# Labour law and Metaverse – can they fit together? Ildikó Rácz-Antal\*

1. Preliminary remarks. 2. Payment in cryptocurrency. 3. Occupational Health and Safety. 4. Discriminatory conducts. 5. Conclusion.

#### Abstract

The paper focuses on some labour law questions which arise from work in the metaverse. The first question is whether meta-work could be the next new type of work as standard employment relationship, which is going through a transformation in general. Indeed, the idea of personal work – as a main pillar of the employment relationship – was challenged by platform work in the recent years, but metaverse seems to further question the old paradigms. The article shortly examines the question of wages, for instance, as the metaverse generally relies on cryptocurrency (CC) to pay for transactions and purchases. Subsequently, the paper mainly concentrates on the analysis of health and safety at work and of the discrimination ban in metaverse.

Keywords: Labour law; Metaverse; Future; Occupational health and safety; Discrimination

## 1. Introduction.

Cryptocurrencies, NFTs, Metaversum, Avatars are expressions from the last years which might drag lawyers into a legal black hole.

Indeed, Jurisprudence as a whole is challenged by the new virtual reality (VR), in terms of trademark, privacy, human rights and tax law issues. From a labour law point of view, employment related issues are the most exciting. Wages, health and safety, discrimination are the three main subjects of this article. These fields of employment are the first ones, which can demonstrate the questions of working in metaverse.

<sup>\*</sup> Senior Lecturer at the Károli Gáspár University of the Reformed Church in Hungary. This essay has been submitted to a double-blind peer-review.

<sup>&</sup>lt;sup>1</sup> McCormick E., Re brands protected in the metaverse? Hermès and NFT artist spar in US court, in The Guardian, available at https://www.theguardian.com/fashion/2023/feb/07/hermes-nft-artist-birking-bag-metabirkin-new-york-court.

<sup>&</sup>lt;sup>2</sup> Huang Y., Joy Li Y., Cai Z., Security and Privacy in Metaverse: A Comprehensive Survey, in Big Data Mining and Analytics, 2023, 6, 2, 234-247.

<sup>&</sup>lt;sup>3</sup> Choudhury B., *Business and Human Rights in Metaverse*, in *Cambridge Core blog*, March 2023, available at https://www.cambridge.org/core/blog/2023/03/31/business-and-human-rights-in-the-metaverse/.

<sup>&</sup>lt;sup>4</sup> PwC, What are the sales and use tax implications of the metaverse?, available at https://www.pwc.com/us/en/tech-effect/emerging-tech/metaverse-tax-implications.html.

The development of virtual reality is stupendous. For example, Multiverse Labs has partnered with the Sharjah Commerce & Tourism Development Authority to launch Sharjahverse, which is the first true metaverse of city scale with economic and social utility.<sup>5</sup> It creates metaverse jobs for local employees at Sharjah's iconic sights. Working in virtual reality is not a theoretical fiction anymore, but it is practical reality. A casino on Decentraland – which is a metaverse platform – is hiring real-life human hosts to work the floor of its virtual gambling establishment.<sup>6</sup> These hosts greeting customers entering the virtual casino as they would do it in real life casino.

One can define a preliminary question in this regard: what is the legal basis of employment in metaverse<sup>7</sup>?

On the one hand, meta-workers can work out of employment law's boarder as entrepreneurs. In this case they miss employment law's legal guarantees. Agreeing with De Stefano, meta-work is a new opportunity to expand forms of sham self-employment.<sup>8</sup>

On the other hand, people working in the virtual reality can be employees. If so, parties can agree on meta-work as permanent "meta-employment" by mutual consent. In this case the place of work is located at a specific point in virtual space. But if employment in the metaverse is only temporary, does the employer have the right to unilaterally instruct employees to work virtually? In general, national jurisdictions allow employers to unilaterally instruct employees on temporary basis in relation workplace, with restrictions. But unilaterally established permanent virtual employment is unlawful.

In the light of introduction above, firstly, the paper will examine the possibility of payment in cryptocurrency (hereinafter, CC). Whether wages can be paid in CC? Secondly, as the core of the article, occupational health and safety issues will be analyzed. Such as, how can the employer realize his duty to ensure the safety and health of workers in every aspect related to the work in the metaverse? Among others, virtual reality sickness, "traditional" risks of desk jobs and the so called Proteus Effect will be examined. Thirdly, discriminatory conducts will be discussed. One really practical question is whether discrimination could be based on the attribute of the avatar? Considering VR characteristics, cyberbullying or harassment should be re-regulated or present regulations are adequate?

