WHAT DO WE TALK ABOUT WHEN WE TALK ABOUT POST-PANDEMIC TIME IN SCHOOL EDUCATION? REFLECTIONS ON TEMPORAL PLASTICITY OF POST-PANDEMIC SCHOOL EDUCATION

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ABSTRACT

This paper reflects on post-pandemic school condition and speculates the temporal characteristics of post-pandemic school education based on an empirical school study. By conceptualising pandemic as an accident as developed by Malabou (2012) and adopting the timescape perspective as a methodological device to identify the characteristics of post-pandemic schools, this paper reflects on an ethnographic study of a school which adopts a bring your own device (BYOD) policy. The paper identifies three turns for post-pandemic school condition, namely a turn towards algorhythmic patterns (Miyazaki, 2012), infraschoolization and taskification of classroom practices (Alirezabeigi, 2021). By showing how classroom practices are organized around devices, students and teachers, the paper elaborates on spatiotemporal reconfigurations of schools and centrality of tasks for post-pandemic education. Based on these turns and the concept of plasticity, the paper concludes that the post-pandemic condition can be described as a plastique stability after the accident of pandemic.

KEY WORDS

algorhythms; post-pandemic school; taskification; accident; plasticity.



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DE QUE FALAMOS QUANDO FALAMOS DE TEMPO PÓS-PANDEMIA NA EDUCAÇÃO ESCOLAR? REFLEXÕES SOBRE A PLASTICIDADE TEMPORAL DA EDUCAÇÃO ESCOLAR PÓS-PANDEMIA

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RESUMO

Este artigo reflete sobre a condição escolar no período pós-pandemia e especula sobre as características temporais da educação, com base num estudo escolar empírico. Considerando a pandemia como um acidente, na visão de Malabou (2012), e adotando a perspetiva cronológica enquanto dispositivo metodológico para identificar as características das escolas no período pós-pandemia, este artigo baseia-se num estudo etnográfico de uma escola que adota a política BYOD ("bring your own device" — traz o teu próprio dispositivo). O artigo identifica três ruturas diferentes na condição escolar pós-pandémica, nomeadamente na rutura que decorre do uso de padrões algorítmicos (Miyazaki, 2012), na infraescolização e na tarefização das práticas de sala de aula (Alirezabeigi, 2021). Mostrando como as práticas de sala de aula se organizam em torno de dispositivos, estudantes e professores, este artigo discute as reconfigurações espaciotemporais das escolas e a centralidade das tarefas para a educação pós-pandémica. Com base nestas ruturas e no conceito de plasticidade, conclui-se que a condição no período pós-pandemia pode ser descrita como uma estabilidade plástica após o tempo da pandemia.

PALAVRAS-CHAVE

algoritmos; escola pós-pandemia; tarefização; acidente; plasticidade.



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¿DE QUÉ HABLAMOS CUANDO HABLAMOS DEL TIEMPO POSTPANDEMIA EN LA EDUCACIÓN ESCOLAR? REFLEXIONES SOBRE LA PLASTICIDAD TEMPORAL DE LA EDUCACIÓN ESCOLAR POST-PANDEMIA

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RESUMEN

Este artículo reflexiona sobre la condición escolar pospandemia y especula las características temporales de la educación escolar a partir de un estudio escolar empírico. Al conceptualizar la pandemia como un accidente, desarrollado por Malabou (2012), y adoptar la perspectiva del paisaje temporal como un dispositivo metodológico para identificar las características de las escuelas pospandemia, este artículo reflexiona sobre un estudio etnográfico de una escuela que tiene una política "trae tu proprio dispositivo "(BYOD - ("bring your own device"). El artículo identifica tres giros para la condición escolar pospandemia, a saber, un giro hacia patrones algorítmicos (Miyazaki, 2012), infraescolarización y tareas en el aula (Alirezabeigi, 2021). Al mostrar cómo se organizan las prácticas en el aula en torno a dispositivos, estudiantes y docentes, el artículo profundiza en las reconfiguraciones espaciotemporales de las escuelas y la centralidad de las tareas para la educación pospandemia. Con base en estos giros y el concepto de plasticidad, el artículo concluye que la condición pospandémica puede describirse como una estabilidad plástica después del accidente de la pandemia.

PALABRAS-CLAVE

algoritmos; escuela pospandemia; tarea; accidente; plasticidad.



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What do We Talk About When We Talk About Post-Pandemic Time in School Education? Reflections on Temporal Plasticity of Post-Pandemic School Education

Samira Alirezabeigi1

INTRODUCTION

The question of 'school time' has become ever more pressing as schools were subject to radical shifting of their practices towards fully online and distance practices during the pandemic emergency in most part of the world (Williamson, Eynon, & Potter, 2020). The fully online and distance school education during the pandemic engendered the decoupling of school time and space from the spatiotemporal organization of the physical classroom, in which family, leisure and school timespace become interwoven. As a response to this emergency online schooling experience, different countries in Europe have aimed to accelerate the digitization of schools by introducing new policy actions (e.g., Digisprong in Flanders and Digitalpakt in Germany) and by injecting COVID recovery funds directly to schools. These policies responsiblize schools to innovate themselves digitally through the procurement of digital devices and establishment of digital infrastructure as well as initializing the use of certain online learning platforms and learning management systems. Not only these initiatives pave the way for global Ed-Tech companies to become an influential actor in deciding the future of local school education, but they also reconfigure day-to-day classroom practices and thus the spatiotemporal organization of school (Grek & Landri, 2021). As Rapanta and colleagues (2021) argue, the post-pandemic educational practices will be unfolding differently to the emergency situation of the pandemic in which practices radically changed in a short time span and only temporarily. As such, what schools in a post-pandemic condition are confronted and have to deal with remains yet a transition unlike the emergency situation.

