Cyberspace as a Metaphor of Being Online or a Particular form of Space Organization?

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Cyberspace gradually becomes a place (state, space) in which more and more interactions between users take place. The boundaries between online and offline are progressively being washed away, and it will be increasingly important to be able to work with it adequately for research in pedagogy and historiography. I aimed to create an empirical probe into how the term "cyberspace" works by students of the Faculty of Arts of Masaryk University in Brno, or how they perceive it. For the research, I used the study of metaphors.

Key words: *Cyberspace; metaphor; Being; internet; ICT*

Cyberspace is a concept that can be perceived as fuzzy, can be approached as a metaphor that relates to the online environment and is based on the reflection of ordinary space, but also as a specific spatial modality integrating both the online and offline components of Being. It is precisely the analysis of the other, here the gradual merging and online and offline space, that We want to deal with in the following text. We will start from the assumption that metaphors are connected with corporeality and can be used for the research of tacit knowledge.[1]

Anna Hogenová, repeatedly offers an interesting picture for further thought. He says the body has no hand, but that the side has a body. The hand is the tool that unlocks the world that allows you to enter the door and be at home.[2] But what is it at home? At home is an extension of Being. In other worlds, it is the hand, as part of the body that comes out of Being (Hogenová makes a sharp distinction outside and inside about mind and body), but also something that returns to him through the hermeneutic circle.

In other worlds, We could say that it is the corporeality that connects man with the world and constitutes his Being, but it is also the human Being that represents

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[1] Švec, V. et al. (2016) *Studenti učitelství mezi tacitními a explicitními znalostmi.* Brno: Masarykova univerzita.; Šíp, R. – Švec, V. (2013). Pojetí tacitních znalostí v paradigmatu sjednoceného pole. *Pedagogická orientace*, *23*(5), pp. 664–690.
[2] Hogenová, A. (2017) *Současnost, dějiny, fenomenologie.* Praha: Luboš Marek.

the world. The world is nothing, sharply separated from man. Together they form one complex interconnected organism. Intensity and corporeality are correctly connected. Freshness gives us access to what the world is, and at the same time, in interaction with the world, we are constituting and revealing our Being as a Stay (but here we are probably far from the original position of the Hogenová). Patočka's combination of movement and Stay is precisely this way. Staying is not an existence; it is a constant becoming. This temporality is undoubtedly associated with Being. Martin Heidegger then puts temporality to the innermost one, linking it to ontology.[3]

Mark Johnson and George Lakoff in the book *Metaphors We Live* with Space combine virtually all metaphors – the orientation in space, the metaphor of the vessel or the path and the pipe, all of which assume the existence of space. Throughout the book, we find no metaphor that is not spatial.[4] This is understandable because all the metaphors have, as both authors convincingly reveal in their later works, a real character. So physical that, for example, Johnson[5] rejects the metaphysical concept of angels and souls, or Lakoff builds on it his experimentalists paradigm.[6] In other worlds, it is impossible to think categorically without corporeality, i.e., and here We could probably agree with Descartes – corporeality assumes vastness. A necessary condition for vastness is space, as a category in which vastness can occur.

Is this vastness even in cyberspace? Our research did not offer an explicit answer to this problem, but we could say that in some respects, it is. The fact that we can move in, navigate, and even create, strongly supports this possibility. The question is what her character is. By the size of this study, We mean a closed n-dimensional non-point object, n corresponds to the number of dimensions of space.

Another example of the metaphor of space is pointed out by Miroslav Petříček, who says that in this way we can mark our knowledge, knowledge, and the overall cognitive landscape. In it, we can orientate, move towards the goal, systematically analyse, fumble or stray.[7] It is even possible to meet or miss another person (as well as an idea). Some can move quickly and easily, others with difficulty or effort. Thus the thought world also creates a specific space with a deep structure into which we project our entire Being. Petříček's interpretation is that the body is the closest part

[3] Heidegger, M. (1996). *Bytí a čas*. Praha, Oikoymenh.; Heidegger, M. (2001). *Aristotelova Metafyzika IX, 1–3*. Praha: Oikoymenh.; Heidegger, M. (2004). *Kant a problém metafyziky*. Praha, Filosofia.

[4] Lakoff, G. – Johnson, M. (2002). *Metafory, kterými žijeme*. Brno,Host.