<sup>&</sup>lt;sup>5</sup> CNG Media, Multiverse Labs launches world's first city in metaverse with government of Sharjah, UAE, in Caribbean News Global, October 10, 2022, available at https://www.caribbeannewsglobal.com/multiverse-labs-launches-worlds-first-city-in-metaverse-with-government-of-sharjah-uae/.

<sup>&</sup>lt;sup>6</sup> Patton Boggs S., *Employment Law in the Metaverse*, in *Family Office Insights*, August 2022, 1, available at https://www.lexology.com/library/detail.aspx?g=b92ccb3d-8eb6-46b3-a7ef-8e57c45cab15&fbclid=IwAR0yzAx86XE-PbMO1BgFgo4FrTBmayiS-n7lasIoLFCvS\_8xPbg33Hpbcao.

<sup>&</sup>lt;sup>7</sup> See more in details: Biasi M, Murgo M., The identification of the applicable labour law(s) in the virtual space of the Metaverse, in Italian Labour Law e-Journal, 2023/1, https://doi.org/110.6092/issn.1561-8048/17124

<sup>&</sup>lt;sup>8</sup> Heikkila M., AI: Decoded: Algorithmic Accountability Act – Pentagon's AI chief – Labor problems in the Metaverse, in Politico, February 2022, available at https://www.politico.eu/newsletter/ai-decoded/algorithmic-accountability-act-pentagons-ai-chief-labor-problems-in-the-metaverse-

<sup>2/?</sup>utm\_source=POLITICO.EU&utm\_campaign=7b5f7478b6-

EMAIL\_CAMPAIGN\_2022\_02\_09\_09\_59&utm\_medium=email&utm\_term=0\_10959edeb5-7b5f7478b6-190834884&fbclid=IwAR2RxVabdJEvlt5gQHRnpBRKg0PFNU6wqseQLaOwt5ZDYehLNQq\_xOAnfN8.

## 2. Payment in cryptocurrency.

Wage is one of the most important elements of employment, as it serves employees' livelihood. Metaverse basically relies on cryptocurrency to pay for in-app purchases. It seems acceptable as long as it is not about wages. The ILO Constitution refers in its Preamble to the "provision of an adequate living wage". How could a unique digital token function as living wage if people cannot use it anywhere? They cannot pay bills and buy food in supermarket by cryptocurrency. Almost every platform has its own cryptocurrency, therefore interoperability is out of question.

On the other hand, the mean of payment is also problematic. Basically, national laws require wage payment via cash or by bank transfer. Payment in CC can be considered as payment in kind which raises a risk of abuse. The ILO Convention No. 95<sup>11</sup> allows for the partial payment of wages in the form of allowances in kind in industries or occupations in which payment in the form of such allowances is customary or desirable because of the nature of the industry or occupation concerned. In such cases, it calls however for measures to ensure that: (a) such allowances are appropriate for the personal use and benefit of the worker and his family; and (b) the value attributed to such allowances is fair and reasonable. If we acknowledge that the nature of the industry justifies cryptocurrency as payment in kind, still it shall be partial. It is important to emphasize that income in kind may bring less satisfaction than income in cash because employees are not free to choose how to spend it. In the content of the income in the content of the income in cash because employees are not free to choose how to spend it.

The cryptocurrency's fluctuating value creates two different problems. Firstly, how can the employer realize payroll deductions or pay taxes and health insurance? For example, the employee's gross wage is permanent in crypto. But the employer needs to make deductions and pay taxes according to real life currency. Presumably there will be difference in deductions' value of each month. Secondly, how a national minimum wage can be calculated? Developing a crypto-to-cash and a cash-to-crypto exchange rate seems crucial.

<sup>&</sup>lt;sup>9</sup> Patton Boggs S., nt (6), 1.

<sup>&</sup>lt;sup>10</sup> ILO Constitution, available at:

https://www.ilo.org/dyn/normlex/en/f?p=1000:62:0::NO:62:P62\_LIST\_ENTRIE\_ID:2453907:NO.

<sup>&</sup>lt;sup>11</sup> Protection of Wages Convention, 1949 (No. 95), available at:

https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100\_ILO\_CODE:C095.

<sup>&</sup>lt;sup>12</sup> ILO Convention No. 95, Article 4.1

<sup>&</sup>lt;sup>13</sup> ILO Convention No. 95, Article 4.2

<sup>&</sup>lt;sup>14</sup> System of National Accounts 1993, paragraph 7.38.

