

# A First Holistic “4th Space” Concept †

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**Abstract:** This short paper describes an inter- and transdisciplinary concept of the “4th Space” by building upon other concepts that aimed to describe communities in the digital/virtual sphere, such as the “4th Place”, or the hybrid “Splace” concept. However, this concept argues that the “4th Space” that can be made visible through three axes (hence the term “Space” instead of “Place”), while each axis represents another factor that defines the “4th Space”.

**Keywords:** digital society; digital community; community building; third place; fourth place; splace; interdisciplinarity; digital transformation

## 1. Introduction

This short paper aims to present a first attempt of an overall and holistic concept of the “4th Space”. It aims to explain the general idea and how such a concept could facilitate a better understanding of the emerging digital society and the digital communities that exist within. At the end, an outlook of some ongoing questions regarding the “4th Space” concept and challenges within the said “4th Space” will be addressed. Having said that, this “4th Space” concept is not a purely technological or applied science concept, but rather a way of thinking that allows us to facilitate trans- and interdisciplinary research, analysis, discussions and application regarding digital communities, digital community building and the related challenges in society, science, economy and politics of our time.

Before I start with an explanation of the concept, I at least have to try to contextualize it. In recent years, there have been various attempts to conceptualize virtual spaces and places where digital communities emerged or are emerging. For this essay, the most important and most recent ones are the “4th Place” concept created by Arnault Morrison [1] and the “Splace” concept created by Shih-Lung Shaw and Daniel Sui [2].

Interestingly, both concepts were developed by geographers but focus on different aspects of the community building of place and space: Morrison focuses on the social and cultural aspects, while Shaw and Sui focus on the technological questions.

For this short paper, the concept of Morrison is the most interesting one. As outlined in his article “A typology of places in the knowledge economy: Towards the fourth place”, he builds upon the concept of Oldenburg regarding the First, Second and Third Place [3]. He argues that the “knowledge economy” is “blurring the lines” between the before-separated places and, in this way, establishes a “4th Place” where all three before-separated places are merging (Figure 1).

However, Morrison’s “4th Place” is still located and anchored within the actual world and “uses” digitalization as a “tool” to “merge” already existing places of community. It does not answer the question as to how the “virtual space” is intertwined with the actual world. Therefore, this begs the question whether concepts such as these provide a good explanation for the emerging digital society and the digital communities within and their relationship to the “real world”, and whether they provide a feasible concept for inter- and transdisciplinary research and understanding.



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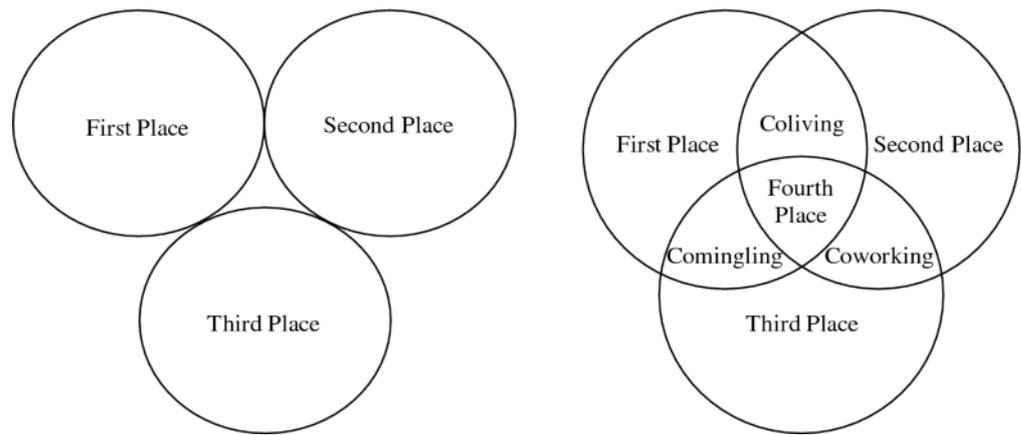
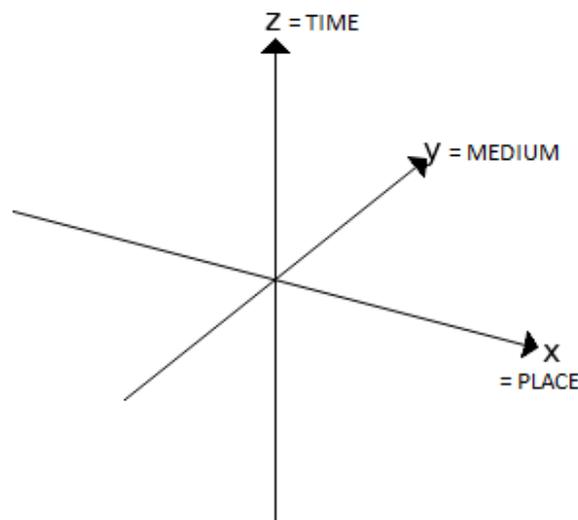