This paper deals with the question of the temporal characteristics of post-pandemic schools, in which 'post'of the post-pandemic is understood based on the conceptualization of an accident as developed by Malabou (2012). Even though time and space cannot be understood separately from each other, the first association with remote and distance education evoke space and spatial relations to be the more apparent aspects that effect school practices. In this respect, educational studies which tackle with the educational problematics 'in time of crisis' or 'the time of COVID' mainly consider time as a container of events in a specific linear and chronological order that is predefined by 'crisis' or 'disruption' (Romero-Hall & Jaramillo Cherrez, 2022; Saito, 2021). As such, it is argued that the pandemic situation made a disruptive, aggressive and disastrous shift in education from a pre-pandemic face-to-face practice to fully distance and remote ones in the crisis and moved to a post-pandemic condition, in which different forms of educational practices are debated (Rapanta et al., 2021). This approach allows researchers to scrutinize educational relations emerged within this specific period of

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crisis to speculate and re-imagine how school education in post-pandemic time could or would look like. In this respect, building on Roy's (2020) argument that the pandemic forced a 'break' in the past which consequently forces the world to be imagined anew, Ladson-Billings (2021) asks for re-setting educational conditions in terms of social equality, curriculum, assessment and the role of digital devices. These pleas and statements make clear that whereas pandemic education was considered as an emergency state that grasps a temporary survival state of educational practices in a quick fashion (Hodges, Moore, Lockee, Trust, & Bond, 2020; Mohmmed, Khidhir, Nazeer, & Vijayan, 2020), the post-pandemic educational practices unfold in a condition different from the pre pandemic and different from the emergency education. The power of pandemic pedagogy in installing a new set of relations with devices and thus digital practices in and for education, and in demarcating a turning point that gave birth to suffixes pre- and post- pandemic education lies in its accidental characteristic. The accident imposed and materialized online and distance educational practices and thus forced a traumatic break in education. This paper approaches pandemic pedagogy as an ontological 'accident' as discussed by Malabou (2012) that serves as a starting point to illuminate the temporal characteristics of post-pandemic education.

Whereas pre- and post- suffixes point to a shift that bares significant temporal qualities, these qualities are mainly underemphasized, and thus, time is addressed as a container for events to happen. Moreover, it also takes time as a given. Consequently, the term post-pandemic is mostly used in a generic way pointing to *the after*, in which the notion time is understood in a linear, sequential, and chronological way, without itself playing an agential role. This agential role points to specific temporal characteristics that are engendered and can temporalize education in a specific way. In this respect, this paper seeks to engage with this question on a conceptual level by unpacking the temporal characteristics of post-pandemic schools. For doing so, the notion of timescape (Adam, 2004) is deployed as an analytical sensitizing device upon which the characteristics of digital schools which have engendered a post-pandemic epochal time is drawn.

In this paper, 'the pandemic emergency distance school education' is understood as an 'accident' demarcating a momentum, in which a distinction between the status of digital technologies for schools has been in-formed. In other words, the experience of the pandemic education makes school policies and practices to relate in a fundamentally different way with 'digital technologies' and what digital relations do for school education. In order to conceptualize this shift, the paper firstly draws on Malabou's notion of accident (2012) and argue for the emergency education as an accident, thus accounting an agential role to the accident for contributing in what comes after. Secondly, it elaborates on the timescape perspective as a sensitizing device that allows to identify the temporal characteristics of post-pandemic schools and argues that time can acquire an epochal character which is not considered as a linear entity and a container for events to happen and thus is not perceived merely through a chronological order. The timescape perspective enables to characterize the post of the post-pandemic school in an embodied and substantiated way. Lastly, drawing on the empirical findings of an ethnographic study of one international school, the paper highlights the characteristics of the post-pandemic schools and the pressing issues that school will need to deal with and take into consideration in this post-pandemic condition. The contribution of this paper is thus conceptual as it builds on previous empirical findings which are explored in-depth elsewhere (Alirezabeigi, 2021).

It is often discussed that the pandemic has accelerated digitization of school education through installing 'emergency pedagogies' that continue to persist in the post-pandemic time and reshape educational practices and governance (Grek & Landri, 2021; Williamson et al., 2020). With respect to time, on the one hand, scholars address the stabilizing logic of acceleration that was manifested through policy responses which aimed to radically change educational forms and temporalities. For instance, Grek and Landri (2021) discuss how the implementation of the European digital education agenda, issued before the pandemic, was accelerated in the pandemic time. On the other hand, scholars argue how the pandemic situation suddenly and drastically disrupted the installed conception of temporality in which educational institutions operated (Takayama, 2020). This conception conceives time as a progressive linear term which is not only measurable, but it has a direction towards an anticipatory future and it is ownable. "This logic of futurity was completely shattered by COVID-19, albeit momentarily" (Takayama, 2020, p. 1343). What becomes clear from these discussions is a crucial and multifaceted shift in the conception of time in relation with educational practices and governance. In line with these discussions, this section conceptualizes pandemic as an accident as elaborated by Malabou's (2012). The metaphor of accident is not only helpful in understanding the temporal qualities of post-pandemic digital schooling, taking into account the plurality of temporalities engendered as a result of this accident, but it is also helpful to better position the role digital technologies play in relation to school practices. Addressed as 'rupture', 'breakdown' or 'disruption' by the above-mentioned scholars, this paper conceptualizes the pandemic situation as an ontological accident which drastically reconfigures the spatiotemporal organization of school practices in a plastic way.