# 3. Occupational health and safety in Metaverse.

Using virtual reality in medicine is on the fast track to widespread application.<sup>15</sup>

VR is more and more common in health care as it can be used during physical therapy and rehabilitation, surgical planning, pain management, health education or helping with recovery from addiction to substances.<sup>16</sup>

It is clear that incidence in VR can affect people's real life and their wellbeing. The appearance of immersive technologies<sup>17</sup> enhanced the role of health and safety regulation. Tools such as AR (augmented reality) and VR headsets, 3D displays, 3D audio, gesture recognition, spatial sensing, speech recognition, etc. have created a new level of working. The basic difference between AR and VR is the fact that in VR the user is aware of being in a completely simulated reality, while AR consists of a combination of real and virtual world.

There is universal consensus among leading global and regional agencies, including the World Health Organization (WHO), the International Labour Organization (ILO) and also the European union (EU) that the health, safety and well-being of workers is of top importance in general.<sup>18</sup>

Working in metaverse brings up occupational health and safety issues.

The 89/391/EEC Directive defines as a general provision that the employer shall have a duty to ensure the safety and health of workers in every aspect related to the work.<sup>19</sup>

The employers' responsibility to protect employees should extend to a wider variety of risks, which can be determined in metaverse.

In fact, introduction of technological tools to be worn by the employees and connect them to a digital platform with immersive features is already creates new risks at workplace.<sup>20</sup>

Luckily, EU regulation has related legislation which can be applied in this regard. The before mentioned 89/391/EEC Directive specifies that the employer shall take the measures necessary for the safety and health protection of workers, including prevention of occupational risks and provision of information and training, as well as provision of the necessary organization and means.<sup>21</sup>

During meta-work, employers also have to evaluate the risks to the safety and health of workers, inter alia in the choice of work equipment, [...] and the fitting-out of work places. Subsequent to this evaluation and as necessary, the preventive measures and the working and

-

<sup>&</sup>lt;sup>15</sup> Delzell E., *Virtual Reality in Medicine*, in *WebMD*, May 2021, available at https://www.webmd.com/a-to-z-guides/features/virtual-reality-medicine.

<sup>&</sup>lt;sup>16</sup> Thomas L., *Applications of Virtual Reality in Medicine*, in *News Medical Life Sciences*, January 2021, available at https://www.news-medical.net/health/Applications-of-Virtual-Reality-in-Medicine.aspx.

<sup>&</sup>lt;sup>17</sup> Immersive Technology is any technology that extends reality or creates a new reality by leveraging the 360 space. Barton L., *What is Immersive Technology?*, in *Advrtas*, available at https://advrtas.com/immersive-technology/.

<sup>&</sup>lt;sup>18</sup> Kun A., Work accident compensation in Hungarian labour law – liability rules and compensation, in Hungarian Labour Law E-Journal, 2014, 2.

<sup>&</sup>lt;sup>19</sup> Council Directive of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work (89/391/EEC), Art. 5. (1)

<sup>&</sup>lt;sup>20</sup> Donini A., Novella M., *Il metaverso come luogo di lavoro. Configurazione e questioni regolative*, in *Labour&Law Issues*, 8, 2, 2022, 17.

<sup>&</sup>lt;sup>21</sup> 89/391/EEC Directive, Art. 6. (1)

production methods implemented by the employer must assure an improvement in the level of protection afforded to workers with regard to safety and health.<sup>22</sup>

Employers in metaverse should *inform and train* employees about new types of risks, positive and negative effects of meta-work. Employees or their representatives must be involved when immersive technology transform working conditions or when the employer orders usage of new working tools. Employers shall consult workers and / or their representatives and allow them to take part in discussions on all questions relating to safety and health at work as the 89/391/EEC Directive regulates. This presupposes: the consultation of workers, the right of workers and / or their representatives to make proposals, balanced participation in accordance with national laws and / or practices.<sup>23</sup>

Finally, to promote employee participation in decision-making, it is inevitable to refer Art. 88 of GDPR. It determines that Member States may, by law or by *collective agreements*, provide for more specific rules to ensure the protection of the rights and freedoms in respect of the processing of employees' personal data in the employment context, [...] including health and safety at work [...]. Those rules shall include suitable and specific measures to safeguard the data subject's human dignity, legitimate interests and fundamental rights, with particular regard to monitoring systems at the work place.

It is highly recommended that employees get to know about benefits and downsides of meta-work.<sup>24</sup> Obviously, numerous advantages could be listed: cash and time savings for workers; reduced rental and running costs for companies; visibility and efficiency; more natural socialization compares to remote working. Disadvantages included: extra time investment (provision, training and acceptance of new equipment and software); longer times spent online; privacy and monitoring concerns.

