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ASKING MORE FROM THE ONLINE UNIVERSITY. CAN WE THINK TOGETHER WHILE SEPARATED BY A SCREEN?[1]

Pedir más a la Universidad en línea. ¿Podemos pensar juntos estando separados por una pantalla?

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ABSTRACT

The switch to online education that occurred during the Corona pandemic brought to the fore questions about the value and desirability of a fully online university. This article explores to what extent is a fully online university desirable from an educational perspective, whereby education is seen as a valuable

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experience taken in itself, regardless of its output. I start from the hypothesis that a fundamental dimension of study practices at the university is the experience of collective thinking triggered by specific material and social arrangements. I proceed to describe material conditions for triggering thinking in terms of what I call mediatic displacement, which is a way of integrating media into educational practices that enables a fluctuating type of attention. The paper concludes by arguing that we need to develop new technologies for online education and train our attention deliberately for online environments by establishing new protocols for dealing with the digital scattering of attention.

Keywords: online university; educational practices; study; collective thinking; mediatic displacement.

RESUMEN

El cambio a la educación en línea que se produjo durante la pandemia del coronavirus puso en primer plano las preguntas sobre el valor y la conveniencia de una universidad totalmente en línea. Este artículo explora hasta qué punto es deseable una universidad totalmente en línea desde una perspectiva educativa, en la que la educación se considera una experiencia valiosa tomada en sí misma, independientemente de su resultado. Parto de la hipótesis de que una dimensión fundamental de las prácticas de estudio en la universidad es la experiencia del pensamiento colectivo desencadenado por acuerdos materiales y sociales específicos. Procedo a describir las condiciones materiales para desencadenar el pensamiento en términos de lo que llamo desplazamiento mediático, que es una forma de integrar los medios en las prácticas educativas que permite un tipo de atención fluctuante. El artículo concluye argumentando que necesitamos desarrollar nuevas tecnologías para la educación en línea y entrenar nuestra atención deliberadamente para los entornos en línea estableciendo nuevos protocolos para tratar la dispersión digital de la atención.

Palabras clave: universidad en línea; prácticas educativas; estudio; pensamiento colectivo; desplazamiento mediático.

1. Introduction: An educational approach to the online university

During the COVID-19 pandemic, various attempts at transitioning university classes to the online environment confronted us with the realisation of how difficult it is to enact an online university as a complete replacement for the physical university. Some wondered if an online university is desirable after all, drawing on previous discussions on the digital university[2]. However, it is unfair to draw such conclusions since the pandemic experiment of the online university was a survival solution, temporary at best. As Hodges and colleagues (2020) pointed out, we should abstain from concluding about the capabilities of online education from the emergency situation of remote online teaching that happened during the pandemic. However, after everyone got a first-hand experience of online teaching in the previous year, a question has been opened up: can an online university replace the physical university, and is this a desirable goal after all? To answer this, we must first clarify what we are after with an online university from an educational perspective.

It seems, at first sight, that we are currently in a good place to answer this question, given the extent of existing research on digital universities. For at least a decade before the Corona pandemic, the 'digital university' was a recurring trope in policy discourse on higher education. The 'digital university' discourse construed it as a desirable goal for policymakers and university administrators

2. In this article I distinguish 'digital university' from the 'online university' and will focus predominantly on the online form. The digital university is a distance university that uses digital media instead of paper (e.g. ebooks, pdf documents, digital quizzes, pre-recorded lectures, etc), meaning that an entire curriculum could be fitted on a CD or memory stick and given to students to access it fully offline. While the digital university can make use of the Internet connectivity and deliver its courses in real time, this is not strictly needed; a digital university can be, in principle, a fully asynchronous university. One paradigmatic example of a digital university are the MOOCs (massive open online courses) which are set up in such a way that students can take the courses and solve the exams at different times, at their own pace. By contrast, in the online university, lectures and seminars are delivered as much as possible in real time, for example through videoconferencing platforms - as seen in the higher education's responses to the COVID-19 lockdowns. Even if the lectures may be pre-recorded, the students get some tutorial or interactive sessions which happen in real time so that they can discuss these (the so called flipped-classroom model was used heavily in the online education). The digital university was meant to work as stand-alone, as a package of information and instructions that, once received by the student, do not usually need any more input from the teachers. Meanwhile, the online university can survive only because students and teachers are tethered to the Internet, usually at the same time, from different spaces. The digital and the online university have a commonality in terms of mediation: both are accessed through a digital screen- be it of a phone, laptop or tablet, but their protocols are somewhat different. Thus, while the digital mediation is the same, the educational practices and the assumptions of what makes education are strikingly different. The digital university proponents assume that long-distance education counts as a complete education, while the online university proponents assume that there is always a need for contact between students and instructors, even if it is mediated by Internet technologies and digital screens.