Accidents have already been touched upon by other scholars, such as Latour (2005), as unique entry points of inquiry, moments and situations when the silent doings of seemingly autonomous and automatic objects and logics are revealed. Upon occurrence of accidents, the operation of former effortlessly and silently working actors, such as techno-social objects or schools, come into the foreground, reflecting to us what our social and educational ties have become. One example of such accident study can be found in the book *Challenger Launch Decision* (1996) in which Vaughan discusses how the challenger disaster in 1986 reflects normalization of poor decision making and silencing of the professional judgement. In relation to educational practices, Adam (2016) explores how the accident of breaking a finger brings gesture of writing through a word processing to the fore and makes a case for understanding how algorithms of autocorrection and phrase suggestion silently work together with the writer. They, thus, create a complex ecology of reading and writing between the hands and the word processor features of auto-correction and auto-suggestion.

In these examples, accidents are approached and put into play by sociomaterial and phenomenologist researchers as an event that can be mapped out, elaborated, and its beginning and endings can be delineated. Put differently, what accidents do in these examples, such as professional judgement or writing, can eventually be connected to the network of different forces and explain different agencies or unveil the invisible doings of specific actors. But they do not fundamentally change the practice as such. Reflecting on how the word processor and hands collaborate for the assemblage of type writing to come into being does not change how type writing is being done, even if it unmasks important operations that are otherwise neglected. As much as this way of accounting for accidents is illuminating and valuable, it, however, dismisses the agential role of accidents as an active part of shaping what comes after the accident. In the context of pandemic, this addresses

a post-pandemic school education. In this respect, the elaboration of Malabou (2012) on accident and her conceptualization of the ontological feature of accident sheds a light on how we can understand post-pandemic schools as fundamentally different than prepandemic schools in the way they relate to digital technologies.

To elaborate on the notion of accident, Malabou (2012) contrasts two distinct understandings of aging. The first conception characterizes aging as a gradual and slow process that might be nonlinear or perhaps even with some turbulences. Nevertheless, aging as a process traverses the subsequent stages in an orderly manner which can be understood as aging as a *becoming* (p. 40). The second conception, however, characterizes aging not as a gradual process but as an *event*. A sudden rupture that is unpredictable, unexpected, and upsetting after which one is suddenly old. Here, aging cannot be termed as becoming old, but instead, we should understand it as the *instantaneity* of aging. In Malabou words, "A stupid accident, a piece of bad news, mourning, pain and abruptly becoming freezes, creating an unprecedented being, form, individual" (p. 41).

For Malabou (2012), accidents entail an ontological feature and destructive plasticity is the defining ontological feature of the accident. The destructive plasticity points to the possibility of a drastically new formation after an accident, which renders previously known habits of a self, an organization, or a form, unrecognizable. The important aspect of understanding this ontological feature is the ground on which a form of school will be built. That is, a ground utterly different from before, the pre-accident situation (Sturm & Turner, 2018). Building up on this feature, Sturm and Turner (2018) open the case of an earthquake as an accident, destroying the existing relations within a city, and argue that plasticity

demands and generates a radical resourcefulness. It does not imply a return to what was before, (...) but a new form, to which the injured party must now accommodate themselves in a way that it generates new habits, or, we prefer, new strategies for living—even a new self. (p. 521)

As Malabou (2012) notes, this "negative possibility, the existential possibility opened by destructive plasticity' is not nothing; it gives rise to 'new form[s]'—and new ways of thinking and being, or forms of life—that 'move with the ground" (as cited in Strum and Turner, 2018, p. 521).

As such, destructive plasticity points to the "possibility of explosion, the annihilation of equilibrium, the destruction of this capacity, this form, this force, this general identity" (Malabou, 2012, p. 5). While we might want to think such destruction as a form a metamorphosis, Malabou stresses that if there is mutation here it is a "radical metamorphosis" (p. 17) that amounts to a fabrication of a novel form, without anything in common with a preceding form" (p. 18). In this sense, there can be no remorse, no regrets over what has been lost. Nor can there be any hopes that what has emerged is better. Teleologies of progress or regress cannot apply. There is simply the contingency of the accident without valuation.

In the case of what happened during the past years, the accidental aspect of pandemic simply implies going beyond mapping out agencies and intentionality, such as a focus on the Ed-tech companies and policy makers for carving the path of the post-pandemic schooling situation and considering the pandemic as an ontological accident resulting to a shift in schooling beyond the logic of acceleration or slowing down, a shift that as argued above, is made on a different ground as before. To better elaborate this in the pandemic context, a parallel can be made between an accident that engenders abrupt aging by cutting through processes of getting old and the emergency education that the pandemic imposed

on school practices, engendering an abrupt digitized state. Regarded as an accident, it can be argued that the pandemic crisis challenges the abovementioned optional, gradual yet turbulent relations schools established with digital technologies with a possibility of "changing all of a sudden" (cf. Malabou, 2012, p. 48). In fact, similar to the instantaneous event of aging, school digitization has been suddenly concretized and materialized into a radically digitized form as an effect of this accident. That is, many schools who did not have any initial encounter with digital technologies had to immediately come up with improvisations and ad-hoc online and digital solutions to hold up their practices. The pandemic emergency forced a condition on schooling that no one could predict and the schooling condition was faced a sudden, unprecedented rupture compared to its known condition. As such, it can be argued that the distance and digital education during the pandemic has annihilated the previous relations established with digital technologies. Before the pandemic emergency however, integrating school practices with digital technologies was closer to 'an option', something which was not yet forced into the school relations. During the pandemic, the fact that school practices on a 'survival and emergency mode' (Williamson et al., 2020) could only be held together by and through digital technologies makes investigating the role these technologies will play for school education in a post-pandemic time even more crucial. Now that we have entered a post-pandemic time, in which schools continue their practices back in the physical space of the classroom, and now that the policymakers enforce recovery funds and policies to innovate school digitization through the introduction of national and international policy actions, speculating the temporal characteristics which will be set becomes ever more pressing. In order to trace and conceptualize these temporal characteristics in relation to temporal modalities of a past, present and future, the notion of timescape (Adam, 2004) is deployed and is discussed on the next section.