The literature specifies several different types of risks which occur in meta-work. The article will examine three of these in the following: virtual reality sickness, Proteus Effect and "traditional" risks of desk jobs.

The so-called *virtual reality sickness* occurs when exposure to a virtual environment causes symptoms that are similar to motion sickness symptoms.<sup>25</sup> The most common symptoms are general discomfort, eye strain, dizziness, headache, stomach awareness, nausea, sweating, fatigue, drowsiness, disorientation. These are direct consequences in the human body caused by VR. Although motion sickness has afflicted humanity for thousands of years, VR sickness is a much newer situation. It is still not clear what causes the sickness and how the symptoms could be mitigated or terminated. In case of meta-work, VR sickness's connection with employment relationship is uncertain. Because a person can go to VR for the sake of shopping or entertaining as well. In this latter option, employer can't be held liable for employee's disease.

<sup>&</sup>lt;sup>22</sup> 89/391/EEC Directive, Art. 6. (3)

<sup>&</sup>lt;sup>23</sup> 89/391/EEC Directive, Art. 11. (1)

<sup>&</sup>lt;sup>24</sup> Bouquet A., What is the Future of Work in the Metaverse?, in Horizons, July 2022, available at https://nhglobalpartners.com/future-of-work-in-the-metaverse/.

<sup>&</sup>lt;sup>25</sup> LaViola J. J., A discussion of cybersickness in virtual environments, in ACM SIGCHI Bulletin, 2020, 32, 1. 47–56.

As a second risk the "traditional" risks of desk jobs and working with video screens, computers can be mentioned. Scientist have numerous evidences and experiences of desk jobs' negative effects.<sup>26</sup>

If an employee works with video screens on a full-time basis, it could cause visual strain, musculoskeletal disorders, fatigue and mental health problems.<sup>27</sup> In addition, psychosocial health consequences are associated with desk jobs, such as stress, anxiety, and depression.

According to a WHO Report from 2022, bullying and psychological violence ("mobbing") is a key complaint of workplace harassment that has a negative impact on mental health.<sup>28</sup>

If we take into account meta-work's characteristics, it can be even more significant. Since people can "disappear" behind their avatars, they can be easily out of control, sooner than in real life.

Another potentially detrimental impact (as a traditional risk) may be the feeling of being *constantly monitored*, which may affect employees' wellbeing.<sup>29</sup>

The interactive and collaborative work experience will add the stress of being subject to ever-more invasive and relentless forms of algorithmic surveillance.<sup>30</sup>

The employer can introduce new tracking and monitoring tools combining with immersive technologies.

For example, powerful surveillance instruments operate during work, through tracking, control of facial movements, behavioural and emotional profiling (such as monitoring and evaluating the heartbeat and redness in the face).<sup>31</sup>

It is not only a theoretical issue, according an inquiry from 2022, the main concerns of employees related to workplace surveillance are the following: tracking of their real-time location (51%) and real-time screen monitoring (50%).<sup>32</sup> The topic of constant monitoring and artificial surveillance has a huge publicity in the last years. The wide spread and continuous employee monitoring by technological tools contributing to the erosion of issues such as meaningful consent, collective involvement and prior administrative authorisations.<sup>33</sup>

During employee surveillance, employers should apply the idea of "human oversight" and incorporate in its' risk assessment.<sup>34</sup>

\_

<sup>&</sup>lt;sup>26</sup> Aliouche H., What are the Health Implications of Office Jobs?, in News Medical Life Sciences, January 2023, available at https://www.news-medical.net/health/What-are-the-Health-Implications-of-Office-Jobs.aspx#3.

<sup>&</sup>lt;sup>27</sup> De Luca Tamajo S., *Health and Safety in the Metaverse*, May 2023, in *Ius Laboris*, available at https://iuslaboris.com/insights/health-and-safety-in-the-metaverse/.

<sup>&</sup>lt;sup>28</sup> WHO, World mental health report: transforming mental health for all, Geneva, 2022.

<sup>&</sup>lt;sup>29</sup> Employment Buddy, *The Metaverse: Employment law implications*, in *employmentbuddy*, September 2022, available at https://www.employmentbuddy.com/hr-articles/the-metaverse-employment-law-implications/.

<sup>&</sup>lt;sup>30</sup> Nogueira Guastavino M., Mangan D., *The metaverse matrix of labour law*, in *Italian Labour Law e-Journal*, 1, 2023, 13-27.

<sup>&</sup>lt;sup>31</sup> Lombardi M., Il lavoro nel metaverso: uno spazio indefinito del possibile, in Labour&Law Issues, 2022, 8, 2, 37.