(Bowen, 2013), part of a broader rhetorical move of modernising the universities by giving them a digital appendage[3]. Notwithstanding pandemics, there are many reasons why a digital university might be desirable. Some have to do with increasing the student base or offering more inclusive services to disabled students. Furthermore, there has been a lot of research in the last decades about the effectiveness of online learning, measuring how well online students perform while compared with offline cohorts (Kimball, 2002). However, the discourse on digital university seems to assume that the goal of university education is primarily about learning (Lewin, 2016); hence the metrics used to measure the success revolves around the student's remembering of things learned and their skills acquisition. While I acknowledge that learning is an important part of university life, often used as a primary justification for the societal role of universities, in this article, I will take *an educational perspective* (Masschelein & Simons, 2013, p. 173) on the online university. An educational perspective is an approach that conceptualises university practices as worthwhile of being done in themselves, implicitly taking a distance from functional approaches[4] that conceive the university as primarily conducive to goods outside itself. An educational approach sees the value of educational practices as being experiences worthwhile having in themselves and is almost identical with a post-critical approach to education (Hodgson *et al*., 2017, p. 17).

The possibility of having a digital education has been tackled already from an educational perspective by Vlieghe (2014), who showed that there are conceptual foundations in the work of Agamben and Stiegler that allow us to envision an educational use of digital technologies. Starting from this conceptual groundwork but going more into a normative direction, I want to look particularly at the kinds of experiences that online university practices give rise to and ask whether and how one can find meaning in these. Based on the educational approach, I inquire what the experiential conditions an online university should minimally provide to keep its educational form intact. This is a normative question whose answer implies a clear stance on what is valuable about university education and what needs to be kept in the transition to the online university, namely the distinctive experiences students have while studying at the university. All forms of education give rise to distinctive experiences, but the university's characteristic feature is the

3. For a comprehensive discussion of the discourse on the modernisation of higher education, see Custers & Magalhães, 2021.

4. Such functionalist approaches are, for example, sociological or economic ones which treasure the university insofar as it creates a uniform culture or contributes to the creating of a mass of knowledge workers, highly skilled.

felt experience of collective thinking[5]. Thus, the question of whether the online university can instantiate the same educational form as the physical university is narrowed down to inquiring about the experiences of collective thinking. To my knowledge, this question has not yet been asked in the online university scholarship, yet it is fundamental if we are considering online universities as a serious alternative to the physical ones.

Collective thinking at the university has been described as an event where thinking becomes real for those present who then become compelled to study it (Simons & Masschelein, 2018, p. 59). The collective aspect of thinking is not about a shared mental state that all participants experience at the same time (similar to emotional contagion in a group). Rather it is about the compelling effect of educational practices which make us think anew about a topic. The thoughts and conclusions we arrive at may be different, although there will be some alignment if we discuss what we think, ultimately. Whenever we enter into a situation of study, a topic that previously used to be indifferent to us suddenly becomes a matter of concern (Masschelein & Simons, 2009, p. 240), entailing that reverting to previous knowledge to solve this new problem is not enough, we must do some effort ourselves. The commonality of collective thinking is about instating something akin to an electromagnetic field that orients all subjects towards an issue of concern with such force that thinking cannot be avoided.

Collective thinking is intertwined with studying: something makes us think and, because we realise that we do not understand it enough, we need to study it further. Study practices have the effect of drawing us out of our own interests and patterns while placing in front of us a topic on which we must reflect urgently. The collective aspect is instantiated by the felt need to think, not by the conclusions of this reflection. Individual thinking and the collective one are similar up a point since, while we are alone, something can make us think - a book, a movie, a lived experience - yet the distinctive mark of the university is that it can make people think together about a common theme which becomes a matter of concern for all those involved (Schildermans *et al*., 2019; Swillens & Vlieghe, 2020; Schildermans, 2021). When something makes us think together while studying it, this is a sign that the boundaries between the world and education have been erased, and then the world becomes an educational opportunity. This focus on collective thinking at the university helps narrow the initial question into the following: what conditions are needed to enact collective thinking at a university? First, we need to look at how the classical university enacts thinking through its practices.

5. What I call 'collective thinking' is described by Masschelein and Simons as 'public thinking' (Masschelein and Simons 2013, p. 174) but I prefer the word 'collective' to designate the felt experience of thinking together, whereas they use the word 'public' to discuss the political implications of such thought and the formation of the public as an entity.

2. Three exemplary instances of thinking at the university

Next, I will describe how thinking at the university emerges as a form of collective thinking while studying. To illustrate this experience, I will use three pedagogical practices at the university: a traditional one - the lecture, and two very new experimental practices: the Labo and the PATHES-3 study groups. By elucidating how thinking emerges in these three instances, we will be closer to understanding what conditions make the experience of collective thinking possible and even trigger it, and hence we will have a point of comparison with the online educational practices.

