EDUCATION – DIGITAL AND BIOTECHNICAL OR:
TWO UNSUCCESSFUL ATTEMPTS BY THE CENTAUR_ESSAS, GETTING OFF THE HORSE

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Key words: Education; Digital and Biotechnical Means; Social Dependency of Education, Digitalisation, Motherhood, Children and Young People, Educational Environment, Transhumanism.

Brief introduction: If you try to understand current developments in the field of education, the image transmissions that come from the war and show all the suffering and misery that people in the contested areas are exposed to in real, not just virtual, come to the fore. The impressions even surpass the extent and quality of the simple upheavals that children and young people were recently expected to face in the course of the pandemic - in the educational and teaching processes, their usual social associations of classes and groups. After a further strong push into digitality\(^1\), children and young people are now experiencing directly and almost up close what it must feel like to persevere in shafts or to flee from live fire, bombs and rockets. In any case, the images confronted us "in physical real time with a reality"\(^2\) of the war, which were part of the daily reporting in the first few weeks until, from the point of view of those responsible, they were exhausted and did their service for the willingness to donate that was to be initiated. Then the display of the ORF "Neighbor in Need" with the corresponding donation account is apparently sufficient.

Aims: The aim of the article is to draw attention to the one-sidedness of educational phenomena. The emphasis on intellectual skills associated with digital media neglects physical development. Conversely, physical processes cannot be separated from mental and emotional developments. The social dynamics place special demands on education and at the same time always show the limits of education.

Analysis of current researches and publications related to the problem: It is difficult, even for adults, to be held responsible and at the same time not only irresponsible, but completely powerless. No matter how hard you try not to let these images become overwhelming or to protect the children from them: the images force themselves on and into everyday life and consciousness. Experience, persevere, up close, feel, sympathize, flee, seek shelter, fear, despair - all these activities happen physically, even if they are "only" triggered virtually. There is no digital, media, information technology substitute for the physical experience - no substitution by emojis that could symbolize one's own feelings or express sympathy for the victims.\(^3\) In

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2 Ebd., S. 4.
3 Symbols can denote bodily experience and feeling - sometimes this is not done very clearly - but they cannot replace it in the sense of "taking the place of experience".
impotent desperation, one is at the mercy of those powers who, armed to the teeth, glorify their goals and, in war as in peace, use their subjects as a means and demand from them allegiance under arms and solidarity with the civilian victims.

War shows both: the autocratic hubris of the rulers, their power to dispose of and command precision weapons and emergency services, as well as the powerlessness, vulnerability and mortality of the physical existence of the people, which only serve and appear here as material. An unbearable tension that not only catches children completely unprepared and confronts them with situations that even adults face new, unexpected challenges. In this context, the turbulent, untamed ferocity of the fighting centaurs would probably be the appropriate image. But it is only a small excerpt from this currently so oppressive educational environment that I am undertaking as a contribution to the focus on phenomenology and pedagogy - to remind once again of the dual nature of the pedagogical actors. It is not only now asserting itself, not only in extreme, real or supposed exceptional situations. Despite or rather because of the ongoing attempts to overcome it and get off the horse – to stay with the metaphor – the dual nature is all the more emphatic. I will take up two of these attempts, on the one hand the digital and on the other hand the biotechnical or biomedical replacement of education with all its acting subjects. In my opinion, the kind Centaurus Chiron, legendary teacher of Achilles, and the nature-loving, nameless Centauressa are the more appropriate images. How futile both of these attempts are to replace education and to imagine Chiron without an abdomen or the Centauressa without a head, I want to show at least in a few fragments. I can only leave open the pedagogical implications of the concluding plea to finally consciously get on the horse – for old and young, rational Centaur_essas.

The main text of the article material

First attempt - disembodied intelligence or free-floating spirit

In the age of digitality, the dual nature of the human species is probably one of the least and most reluctant to remember. Technology and mastery of nature have meanwhile reached one of their peaks. All of the shortcomings and deficiencies of Homo sapiens can apparently be compensated for or even eliminated through biotechnical processes, prostheses and physically controllable processes of artificial intelligence. A misshapen mythical creature, half horse and half human, seems very antiquated and outdated, as it points with a certain penetrance to the dialectic interweaving of nature and culture. "We are wholly nature, even in the highest region of thought, even in the proudest plan of action. History is natural, just as nature is historical", Sünkel stated at the very beginning of the process of digitization, in a collection of texts that bears the title "Centaurus" for good reason. 1 Even then, he considered it possible that "the unintended results of cultural evolution […] reveal a biological unsuitability of our species” 2. In the meantime, this unfitness seems to be a foregone conclusion. From the point of

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1 See ibid. - Here one could easily make a connection to Merleau-Ponty's efforts to radically question dualism, for example when he writes: "It is absolutely not possible for humans to have a first layer of behaviors called 'natural' and a second, to want to distinguish between the layer of the natural or cultural world that has just been created and the layer that has been laid on top of it. […] In humans […] everything is manufactured or everything is natural" (Maurice Merleau-Ponty, Phänomenologie der Wahrnehmung, übers. von Rudolf Boehm, Berlin: Walter de Gruyter 1966, S. 224).