<sup>&</sup>lt;sup>32</sup> ExpressVPN, Survey reveals surveillance fears over the metaverse workplace, in ExpressVPN, June 2022, available at https://www.expressvpn.com/blog/survey-reveals-surveillance-fears-over-the-metaverse-workplace/#everywhere.

<sup>&</sup>lt;sup>33</sup> Aloisi A., De Stefano V., Essential Jobs, Remote Work and Digital Surveillance: Addressing the COVID-19 Pandemic Panopticon (2021), in International Labour Review, 2022, 161, 2, 289-314.

<sup>&</sup>lt;sup>34</sup> Peruzzi M., "Almeno tu nel metaverso". Il diritto del lavoro e la sfida dei nuovi spazi digitali, in Labour&Law Issues, 2022, 8, 2, 72.

Thirdly, risk of *Proteus Effect*. It describes a phenomenon in which the behaviour of a person, within virtual worlds, is changed by the characteristics of their avatar.<sup>35</sup> It is an interesting question and maybe impossible to answer, whether an employer can be liable for any damage which occurs through the employee's avatar in the VR? If there are risks and hazards, damages and injuries presumably will happen. Are these cases work accidents?

National compensation system can be varied; therefore, it is needed to look into details in one national system to answer the questions above. For instance, according to Article 166 of Hungarian Labour Code<sup>36</sup> the employer shall provide compensation for any loss caused to its employee in connection with his employment. Consequently, if an employee performs work under an employment contract according to his or her employer's direction and the damage and the employment relationship has connection, the employer will be liable. If an employee performs meta-work the same regulation could be applied. Due to the nature of meta-work, the employee's avatar will directly and the employee indirectly sustain the loss. In my view, this character of work performance cannot be an exclusionary reason of employer's liability.

Meta-work relates to disabled employees in more aspects. On the one hand, working in metaverse gives less opportunities to disabled. Many apps require some degree of manual dexterity and good motor skills. These challenges make meta-work less accessible to workers with disabilities in the lack of reasonable accommodation.<sup>37</sup> On the other hand, it serves more accessible environment for disabled employees. Assuming that disabled people can easily handle computers with special programs and applications. They can work from home without traveling to a workplace. Furthermore, meta-work could be a form of reasonable accommodation. Employers can use immersive technologies to provide a change in a job or a work environment that is needed to enable a person with a disability to apply, perform and advance in job functions, or undertake training. It is even not that unthinkable, see the example of the movie Avatar, where a marine veteran in wheel-chair "worked" in the military through his avatar.

### 4. Discriminatory conducts.

The issue of equal treatment can occur from several angles.

On the one hand, given that the basis for discrimination law are some protected characteristics,<sup>38</sup> the question may be whether a characteristic invisible in the virtual space (e.g. social origin) could be the basis for such a claim. To take this line of thought further, if a person's avatar has a characteristic that the actual user does not (e.g. different skin colour),

<sup>&</sup>lt;sup>35</sup> Wikipedia, *Proteus Effect*, available at https://en.wikipedia.org/wiki/Proteus\_effect.

<sup>&</sup>lt;sup>36</sup> Act 1 of 2012 on Labour Code.

<sup>&</sup>lt;sup>37</sup> Patton Boggs S., nt. (6), 3.

<sup>&</sup>lt;sup>38</sup> According to ILO Convention No. 111. Article 1 these protected characteristics are race, colour, sex, religion, political opinion, national extraction or social origin.

should the protected characteristic be considered in relation to the avatar or the real user? Could discrimination be based on the attribute of the avatar?<sup>39</sup>

As ILO Convention No. 111 stipulates, discrimination includes any distinction, exclusion or preference *made on the basis* of race, colour, sex, religion, political opinion, national extraction or social origin (...).<sup>40</sup> Therefore it is not based on the person's actual characteristic. As numerous national legislations specify,<sup>41</sup> discrimination is unlawful based on perceptive characteristics. It means that an individual is treated unfairly because it is believed that he or she possess a protected characteristic. Actually, it could happen in VR. In my point of view, discrimination, more precisely perceptive discrimination can be established in this regard.