2.1. *The lecture*

Standard academic lectures at the university do not appear to be, *prima facie*, sites for thinking. The academic lecture has been described as a passive method for knowledge transmission with appalling results, begging the question of why this practice is still around (Laurillard, 2002). Conceiving the lecture as a means for knowledge transmission should indeed pose a problem for lecturing: why should we want to hear someone *speak* to us about the same kind of information that we can *read* much faster? Yet, learning is not the main aspect of the lecture, nor why we value it. From an educational perspective, which is about seeing the educational act as valuable of being experience in itself regardless of its outputs, one should ask what is unique about the lecture as a felt experience worthwhile in itself? Following Masschelein and Simons (2013), this valuable aspect lies in the unique ability of the lecturing as a pedagogical form to gather people around a shared matter of concern and thus make them think about it.

Thinking experienced in the lecture could be conceived as a solitary event up to a point: the lecturer speaking in front of the classroom can get sudden sparks of inspiration from seeing the faces of the students in disbelief or frowning as the presence of students acts as a catalyst for brainstorming by triggering successive explanations and reformulations, as explained by Kleist in a famous essay:

> The human face confronting a speaker is an extraordinary source of inspiration to him and a glance which informs us that a thought we have only half expressed has already been grasped often saves us the trouble of expressing all the remaining half. I believe that, at the moment when he opened his mouth, many a great orator did not know what he was going to say (Kleist, 1951 -1805-, p. 43).

But this is not yet a collective thinking experience; rather, it is individual thinking supported by a collective, similar to improvisational theatre and political speeches that need some kind of audience. Collective thinking is somewhat different and has the distinctive features that both the audience and the lecturer are turned into students, or as Simons and Elen put it, "the student at the university is not a pupil,

but someone who participates in academic enquiry" (Simons & Elen, 2007, p. 624), namely the student and the lecturer are equal in several key moments when they are left without answers, and this compels them to think.

What happens concretely in the lecture to call forth this experience of collective thinking? For the lecturer, a certain risk-taking is needed. The lecturer needs to not follow one's notes or slides too closely. It is in those moments of straying from the notes when the lecturer addresses the audience thinking starts to occur by going into unprepared topics, into making connections and reflections on the spot. Thus, for the lecturer, leaving the pre-established lesson plan and following one's intuition are preconditions for thinking.

Meanwhile, for the students, note-taking experience is fundamental for triggering thinking. In taking notes, the students reshape the lecturer's speech, select what interests them, and rephrase it in their words. We can look at the student's notes as a seismograph of what made them think, as laid down on the page (Marin & Sturm, 2021). In taking notes, the students signal to the lecturer that they are present, following her train of thoughts, being attentive to the matters at hand. When doodling or writing absent-mindedly, students follow their train of thought that takes them out of the lecture hall into their own private space for thoughts. These events can alternate: a student can take notes about the lecture, stay with it, and suddenly steer off into a tangent and zone out of the event. We can easily recognise the moments of collective thinking when students are electrified by the speech and take notes furiously while fully attentive to the matter at hand. Yet, there is something important about the moments of zoning out; these are not uncommon events but are needed for students to focus their attention on those moments that matter truly to them. Zoning out and zoning in, being attentive to the lecturer's words, imagining these words, and then withdrawing in one's own thoughts are rhythmic stages of the lecturing experience that resemble inspiration and expiration. The note-taking is the lifeline of the lecture, ensuring that students return their attention to the present moment from time to time and participate in the collective event.

Strictly speaking, not everything going on in a lecture is about triggering thinking experiences. When an instructor introduces a new topic and explains its components, the students are primarily passive since they cannot do any thinking if they do not grasp the basic concepts. These expositional moments are necessary for the lecture because simply by having someone explain these in one's voice and addressing a particular audience, the concepts and theories become alive in a way that would be hard to achieve through reading a text alone[6]. Thus, regular lectures

6. One would consider these moments of explanation and being spoken to as passive learning or knowledge transmission. However, I do not consider this passive learning since students need to "strain to catch what the reader's mouth gives forth" (Illich, 1993, p. 54) and actively participate in the construction of meaning by following the line of explanation and by thinking alongside their instructor.

are not solely thinking together but neither only exposition and explanations of concepts, rather a combination of both. If the lecture is only explanatory and the knowledge is treated as fixed[7], then it is indistinguishable from a school-like class session. What makes the university lecture distinctive is this possibility of being punctured by moments when students are not merely spoken to but also called to think with the lecturer. These moments need not be frequent, but the possibility of their appearance is important and gives value to the experience of attending a lecture. Before entering a lecture hall, students do not know if it will be thought-provoking or a tedious experience, yet they do know that thinking is a genuine possibility with every lecture.