THE TIMESCAPE OF THE PANDEMIC EDUCATION: A METHODOLOGICAL DEVICE

As mentioned before, Reflections of educational scholars upon the pandemic and the resulted emergency education as an accident has demarcated a distinct point in time with specific characteristics that are conceptualized within the lines of the pre pandemic, the time of crisis, and now post-pandemic education. However, the temporal diversity (e.g., acceleration vs slowing down) produced through the interplay of different actors (e.g., Ed-Tech companies, policy makers, teachers) cannot be captured under a unifying and generic term of post-pandemic time of education. The conceptual framework of accident helps us to consider that the experience of the accident itself is an agent for a change which is not abstract and homogenous. In this respect, the timescape as a heuristic device, allows to think this epochal time in terms of its everyday actualizations, resistances, contradictions and multiplicities (de la Bellacasa, 2017). The notion of timescape hence, stresses the temporal features of living in an epoch beyond the generic and linear time, and instead through its lived practices which are time-making. Adam (1998, 2004) who coined this notion, argues that thinking with timescapes makes the contextual temporal practices tangible. "Timescapes are thus, the embodiment of practiced approaches to time" (Adam, 1998, p. 10). In other words, "epochal, practical, and embodied timescales are entangled; they do and undo each other" (de la Bellacasa, 2017, p. 173). In this respect, on the one hand, the pandemic school education has disrupted traditional notions of school time, and on the other hand, the heuristic analytical device of timescape which understands time as being made through specific practices imply that "temporality is not just imposed by an epoch or a dominant paradigm but rather made through these sociotechnical arrangements and everyday practices" (de la Bellacasa, 2017, p. 175). As such, a generic way of addressing time in terms of prepandemic or post-pandemic falls short in acknowledging the characteristics through which these temporal specificities are made.

Looking at temporality from the perspective of everyday experience, post-pandemic time, thus, is not an abstract category, or just an atmosphere that is felt after the actual happening of pandemic. Considering time not as a given, but as a lived, embodied, historically and socially situated experience that we make through practices (de la Bellacasa, 2017), makes that, the prefixes of pre- and post- do not refer merely to chronological points of time. Rather, the post-pandemic time delineates a state in which constituting an educational relation with digital technologies not only has become a pressing issue for school practices, but this very crucial relation precisely gives form to school practices in a specific way. In a similar way through this reading, the pre-pandemic time points to the position of school practices with regards to digital technologies, in which these technologies are rendered redundant or marginal for school practices. In this sense, even though pandemic has demarcated an actual point in time in which the relation of school practices with digital technologies has drastically and fundamentally been transformed, the sorts of time that is produced as the result of the accident is not to be taken literally in this period of time. Put differently, I argue that the post-pandemic time of education is produced based on the different ways in which digital technologies materialize and constitute school practices. Hence, the significance of demarcating a preand post-pandemic time lies on the new form that the pandemic as an accident initiated in schools which previously had little or no encounter with these technologies for their practices rather than the linear time of accident.

Taking this understanding of the pandemic timescape into account, even though the characteristics that will be presented below are drawn upon an ethnographic study which was conducted prior to the actual event of pandemic, they reflect how most schools relate with digital technologies after a sudden and abrupt period of online and distance education. The ethnographic study that created the main body of data for this study, is an international school in Belgium that had already introduced digital technologies into school practices, namely, through the implementation of Bring Your Own Device (BYOD) policy. The same school policy now has been taken up in many public schools in Belgium after the implementation of the Flemish Digisprong (digital leap in English) policy. The implementation of this recently introduced digital action plan not only facilitates but requires massive injection of digital devices in schools (Flemish ministry of education, 2021). In this respect, the ethnographic study can serve us as a case of a post-pandemic school (even though the observations were done chronologically before the pandemic). Following the notion of accident as an ontological disruption in the continuity of time and the timescape perspective which allows to identify an epochal time, the observed school can resemble a case of post-pandemic, through the way it dealt with digital technologies, which resonates in many aspects with how the national schools relate with these technologies after the chronological happening of the pandemic.

Delineating specific temporal features such as timeframe, simultaneity, tempo, timing, temporality, sequence, duration and modalities of past, present, and future, the timescape perspective allows to sketch the characteristics of post-pandemic school education approached from a materialized and lived perspective of daily school practices. The interplay and multitude of these elements give rise to patterns of rhythmicity that will be identified in terms of three main turns. In the next section, I will introduce how

the presence of digital technologies reconfigures the space-time and spatiotemporal relations of school practices by identifying the turns towards algorhythmic times (Miyazaki, 2012), infraschoolization and platform pedagogies. Each section explicates a turn driven by the above-mentioned temporal features which served as a methodological lens to analyse the fieldnotes. In sum, these turns are identified as a result of the analysis of a six-month ethnographic study of different classroom practices namely, geography, literature, and mathematics in a secondary school which was already digitalized before the pandemic. As such, these findings stem from empirical data and elucidate the temporal characteristics of school practices.

TURNING TO ALGORYTHMIC TIMES AND HYBRID SPACES

The first temporal aspect focuses on the *tempo* and *simultaneity* of classroom practices elaborated in the timescape perspective. Tempo highlights the speed, pace, and intensity at which activities are conducted. Moreover, it sensitises us towards the actors who establish the pace of activities and makes us ask the question of on what basis these tempi are established, as well as how different tempi can clash and be contrasted with each other. The second feature is the simultaneity of practices which is one of the particular features that is linked to digital technologies. In this respect, Adam (2006) explains how "succession and duration have been replaced by seeming instantaneity and simultaneity" (p. 124).

In order to trace tempo and simultaneity, the first turn focuses on the classroom's spatiotemporal organization. As screens become the main mediators of practices in post-pandemic school practices, they on the one hand, are integrated within the immediate space of the classroom, thus giving form to specific spacetimes, and on the other hand, they introduce different sorts of screen-based school tasks, assignments and exercises to classrooms that reconfigures the lesson time.

