## (2) Is there a trade-off between Presence and Copresence?

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## **Abstract**

Presence and copresence have been key goals of researchers and developers of shared virtual environments (SVEs). Much research has assumed that the two reinforce each other; that is, an enhanced sense of presence enhances copresence and vice versa. We need only to think of equivalent face-to-face situations, where we are highly aware of the other person but not of the surroundings – and the other way around – to recognize that this may not necessarily be the case.

In this essay we question the assumption that the two go together in SVEs, and provide some examples where high presence and low copresence are observed - and the opposite. Here we report qualitative data from various studies in SVEs, immersive as well as desktop. We exemplify situations where it can be seen that high co-presence can coexist with low presence and vice versa. The findings reported to date concerning presence and copresence are about the psychological state of the user - either for their experience at a particular point in time, or how they report their state for the session as a whole. This may not, however, adequately reflect the way in which the experience can vary over the course of the session, and therefore how the relationship between presence and copresence can vary.

This paper suggests that there may be conflicts or trade-offs between presence and copresence in certain situations in SVEs, and this may apply not only to the segments of tasks or of communication situations as in our examples, but to longer periods during a session. Our examples show that presence and copresence do not necessarily go together. Thus there is a need for more systematic research regarding the relationship between the two concepts in SVEs.