2.2. *The Labo*

The Labo (officially titled "Designing Educational Practices") is an optional course available for the students attending bachelor's and master's programmes in education at KU Leuven. The course aims to explore a city and then map it with the help of the students, following a strict protocol that directs their attention at certain points of interest. Briefly summarised, the students travel together to a new city (such as Athens, Charleroi, Barcelona, Leuven, etc.) and then walk alone or in pairs on a random path - always the same - taking note of certain parameters of what they see (stray dogs, empty shops, gas stations, graffiti). In the evenings, the students are reunited and add the things they found throughout the day on a map. Developed by Jan Masschelein together with an educational team and refined throughout years, the protocol enables students to learn to see (again) a city and experience it through their five senses by immersing themselves in an experience of the city and staying with this experience for hours, per the duration of the walks. The points that need to be recorded by students in their walks are of various kinds:

> informal settlements, benches, abandoned buildings, graffiti, and the like, which had developed and changed over the years — in order to focus on the issue of the "public." The students talked to people, took photographs, captured smells and sounds, and shared moods. As noted, the paths were arbitrary, crossing the whole of Athens, not translating an intention to visit particular (for example, beautiful or deprived) areas, places, viewpoints, or "zones" (Masschelein, 2019, p. 192).

7. As Humboldt put it, “it is a peculiarity of the higher scientific institutions that they always treat science as a problem that has still not been fully resolved and therefore remain constantly engaged in research, whereas the school deals with and teaches only finished and agreed-upon bits of knowledge.” (Humboldt, 1810)

After walking daily through these random paths for a week, the students come to see the city in a different light, beyond the touristy façade and official advertising. Through such a simple yet rigorous procedure of "mapping, walking, looking, listening, and conversation exercises in various city landscapes all over the world" (op. cit., p. 190), students learn to "sensorially 'situate' thinking" since, in the pedagogical conception of the exercise, "walking and mapping exercises ... are conceived as practices of attention, investigation, and entanglement" (op. cit., p. 191). In other words, students learn to see again and to really experience the city for the first time.

In the Labo course, the thinking is triggered by practices that allow students to pay attention to the things they would not normally see (a big part of enabling their paying attention is the rule that they cannot use their phones during the day to search for things or check social media, they can only use phones to take pictures to document the points of interest). Thinking is thus triggered first by the heightened attention of being in the moment with one's all senses and then through collective practices of map-making in the evenings and discussing with each other what they saw. Students see, feel and think, but their thinking is grounded in the experiences they had of the city, it is situated thinking. It is not speculative thinking but abstract thinking grounded in actual experiences since the map-making and the discussions allow students to conceptualise the city at a high level of abstraction that does not exclude care and involvement.

University thinking begins by learning to pay attention to a matter of concern, and the Labo is a sophisticated experiment in making attention through protocols designed specifically to require "a certain discipline of mind and body" (op. cit., p. 200) which uses the senses to orient the student's attention to the present moment. Yet, paying attention by itself is not enough by itself to launch us into thinking. The university thinking in the Labo is emerging as a kind of collective thinking - not in the sense that all students maintain the same thought at the same time - meaning that they are concerned by the same issue, which they have conceptualised in the same terms, and which imposes its presence to them equally. When something commands our attention and reflection as a group, we are engaging in collective thinking. This part of the Labo was made possible by the evening discussions in which students aligned or confronted their beliefs about what they saw during the day, and in those discussions, they also singled out the most important normative aspects of the situation at hand (what matters are of concern and what needs further reflection) in a more systematic way. Collective thinking is not groupthink (Janis, 2008), namely a mode of thinking in a group that seeks consensus above the truth and, after arriving at consensus, becomes resistant to its change. Because, during the Labo, while students do think about the same thing from the same perspective, they do so in different ways. We find commonalities among their conclusions, but they reach them independently

(through the walks) and then dialogically (map-making and discussing what they saw with each other). The students are not told what to believe by anyone; they reach some conclusions and then re-enforce these by their colleague's similar experiences. They make sense of the experience together without a teacher telling them how to interpret what they saw. The Labo is an unusual course in the array of courses that education students take at KU Leuven. It is a course that takes a risk by enacting an experiment of attention forming. The Labo acts as a lens to focus this experience of collective thinking enabled through the common paying of attention while walking and map-making. The teaching instructors moderate some reading seminars, and then they guide the protocol for the walking and map-making, but the minimal teaching takes a back seat to the experience of lived map-making. No person teaches anything in this course; rather, the city teaches the students to look and think.

2.3. *PATHES-3 study groups*

In the autumn of 2019, the *Philosophy and Theory of Higher Education Society* held its 3rd conference in Leuven (abbreviated here as PATHES-3). The local organisers decided to experiment with a non-standard format and designed a conference made up entirely of study groups. The format was, briefly, this: the 70-80 participants who joined the conference were asked to send an abstract of 1000 words maximum concerning the topic of the conference in that year, namely the issue of study. All the contributions were gathered in a booklet with a special format for print: 2/3 of the page was the text, and the remaining third was a white margin on the page, a space to take handwritten notes. During the conference, the participants were split into 8 study groups, and each group was tasked with elaborating a theme related to the conference's topic. Each group worked in a separate room for one day and a half, holding regular study meetings. First, the group members had some reading time - in which they read the contributions from the booklet and made notes in the margins. Then, the group gathered around a table and started discussing their theme and confronting the findings from the booklet. Finally, based on these discussions, they made a conceptual map with the main issues concerning their theme, research directions, and major questions. The output of each group was a visual concept map. The groups convened on the second day in a plenary, showed their maps to the other groups, presented their main findings, and answered questions from other groups.