[5] Johnson, M. (2008). *The meaning of the body: Aesthetics of human understanding*. Chicago, University Press.

[6] Lakoff, G. (2006). *Ženy, oheň a nebezpečné věci: co kategorie vypovídají o naší mysli*. Triáda, pp. 12–14.

[7] Petříček, M. (1992). *Úvod do (současné) filosofie*. Praha, Hermann a synové, pp. 60–61.

of space to us, everything we recognize from it, which is why the cognition begins from ourselves and goes towards an absolute vastness, to distant thought constructions from what we might call our natural world. He even refers to Hegel, who accentuates two worlds, one natural, the other in some way idealized and mathematized. I think that placing cyberspace in the world of ideas is unsustainable,[8] so if we proceed to such a tract of the world, it is necessary to consider that cyberspace is in both, like a bolt between them, our Being.

Luciano Floridi in the Onlife Manifesto[9] says that our research and theoretical attention should turn more towards the environment as something that enables and structures all our behaviour and actions. The analyses of Lakoff and others confirm this fact.[10] They clearly declare that concepts such as guaranteed basic structures in our mind are closely related to the environment – whether in their mutual structure or prototypical representations. Floridi also emphasizes that the boundaries between online and offline, between the virtual and real-world, are disappearing. We should then be able to identify this process of change in the lexical we use about both worlds.[11]

The term "cyberspace" was first used by William Gibson in 1984 (though this assertion is debatable) in his book Neuromancer[12] and later referred to him as "a metaphor that gives us grasp this point in which has been created since the Second World War and is creating more and more of the things we perceive today as part of our culture ... It is beneficial to all concerned because it is merely a movement of data."[13] to "a global and evolving domain determined by the use of electricity networks and the electromagnetic spectrum, designed to create, store, modify, exchange, share, retrieve, exploit or delete information."[14] I get to a domain that integrates devices, users, information, computer networks, and systems.

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[8] Floridi, L. (2015). *The Onlife Manifesto: Being Human in a Hyperconnected Era*. Heidelberg: New York– Dordrecht–London: Springer Cham.

[9] Ibid., p. 7

[10] Lakoff, G. (2006). *Ženy, oheň a nebezpečné věci: co kategorie vypovídají o naší mysli*. Praha, Triáda, pp. 495–501.

[11] Floridi, L. (2010). *Information: A very short introduction*. Oxford OUP; Floridi, L. (2014). *The fourth revolution: How the infosphere is reshaping human reality*. Oxford OUP; Floridi, L. (2015). *The Onlife Manifesto: Being Human in a Hyperconnected Era*. Heidelberg: New York– Dordrecht–London: Springer Cham.

[12] Stratton, J. (2013). Cyberspace and the Globalization of Culture. In *Internet culture* (pp. 253–275). Routledge.; Punday, D. (2000). The narrative construction of cyberspace: Reading Neuromancer, reading cyberspace debates. *College English*, *63*(2), pp. 194–213.; Concannon, K. (1998). The contemporary space of the border: Gloria Anzaldua's Borderlands and William Gibson's Neuromancer. *Textual Practice*, *12*(3), pp. 429–442.

[13] Gibson, W. (1995). "I DON'T EVEN HAVE A MODEM" [Online]. Retrieved June 03, 2019, from http://www.josefsson.net/gibson/index.html

[14] Stratton, J. (2013). Cyberspace and the Globalization of Culture. In *Internet culture* (pp. 253–275). Routledge.

We think that Floridi's concept, which accentuates the interconnection of the online and offline worlds into a unique life experience, is more appropriate for our reasoning. What makes space as such? What does cyberspace have to do to be considered as a valid modality of the spatial arrangement of the world? We can think in at least three ways:

Phenomenological grasp of space as found by Heidegger.[15] In such a conception, the area is what we realize our Stay in, which structures our thinking, encounters and social interactions. But what is at the same time distant from the personal formation of our self. Man is fundamentally temporal, time determines his Being, but he is immersed in space.

Pragmatist grasping of space as found in Lakoff and Johnson.[16] Space itself is a metaphor of a container in which something can be placed, has its outside and inside. At the same time, space can be perceived as a fundamental source of metaphors; it is something within which our knowledge and thinking are internally structured.

Physicalistic grasping of space as an entity having a sure vastness and movement. Changes can be made in space.

