

# VIRTUAL REALITY

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## RESEARCH QUESTION

Can virtual reality (VR) create a *fourth space* in libraries that is a safe(r) space for marginalized communities, such as 2SLGBTQ+ and IBPOC people, where needs around physical well-being and mental health are met? Libraries are considered third places between work and home, so if there is access to VR could that create a *fourth space* for marginalized people to explore by using, learning and developing VR content in library settings?

## VIRTUAL REALITY DEFINITION

VR is a technology that completely immerses the user in a synthetic virtual environment that is in a way a substitute for the real environment of a physical space. The synthetic environment can be further supplemented by adding visual, auditory, and haptic (or touch-based) simulation through means of headsets, earphones, and specially designed gloves or controllers (Arnhem et al., 2018, p. 4-5).

## METHODOLOGY

I will collect qualitative data with a literature review using secondary data analysis. So, my initial research for this project is theory-based due to the time constraint but may include interviews and experiments with VR technology by utilizing a mixed methods type of research. I will use peer reviewed journals from the library, and in particular the book, *The Great Good Place* by Ray Oldenburg (1989) who first coined the term the *third place*. All material will be reviewed with a feminist form of inquiry while examining it with Justice, Equity, Diversity and Inclusion (JEDI) and Critical Race Theory (CRT) in mind.

## THE THIRD PLACE

"The third place is a generic designation for a great variety of public places that host the regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realms of home and work" (Oldenburg, 1989, p. 16).

One other important characteristic that a third place should take on is proximity, so that getting there should be convenient and one is more likely to know the community of people (Oldenburg, 1989, p. 33).

## 4TH PLACE

A 4th Place concept was developed by geographer Arnault Morrison (2019) who is interested in the social and cultural aspects of community building and was built upon Oldenburg's concept of the *third place*. Morrison argues that the knowledge economy is blurring the lines between the spaces, but his *4th Place* is still rooted in a physical space and doesn't cover virtual spaces as noted by Hardegger (2022).

If we think of digital communities as three-dimensional spaces with X, Y and Z axes, then together they define what Hardegger (2022) describes as his concept of a *4th Space*:

- X is the *Place-Axis* that is the link between the real world and virtual space.
- Y is the *Medium-Axis* and is the technology used to enter into or join the *4th Space*.
- Z is the *Time-Axis* where content is created, added or shared to the *4th Space* within a certain time.

## FURTHER RESEARCH

Hardegger (2022) then goes on to mention that his concept of the *4th space* means that wherever he is, he's adding physical location to his culture, language, politics, religion, other social aspects and digital social networks to the virtual space (p. 3).

So again my question asks: Can such a VR space exist solely for the 2SLGBTQ+ and other marginalized communities as safe(r) spaces? A safe(r) space is a non-threatening environment to share and express oneself; this is relative as not everyone feels safe under the same conditions. I am further looking at alternative ways in which VR spaces can be built for and be inclusive of marginalized communities.



## LIBRARIES

What roles should the library take on with VR technology?

**Library as Gateway** – Access starts in the library but can continue onto other spaces, like advanced labs or workplaces. Unfortunately, VR doesn't comply with the accessibility rules under the Accessible Canada Act (ACA) and therefore isn't accessible to everyone.

**Library as Educator** – Librarians assess class or patron needs and then look for VR experiences that are available. Placing experiences into the integrated library system (ILS), so that people will know what's available and how to catalogue and curate titles can be a challenge. There is also an issue with the lack of availability for subjects that students want to learn about.

**Library as Maker**

VR is also creating new knowledge artifacts for research in some academic projects. Emerging Technology Librarians can take it upon themselves to co-create content and become a change agent.

(Ellern & Cruz, 2021, p. 8-10)

## SOLUTIONS TO THE WICKED PROBLEM OF VR

Using VR in spaces is seen as a *wicked problem* because it's a complex issue that defies conventional problem-solving methods. It's both a challenge and a constant experiment that requires continual inquiry in an expansive way for libraries to create an inclusive and a pluralistic space. Libraries can integrate this technology and education around VR to become the gateway as an early adopter, while searching for external support with outside resources around any challenges they may encounter.