Focusing on the immediate space of the classroom, individual screens act as a common site that gather different spaces, depending on the classroom arrangement of the teacher's and students' desks, the place of the blackboard (and/or the interactive board). The commonality feature of screen can enact different temporalities such as leisure time (through watching series or YouTube videos), family time (through messaging with family members), economic time (through online shopping) as well as schoolish time (conducting the individual task). The enactment of these heterogenous times is greatly tied to the arrangement of the immediate space of the classroom. For instance, a traditional classroom setting with a direction determined by the blackboard (the front region of the classroom) and rows of student desks facing the blackboard can enact multiple temporalities simultaneously. In this setting, bodies can be tuned in to the collective space of the classroom facing the interactive board, as well as the individual space of the personal screens that is in front of each student without exposing activities done on the private space of screen to the teacher. This shows how important it is to consider the entanglement of the embodied space with temporal features and the role it plays in creating different temporalities.

"Kristof, close your computer! Rubi the same story! Marva, you don't have to close it completely, just that I can see your face" the teacher loudly announces as he goes back to the front of the class, where the interactive board is located. The moment he sits, Marva

starts playing a game and Jim, next to her, chats on Skype. The teacher points to the slides shared on the interactive board and says "It's future, it's technology. It has advantages, but also disadvantages. What do you think about it?". The topic of the day is innovation, the teacher presents different technological advancements. "We don't have any freedom. We are going to be fat like Wall-E", Jim says and the class bursts into laughter. "I don't like technology", Kristof says. "Why are you looking at your computer, then?" the teacher replies. The teacher invites everyone to participate. "But we don't have to go to school, because the computer does everything for us", Marva says, with her head still on the game.

As it can be seen, the time of the lesson is hybrid within different activities of leisure or participating in the class discussion. This setting then mobilizes the teacher in the classroom to keep the time of the lesson educational, giving the teacher more of a monitoring role. The spacetimes in this setting are in contrast with the situation in which the classroom is arranged as an old computer-lab setting, in which desks face to the walls (of the classroom) and hence the bodies need to change postures to tune in to different spaces of the classroom (e.g., the interactive board, the collective space of the discussion). In such settings, the activities that appear on students' individual screens are rendered visible and exposed to the teacher as the teacher occupies the central empty region of the classroom, thus limiting the simultaneity of other temporalities such as leisure and family time to emerge during the lesson time (Alirezabeigi & Decuypere, 2019). What becomes evident, is that in post-pandemic schools, teachers play as the key actors of sustaining the lesson time a schoolish time. Whereas advocates of technologies increasingly highlight on the facilitator role of the teacher and position students as responsible for organizing their learning and self-disciple, the different design arrangements of classrooms and the distinct activities which emerges highlights the role of teachers in shaping the time of the classroom.

As mentioned above, the presence of screens sculpts the lesson time to a large extent to individual tasks. Focusing more particularly on the temporalities of these screen activities, rhythms of screen mediated tasks can be captured through the term algorhythms (Miyazaki, 2012). The concept of algorhythm, which is a combination of algorithm and rhythm highlights the interplay, orchestration and synthesis of abstract algorithmic and calculable organizational concepts and rhythmic social and educational life (Miyazaki, 2012). When screens become the dominant part of school practices, different entangled temporalities are produced and co-exist as students conduct tasks during their lessons. The features of individual screens and the multiplicities of activities, on the one hand, produce different sorts of times, and on the other hand, they temporalize the task conduction which produces algorhythmic patterns of post-pandemic school practices.

As most of these tasks are conducted individually on personal screens, different activities such as personally listening to music, task related activities (online searching, scanning, bricolage), as well as social media checking appear on students' screen. Whereas listening to the music *envelopes* the time and space to what happens on the screen and away from the immediate interactions of the physical classroom space, the task-related activities produce an *intensive* time, Additionally, single activities, such as social media scrolling and instant messaging *fragments* the time. These sorts of time coexist as students conduct their tasks (Alirezabeigi et al., 2022a).

The temporalizing effect is observed when the researcher asked students to describe their chronological screen activities during the individual task time. Three distinct temporal zones could be identified. The term zone is used in contrast with the term phase

to indicate firstly the spatial aspect that is connected to students' activities while interacting individually on the space of their personal screen. Secondly, it emphasizes on the fluid border that exists between the three zones. These temporal zones consist of 1) the zone of synchronicity; This zone reflects students' initial activity on their screen when they start the individual task time, which is updating their social media feed and reading their unread emails before turning to the task. 2) The zone of focalization in which students' actions are directed towards completing the task as fast as possible with the help of the features of their connected devices (e.g., highlighting a keyword in a text, and skip reading the whole text with the help of the keyword). The activities of this zone follow a distinct pattern of translating the task into keywords, online searching, refining the keywords and producing content with what is available at hand. These patterns show how algorithms strongly direct students' engagement with the task and how these produced rhythms are precisely algorhythmic as the cyclic patterns of online searching, scanning, and bricolaging are combinations of algorithmic calculation (e.g., tagging data, algorithmic sorting) and pedagogical rhythms of conducting a task (e.g., reading, researching, writing). The entanglement of these pedagogical and algorithmic rhythms on the one hand, reshuffles the sequence of activities (e.g., first synchronizing social networks and music, then searching, then reading). On the other hand, this rhythmmaking is intensely directed by the automated processes that function based on the numeric as well as commercial logics of visibility (Citton, 2017). The analysis of students' screen activities shows that they mainly end up in scanning the same webpages even to conduct those tasks which require imagination and creativity (Alirezabeigi, Masschelein, & Decuypere, 2022). 3) The zone of dispersal emerges after the task is completed and students diffuse their attention towards a more personal and leisure time.