2 Ibid., S. 59.
view of transhumanists, human brains are still “at the level of “the African savanna fifty thousand years ago” due to their “evolutionary inertia” and “not designed at all for the modern world”1. They see humans as “heavily armed chimpanzees” who "posses amazing technological power" but are "terribly bad at making decisions"2. Measured against the ideal standard of super-intelligent machines, on the one hand, the antiquated brain structure and human nature are said to be total failures. On the other hand, the tight-knit community associated with transhumanism, the "Less Wrong community", is apparently certain that the same brain that causes cognitive distortions can, due to its plasticity, be trained and shaped to be at least less wrong than theirs Majority. By 'learning 'rational' thinking methods' it is fundamentally possible to overcome natural deficiencies and 'gain a clear advantage over irrational fellow human beings'3. Even the most elitist form of self-optimization only succeeds - how could it be otherwise - through education or "the mediated acquisition of non-genetic activity dispositions"4, to use Sünkel's expression. But the aspired disposition of completely rational, formally correct, logical and error-free thinking cannot be acquired without concrete content. Formal algorithms or rational thought patterns guarantee accurate thoughts or correct content just as little as it is possible to learn to swim on dry land. Even information theorists find their theory's promise to arrive at a full understanding of the real world in this way highly questionable, as well as the underlying understanding of the subject. According to the mathematician Claude E. Shannon, information theory may be interested in the reliability in the transmission and processing of information, but not at all in the meaning and meaning of messages.5 However, this is essential in order to understand. For computer scientist Jaron Lanier, talking about humans as a "cybernetic pattern" for which "subjective experience either does not [exist] or [is] unimportant" is part of the dogmatic tenets of computer science, as is "some kind of environmental or peripheral effect", bearing the features of a "cybernetic totalitarianism"6. The idea of detaching "human consciousness from its biological hardware" and transferring it completely to a controllable "transmitted [to] electronic medium"7 does indeed have a radical effect. The attempt to detach Chiron completely from the horse and to believe that the mediation activity does not require any reference to the perceptible (sometimes audible or tangible) meaning of the content and to understand this as pure, allegedly neutral or ineffective information, contradicts itself already the impatiently rushed awareness of life of the appropriating generation.8 But trying to replace physical existence with digital systems is inappropriate for another, opposite reason. The reduction of acquisition activity to the pure storage of information not only underestimates the dialectic relationship

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2 Ibid., S. 57.
3 Ibid., S. 62.
between body and mind, but also the role of bodily experience and perception in the development of intelligence, in both a positive and negative sense.

On the one hand, corporeality is by no means "only" a defect. On the contrary, it is a special kind of productive force that unfolds above all in correspondence with intellectual activity. Last but not least, phenomenology in the 20th century made a significant contribution to this insight1. Recently, for example, experimental settings have shown that people in phases of tense attention perceive surprising or loud noises as extremely disruptive in the memory or acquisition process. Nevertheless, as Martin Grunwald’s team was able to demonstrate, they manage to refocus by stimulating the sense of touch in spontaneous self-touching2. The (self-)touch not only centers the individual. Because: "The body is sensitive and felt at the same time"3. Brief touches express "quickly and effectively [social] appreciation and respect" and motivate, for example, when solving complicated statistical tasks4. The selected examples of the importance of the sense of touch in learning processes alone give an idea of how under challenging and hopelessly one-sided the virtual and digital world presents itself to the touchscreen generations. The "disembodiment in the digital" also blocks the view of the bodily potential for appropriation for adults and reactivates and enriches Foucault’s "disciplinary power" with several new instruments5.

The other side is the overwhelm of constantly changing visual stimuli, which blatantly dominate the "societal attention regime"6 and under which children can shape their plastic brain, but also deform it if they hardly get "opportunity to stabilize"7 and build solid foundations. The common "attitude of being driven"8 and the ideal goal of thinking and reading even faster, if necessary with brain doping or electronic prostheses, and being largely independent of physical conditions seem more obvious.