Figure 1. “Places before (left) and in (right) the knowledge economy” according to Morrison.

2. The Three Axis of the “4th Space”

However, Morrison’s “4th Place” is still located and anchored within the actual world and does not digitalize that in any sense at all. I think of digital communities not as a “place” but as three-dimensional space. On a pure conceptual level, I strongly believe that it will make more sense to describe said space as a “4th Space”, which can be made at least mentally ‘visible’ on a three-dimensional axis. Each axis not only represents a good explanation for the emerging digital society, and the digital communities within and interrelations to the “real world”, but they are also key factors for the digital communities within this “4th Space” (Figure 2).

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Figure 2. The “Place”, “Medium” and “Time Axis”, which together form the “4th Space”. Content is being created, amended or shared within or added to the “4th Space”, as is each person that is present within the “4th Space”, within a certain time (frame).

2.1. The x- or “Place-Axis”

represents the connection of the real word into the virtual space: Every person who enters the virtual “4th Space” is still anchored within a ‘real’ place while also being within the “4th Space”. The x-axis represents the “medium” that is required and/or used to enter the “4th Space”: Every person needs a medium to “join” the “4th Space”. This includes the technical aspect, such as hardware and software, that is required to enter the “4th Space”.

The z-axis represents “time”. Content is being created, amended or shared within or added to the “4th Space”, as is each person that is present within the “4th Space”, within a certain time (frame).

If a person joins a digital community, this person also brings their real world into it and changes and expands the already existing digital community through their personal experiences, expectations and imprints, as well as their past experiences from participating within digital communities. Additionally, this person also adds their culture, language, political attitude, religion, socialization and “real life”, as well as their “digital social network” to the digital community. Furthermore, the direct and indirect influence of the “real place” where a person is that joins or acts within a digital community must also be considered as well. This includes the ‘meaning’ of the place where this person is, for example, whether this person is at home, the so-called First Place, or at the office, the Second Place, or at a place that could be considered to be the Third Place.

even though we as people move and interact within a virtual space, we continue to be influenced by our “real environment”. Similarly, we cannot view content created in the virtual world isolated from its meaning and interpretation in the “real world”.

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Furthermore, the direct and indirect influence of the “real place” where a person is that joins or acts within a digital community must also be considered as well. This includes the ‘meaning’ of the place where this person is, for example, whether this person is at home, the so-called First Place, or at the office, the Second Place, or at a place that could be considered to be the Third Place.

As in Morrison’s concept, we also have a merging of “Places” within digital communities that emerge within the “4th Space”. However, it goes much further, because it not only merges the physical “Place” of the individuals independently from the fact of where they are at the particular moment, but it includes also all other aforementioned factors (e.g., culture, language, religion, politics). The diversity of a digital community that manifests itself in the “4th Space” can, accordingly, be much greater than if it existed only in the real world.