PATHES-3 was conceived as a reversal of the usual progression of a conference whereby one comes to the conference with a paper already written, ready to be presented, thus assuming the thinking to have happened before the conference. By choosing the format of the study groups, the conference asked participants to think during the conference, in their study group, while starting from the drafts

published in the booklet as an inspiration. The conference was a success in respect to materialising conditions for thinking, as shown by the participants' feedback explicitly mentioning how it made them think and how unusual this experience had been for them. The format encouraged collective thinking through map-making and discussions, which confronted all participants with the limits of their own interpretation of the readings. This format also presupposed an ethos of equality among participants: PHDs, lecturers, professors, postdocs were speaking to each other on an equal footing, all contributing to the discussion and the map-making. They had all become students (Simons & Masschelein, 2018). The PATHES-3 took a classic format for presenting research - the academic conference- and turned it into an occasion for studying and managed, successfully, to enact collective thinking in all its sessions.

3. Mediatic conditions for enacting thinking in university practices

Inspired by the previous examples, we can now draw some conclusions about the material and affective conditions that foster thinking at the university. Collective thinking emerges when students and instructors alike are asked to think about a phenomenon they study. The collective aspect lies not simply in doing it together but in the erasing of the differences between students and teachers: in the moments of thinking, everyone is a student of the topic at hand, seeking to understand and navigating the flow of thoughts stirred by it. Thought equalises those engaged in it. Or, in the words of Simons and Masschelein, we all become students:

> Becoming a student means becoming curious about what a text, or any other thing, has to say or makes visible. (…) These are practices – for instance, in a seminar, laboratory, lecture hall – where a text, a graph, an image suddenly starts to raise its own voice, difficult to ignore yet equally difficult to understand, at least when holding to established ways of understanding and looking. It becomes a thing, it becomes real, it interrupts discourses and representations, it causes stuttering and hesitation, it appears as what was not calculated as presenting a possible objection to our statements and hypotheses (Simons & Masschelein, 2018, p. 59).

To be able to think together with others, one needs to stay with the discomfort of not knowing and be sensitive to the limits of one's knowledge. When we do not know something, the spontaneous temptation is to revert to previous knowledge that is somewhat similar, to use heuristics or rules-of-thumb to derive a quick answer or to defer thinking in order to jump into action. This entails some willingness to take risks and experiment for all sides involved.

The Labo and the PATHES-3 were experimenting with reversing a classical educational format and questioning it. The Labo proposes a course format without

a teacher, a radical reversal of the lecture. The city teaches the students through walking and map-making, and then students think together, without needing a teacher to highlight what to think. PATHES-3 was a conference without individual presentations, whereby thinking and presentation were done by groups, subverting the hierarchy speaker/audience and showing us how a conference could look if all participants would get to speak, placed on an equal footing. This reversal helps to make thinking more tangible for the participants by asking them to take a risk; the classical format of the lecture can trigger collective thinking, but, again, some risk taking is needed from the lecturer and the students, and this is somewhat harder to achieve. In the centuries that passed since the invention of the lecture as a format, we have learned to tame it through lesson plans, slides and lecture notes that minimise the risks we take as educators.

Given that risk-taking is needed to enact collective thinking, one could point to several epistemic virtues needed here, the most important being intellectual humility and curiosity. These two epistemic virtues can be acquired and trained, yet we cannot directly assume that people have those epistemic virtues when they participate in study practices. The university does not rely on pre-existing epistemic virtues, but rather it creates environments where such virtues are made easier to exercise and perhaps contribute to the formation of virtues through study practices. In this paper, I want to clarify to what extent can the university enact environments that call forth our propensity to think, regardless of how virtuous or knowledgeable the participants were before. Is there a systematic way in which the university manages to make its participants think through material arrangements? My answer below singles out the material arrangements needed to enact protocols for fluctuating attention and the affective environment enacted by participants. I leave open the possibility that more conditions are needed to enact collective thinking, but these two seem necessary and primary concerns.

