



*Since the dawn of the millennium,
we have been regularly functioning
in two parallel realities at the same time:
"meatspace" and "cyberspace."*

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PARALLEL REALMS, INTEGRATED LIVES

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Time and space are natural reference points for all processes and phenomena on Earth, experienced by all humankind with the full spectrum of our senses. Our real world – or “meatspace,” as it is sometimes colloquially called – objectively exists, and

it is frequently regarded as the opposite of the digital world, or “cyberspace.” The emergence (creation) of the latter has touched off myriad discussions regarding its significance, its relationship to physical space, and the question of whether one sphere is “better” than the other, in the sense of being more adequately suited to the contemporary world and the needs of society, the economy, politics, etc.

Technologies

Digital space is comprised of data generated by the usage of the World Wide Web, other online services, and digital technologies operating beyond it. Digital space can continue to exist only if certain conditions

ACADEMIA FOCUS ON Digital geography



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are met. The first is technology, which means the Internet – a thoroughly physical infrastructure made up of optic fibers and devices capable of sending and receiving data. The second is access to the Internet. Infrastructure alone is not enough – there must be users who can use, are able to use, and want to use the Internet. This brings us to another important factor responsible for the development of online space and its characteristics: how users actually use the Internet. Digital space is shaped by all our activities, which create digital data and our digital footprint. These need not be a direct result of Internet use, but in practice the greatest contribution to the development of digital space comes from individuals connecting themselves and their devices to the Internet. We should not forget that online space is not limited to merely browsing websites or using smartphone apps; it includes hundreds of other services, such as streaming, gaming, social media, myriad and varied smart sensors and devices, blockchain and cryptocurrency, and GPS. Mobile devices are becoming increasingly important in shaping the digital realm. As a result, growing volumes of data now have a spatial component. Additionally, such data is being generated almost constantly, registering our behavior not just online but also in physical space (e.g. through GPS).

Physical space also has many meanings, since in today's world reality it can be understood in myriad ways. We understand it as a geographical space comprising various elements which broadly fit into three categories: nature (terrain, flora), socioeconomics (networks of human settlements, economic structures) and culture (material culture, intellectual resources). This means we are dealing with both physical and non-physical layers of the “physical” (i.e. non-digital) realm.

Intertwining worlds

Both the digital and physical realms are thus created and brought together by humankind. Initially, digital space existed as an addendum to physical space; it was a parallel world that we at most stepped into for a moment. The vast majority of geographers and other scholars claimed that the two spheres do not affect one another, and that certainly digital space cannot encroach on physical space. This position dominated at the time when the online world was first being created and shaped. Roughly since the early days of the Internet coming into popular use around 1995, and certainly since the dawn of the millennium, we have been regularly functioning in these two parallel realities, intertwining worlds, a hybrid merger of the “real” and the digital. This applies to individuals as much as business entities, governmental institutions and countries as a whole. The degree of intertwining and coexistence of phys-

ical and digital spaces depends on certain characteristics of the users.

The intertwining of the two spheres is, paradoxically, a perfectly natural process. Digital space is created from data representing how humankind functions in various contexts, situations and places. It is also a very accurate reflection of our functioning in physical space. Most Internet users do not even tend to distinguish many routine activities as being performed in one sphere or the other. They are automatic, subconscious, instinctive, not requiring deep thought, and as a result users operate in both spaces concurrently, experiencing them in equal measure. Actions taken in one realm have consequences in both.

Perhaps we should return to the question which was being routinely asked as recently as a decade ago: is physical space significant, important, and necessary? Despite futuristic predictions that the Internet will completely take over our lives, this has not taken place. The Covid-19 pandemic has revealed two important and somewhat contradictory observations. Our dependence on technology is now vast, and in many contexts and situations it makes our lives far easier. However, we also really need face-to-face interactions, and the simple fact is that not everything can be transferred to digital space. When the pandemic forced us to give up direct contact in public spaces with our friends, families and work colleagues, we realized we were missing something important. Our new discomfort was only partially alleviated by technology.

Digitalization

In the context of the growing significance of the Internet and the digital sphere more generally, we should all be aware of the potential threats they pose, and their consequences. One example is the digital sphere's impact on the environment. Non-material, digital space would not exist without material infrastructure. Additionally, growing numbers of devices have a short life and replacing them requires resources which are largely non-renewable. Accessing the digital world requires electricity, and the growing volumes of content being processed and consumed mean increasing energy usage; this applies in particular to cryptocurrencies. Another consequence of the growing volumes of digital data and Internet use in general is the growing demand for physical space required by data centers and the infrastructure needed to store and send data. While the digital world is non-material, it exists on physical servers and is accessible through physical infrastructure, such as optic fibers.

Another important consequence of the growing use of the Internet is known as “digital exclusion.” Digital space certainly makes our lives easier, but despite Internet access becoming easier there is still a large group of people incapable of functionally us-



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ing the net. Digital exclusion reflects similar social inequalities in physical space, making it an important topic in discussing the relationship between the two realms, and who they are for. Who creates digital space, and who wins and loses by using it? There is no doubt that the Covid-19 pandemic has amplified the importance of digital technologies in the lives of individuals, societies and entire economies. Digital space is now closely intertwined with the physical world, and in certain spheres, such as education, it has become essential. It is no longer a space floating off somewhere between dream and wakefulness. The two worlds are equally real, and it seems likely that even discussing them in discrete terms will soon become meaningless. We will have a single “new,” integrated space, even as we wait for the next technological advancement, coming swift on its heels.

Other consequences of the growing importance of the Internet and digital space – such as the platformization of the economy, growing use of algorithms in decision-making processes in the public sphere, interference by public authorities in digital space, and the growing popularity of cryptocurrencies – are also becoming more noticeable, and this trend

will certainly continue. They all have a clear impact on the traditional functioning of individuals, societies, economies, and countries.

The physical and digital realms are equally valid “realities.” The definition of physical space is clear, although the way we use it is changing, while the concept of digital space is rapidly evolving to encompass technological progress and innovation. We are shifting many of our activities online – the world is changing and so are we with it. We are faced with the question of which of the two domains will come to dominate. As noted earlier, the digital sphere will inevitably continue to grow in importance on all levels. The most important factor will be finding the right balance and making sure that we do not allow ourselves to get trapped up in the digital sphere.

Finally, we should note that while in the recent past we largely abandoned analogue media in favor of their digital counterparts, we are now witnessing a somewhat reactionary return to analogue technologies, such as vinyl records. Perhaps this reflects a sentiment for something which no longer has practical value beyond hobbyist circles in today’s digital world – a kind of longing for the non-digital. ■

 Further reading:

Stephens-Davidowitz S., *Everybody Lies: Big Data, New Data, and What the Internet Can Tell Us About Who We Really Are*, Bloomsbury, 2017.

Sumpter D., *Outnumbered: From Facebook and Google to Fake News and Filter-bubbles – The Algorithms That Control Our Lives*. Bloomsbury, 2018.