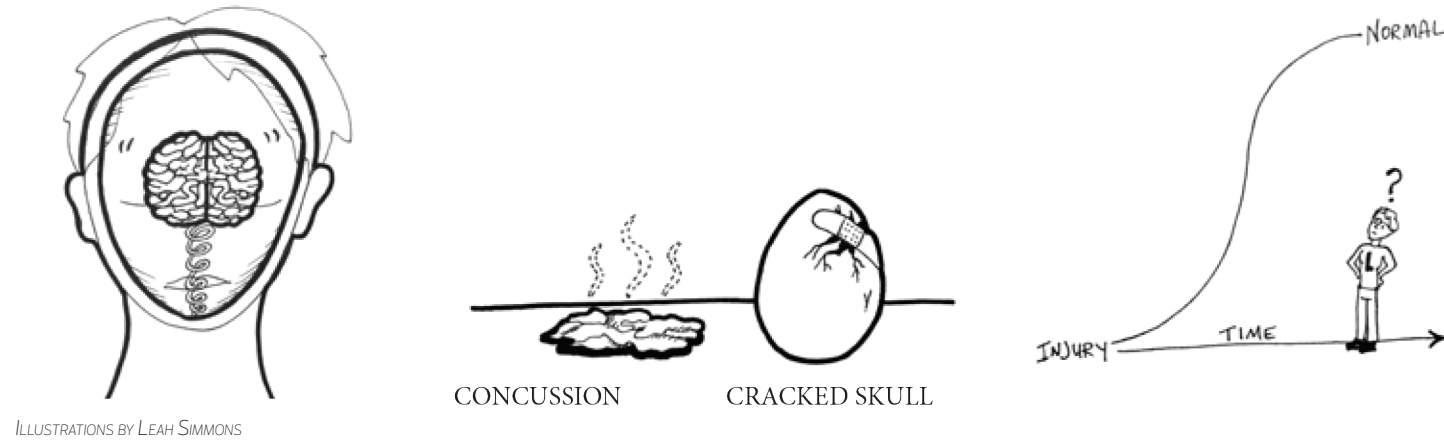


Brains Crave Natural Environments

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I. EXTENDED ABSTRACT

Digital tools and toys have become quickly integrated into our professional and personal lives. What is this doing to the "human being"? (Gadamer, 12). We must examine how the digital environment affects our physical, mental and emotional health and welfare.

Our understanding of brain injuries and positive recovery could help define healthy use of future digital environments. Neurocognitive tests and ocular movement document the normal brain and recovery path for brain injuries (Samadani). A concussed person is advised to minimize stimuli. Excessive use of digital screens exacerbate symptoms and prolong brain healing. Concussion specialist Dr. Valentine recommended artistic tasks, such as drawing, to his patient, Leah Simmons, who suffered over six months from a concussion she received while playing roller derby. Simmons found drawing challenging, but did not aggravate symptoms. The task became a predominant role in her recovery.

Even with minimal use of digital reality, we are forced to adapt as technology is streamlined, and ergonomics requires a broader definition. Inventions such as glasses with computer screen lenses could solve the physical harm our bodies suffer while looking down at a phone or tablet. However, our brains might not easily assimilate to a world with constant 3D environments, which is where technology is moving, especially in architecture.

3D or digital environments, such as 3D movies, computer modeling, tablet or phone use, can trigger nausea and dizziness for some people. Motion Sickness is a common term, however, the sickness we feel from digital environments is not. Cybersickness, Simulator Sickness, Visually Induced Motion Sickness, etc., are some terms to describe it.

"Cyriel Diels from Coventry University's Centre for Mobility and Transport, England explained that cybersickness is a basic dilemma that has sort of been swept under the rug in the technology sector. 'It's a natural response to an unnatural environment,' he said" (Tech Times).

The unnatural environments of the 21st century are affecting our health beyond our comprehension (Gadamer). Technology is here to stay, and we need to think beyond limiting computer and television time because our brains crave natural environments.

2. ACKNOWLEDGEMENTS

A special thank you to the Sioux Falls Roller Dollz of the Women's Flat Track Derby Association from Sioux Falls, South Dakota for their generosity, to their local community, and spirit of volunteerism.



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4. AUTHOR BIO

Sandra Callies: Graduating from the University of Minnesota with a Master of Architecture in 2015, Sandra is working towards becoming a licensed architect. Originally from the Great Plains of South Dakota, she is interested in architecture that ascribes to its landscape. As desire for dexterity is seemingly fading, Sandra loves craftsmanship and encourages everyone to find a craft they enjoy doing. Art is a therapeutic effort anyone can benefit from. Her artistic interests are in watercolors, stained glass, sewing, and singing.

Sandra's past five years of skating with women's roller derby (WFTDA) has caused two concussions, and her recovery has been a battle while depending on digital resources. With architectural theory in mind, Sandra hopes to speculate how the digital environment affects us.