Harassment as a type of discrimination can emerge during meta-work. The first incident took place in December 2021, when the avatar of a female researcher was cornered and allegedly sexually harassed by three avatars with masculine voices and traits. <sup>42</sup> Furthermore, cyberbullying as the execution of any aggressive behaviour against an individualized victim through ICT means in the context of work, <sup>43</sup> strictly relates to meta-work. The issue of cyberbullying can be regulated through different legal instruments such as statutory provisions, collective agreements or even policies, code of conducts. For example, in Hungary the Act on equal treatment and the promotion of equal opportunities bans harassment at workplace. It provides that a conduct of sexual or other nature that violates human dignity shall constitute harassment if it is related to a protected characteristic of the person concerned and has the purpose or effect of creating an intimidating, hostile, degrading, humiliating or offensive environment for a person. <sup>44</sup> Agreeing with the cited ILO's Working Paper from 2020, updating existing bullying or harassment regulation is needed to reflect IT and VR specialities. As the Hungarian example shows, there is not any reference to cyberbullying or harassment which could identify VR characteristics.

After potential misconducts we should take a look at some positive opportunities in the field of discrimination in metaverse. As claimed by Rethinkly's<sup>45</sup> research, 36 % of ethnic minority employees say they have no voice in the workplace. Rethinkly has created a virtual reality space where employees can re-enact real life situations using neutral avatars, eliminating any discrimination that may prevent to communicate their true feelings.<sup>46</sup> This

<sup>&</sup>lt;sup>39</sup> Sipka P., A virtuális térben történő munkavégzés lehetséges munkajogi kihívásai, 2023, manuscript submitted for publication.

<sup>&</sup>lt;sup>40</sup> ILO Convention No. 111 Article 1.

<sup>&</sup>lt;sup>41</sup> Hungary: Act 125 of 2003 on equal treatment and the promotion of equal opportunities; UK: Equality Act 2010.

<sup>&</sup>lt;sup>42</sup> Frenkel S., Browning K., *The Metaverse's Dark Side: Here Come Harassment and Assaults*, in *The New York Times*, December 2021, available at https://www.nytimes.com/2021/12/30/technology/metaverse-harassment-assaults.html.

<sup>&</sup>lt;sup>43</sup> De Stefano V., Durri I., Stylogiannis C., Wouters M., "System needs update": Upgrading protection against cyberbullying and ICT-enabled violence and harassment in the world of work, in ILO Working Paper 1, 2020, 16.

<sup>&</sup>lt;sup>44</sup> Act 125 of 2003 on equal treatment and the promotion of equal opportunities, Article 10.

<sup>45</sup> https://www.thisisrethinkly.com/.

<sup>&</sup>lt;sup>46</sup> Taylor P., Tech for Good: How the Metaverse is Stopping Discrimination in the Workplace, in Verge, May 2023, available at:

https://vergemagazine.co.uk/tech-for-good-how-the-metaverse-is-stopping-discrimination-in-the-workplace/.

VR space authorizes employees to have freedom of expression when discussing a certain scenario, and the software allows them to show their true feelings to their manager. Hence, metaverse can also mitigate discrimination and its' effect. According to some point of view, choosing a characteristic which the individual does not have would help avoiding discrimination.<sup>47</sup> In my opinion it is basically right. But the case when an employee creates a totally different avatar than his or her real personality can be abusive. We should take into consideration also employers' interest. Employers have the right to enter into an employment contract with the person they want. Therefore, a direct or indirect misrepresentation can cause confusion.

#### 5. Conclusion.

Virtual reality headsets, customized avatars and virtual offices are potentially shaping the work of future. As it was described above, metaverse generates some labour law related questions. The issues explored in this contribution have been mainly health and safety and discrimination. The raised questions cannot be answered conclusively, as working in VR is a dynamically emerging field. Meta-work evolves some typical occupational risks, such as virtual reality sickness, Proteus Effect or the traditional risks of desk jobs. Discrimination as perceptive discrimination could be often identified in metaverse.

Working in metaverse is the next level of remote work. But it is far from being that simple. This new way of work can be a race to the bottom in terms of working conditions.<sup>49</sup> The institutions of European Union have expressed their concern on metaverse's operation.

The EU Commission has launched an initiative called "Virtual worlds (metaverses) – a vision for openness, safety and respect" which is not expressly dealing with labour law issues but still indicates virtual reality's importance. Officials from the Commission stated that we should avoid those mistakes what raises during the advent of the internet. As the first wave of the Internet developed mostly in an unregulated manner leading to a more closed ecosystem. <sup>51</sup>

As Biasi stipulated in his Editorial of this Issue, the entire shift of (almost) any working activity to the virtual space seems to collide with both empirical and theoretical considerations. <sup>52</sup> Agreeing with Sipka, the existing instruments of labour law are more or less

-

<sup>&</sup>lt;sup>47</sup> Lewis L., Rule R., *Diversity and Inclusion in the Metaverse*, in *Ius Laboris*, May 2023, available at https://iuslaboris.com/insights/diversity-and-inclusion-in-the-metaverse/.

