Why BCI-fi?

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Introduction: For decades, a myriad of papers and posters have noted that BCIs are gaining attention among the public due to increased research, conferences, classes, commercial efforts, media, and other factors [1-4]. However, BCIs have also been getting attention since before the invention of BCIs through BCI-fi, which means BCI-related science fiction [2]. In addition to academic curiosity, BCI-fi merits study because it probably influences public perceptions of BCIs more than ***all other factors combined.***

Material, Methods and Results: I reviewed numerous examples of BCI-fi, articles about BCI-fi, award mechanisms for both BCI and sci-fi, and other sources. Very many BCI experts were consulted. Recurring components of BCI-fi include:

- "BCI exaggeration" is common. BCI-fi BCIs often seem unlimited by technology.
- BCIs are rarely used alone. They're often integrated with intelligent systems, perfectly immersive VR, brain stimulation, and who/what-ever they control.
- Neurotechnology enables otherwise unsafe behavior.
- BCI systems are often used by evil entities for evil purposes in an unethical society.
- Positive applications of BCIs and other technologies are minor.
- Preparation, training, and universality are usually ignored.
- Most BCI-fi is written without real-world BCI practitioners. [5] is an exception.

Discussion:
BCI-fi has been around since (arguably) 1818 [6], and is becoming more prominent across different media. BCI-fi can be fun, inspiring, and informative, but can also negatively influence public beliefs and decisions regarding BCIs.

Significance:
Laypeople often share views about BCIs with BCI experts that are based on BCI-fi – often without realizing it. Thus, studying how BCI-fi and BCI-re interact could help us understand and improve BCI development, BCI-fi and communication with the public.

References (8pt)
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