The result of these rhythm-making processes is that task completion and task performance embrace a more computational meaning. Whereas it might not be visible in the first place how lesson time can gain a more computational and measurable direction when students' performance data is not directly involved, focusing on how the collective of students conduct one single task brings the computational aspect to the fore from two different perspective. Firstly, these algorhythmic patterns direct the lesson time towards the acceleration of the task completion and freeing the task time in favour of leisure time. Moreover, these patterns show that times of boredom, distraction, and pause are occupied through the rhythms of scrolling and refreshing social network accounts, TV subscriptions, or game channels which are interwoven with predictive algorithms, installing algorhythmic patterns for times of boredom, distraction, and daydreaming. Secondly, these algorhythms entail the production of collective patterns of task conduction, even though tasks are done individually. Over and beyond that, as the ultimate effect, these patterns navigate students' imagination, creativity, and communication: The fact that students arrive at similar webpages while doing a task like writing an explorative text, precisely shows how their imagination, communication, and creativity is being directed and temporalized through algorhythms. In sum, the postpandemic school time can be characterized as a poly-synchronous time that does not only follow the school time-table and the temporal script of the teacher and learning platforms, but it equally follows the global time which is synchronized with the happenings of the world and other activities of students out of school (Alirezabeigi, Masschelein, & Decuypere, 2020a; Sheail, 2017).

TURNING TO DIGITAL INFRASCHOOLIZATION

Introducing personal screens, in form of BYOD policy in classroom practices initiates a range of timings as well as temporalities of decision-making moments with respect to the different use of devices. *Timing* as another element of the timescape approach stresses "social synchronization, coordination and what are good and bad times for action" (Adam et al., 2008, p. 8). In other words, timing sets the good or bad time to do something. In the case of classroom practices, this means good and bad times of using a device. Connected to the feature of timing, *temporality* is characterized to pertain the quality of the time whether it is measured, regulated, fixed, or it is expanded. As such, this section looks into aspects of classroom practices, in which deciding and conditioning elements for a specific temporality are elaborated. These are categorized in terms of a) policies and regulation and b) dealing with constant breakdowns.

DEALING WITH MICRO-POLICIES AND REGULATIONS

When I am explaining a topic, I want laptop screens to be half down, so I can have eyecontact with students, because otherwise their eyes are on their screens and their facial expression is not the same as when they are looking at the interactive board or me. I can then recognize if they follow or not.

These are the sentences of one teacher who regulates the device usage in her lesson time. Similar occasions happen in other classes in which through micro policy negotiations in the classroom, the teacher authorizes or prohibits the use of devices. Depending on the practice, variety of usage modes emerges in which personal devices can participate in lessons. That is, before each activity, the teacher announces the role devices would play for that activity. These roles include, firstly an active usage of devices during individual tasks. Secondly, their complete absence in situations like class discussions and lastly, the idle mode in which laptops remain ready to use but with the screen halfway down, as described in the above quote. Other activities related to personal devices, such as listening to music while working individually or leaving smartphones on the desks are constantly negotiated with teachers as well. As such, these examples illustrate the instances in which, not having a concrete and unified guideline for what delineates a BYOD policy in classrooms apart from 'just bringing all devices to school', results in an ad-hoc and bottom-up way of enacting the policy in classrooms which highlights how new spaces of policy making are opened up at the classroom level (Selwyn, Nemorin, Bulfin, & Johnson, 2017). The ad-hoc and bottom-up decisions and negotiations of teachers and students shows how different components are assembled to make a specific BYOD policy come into being, namely digital devices and the way they are pulled into or rejected from the educational practice. Moreover, it can be observed that, it is once again, the teacher whose interventions in the first place regulates and resists the performances of a generic BYOD policy that functions as 'just bringing any devices' in to school and translate it to a policy bounded within the school's local and educational milieu.

Additionally, the integration of different platforms in form of learning management system or online learning platform creates moments of regulating how and when students or the staff should interact with the platform. For example, one of the teachers showed how setting a technical limit of receiving messages to 20h keeps his temporal



boundaries between work and rest. What is important here is the entanglement of the technical decisions with pedagogical decisions and boundaries that makes a school time possible (Perrotta & Selwyn, 2020). As Berry (2016) argues, even though infrastructure at first accounts for the "the basic physical and organizational structures and facilities (e.g., buildings, roads, power supplies) needed for the operation of a society or enterprise" (n.p), it nevertheless entails the clouds, code and algorithms as well as the negotiations between them that make a constitutive part of the infrastructure. In the above examples, what delineates the infra in infrastructure is what remains beneath the immediate attention at school level. The post-pandemic school condition in which personal laptops and Ed-Tech companies are flowing to schools, precisely highlights constant negotiations and dealing with moments in which the school time can be made possible through the infrastructure.

DEALING WITH CONSTANT BREAKDOWNS

One of the main characteristics of the post-pandemic schools is manifested through the constant infrastructural breakdowns and the need for provisioning different strategies to keep the educational practices alive at school. This is especially visible for schools whose physical space was transformed to a networked space only after the pandemic. Similar to the abovementioned point with respect to micro-policies, breakdowns reveal how in the post-pandemic condition, the infrastructure goes beyond a set of cables and wires and comes to fore as a fundamental element that renders the classroom practices (im)possible.

"Since we don't have the internet connection today, and I was not able to put up this bulletin on the class page..." the teacher says, when he is interrupted by one student: "Mr. Jordan, could you still put it online afterwards?". The teacher continues, "Yes, I'm going to do that anyways, but for now I will give everybody a hard copy. So, because we don't have the internet, we're going to do this exercise a little bit differently. Can you read the first item Rory, loud and clear." In previous sessions, students mostly looked at their individual screen to see the text, or once in while at a copy which was displayed on the interactive board. They, however, didn't read each item of the bulletin out loud. Rather, the teacher would go through the points, while scanning parts of the text, and they mainly spent the time on a class discussion about each item. Now that there is no digital copy available, neither on the interactive board nor on individual screens, the teacher asks students to read the text out loud to create the collective lesson time.