The artificial superintelligence simply reprograms itself and "gets by without childhood. She has fully developed abilities from the start, so that she can interact directly with the world"9 and, for example, according to a "transhuman" idea by Ben Goertzel, watch over humanity as a global nanny "until it is mature enough to be responsible with its creations to deal with".10 The "Promethian shame"11 of feeling permanently inferior as the maker of the

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5 This is shown fresh off the press for our area: Katarina Froebus, Daniela Holzer, »Universitäre Online-Lehre: Machtverschiebungen für neue Disziplinaritätsräume«, in: Magazin erwachsenenbildung.at, Das Fachmedium für Forschung, Praxis und Diskurs, Ausgabe 44–45, Thema 12 (2022), S. 1–11, hier S. 4.
7 Ibid., S. 34.
9 Schnetker, Transhumanistische Mythologie, a. a. O., S. 66.
10 See ibid., S. 17.
self-produced machines, and the "omnipotence of the superintelligences" with their repeated "omnipotence structures"\(^1\) are apparently two sides of the same coin.

**Second attempt—mindless bodies or unloving mothers**

Again it is nature, which on the one hand is to be stripped off and outsourced, and on the other hand to be perfected and shaped as desired. According to Beauvoir, the "biological body of women" is "characterized by a number of disadvantages" and "alienation is a fundamental experience of women"\(^2\). The alienation has meanwhile experienced an increase. The reduction of women to "breeding machines" for workers and soldiers has always been criticized by feminists, but with the emergence of surrogacy even "pregnancy appears as a purely mechanical process, as alienated work in which the woman engaged for it is not emotionally involved may be"\(^3\). She undertakes under her (employment) contract to ensure that her physical and organic processes run smoothly during the nine months through healthy nutrition, medical care, sexual abstinence, etc., without "developing feelings for the child in her womb"\(^4\). She is apparently pure, spiritless nature, only carrying helper of the "real" mother or parents, who for their part seem to have the purest feelings for the child, without being affected by the natural processes. Dismounted from the horse, they exercise their cultural rights as owners of the implanted germ cells in advance and use biotechnology to determine the appearance, the "design", the sex and other genetically manipulated properties of "their" child, to which they hold property rights as if they were property.

The difference in the rhetoric, which comes into play in relation to the "reproductive rights of the better off"\(^5\) who are fulfilling their dearest wish for children, is very clear. It's no longer just rich pop stars, actors, famous soccer players or musicians who can afford it. Long before the war, there were Ukrainian placement agencies and clinics with catchy names like "La vita nova" with a "low-cost guarantee": If the first attempt with your own egg cells is successful, the overjoyed parents pay "only" 26,000 euros! On the other hand, the fertility clinics glorify their deeds, which are said to be nothing more than "a work of love, a pure expression of altruism, a "gift of life", and in doing so thoroughly blind the poor living conditions that lead women to "renting out their womb" over the daily struggle for survival\(^6\), as does the legal obligation for surrogate mothers to maintain a perfectly cool, detached attitude towards the child, "as if 'it' were a purely physical outgrowth, an object not worth speaking of"\(^7\).

The fate of the children and women who become the objects of this interplay of poverty, business interests and property rights is more than worrying. There has always been a "number of 'abandoned children' who, for various reasons, are not granted legal status in the country of the 'target parents' or are born with disabilities and are therefore rejected by both the

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\(^1\) Meyer-Drawe, "Zum Wandel selbst verschuldeter Unmündigkeiit", a. a. O., S. 22.
\(^3\) Silvia Federici, Jenseits unserer Haut. Körper als unübertreppter Ort im Kapitalismus, Münster: Unrast 2022, S. 71.
\(^4\) Ibid., S. 74.
\(^5\) Ibid., S. 76.
\(^6\) Ibid., S. 77.
\(^7\) Ibid., S. 76.
surrogate mother and the commissioning couple". The surrogate mothers, open to blackmail with their poverty, fulfilled their part of the contract, the agencies did their business with it, and the target parents ended up paying for perfect human "quality goods." That sounds cynical and it is. However, reality has long since overtaken even this thought-provoking cynicism, with reports of surrogate mothers being told by their agencies not to leave war zones with the precious "goods child" in their bodies, and videos of bunkers in where surrogate mothers deliver the children safely protected, which apparently should reassure the business partners "target parents". There are also reports with pictures of countless children whom the war turns into "human waste" because the "goods can no longer be delivered" ...
thinking about finally using digital and biotechnical or biomedical means practically for the well-being of all living beings on this earth is of course just an idea up to now. But maybe it all starts with self-confidently acknowledging the dual nature of the Centaur_essas.\(^1\) Sünkel reminds us of this when he says: "Only as an imperfect being can man also be the highest being in nature and for himself. As an open, reflective being, man has reason; as a weak being, he has love. Both are needed... "\(^2\).