<sup>&</sup>lt;sup>48</sup> Lutz G., Employment law challenges in the Metaverse, in Gleiss Lutz, October 2022, available at https://www.gleisslutz.com/en/Employment\_law\_challenges\_metaverse.html?fbclid=IwAR1sjyibHWesegORvF9fsBTuHHc7UD9AA7h0E92lkPwKitO1SqdCSgYHfCc.

<sup>&</sup>lt;sup>49</sup> De Stefano, V., Aloisi, A.. Countouris, N., The Metaverse is a labour issue, February 2022, available at https://www.socialeurope.eu/the-metaverse-is-a-labour-issue

<sup>&</sup>lt;sup>50</sup> About the initiative, *see*: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13757-Virtual-worlds-metaverses-a-vision-for-openness-safety-and-respect\_en.

<sup>&</sup>lt;sup>51</sup> European Commission, Call for Avidence for an Initiative. Ref. Ares(2023)2474961 - 05/04/2023, 2.

<sup>&</sup>lt;sup>52</sup> Biasi M., Guest Editorial. The Labour Side of the Metaverse, in Italian Labour Law e-Journal, 1, 2023, I-X.

adequate to deal with the new technology and that the advent of Metaverse is not expected to change the legal structure completely.<sup>53</sup>

# **Bibliography**

Aliouche H., What are the Health Implications of Office Jobs?, in News Medical Life Sciences, January 2023, available at https://www.news-medical.net/health/What-are-the-Health-Implications-of-Office-Jobs.aspx#3.

Aloisi A., De Stefano V., Essential Jobs, Remote Work and Digital Surveillance: Addressing the COVID-19 Pandemic Panopticon (2021), in International Labour Review, 2022, 161, 2, 289-314.

Barton L., What is Immersive Technology?, in Advrtas, available at https://advrtas.com/immersive-technology/.

Biasi M, Murgo M., The identification of the applicable labour law(s) in the virtual space of the Metaverse, in Italian Labour Law e-Journal, 1, 2023, 1-11, https://doi.org/110.6092/issn.1561-8048/17124.

Biasi M., Guest Editorial. The Labour Side of the Metaverse, in Italian Labour Law e-Journal, 1, 2023, I-X.

Bouquet A., What is the Future of Work in the Metaverse?, in Horizons, July 2022, https://nhglobalpartners.com/future-of-work-in-the-metaverse/.

Choudhury B., Business and Human Rights in Metaverse, in Cambridge Core blog, March 2023, available at https://www.cambridge.org/core/blog/2023/03/31/business-and-human-rights-in-the-metaverse/.

CNG Media, Multiverse Labs launches world's first city in metaverse with government of Sharjah, UAE, in Caribbean News Global, October 10, 2022, available at https://www.caribbeannewsglobal.com/multiverse-labs-launches-worlds-first-city-in-metaverse-with-government-of-sharjah-uae/.

De Luca Tamajo S., *Health and Safety in the Metaverse*, in *Ins Laboris*, May 2023, available at https://iuslaboris.com/insights/health-and-safety-in-the-metaverse/.

De Stefano V., Durri I., Stylogiannis C., Wouters M., "System needs update": Upgrading protection against cyberbullying and ICT-enabled violence and harassment in the world of work, in ILO Working Paper 1, 2020, 16.

Delzell E., *Virtual Reality in Medicine*, in *WebMD*, May 2021, available at https://www.webmd.com/a-to-z-guides/features/virtual-reality-medicine.

Donini A., Novella M., Il metaverso come luogo di lavoro. Configurazione e questioni regolative, in Labourc's Law Issues, 2022, 8, 2, 17.

<sup>&</sup>lt;sup>53</sup> Sipka P., Pontential Challenges of Working in a Virtual Space, in Italian Labour Law e-Journal, 1, 2023, 53-65.

Employment Buddy, *The Metaverse: Employment law implications*, in *employmentbuddy*, September 2022, available at https://www.employmentbuddy.com/hr-articles/the-metaverse-employment-law-implications/.

ExpressVPN, Survey reveals surveillance fears over the metaverse workplace, in ExpressVPN, June 2022, available at https://www.expressvpn.com/blog/survey-reveals-surveillance-fears-over-the-metaverse-workplace/#everywhere.

Frenkel S., Browning K., The Metaverse's Dark Side: Here Come Harassment and Assaults, in The New York Times, December 2021, available at:

https://www.nytimes.com/2021/12/30/technology/metaverse-harassment-assaults.html.