During the ethnographic study, the network of one part of the school building was caught off for two weeks, making classrooms to move to spaces that granted the access to the Internet or making teachers to shift their practices as we see in the excerpt above. This demonstrates that once introducing a networked space and integrating digital devices, the local and physical boundary of the classroom will be highly influenced by digital actors which characterizes the classroom space as plastic. Characterizing the classroom's space as plastic means that the classroom arrangements are not fixed and can be deformed by interventions of the digital infrastructure. More importantly, as the excerpt shows, the activities shift into other forms with or without the presence of a networked space. This

goes along with what could be witnessed during the lockdowns and establishment of virtual spaces as classrooms. Berry (2016) introduces the term infrasomatization to capture "the capacity for framing or creating the conditions of possibility for a particular knowledge milieu" (n.p.), and hence, the conditions for changing existing institutions. As such, the constant negotiations with digital actors (networks, platforms) in terms of regulation and policy or dealing with breakdowns highlights how these actors have gained the capacity to transform the school time and space. In this sense, the schoolish milieu that is created as a result, is not only indispensable of digital actors, but it precisely sets the conditions of possibility of keeping educational practices alive. This is precisely what could be observed during the rounds of lockdowns in Europe. Thus, the characteristic of the post-pandemic time is what I identify as a turn to infraschoolization. That is, the silent and mundane entanglement of digital actors and the network of their relations with the school's infrastructure, which enacts specific spatiotemporal configurations, requires moments of micro-policies, and creates digital activities that consequently give shape to infra-schoolization. Infra-schoolization can be described as the capacity for concretizing a particular techno-scholastic milieu in which digital actors are an indispensable part of school practices.

TURNING TO TASKIFIED PEDAGOGIES

Whereas the two previous characteristics focused on post-pandemic schools from the spatiotemporal and the infrastructural aspects of schooling, this characteristic investigates how classroom practices are organized around personal devices and what sort of pedagogy they bring forward. This aspect is equally tightly entangled with how the lesson time is organized and what activities it engenders. The two characteristics of taskification and bricolage are elaborated by focusing on different *sequences* and *durations* explained as temporal features in the timescape approach. These sequences and durations characterize central activities of the classroom and thus shape the gravitational part of the classroom practices. The first aspect elaborates taskification of school practices in which a new form of school practice is developed, and the second part delves into bricolage as one of the typical practices of this new form. The excerpt below demonstrates both aspects in a nutshell.

"Okay everyone, I shared these slides with you, and they contain the questions that will arise in the future for megacities, and I want you to address them in your poster. Keep in mind that you should include something handmade as well. You are the creator of the poster. The presentation you will give afterwards, should not be you pointing at your poster, but you will discuss the different parts which are not written at length. If you have trouble, I'll help you. Now please start working" the teacher says. He starts the first minutes of the lesson to explain what they are expected to do. Immediately, students all open their laptops as they need to work on their posters, and to find information about the cities they have chosen. The poster is the mixture of printed pictures and printed out texts with different fonts and sizes. There are also some elements they have made themselves, either painted or handwritten. The cities they are working on are Moscow, Rio de Janeiro, London, and New York. The class is rather quiet, and students are searching for pictures and resources. One student has Google docs open and at the same time he is searching on Google search

engine. He immediately saves the findings of his research on the Google document, sometimes he also pastes pictures that he finds on the document. The teacher walks in the classroom and checks their work if they have questions.

TASKIFICATION OF SCHOOL PRACTICES

When personal devices materialize educational practices and the coming together of learning materials and assignments, tasks find a key status for the lesson beyond designed entities that are performed to achieve learning outcomes, and which require teachers' orchestration and students' activities (Goodyear & Carvalho, 2013). In this sense, tasks are not merely instruments of learning, but more importantly, they are central factors in coming to terms with what BYOD schooling is all about. As such, tasks divide the lesson time into two parts, in which the first part functions as the introduction and instruction to what is expected in the individual task time, and the second part is the conduction of the task on personal screens.

These specific framings portray that these processes constantly task different actors (e.g., teacher, students, and devices). The teacher introduces the task with the collaboration of online material, such as a video or a digital presentation. As the introduction is over, the teacher has either distributed the online resources needed for doing the task or has shared the code needed to enter the platform and do the online task on the interactive board. The students consequently are tasked to finish the individual task in the timeframe given by the teacher or the platform. In a such a constellation, tasks don't act as isolated entities, but rather, they actively format how the lesson, and its activities look like. Even stronger, the task always entails a process of taskification that formats BYOD schooling. That is, tasks not only influence the organization and structure of lessons, but equally the form in which educational practices take place. The second part elaborates on bricolage as one of the main classroom practices.

DIGITAL BRICOLAGE AS A STUDY PRACTICE

As algorhythmic patterns become dominant in how students do the task, new practices such as keyword reading and online searching emerge. Online searching and browsing are always closely entangled with processes of production in form of a bricolage. The concept of bricolage captures the productive part of tasks as a collaboration between students and algorithms, as it takes into account the work of algorithms in preconfiguring task resources. Here, the notion bricolage mainly focuses on making do with what is at hand and what is available (Johri, 2011). In other words, bricolage refers to a synthesis of evaluated and browsed results assembled into a multimodal content on a given measurable time (Alirezabeigi, Masschelein, & Decuypere, 2020b).

The practice of bricolage is not linear and entails multiple threads of actions that are spatially fragmented, temporally compressed but thematically related and bounded. Put differently, entangled with algorithmic processes of searching, the practice of bricolage stresses firstly the direction towards accomplishing a task in a given time either decided by the teacher, the platform or the school's timetable. Secondly, it emphasizes on the role of what is made available and what is at hand in this given time as resources. As

such, these two elements specify how the productive part of the screen-based task is centred around completing the task through algorhythmic patterns as well as, the tinkering element that is at the core of the French term 'bricoler'. The entanglement of searching, browsing and bricolageing that captures students' editorial, selective and filtering role next to the work of algorithms which already order students' range of available material, makes bricolage a practice distinct from curation and creation.