Interestingly, a person that acts within the “4th Space” can, in the real world, be at a place that is neither covered by Oldenburg’s nor by Morrison’s concept. For example, I could be at this moment all by myself in a forest in the middle of the night, so there is no “community” where I am. However, the moment I join or act within the “4th Space”, the location where I am becomes part of this “4th Space”, because the fact that I am alone in a forest in the middle of the night influences how I interact with others within the community; I might even show them where I am through photos, videos or vivid descriptions of the location. This means that simply by entering the “4th Space”, I can add the location where I am, its meaning and features to the digital community that I am part of. By acting in this way, every real-world place can become part of the “4th Space”.

## 2.2. The *y*- or “Medium-Axis”

The *y*- or “Medium-Axis” acknowledges the fact that digital communities also need certain resources to exist. Just as real communities emerge in certain places and, thus, require or make use of a certain infrastructure, be it a pub, a coworking space or a sports field, the digital community also requires a corresponding infrastructure in order to take shape. This involves both the hardware and the software used by the digital community, which determines and influences it.

At the hardware level, simply put, it is about the physical means by which the person becomes part of the community. This can be a classic desktop or a laptop, as well as a smartphone or even a smartwatch. On the software level, there is the question of the platform, its design, functionality, etc. The whole thing is far more complex than it appears at first glance, especially if you combine the two levels. Indeed, the “community experience” in the “4th Space” is decisively shaped by how I become a part of it and the opportunities everyone has to interact with the other members and the content of the community.

However, this also means that the “community experience” can be very different within the “4th Space”. A community that manifests itself in the real world, e.g., in the context of a meet-up in a bar, basically has the same physical “community experience” (although the individual interpretation of the “experience” might differ, the basis of the experience is the same). With regard to the “medium axis”, this means that every person that is present during such a community meeting is, more or less, at the same point on the “medium axis”.

This is, however, not the case with digital communities because this would mean that every member of a digital community uses absolutely the same hardware and software to join and act within a community. Rather, it can be assumed that the diversity of the “media” used is very high and even increases with the size of the digital community and the duration of its existence. The last point in particular, the duration of existence, should not be underestimated. The introduction of new technologies, whether as hardware or software, also changed the community experience, which, in turn, changes the entire community as well. While we all know how the ‘usual suspects’ such as Facebook, Twitter, Instagram, etc., have changed over the years due to the introduction of additional features and new designs (or lost their importance due to not being able to adapt, such as Myspace), an even more interesting example is World of Warcraft.

World of Warcraft, a massive multiplayer online role-playing game with, at times, over 12 million players worldwide [4], each of them willing to pay a monthly fee to be an active part of the game’s community, was released 17 years ago in 2004. Its digital community even met in the real world with unofficial get-togethers of players and, later, with an official yearly conference organized by the game’s developer and publisher, attracting several thousand participants from all over the world and even more online (as a side note: this means that World of Warcraft, as a community within the “4th Space”, is also an example how a ‘successful’ digital community can sooner or later influence and materialize within the real world, but I will come to that again later).

In its 17 years of existence, it has changed drastically due to the introduction of new content and new designs, as well as changes of some of the core mechanics. Some of the features introduced were not possible in 2004 due to the technical limitations. At the start of the game in 2004, every player had to choose a server he/she was playing on, and it was not possible to interact with players on another server. Technical advancement, however, made it possible that servers were connected to one another and that players were no longer limited to the server they started with. However, these changes also ‘split’ the community in two, as not every player accepted them. They argued that these ‘improvements’ also change how the community of the game interacts with each other (e.g., they argued that the fact that every player could play with every other player diminished the identification of a player with his/her “home server”); hence, they change the ‘community experience’. This even led to ‘unofficial servers’ running the original 2004 version, some of them attracting several thousand players, and a campaign pressuring the game’s developer to undo the changes [5]. While the developer never reversed the changes within the official game, in 2019 they, in a way, restarted the game with the 2004 version, called “World of Warcraft Classic”, to reattract the players they lost over the years. This means that there are now two version running: one with all the new features and technical improvements and one without (at least most of them).