Librarians can build networks by creating relationships outside the library with faculty at universities and other centres of learning or with community organizations to work in collaborative ways. They can also use their interdisciplinary imagination and intellectual dexterity to use convergent research. This transdisciplinary method of inquiry synthesizes knowledge from different sources, perspectives and lived experiences to solve complex problems.

If libraries model a willingness to explore new technology, librarians can take the lead in showing that they have the tenacity to tackle new problems and challenges by learning new skills and supporting each other.

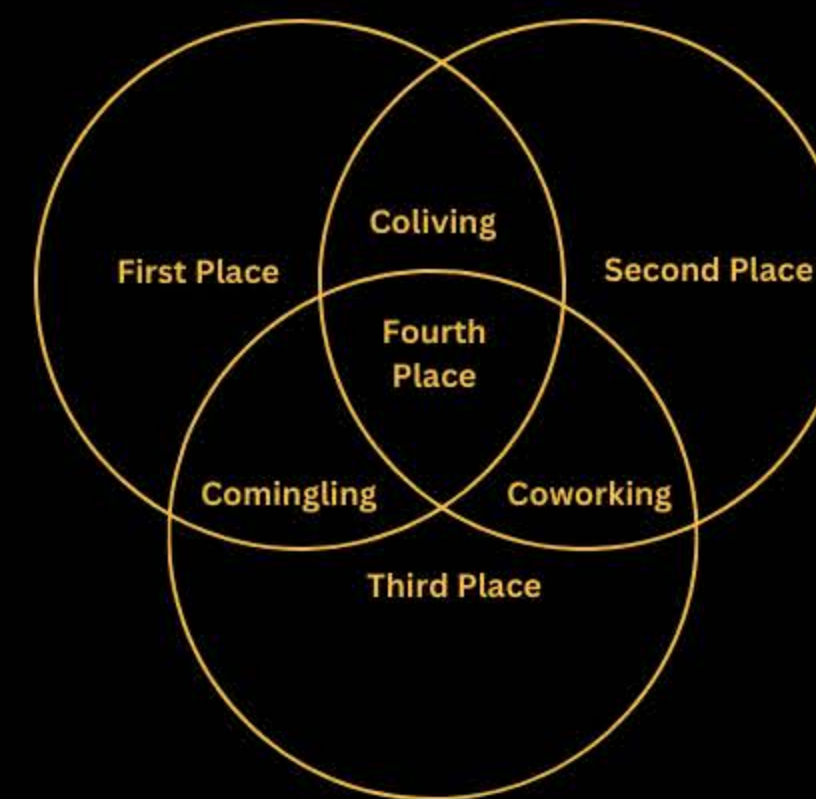
(Ellern & Cruz, 2021)

## CONCLUSION

*Third place* is a term that Oldenburg (1989) created that means a physical space between work and home, and while Morrison's (2019) concept of a *4th place* takes into account the knowledge economy and the blurring of the lines between work and home, it's still rooted in a physical space. Hardegger (2022) brings up a concept of a *4th space* that starts to blend physical spaces with virtual spaces, while I'm researching whether a different *4th* or even a *5th virtual space* built in a VR context can exist as a safer space for marginalized communities.

The big push is to have libraries and librarians adopt this technology as part of digital literacy just like any other emerging technology, so that 2SLGBTQ+, IBPOC and other marginalized individuals will have the same opportunities as people that already have access to this technology. There are some libraries that have already implemented VR and have started sharing knowledge about their experiences with VR technology. For example, in the research done by Lee et al., (2020), they found that librarians were aware of the fact that once people do have their first experience with VR that the majority of them, regardless of age or gender, loved it (p. 7).

As queer, trans and other marginalized folks interact with technology it can move them away from traditional areas of knowledge towards more exploratory fields such as STEAM which allows for questions around their queer embodiments in the past, present and future. This redefines relationships with emerging technologies and VR then becomes a tool and a *fourth space* that moves society away from cisheteronormativity to new forms of gender-becoming so that a queering of the phenomenology of learning can happen. This helps queer people to share their lived experiences around the contexts of gender and sexuality with a group of people that will become part of their trusted circles in a safer space (Paré et al., 2019, p. 21-22).



"Places in the knowledge economy" according to Morrison.  
Source: Hardegger, A first holistic "4th space" concept, 2022.

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