At this point, We would like to emphasize that this is far from typical and that it is in this unconventional division of space that we perceive one of the possible benefits of our entire research. It enables the topic to be studied in a new and unusual way.

Methodology

To analyze the metaphors that students use in their statements about cyberspace, We use the data that I have available from the introductory questionnaire for the compulsory Digital Competence course for undergraduate students in Information and Library Studies at the Faculty of Arts. The students answered many questions, and one of them was: "Describe how you imagine a digitally competent person". Thus, we obtained answers from 40 respondents who had an approximate recommended length of about 500 characters, including spaces. Students submitted these questionnaires to the information system. I then exported it and copied the answers to the chosen question.

We transformed this data into a single file and looked for metaphors in a broad sense that focused on the digital environment. The subject of my analysis was not the research of a digitally competent person through the eyes of the students of the philosophical faculty (as it was originally set up and coded), but the study of lexical metaphorical means that describe their relationship to the digital environment.[17]

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[15]   Heidegger, M. (2004). *Kant a problém metafyziky*. Filosofia.
[16]   Lakoff, G., & Johnson, M. (2002). *Metafory, kterými žijeme*. Brno: Host.
[17]   In the original codes we followed primarily a digitally competent citizen, so the codes
        followed the five dimensions of DigComp – information and data literacy, communication

The question is designed that it does not lead the student to a specific structure of answers or a targeted reflection of cyberspace. In particular, we consider the statements that are at least partially pure in this respect (Owen 1996, Sullivan & Rees 2008), while limiting the phenomenon we follow. At the same time, it should be pointed out that my research does not describe the structure of the perception of a cyberspace phenomenon in a particular student, but from the community thinks if I can borrow this – often emphasized in Czech literature – Donald Davidson's expression[18] – to extract possible aspects of student relation to this phenomenon.

Our original focus was to compare students' statements at the beginning of the course and after it was rehearsed, and to see how the metaphors in the world were changing. However, it turned out that the differences in metaphors are minimal and that the students in their answers actively take on the thought and lexical means that appear in the course. So if I want to examine the metaphors that correspond to how students approach the phenomenon in a certain way immediately, it seems preferable to use a smaller research sample whose answers are more precise. At the same time, however, we are aware that a short written response does not have the character of a statement in pure language for many reasons.

When it comes to research ethics, all data was fully anonymized during copying and cannot be linked to a particular student. If our research works with Slovak statements, they are translated into Czech, which again refers to the effort to anonymize the results more effectively. Since we always work with only a relatively short, one or two-sentence structure, it is not expected that the text form itself could identify the student. The statements I was translated into English.

Limits of research: research is not about qualitative or quantitative research in the ordinary sense of the word, but about obtaining interesting data for philosophical inquiry, which would allow for analyzing and documenting some broad thought ideas. In this respect, it is also clear that the sample is not representative of the entire population, but this does not interfere with our research intent.

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and collaboration, digital object creation, security and problem solving, the problem of competency structuring, new uncategorized competencies in DigComp), referring to the competences of others and to society, and the spatial metaphors and utterances associated with connecting the online and offline worlds. These were initially classified into one category and only secondarily further divided, as shown in the article. In total, our analysis concerned a text with 139 sentences. We selected 36 of them that fall within the scope of our study and worked with them further. This is the last mentioned category, i.e. statements aimed at the metaphor of being online as a movement or connect both worlds.

[18] Švec, V. et al. (2016) *Studenti učitelství mezi tacitními a explicitními znalostmi*. Brno: Masarykova univerzita, p. 23; Slavík, J. – Janík, T. – Najvar, P. – Knecht, P. (2017). *Transdisciplinární didaktika: o učitelském sdílení znalostí a zvyšování kvality výuky napříč obory*. Brno: Masarykova univerzita, Pedagogická fakulta.

Out of my attention will be metaphors that are no longer alive and have the character of a steady concept. Here we use the notion of living metaphor in Lakoff's and Johnson's concepts. An example of a dead metaphor is, for example, the word 'foot' – it has a specific physical metaphor, but language does not offer any way to describe it otherwise. For this reason, we will not consider "searching for information" as a living metaphor, however it is based on the usual "searching" in physical space, because there is no other adequate term for them.