### 2.3. The z- or “Time-Axis

Now, let me address to the final axis. The z- or “Time-Axis” is, interestingly, also the one in the concepts mentioned at the beginning that has not been included. However, every community, digital or not, has its “emerging moment”. From that moment on, the community exists, and it expands along the “Time-Axis”. It will continue if the community is active, which means that people interact with each other, and the content of the community, or new content, is being created to interact with. In combination with the “Place-” and the “Medium-Axis”, the “Time-Axis” represents how the “4th Space” not only expands over time, but also makes the changes and interactions, e.g., through the introduction of new technologies or new members joining a digital community, within the “4th Space” ‘visible’ over time.

Nevertheless, it is important to note that the “time axis” does not solely represent “Time” itself, but also the different interpretations of time and how a person who enters the “4th Space” experience it differently, e.g., due to different locations or cultural as well as personal differences between the members of a digital community. The most obvious

example concerns the different time zones that members of a digital community belong to. While for some members of a digital community, their interaction with other members and the content of the community could happen in the morning, for others, this happens in the afternoon or late at night. Additionally, the definition of morning, afternoon or late at night is a cultural one and depends on each individual's experience or definition of time as well [6]. For some, morning starts at 8 o'clock and ends at 10 o'clock; for others, it starts earlier or simply when they wake up. This means that the time-related community experience is a very individual one, because it depends not only on each individual's local time, but also how time is experienced as well. On the other hand, this also means that the "4th Space" not only expands along the "Time-Axis", but also into each and every member's individual experience of time and local time as well.

### 3. The "4th Space" and the "Actual World"

I have talked a lot about the "4th Space" as a concept that facilitates the understanding of and thinking about digital communities, how they develop and are being defined through "place, medium and time" in the digital sphere. Now, towards the end of my essay, I want to briefly address the relationship between the "4th Space" and the real or actual world [7].

Although the "4th Space" is concept for digital communities, all three axes of this concept are bound to the real world as well. This means that every digital community that 'materializes' within the virtual sphere, and, in materializing, creates a "4th Space", is also (still) connected to the actual world by the people involved, the technology used to access and create the community or through the different experience and definition of time. As a result, a community that manifests as a "4th Space" in the virtual sphere influences the actual world along the axis the "4th Space" expands.

Take, for example, the x- or "Place-Axis": the fact that the digital community within the "4th Space" is not bound to a specific location in the actual world also means that its influence in the actual world is not limited to a particular location (or "Place"), but to every single location where members of the digital community are, were or will be present. The same applies to the languages the members of a digital community speak, the culture and religion they belong to or associate themselves with or their family and working environment, too. This is especially true for successful digital communities that manifest within the "4th Space". They can become very influential in the actual world, such as political movement such as Fridays for Future, Extinction Rebellion or QAnon, but also more culturally related "4th Space" communities, such as K-Pop or eSports.

### 4. Conclusions

It is important to mention, however, that this concept is still in development. There are still a lot of question that need to be addressed, e.g., what happens to a "4th Space" that becomes "archived", so people can see or read the content, but can no longer create new content or interact with other people of the community? Is it still a "4th Space"? Or is it something different? Additionally, what happens to a "4th Space" that consists entirely of non-human actors? Is this still a "4th Space", or is it something different? Additionally, how would this change our understanding of "Community" and "Community Building"? Another question is if it would make more sense to separate the "Place-Axis" into a "Location-" and a "Culture-Axis", while, at the same time, defining time, not as an axis, but as a value. This way, the three axes, which would now be "Location", "Culture" and "Medium", would, in combination with the "Time" value, create a spacetime concept for the "4th Space". This also begs the question as to whether we can define laws of nature for the "4th Space" that are always valid, no matter the cultural background of an actor within the "4th Space" or the technological advances. These are just some of the questions that need to be analyzed and discussed regarding the "4th Space" and how it changes and influences our society, politics, environment and economy on a regional, national and international level.

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