3.1 *Educational Protocols for fluctuating attention*

Any university practice could be described either in terms of its outcomes (e.g. a practice in view of learning) or in terms of how it unfolds practically, step by step; the latter description is about the protocols that make up a practice. Whether we realise it or not, protocols are the backbone of university educational practices yet, in educational research, we do not frequently use this term to describe what is going on in education because of the overwhelming focus on desired outcomes. Protocols are used most in technical disciplines involving non-human actors such as computer networking, or in medical practices, and in qualitative research (Jacob & Furgerson, 2012). A protocol is a sequence describing the rules for conducting a practice and the order of steps. As defined by Masschelein, "a protocol contains some principles or rules and also requires

a certain discipline of mind and body" (Masschelein, 2019, p. 200), whereby the discipline of mind and body was meant specifically to capture the educational nature of this protocol. All educational practices are made up of protocols largely (some tacitly assumed by participants), yet what makes university practices unique is that their educational protocols are about sustaining attention. Without attention, it is hard to imagine what an educational experience would look like, yet how we facilitate attention in various educational practices depends overwhelmingly on protocols.

I conceptualise attention as an internal good of educational practices. Internal goods, following Alasdair MacIntyre's theory of practice, are what is essential to perform an activity and to achieve standards of excellence in that practice: "internal goods must not be subordinated to external goods, but the latter to the former" (Keat, 2008, p. 245). As mentioned previously, an educational perspective entails taking educational practices as valuable experiences in themselves, but this can only happen when actors are pursuing the internal goods in the practice. If we zoom in on the protocols enacted in university practices, the central question is what kind of attention do we need to enact at the university? Not all kinds of attention emerging in educational practices are equal. As theorised by Katherine Hayles, the two primary forms of attention are deep and hyper attention. Deep attention is experienced when we are focused on one task at a time: "Deep attention … is characterised by concentrating on a single object for long periods (say, a novel by Dickens), ignoring outside stimuli while so engaged, preferring a single information stream, and having a high tolerance for long focus times" (Hayles, 2007, p. 187). By contrast, hyper attention is an "attention [that] excels at negotiating rapidly changing environments in which multiple foci compete for attention" (op. cit., p. 188). Hayles argued that, from an evolutionary perspective, hyper attention is older than deep attention because the first humans needed to be on the alert for constant dangers. In contrast, deep attention is "a relative luxury" (op. cit., p. 188) of developed civilisations that could afford to create environments for focusing only on one thing at a time.

Based on Hayles' distinction between modes of attention, I hypothesise that the attention experienced during university practices is one of deep attention experienced while switching media while focusing on one topic or thought. I call this mode fluctuating attention and, although it may look as if it is a mode of hyper attention (due to the constant switching), I maintain that it is deep attention in another guise. Fluctuating attention is deep attention that follows the same thought through multiple media instantiations, sometimes going into daydreaming but not seeking excitement or the change of topic. To illustrate what this attention looks like and how protocols facilitate its work, I will go back to the previous three examples as exemplary cases of fluctuating attention enacted through educational protocols.

Lecturing can be described as a series of protocols for keeping the attention focused on what is happening in the lecture hall: there are implicit rules for keeping silent, for sitting down, for taking notes, and for asking questions or interrupting. There are also rules embedded in the architecture of the lecture halls that draw students' gazes to the lecturer and to the blackboard, sustaining their attention focused on one point. The protocols of lecturing can be written down as a series of' shoulds' that are not stated explicitly until someone trespasses and does something else: one should listen attentively, one should take notes, one should look at the blackboard or the slides when the lecturer is pointing there, one should not disrupt the concentration of one's colleagues, etc. Tutorials or seminars are made up of similar protocols for attention, but this time, instead of being primarily supportive of listening, the enacting of dialogue among participants is a primary goal. As a non-standard educational practice, the Labo made a list of all its protocols meant for the students. During the Labo expeditions, the students are encouraged to perceive the world around them through all their senses - hence to be present in the moment (which entails a special rule for not using their phones), and then, to transpose it into maps, to visualise it, and to interpret it through discussions gathered around the maps. The protocols for PATHES-3 were about silent reading, taking notes, discussing together and map-making. These protocols were enforced by the way in which the time was structured, allowing for ample discussions and open time for thinking while conceptual map-making.

The protocols employed during educational practices at the university sustain the student's attention, but these are not meant to create uninterrupted attention, fixed on one point. In this kind of attention lies the main difference between school practices and university practices: the school asks pupils to listen and pay constant attention, whereas the university asks students to think; the difference between the two lies in the modulation of this attention. Attention in the university cannot be a continuous focus on the matter at hand, nor can it be merely passive (as in trying to understand the speaker's words alone). Rather, at the university, this attention is active; it interrogates the words, and it makes its own conclusions. This means that the attention needs to fluctuate between self-directed and other-directed orientations[8]. When we only pay attention to our own thoughts while studying, we risk becoming self-absorbed and ultimately insensitive to the world as it challenges our modes of thinking about it. Studying starts emphatically with a stance of 'I do not know' and, in order to arrive at it, we need to be challenged by the world as it does not fit neatly into our conceptual models. When we only pay attention to what others say (as is the case with passive absorption