So, for example, searching for information is a description of an activity that certainly has its "analogue" correlate. Still, we cannot quickly speak of it as a live metaphorical reference to the online environment or cyberspace as such. I did not interfere with the metaphors themselves.[19]

According to Šíp, Dewey defines "a situation as an existential quantum in which objects and relationships between them are in a contextual whole."[20] these are secondary. This fact allows us to study space as a specific venue that is decisive for the situation. We assume that every thought is associated with corporeality, from which it arises through linguistic forms through metaphorical construction.[21] The metaphor is not merely a reference, but a way of uncovering the real structure of phenomenon grasping. The whole construction of metaphors is connected not only with corporeality but also with the social framework and the entire environment in which we operate.[22]

It should be emphasized that in this research, we start from the concept of an experimentalist paradigm in which metaphors are not primarily linguistic matters but a matter of thought and action. Language metaphors are derived from them.[23] That is, I suppose that metaphors are not some kind of simplification or distortion of the situation, something simply referring, but they have a significant content base that is associated with tacit knowledge.[24]

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[20] Šíp in Švec, V. et al. (2016) *Studenti učitelství mezi tacitními a explicitními znalostmi*. Brno: Masarykova univerzita, p. 23.

[21] Ibid., p. 25.

[22] Slavík, J. – Chrz, V. – Štech, S. (2013). *Tvorba jako způsob poznávání*. Praha: Karolinum Press.; Johnson, M. (2008). *The meaning of the body: Aesthetics of human understanding*. Chicago: University Press.; Lakoff, G. (2006). *Ženy, oheň a nebezpečné věci: co kategorie vypovídají o naší mysli*. Triáda.; Lakoff, G., & Johnson, M. (2002). *Metafory, kterými žijeme*. Brno: Host.

[23] Lakoff, G. (2006). *Ženy, oheň a nebezpečné věci: co kategorie vypovídají o naší mysli*. Praha: Triáda, p. 170.

[24] Paavola, S. – Hakkarainen, K. (2005). The knowledge creation metaphor–An emergent epistemological approach to learning. *Science & education*, *14*(6), pp. 535–557; Paavola, S. –

Results

In presenting the results, I will proceed in a logical scheme from spatial statements to statements of a temporal nature. One of the emerging topics is the safety concern. Staying in cyberspace is so important and at the same time associated with the risks that students commonly reflect it: "In a digital environment, one should behave safely.", "Can move relatively safely." vigilance… enters the page as a dubious place. "or" It can move safely and ethically. "Interesting is the third metaphor that structures space – it shows that there are places that are safe and dangerous and that it is possible to distinguish between them. Even the competent digital person can make such a distinction. Most of the time, cyberspace is referred to with an emphasis on its complexity and interconnectedness, not as a set of places.

Movement is represented in metaphors, not only in terms of "place-to-place" translation itself but above all it is associated with orientation, an overview of finding away. Movement is a crucial metaphor for our research. "He can move in the digital environment.", "He can move in the digital space.", "He can explain the possible path to the other.", "He should be able to move in the digital environment, search for information." Or „Relatively complex can navigate the digital environment."

Orientation and movement are closely related to etymology - orientation is based on Latin oriens, i.e. east. It is the determination of direction and recognition of its place in space. While the movement is already an actual change of position, orientation is merely ascertaining the state. At the same time, it does not appear that any of the respondents referred, for example, to erratic movement, i.e. an inevitable wandering or wandering, movement without orientation.

This movement is perceived as necessary, but that does not mean that it is not differentiated: "It has no major problems with this movement." Or "Manages to move the digital environment on its own." Note that these are metaphors that appeal to the most physical experience of staying in a normal environment. Only if we are already very old or young children, only when we do not have the body well enough do we need help. Limited movement is the movement of incomplete or damaged corporeality. But it is also associated with human dignity – one who can walk alone does not have to be led by the hand, acts freely.[25]

Lipponen, L. – Hakkarainen, K. (2004). Models of innovative knowledge communities and three metaphors of learning. *Review of educational research*, *74*(4), pp. 557–576; Bratianu, C. – Andriessen, D. (2008). *Knowledge as energy: a metaphorical analysis.*

[25] Kantor, T. – Jirásek, I. (2014). Pohyb jako teologická kategorie: pohled vybraných duchovních v ČR na sport. *Česká kinantropologie*, *18*(4), pp. 11–25.; Jirásek, I. (2005) *Filosofická kinantropologie: setkání filosofie, těla a pohybu*. Olomouc: Univerzita Palackého v Olomouci.; Steiner, R. – Hudeček, F. (1998). *Před branou duchovní vědy*. Praha: Nakladatelství Přátel duchovních nauk.