Bhatt (2017) refers to the ensemble of students' screen activities as a curation practice, which he describes as "the students' judicious and purposeful assimilation, aggregation, and harnessing of digital content in order to produce something new" (p. 117). The verb to curate originated from the Latin root of *curare*, which means to 'take care' and to 'cure'. In contemporary digital media content, curation refers to the organization of content around a theme for a special purpose. Content curation is made distinct from content aggregation that captures the work of algorithms in filtering and ordering content and content creation that involves the development of original material online (Bhatt, 2017)). Whereas the term curation does not acknowledge the active collaboration of algorithms for the act of curation and thus doing the task, the term bricolage emphasizes this aspect by bringing forward on what has made available.

CONCLUSION: REFLECTING ON THE PLASTICITY OF THE POST-PANDEMIC SCHOOL FORMS

With the use of the analytical device of timescape in approaching temporality, this paper emphasized once more that time is not an abstract category, nor just an atmosphere, but a lived, embodied, historically and socially situated experience (Adam, 1998, 2004). Time is then made, remade and unmade through practices. This implies that "temporality is not just imposed by an epoch or a dominant paradigm, but rather made through sociotechnical arrangements and everyday practices" (Puig de la Bellacasa, 2015, p. 4). Thinking pre- and post-pandemic education through the timescape perspective has created a space for thinking practices as time-making and envisioning what doings and agencies overpower the educational milieux of school. The importance of making the above characteristics visible is first of all, to show that when school practices are interwoven with technological components, they create a specific modality for the relations that I describe as plastic. To further elaborate on the modality of relations, Law (Law & Douglas, 2012) emphasizes that stability as a quality is needed for networks to operate when technological artifacts are newly introduced to a setting. This, for him, implies that a failure in any component of the network threatens the stability of the whole network which can potentially result in its complete disruption. Opposed to this traditional take, Sorensen (2009) conveys how this assumption falls short in relation to virtual environments and hybrid classroom settings. According to her, different components can temporarily disappear or break down (e.g., technology glitches), nevertheless the educational practice can continue, and it remains stable. "The stability is not created through all the components staying in place" (p. 64). Rather, the technological process is stable precisely because of its fluidity, which allows components to be mobile and to float in and out. For Sorensen (2009), a temporary interruption of the components does not interrupt the practice, for the fluid patterns of relations allow the practice to sustain itself and consequently, the network to remain stable, thus leading to a 'fluid stability'. However, this understanding equally implies that in constructing a network, one has to intentionally reject, avoid, or dismiss observing what (relations) emerge as a consequence of these breakdowns (what happens when a device shows glitches even temporarily, or what happens when during a presentation, the presenter's computer suddenly crashes for two minutes, or in the case of pandemic, what happens to educational practices if school buildings get abandoned). This issue can especially be traced when a temporary absence of a component transforms the practice drastically, so much as to drastically change its form. Focusing on fluid patterns of relations do not sensitize us to analyse these situations, for they simply focus on the fluid stability (Sorensen, 2009). Poor network connections, computer crashes, and the need for constant reparations are some components that might periodically stop parts of the educational practices, but they do not lead to the failure of the practice, or a complete (re/de) formation of it. As such, these components create fluid patterns that can float in and out without disrupting the whole practice or changing the form of the practice.

This paper, however, shed light on how the emergency education (even if we understand it as a temporal suspension of a known form of school, that is physical and collective embodiment of practices) can question the fluidity of practices by completely re/deforming them. Drawing back to Malabou's accident, she elucidates that what comes after an accident is plastique. Plasticity as a notion that was already introduced in the paper refers to "an ontological principle, organising form's self-transformational quality-and therefore a reconfiguring of the concept of form itself" (Hogstad, 2021, p. 981). The postpandemic form of school practices which this paper tried to illustrate through the articulation of its temporal characteristics, shows the constitution of a deep entanglement between the digital infrastructure and already-existing daily school practices. As such, the post-pandemic form that comes into being is not only flexible or fluid towards the specificities of digital technologies (juggling between course related and non-course related activities, putting forward taskification, etc.) and the digital mode of being in a way that "flexibility only designates the capacity to be molded or bent in all directions without resistance" (Malabou, 2017 as cited in Oral, 2021, p. 1001). Rather, the post-pandemic form puts the plasticity of these practices forward. Oral (2021) describes that plasticity entails the power to bestow form. Put differently, instead of practices bending to all direction as a result of integration with digital technologies, the empirical findings show how teachers, students, digital technologies, the physical arrangement of chairs and the subject matters form school practices in multiple modes that cannot be captured through fluidity. Elaborating on the relation between plasticity and time, Hogstad (2020) states that

plasticity is the mode which controls the relation between time and the future, (...) plasticity is the process or dynamic by which time and the future are turned into multi-dimensional and variable units with a constant opening to change and accident. (p. 158)

This plastique stability is speculatively characterised by the three turns elaborated as algorhythmic patterns of time, infraschoolization of digital technologies and taskification of school practices. These turns suggest the relation between digital technologies and the future of school practices cannot be simply grasped by fluidity and flexibility, by giving shape and receiving shape from specific conditions of functioning of digital technologies. Plasticity is perhaps a better term to delineate a sort of resistance from existing school practices and specially the teacher in taking a specific form. As such, this approach grants us a more open way to scrutinize the relation between the future of school practices and the extensive digitalization of schools in post-pandemic time, to not fall into knowns forms of schooling, but to able to open a space for the concept of form to be formed differently.

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