8. Even though I employ words such as “external” and “internal”, I do not presuppose a Cartesian theatre of mind, a place in our minds disconnected from the world. Rather, these words need to be understood as directed vectors: internal means directed towards the self, and external directed towards others.

of information), we run the risk of taking it all for granted and being immersed in others' thinking to the extent that our thinking cannot lift off the ground. Hence the fluctuation of attention between what others say and do and what we think ourselves needs to be constantly shifting. Usually, this is achieved at the university primarily through the practice of note-taking: when students take notes in a seminar or a lecture, they do not transcribe verbatim what they hear, but they also process it and transform the words based on their interpretation, and what gets written down is a combination of what other thinks and what one thinks (Marin & Sturm, 2021), a hybrid thought which is collective by its very nature.

3.2. *Mediatic displacement as the material condition for fluctuating attention*

I have theorised elsewhere that the distinctive way university practices make this fluctuation of attention possible is by employing media in certain ways, through what I have called *mediatic displacement* (Marin, 2021). Mediatic displacement is a protocol of constantly switching between media, not allowing any medium to dominate the study experience. The medium is the support for what makes us think, and also the support for the object of study, but it should not inescapably absorb our attention, for example in the way that cinema focuses our attention on the big screen, making it hard to switch our attention away from it. In light of this idea of one medium as capturing thought and giving structure to our thinking (see Flusser, 2000 for a theory of media as structuring thought), there is a need to be able to think beyond the order imposed by one media. Inspired by Vilém Flusser's technique of repeated translations as transcoding of thought (Flusser, 2011), whereby the structure of a language is neutralised by the translation into a subsequent language, I have hypothesised that a similar effect is reached at the university through repeated use of various media, or what I have called mediatic displacement:

> Mediatic displacement in the university is constituted by a double movement: an object of study encoded in some media form—be it a text, an image, a sound—is brought to our attention, but it is not left to take centre stage. It is immediately displaced to the periphery by another medium, thus turned into a pretext for thinking. (…) The lecturer's voice displaces the text, the student's gaze displaces the voice, the writing hand displaces the text and the voice, and then the text again is read and commented while displacing voice and writing, and so on, in endless circular movements of displacement (Marin, 2021, p. 52).

University practices manage to subvert each medium by switching alternatively between media during the same practice. In the Labo, the medium was the city itself. At the same time, the walking protocol was the lens that allowed one to study it methodically, attach and detach from it (Masschelein, 2010), namely attachment while walking and detachment while mapping and discussing it. In

the PATHES-3 study protocols, the fluctuating attention was ensured by visual diagramming, note-taking on the margins of the booklet, discussing in the group. The mediatic displacement took place between the booklet, note-taking, the blackboard and the discussions.

Can we find mediatic displacement in online university practices? At first sight, this seems possible. Protocols for mediatic displacement in the classical university use a variety of media (text, speech, slides, videos, material objects); hence a certain medium is not necessary to enact fluctuating attention, only a variety of media. Thus, mediatic displacement at the online university seems feasible when protocols ensure a variety of fluctuating attention between what is given (the matter of study) and what one thinks. This is the with video lectures streamed online, whereby students can switch seamlessly between tabs and pause the video or slow it down, switch tabs to take notes or ask questions in the chat if the lecture is streamed live. However, it is too easy to switch away from the video. Students are tempted to self-distract by checking their email, chatting with friends, and then returning from time to time to the educational experience. While the online students' attention fluctuates between the educational experience and something else, that something else is not necessarily their own thinking, but rather something external that acts more often than not as a distraction. Precisely because there are so many things we could do on the digital screen, since a variety of applications can be run simultaneously, there seems to be no space for us to recollect our own thoughts and be with ourselves. New movements towards digital minimalism illustrate how those who want to think for themselves will consistently choose to switch off their computers and phones (Newport, 2019). The main problematic issue about the digital screen that commands our attention relentlessly was theorised by Agamben (2017) as a lack of potentiality: whereas a blank page is a place to rest our eyes and imagine potential words, the digital screen is always full of signs. The digital screen is always full "always already possessed of and by an infinity of icons, toolbars, links, windows, and so on" (Lewis & Alirezabeigi, 2018) which makes any experience of potentiality (or "blankness" as Lewis and Alirezabeigi put it) hard to achieve in practice. Without potentiality, there is no thinking, as Agamben (2017) reminds us.

When we are online, we are systematically drawn out of our thoughts while we mindlessly surf online, allowing our attention to be grabbed by other non-educational activities, scrolling through videos and pictures. In this carousel of attention-commanding devices, the educational experience delivered on the screen needs to compete unfairly for our attention with other distractions (Aaron & Lipton, 2018). However, this is a problem since the educational experiences while studying need to allow pauses to think. The students need to take a distance from the attention-grabbing stimuli and retreat into the self for a brief time. Whenever online users cannot stand the discomfort of thinking, they may start switching to

a new tab or another app, looking for information related to the topic as if more information would give them a break from the task of thinking. The escape from thinking through digital distractions is readily available for anyone, and it takes a lot of self-discipline to stay with the discomfort of thinking.