Specific metaphors are temporal, so they refer to cyberspace as an era or time. This form of expression can also be found in Floridi's, when instead of cyberspace, he speaks of a hyperconnectivity era.[26] "He is a person fitting into today's modern age." Or "He can navigate in a modern age that is virtually all digitized." Through time, or through tremendous and rapid changes that transform space and what is in it, we can look at what cyberspace is.

Cyberspace can also be a space for living, shaping the identity and self-conception of oneself. "He is able to exist and move in today's world successfully.", "He knows the Internet and protects his digital identity." they refer to the concept of cyberspace, which is not quite common – they give it high ontological weight. When we ask what it means to be able to live, we are asking a question about the very inner structure of being that these students associate with cyberspace. It is an accurate expression of how he describes the social change in his books, Floridi.

Analysis

Before embarking on a more in-depth analysis of cyberspace metaphors, we should return to our threefold concept of space and try to link it to metaphors. I am faced with the crucial first problem of my research, namely whether cyberspace can be considered as a space that would be constructed in this way in the language and thought structures of student statements analysed.

If we start with the Heidegger phenomenological concept of space as the environment in which Being can be realized,[27] then it is from the metaphors that students use that cyberspace offers such a concept. First, it is a place where we should live and move, to which we should have a habit and in which orientation is possible. Orientation is related to the fact that we are able to grasp the environment as a space for creating a Stay with a goal. In the statements we study, there is even space intertwined with temporality, so it is the environment in which the realization of Being, which is fragile and to observe, is something that needs to be protected.

In the texts, in addition to the quoted metaphors, there are also expressions that pointed to the need for man to be able to create in this environment. If cyberspace is a place where it is possible to create or create something new, then it can be understood as a real space, because through creation, there is a constitution of Being.[28] The Stay is thrown into a specific environment in which through active

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[26] Floridi, L. (2015). *The Online Manifesto: Being Human in a Hyperconnected Era*. Heidelberg–New York–Dordrecht–London: Springer Cham; Floridi, L. (2015). Hyperhistory and the philosophy of information policies. In *The Onlife Manifesto* (pp. 51–63). Springer, Cham.

[27] Heidegger, M. (2004). *Kant a problém metafyziky*. Praha: Filosofia.; Heidegger, M. (1993). *Básnicky bydlí člověk*. Praha: Oikoymenh.

[28] Heidegger, M. (1993). *Básnicky bydlí člověk*. Praha: Oikoymenh.; Heidegger, M. (1996). *Bytí a čas*. Praha: Oikoymenh.; Slavík, J. – Chrz, V. – Štech, S. (2013). *Tvorba jako způsob poznávání*. Praha: Karolinum Press.

creation, it can realize itself, grow and develop in it. This Stay is in no way isolation.

It can be argued that the first aspect of spatiality meets cyberspace. At the same time, it is clear that students do not have a form of reflection on the phenomenon of space so that they can actively subscribe to this concept. Again, it is clear from the other answers that students can learn and develop, which in turn tends to connect space with Being.

Several interesting aspects can be distinguished in the pragmatist concept. I have already indicated with the perception of movement, with its lightness, difficulty or independence. Cyberspace is constructed here as something that refers to corporeality. A human Being is necessarily associated with the body (Johnson 2008), which moves in cyberspace. But the famous metaphor of the brain in the vat[29] is not appropriate here. Moving in cyberspace is not done by mere thinking, but it is associated with real movement – mouse cursor, touch on the phone screen, typing on the keyboard. Maybe that's why some of our ways of grasping the cyber world are so ineffective, so perhaps we don't have enough firm feedback. But the movement of the body is there, just like when we steer the ship – change in the boat[30] is also mediated by technology, it is reduced, but it does not mean that it does not exist. Also, the movement in the ship is less smooth, visible or grasping than „on your own feet".

The second level is related to how man generally constitutes metaphors. There is a metaphor of a container in which something can be found that allows movement from place to place that is large enough to be navigated. This orientation is not obvious, and it requires some experience of movement, orientation, critical thinking, etc. The metaphor of space as a vessel and the metaphor of a journey (Lakoff & Johnson 2002) are, therefore, very faithfully preserved in the case of cyberspace. Students do not construct any metaphors that would show any gauge between the two types of spatial arrangement.