Heikkila M., AI: Decoded: Algorithmic Accountability Act – Pentagon's AI chief – Labor problems in the Metaverse, in Politico, February 2022, available at https://www.politico.eu/newsletter/ai-decoded/algorithmic-accountability-act-pentagons-ai-chief-labor-problems-in-the-

metaverse-2/?utm\_source=POLITICO.EU&utm\_campaign=7b5f7478b6-

EMAIL\_CAMPAIGN\_2022\_02\_09\_09\_59&utm\_medium=email&utm\_term=0\_10959ed eb5-7b5f7478b6-

190834884&fbclid=IwAR2RxVabdJEvlt5gQHRnpBRKg0PFNU6wqseQLaOwt5ZDYehLNQq\_xOAnfN8.

Huang Y., Joy Li Y., Cai Z., Security and Privacy in Metaverse: A Comprehensive Survey, in Big Data Mining and Analytics, 2023, 6, 2, 234-247.

ILO Constitution, available at https://www.ilo.org/dyn/normlex/en/f?p=1000:62:0::NO:62:P62\_LIST\_ENTRIE\_ID:24 53907:NO.

Kun A., Work accident compensation in Hungarian labour law – liability rules and compensation, in Hungarian Labour Law E-Journal, 2014, 2.

LaViola J. J., A discussion of cybersickness in virtual environments, in ACM SIGCHI Bulletin, 2020, 32, 1. 47–56.

Lewis L., Rule R., *Diversity and Inclusion in the Metaverse*, in *Ius Laboris*, May 2023, available at https://iuslaboris.com/insights/diversity-and-inclusion-in-the-metaverse/.

Lombardi M., Il lavoro nel metaverso: uno spazio indefinito del possibile, in Labourc's Law Issues, 2022, 8, 2, 37.

Lutz G., Employment law challenges in the Metaverse, in Gleiss Lutz, October 2022, available at https://www.gleisslutz.com/en/Employment\_law\_challenges\_metaverse.html?fbclid=IwAR1sjyibHWesegORvF9fsBTuHHc7UD9AA7h0E92lkPwKitO1SqdCSgYHfCc.

McCormick E., Re brands protected in the metaverse? Hermès and NFT artist spar in US court, in The Guardian, available at https://www.theguardian.com/fashion/2023/feb/07/hermes-nft-artist-birking-bag-metabirkin-new-york-court.

Nogueira Guastavino M., Mangan D., The metaverse matrix of labour law, in Italian Labour Law e-Journal, 1, 2023, 13-27.

Patton Boggs S., *Employment Law in the Metaverse*, in *Family Office Insights*, August 2022, 1, available at https://www.lexology.com/library/detail.aspx?g=b92ccb3d-8eb6-46b3-a7ef-8e57c45cab15&fbclid=IwAR0yzAx86XE-PbMO1BgFgo4FrTBmayiS-n7lasIoLFCvS\_8xPbg33Hpbcao.

Peruzzi M., "Almeno tu nel metaverso". Il diritto del lavoro e la sfida dei nuovi spazi digitali, in Labourc's Law Issues, 2022, 8, 2, 72.

Protection of Wages Convention, 1949 (No. 95), available at https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100\_ILO CODE:C095.

PwC, What are the sales and use tax implications of the metaverse?, in PwC, available at https://www.pwc.com/us/en/tech-effect/emerging-tech/metaverse-tax-implications.html.

Sipka P., A virtuális térben történő munkavégzés lehetséges munkajogi kihívásai, 2023, manuscript submitted for publication.

Sipka P., Pontential Challenges of Working in a Virtual Space, in Italian Labour Law e-Journal, 1, 2023, 53-65.

Taylor P., Tech for Good: How the Metaverse is Stopping Discrimination in the Workplace, in Verge, May 2023, available at https://vergemagazine.co.uk/tech-for-good-how-the-metaverse-is-stopping-discrimination-in-the-workplace/.

Thomas L., *Applications of Virtual Reality in Medicine*, in *News Medical Life Sciences*, January 2021, available at <a href="https://www.news-medical.net/health/Applications-of-Virtual-Reality-in-Medicine.aspx">https://www.news-medical.net/health/Applications-of-Virtual-Reality-in-Medicine.aspx</a>.

WHO, World mental health report: transforming mental health for all, Geneva, 2022. Wikipedia, Proteus Effect, available at https://en.wikipedia.org/wiki/Proteus\_effect.

Copyright © 2023 Ildikó Rácz-Antal. This article is released under a Creative Commons Attribution 4.0 International License