ЦИФРОВОЕ И БИОТЕХНИЧЕСКОЕ ОБРАЗОВАНИЕ

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Аннотация

Если вы попытаетесь понять текущее развитие в области образования, на первый план выйдут изображения на тему «война», которые показывают все страдания и несчастья, которым подвергаются люди на спорных территориях как в реальном мире, так и виртуальном. Впечатления даже превосходят по масштабам и качестве те простые потрясения, которые дети и молодежь еще недавно ожидали в ходе пандемии — в образовательном и воспитательном процессах, привычном для них социальным объединении классов и групп. После еще одного мощного толчка в цифровизацию дети и молодые люди теперь непосредственно испытывают то, что похоже на упорную работу в шахтах или бегство от живого огня, бомб и ракет. В любом случае изображения сталкивали нас «в физическом реальном времени с реальностью» войны, которые были частью ежедневных репортажей в первые несколько недель, пока, с точки зрения ответственных лиц, они не были исчерпаны и не сделали свое дело.

С нашей точки зрения, цифровые и биотехнические попытки преодолеть якобы природные дефекты и несовершенства и сойти с коня тщетны, т.е. обречены на провал и достались непозволительно высокой ценой: отказом от идеи гуманизма. Мы считаем, что разговоры о «трансгуманизме» вводят нас в заблуждение.

Ключевые слова: образование, цифровые и биотехнические средства, социальная зависимость, цифровизация, образовательная среда, трансгуманизм.

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3. Symbols can denote bodily experience and feeling - sometimes this is not done very clearly - but they cannot replace it in the sense of "taking the place of experience".
5. See ibid. - Here one could easily make a connection to Merleau-Ponty’s efforts to radically question dualism, for example when he writes: “It is absolutely not possible for humans to have a first layer of behaviors called ‘natural’ and a second, to want to distinguish between the layer of the spiritual or cultural world that has just been created and the layer that has been laid on top of it. […] In humans […] everything is manufactured or everything is natural” (Maurice Merleau-Ponty, Phänomenologie der Wahrnehmung, übers. von Rudolf Boehm, Berlin: Walter de Gruyter 1966, S. 224).
6. Ibid., S. 59.

\(^1\) With the spelling Centaur_essa and Centaur_essas I want to follow gender equality in the language. This means all genders with their double nature, which was mentioned at the beginning.

\(^2\) Sünkel, Centaurus, a. a. O., S. 61.
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EDUCATIONAL REFORMS VS. EDUCATIONAL REPLICA: AT THE JUNCTURE OF BECOMING A PLACEBO IN THE HIGHER EDUCATION SYSTEM IN ARMENIA

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Keywords: higher education reforms, higher education policy, conceptual framework of higher education, performance measurement system.

Brief introduction. The 21st century has witnessed arduous efforts of world polities to endure the ups and downs of globalization and has coerced many economies to step into the age of knowledge-based economies, subsequently triggering substantive changes in the domains of national higher education systems. Globalization, geopolitical and socio-cultural provident developments, and economic instable changes have drastically increased international competition, have intensified massification in higher education and rapidly advanced technologies to the level where these veracities necessitated radical and systemic transformations and reforms in higher education systems across the world. One of the significant megatrends in the contemporary societies is the expansion of higher education and the global recognition that this sector is crucial for social, cultural, and economic development (Cantwell et al., 2018). Accordingly, education systems have been mainly embedded with a long-term development of any society, and their efficient application is instrumental to economic growth and social cohesion. Karakhanyan and Stensaker (2020: 11) further posit that “globalization, massification, and the digital revolution have prompted radical change to the higher education environment and opened up opportunities for a wider range of higher education providers, modes of delivery and student cohorts.” Certain national educational systems and educational jurisdictions have not been ready for such a high tide of reforms either at the systemic or institutional levels. Over a very limited span, educational jurisdictions were typically forced to become rigorously evaluated “output-oriented” systems, often assessed by attainment targets stipulated by different supranational bodies to cater to the needs of divergent constituents. Thus, HE systems have confronted legal and domain-specific problems that are diverse in their nature, are convoluted by the presence of conflicting interests and contesting values between global, national, and local educational environments and are further