Probably the most difficult is to analyse the physicalistic model image. Purely mathematically, cyberspace is space because it is possible to define a coordinate system (for example, vector-based protocols are used for communication between routers). Still, it could also be easily viewed as phase space. It is an entity in which there is a temporal change (see statements in metaphors), and there is movement. In this respect, it should be true that this is a physicalistic picture of space somewhat accurate. Interestingly, looking at Gibson's original grip, he assumed movement was only associated with the flow of flats, but this did not correspond

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[29] Horgan, T. – Tienson, J. – Graham, G. (2004). Phenomenal Intentionality and the Brain in a Vat. *The externalist challenge*, pp. 297–317.; Huemer, M. (2000). Direct realism and the brain-in-a-vat argument. *Philosophical and Phenomenological Research*, pp. 397–413.

[30] The boat is only a reference example of machines where movement is not realized through the individual's motion. An example could be just as good with a car or plane.

to what the students said about the situation. They perceive their motion, the consequences of their actions, as their own – albeit perhaps associated with a certain conversion function between keyboard movement and creation in an online environment.

Cyberspace is thus a space that is constituted through metaphors as a real space in which information interactions take place. Similarly, based on sociological ideas, I could also establish an area of direct sensory experience. It is also evident from the statements that this space has the character of an environment. Just like the environment, students talk about it most often. Now, I should analyse whether Floridi's assumption that the boundaries between here and there are wiping out,[31] whether students' statements (perhaps not so much associated with metaphors) can be found to confirm such a presumption.

There are one or two worlds?

Now We have to find metaphors in the students' answers that could correspond to the theory of onlife of Being, so Floridi[32] talks about it. Thus, being associated with experiencing both environments simultaneously, between which there is an increasingly narrower and less defined boundary line. We would like to describe this situation by two phenomena – a) the phenomenon of activity and benefit, and b) bringing together the personal, work and school environment in one.

Students perceive the phenomenon of utility or usefulness as one of the essential components of who is and who is not literate. Although one should approach technologies critically and cautiously, above all, one should be able to use them. This use can be for the benefit of an individual, a group of people (typically students speak of the "other") or the whole of society. See, for example, "he can transfer his knowledge" or "uses technology to his advantage and others."

In other worlds, it is possible to say that the action in the digital world is directly linked to the social structure and relatedness in the world of direct sensory experience, that in this world that Floridi referred to as real. If such a link exists (and students experience it), then there is no clear distinction between the two worlds. The act in one affects the structure and acts in the other. These worlds are thus intertwined continuously.

Their link may be the construction of identity, as one of the writers indicated above. Identity, if understood through the perspective of multicultural self,[33] is constituted of different facets that are constructed in different environments and roles. Part of them is structured in one way and part in the other world. At the

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[31]   Floridi, L. (2015). *The Onlife Manifesto: Being Human in a Hyperconnected Era*. Heidelberg–New York–Dordrecht–London, Springer Cham, p. 7.

[32]   Ibid.

[33]   Baldwin, M. (2013). *Osobnost jako terapeutický nástroj*. Praha: Cesta.

individual level, however, it forms the overall structure of his / her self, the basic schedule of the Stay that enters creates in them and experiences roommate or concern.

This fact can be immensely interesting if we realize that, according to Heidegger, fear for something is the necessary thing that reveals our Being. Fear, as a specific extreme position of Being, gives us a glimpse of who we are. But if we observe the testimonies of the students, we can relate this fear, manifested by an extreme interest in security, to the dismay of something. While it is right in the real world that most people experience fear of something that may be further exposed by fear of something, which is an authentic fear for Heidegger[34] (1996, 187), the online environment reveals fear for something more clearly and faster, while which often remains in the fog. With this lens, it might seem that life in the digital environment paradoxically (despite majority beliefs) is closer to the authenticity of being than the real one.