To a large extent, one could argue that we do not yet have the habits of mind to allow for a neutral stance towards the digital screen so that other media can displace it while we do have these habits with paper-based media. The habits required by reading (such as sitting still and paying attention to a small square of paper, following lines with our eyes) have been developed through centuries of practice. The digital screen is too new for us, making it hard to integrate it into the attention flowing protocols characteristic of the university. This is indicated by the fact that digital distraction was a phenomenon observed well before the online university, with the mere usage of Internet and communication technologies at the university. When students would bring their laptops in the lecture hall and multitask while pretending to take notes about the lecture, there was little space left for thinking even if the lecture was taking place offline since the underlying ethos of attention of the university was digitally subverted (Marin, 2021).

This means that we need to develop not just new technologies for online education, but we also need to train our attention deliberately for online education by thinking of protocols for enabling a fluctuating kind of attention with the digital screen.

4. Concluding remarks

Before the pandemic experiment with the online switch for universities, there was a flourishing trend of research concerning the digital university and its practices (Friesen & Cressman, 2010). Some of this research was preoccupied with collective experiences enacted digitally. For example, Hahn and Klein (2019) managed to show that multiple users scattered physically throughout the world can create a communal space by contributing to the same media object, and they concluded that the screen could be understood as "a dispersed communal space" (Hahn & Klein, 2019, p. 69). In a pedagogical experiment with an art-based MOOC, Nancy Vansieleghem showed that a digital object can gather students around it when they annotate and comment on it, thus enacting a collective practice (Vansieleghem, 2019, p. 146). Based on these educational experiments, one can conclude that digital communal spaces where one can experience collective study are possible and can be designed deliberately. This gives us some hope for future instantiations of the online university, but this hope needs to be tempered by the realisation that successful digital experiments with online education entail years of experiments, design and re-design, and educational theorising about how to learn new habits with digital tools that do not subvert our attention.

The sudden switch to online education during the Corona pandemic was about appropriating platforms that were not designed for education and trying to make them work somehow. This experiment backfired, and this was visible especially in how students lost control over their attention and, instead of fluctuating attention, they experienced hyper attention (Hayles 2007) visible through the constant switching between tabs and applications, scattering their attention while attending online lectures (Smith & Schreder, 2020). While there is a difference between asynchronous and synchronous online education (or between digital and online education), the difference seems to lie more in how active the students are required to be and not so much in the mediation of the screen. Designing educational activities with an asynchronous component usually entails the students having to do a concrete action, as seen also in the educational experiments previously mentioned (Vansieleghem *et al*., 2019). One of the findings of empirical studies on online synchronous education was that students could maintain their focused attention with difficulty for the lecturing portions, while the groupwork was much easier to engage in (Smith & Schreder, 2020, p. 205).

Pandemic educational experiments have shown us that online education is possible but less likely to lead towards thinking spontaneously. Collective thinking needs to be designed for, paying particular attention to designing new protocols for fluctuating attention that can work with the digital screens and designing new applications for educational practices alone. Until now, we have all used our phones, tablets, and laptops for educational activities just as well as for leisure and work. The separation of tabs on a screen is not enough to enact a separation of contexts needed for the emergence of thinking. Perhaps, as a proposed initial intervention, we need separate devices to access educational activities, devices that would not allow for tab-switching and multitasking. A second factor to account for is to ensure that there are always enough synchronous experiences in online education, alongside the asynchronous ones, and that these are made with an ethos of risk-taking and vulnerability.

Education has always entailed to some extent delivering performance; as pointed out by Goffman (1981), whenever we speak in front of others, we play-act an academic persona, yet this performance is not usually perceived as alienating because all those attending are gathered in the same room, physically. When digital screens separate the attendants, suddenly, this performance becomes more visible in its artificiality. To compensate for this distance that alienates, instructors and students as well need to become more vulnerable and spontaneous, to take more risks in their thinking, for example, by speaking more often. This will entail developing new practices of self-disclosure and self-discipline, all triggered by the mediating effect of the digital screen. It is encouraging to think that, albeit university practices are centuries old, they continue to reinvent themselves and change their mediality slowly (Friesen, 2017). The Labo and PATHES-3 were living

examples of successful educational practices invented only a few years ago and managed to trigger collective thinking systematically and make the experiences of studying together exciting again. Online education needs a similar concern for experimenting with educational formats in view of triggering experiences of thinking for students. No matter how we go around it, online education demands us to rethink our cognitive habits developed through physical education practices and to make the leap towards developing new practices and habits for the online world. Delivering online education by transposing traditional practices on the screen will not be enough unless we start designing protocols and media centred explicitly around collective thinking.

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