While this is surprising philosophically, from the psychological point of view, it is a result that could be expected in some respect. As Vybíral points out, communication through the network has the character of less deep communication. Still, at the same time, it is a form of interaction that leads to faster detection, postponement of barriers, greater openness, more accessible access to personal topics and possibilities.[35] Reveal more about oneself than one would say in a "normal" situation.[36]) It is necessary to say that from the point of view of our research this is only a partial answer - it is not clear whether it really is an existentially asked question after we are afraid or just a less severe communication act with some external a characteristic that will be characterized by the aforementioned higher flatness. About 3 % of people have a feeling of more in-depth online communication than offline.[37]

Students connect the two worlds most accentuated in terms of utility. "Can use modern technology to its advantage", "uses it for its benefit and the benefit of others", "streamlining its work and activities to improve its surroundings" or "to facilitate its life". We need to use technology effectively, usefully, to benefit from it. Effective action is perceived on the one hand as complex, involving and interconnecting the two worlds, and at the same time can be an exciting thought bridge. So far, we have referred to cyberspace as space which, although it has the characteristics of corporeality, direct corporeality is applied in a sharply reduced form. But if we consider cyberspace not as an isolated phenomenon, but as

34   Heidegger, M. (1996). *Bytí a čas*. Praha: Oikoymenh, p. 187.
35   Vybíral, Z. (2009). *Psychologie komunikace*. Praha: Portál, pp. 272–278.
36   Šmahel, D. (2003). Komunikace adolescentů v prostředí Internetu. *Československá psychologie: Časopis pro psychologickou teorii a praxi.*
37   Vybíral, Z. – Šmahel, D. (2003). Komunikace uživatelů internetu: Co výzkumy zjistily a jaký výzkum potřebujeme? In Mareš, P. – Potočný, T. (eds) *Modernizace a česká rodina*, pp. 299–313.

something related to the real world (referring to one of the definitions of cyberspace) that contributes to the overall complexity of the situation, then we have a clear structure of onlife.

On the one hand, it is constructed through human activity, on the other, it is associated with the existence of the construction of an individual's identity in a connected environment of the online and offline world.

When it comes to connecting sub-worlds, i.e. the world of work, education or entertainment, student responses here also show that they experience such a phenomenon. "Both in personal life… and in the business world" or "able to use ICT for their professional and personal needs". Some of these worlds list the side of the specific area by hand, aware that they are traditionally differentiated or tracked, but at the same time attribute the same characteristics or structures to them. At the same time, they can see that (and how) technologies encroach on the whole Being, the constitution of the world in which they move.

Conclusion

Metaphors are a new research tool to understand how students (or people in general) think about their relationship with cyberspace and how we structure it. The original empirical intention was to compare the metaphorical figures of students at the beginning and the end of the course on digital competence. While the content of responses, their depth, quality and structure has changed significantly, what remains almost unchanged are metaphors. Therefore, we decided to concentrate only on one sample, which has the advantage that it is relatively little affected by the way students read and process the course. Thus, the testimonies are closer to pure language (although of course this method cannot be spoken in our research) and longer from the structures given by the researcher's and pedagogue's authorial style in one person and DigComp as the reference framework on which we rely.[38]

We think that through the study of metaphors I managed to uncover the exciting features or structures of what forms cyberspace as a metaphor not in a narrow Aristotelian sense, but in a modern sense, such as Johnoson, Lakoff or authors of a monograph on tacit knowledge research.[39]

We consider our analysis to be new from a phenomenological, pragmatist and physicalistic perspective, which gradually, each in a slightly different way, uncover the thinking of the whole phenomenon, respectively its results. I have identified

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[38] Carretero, S. – Vuorikari, R. – Punie, Y. (2017). *DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use* (No. JRC106281). Joint Research Centre (Seville site).

[39] Švec, V. et al. (2016) *Studenti učitelství mezi tacitními a explicitními znalostmi*. Brno: Masarykova univerzita.

this as a certain way of thinking, which we managed to fulfil in the text, respectively we managed to show that all three points of thought can be identified in the text and that they allow together to explore and structure the analysis of cyberspace in our research discourse.

While we would have expected a certain grasp or delimitation of what we might call onlife as a certain key or manifestation of cyberspace, revealing Heidegger's theme of fear of something is perceived as perhaps one of the central concepts of how to study the entire infosphere in the future[40] or deny cyberspace. Although it is possible that the structure we reveal can be smoothed out by the findings summarized by Vybíral,[41] we believe that an existentially conceived analysis could produce philosophically, psychologically and pedagogically interesting results in this respect.

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[40] Floridi, L. (2014). *The fourth revolution: How the infosphere is reshaping human reality*. Oxford OUP.

[41] Vybíral, Z. (2009). *Psychologie komunikace*. Praha: Portál.