# Learning Through Crisis Epistemologies: Recognising, Managing and Designing New Spaces and Bodies

Wanchen Shi1

<sup>1</sup> A former student of Innovation Management, Central Saint Martins, University of the Arts London, UK Correspondence: Wanchen Shi, A former student of Innovation Management, Central Saint Martins, University of the Arts London, UK.

Received: April 18, 2022 Accepted: June 9, 2022 Online Published: June 19, 2022

### **Abstract**

The Covid-19 crisis made spaces for people to immerse themselves in moments of reflection. The suspension of time, sites, and body mobility, the collapse of the past principles; as the macro learning environment has undergone unprecedented changes, how could people read and react to those changes? Learning at the university, almost all the students have to adopt an online format as a singular way to access higher education, which calls for more self-management capacities and learning autonomy. Bodily learning is crucial from the pedagogical perspective, drawing insights from The Affective Turn, where Clough (2008) took the human body as biomedia so as to affect learning and transform knowledge. This paper shines a light on the new bodies and spaces with inherent innovation potentiality. Based on the literature review chiefly from Sociology, Anthropology, Philosophy, and Culture Studies, this paper engages with four typologies of learning epistemology, nomad, heterotopia, liminality, and rhythm. Their essential characteristics, principles, and interpretations imply in-between and transformational traits, challenging the existing principles and being open to alternatives. They help evaluate the changes and foster our critical and creative learning in risk and crisis. Simultaneously, they serve as the theoretical foundation for the following innovation fieldwork.

**Keywords:** learning space, pedagogy, bodily learning, affect, transformational learning

## 1. Introduction

Reckoning with the moments of reflection during the Covid-19 crisis, "The first lesson the coronavirus has taught us is also the most astounding: we have proven that it is possible, in a few weeks, to put an economic system on hold everywhere in the world" (Watts, 2020). These are the words of Bruno Latour, an influential French philosopher, anthropologist and sociologist. Latour's interview about the Covid-19 pandemic in June 2020 talked about how the lockdown forced people into a retreat, a moment for reflection, and how the public is learning a great deal about the difficulty of statistics, experiments, and epidemiology. His words resonated with the collective empathy living in the pandemic times, suggesting a concern for the new epistemology of learning about the environment, ourselves and their relations.

There is an urgency to recognise this concern and take care of the ecology of learners. Since the education transformation during the Covid-19 pandemic, almost all students moved from physical classrooms to virtual ones. The online or blended learning modes have been primarily normalised. Apart from the limited learning resources available from educational institutions, it also generated spatiotemporal challenges for teachers and students. For the learners, the initiatives to learn would rely even more on autonomy, self-management, and self-efficacy (Falloon, 2011). Thinking ethically, the new physical and virtual learning spaces might convey a hidden message of individualism, compliance, and inequality, revealing new educational gaps (Cahapay, 2020). The digital remote learning/working mode blurred the boundaries between personal and learning-working spaces (Schwartzman, 2020). If this phenomenon is normalised, it will threaten the autonomous times and spaces, prioritising the occupy anytime and anywhere as labour.

For this paper, my interest began with the probes on learning spaces. How could people learn from the shift in their learning spaces? Under the impact of the Covid-19 pandemic, how could people reshape their learning spaces? If taking the education from schools as a fulcrum, were the learners capable of leveraging their learning by re-managing and reconfiguring the spatial-temporal epistemology? The learners are drawn to the new becomings of self and the new ontological areas for critical and creative thinking for the unknown future.

## 2. Literature Review

## 2.1 Learning Space, Place or Landscape

"Learning space" has many alternative terms and meanings that may be used with varied frequency across different disciplines. The distinction between learning space/place is worth mentioning because it frames different perspectives on learning (Ellis & Goodyear, 2016, p. 157). "Space can be managed at a high level, using financial and other quantitative measures, and using categories that necessarily strip away many of the detailed features of individual places" (p. 149). In contrast, "place" is preferred when people's lived experience is involved (p. 157). "Learning landscape" is another term broadly used among architects, interior designers and educationalists working for the practical learning environment design (Temple & Fillippakou, 2007). Shirley Dugdale (2009) developed strategies for new models of learning environments and conceptualised the learning landscape as an interplay between learners' experiences and the networking around people, places, and ideas in order to achieve a sustainable learning environment.

## 2.2 Different Categories

Apart from the synonym, the dimensions of learning space are as varied as the researchers coming from different disciplines. For the educators in high education, who aimed at encouraging student engagement and enhancing learning outcomes, Radcliffe, Wilson, Powell and Tibbetts (2008) developed the *Place for Learning Spectrum* (p. 13, shown in Figure 1) through the project *The Next Generation Learning Spaces*. They took pedagogical, technological, and physical aspects of teaching and learning and distributed learning spaces by structured and unstructured characteristics, from the instrumental university learning places to the social learning areas, library, outdoor environment and home. In *Learning, technology and design*, Goodyear and Retalis (2010) integrated learning spaces in higher education from a more macro perspective, categorising them in physical, virtual, and hybrid formal and informal forms, respectively (pp. 165–170). Whether or not including direct teacher's supervision is the criteria for separating formal and informal learning spaces.

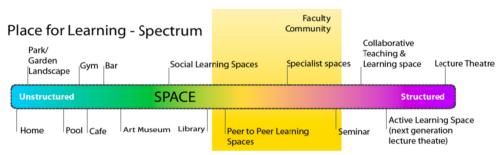


Figure 1. Place for Learning Spectrum (Radcliffe et al., 2008)

Lev Vygotsky (1978), a Soviet psychologist from the sociocultural perspective, advanced the *Zone of Proximal Development (ZPD)* (Figure 2), in which he took children as autonomous learners but put emphasis on the role of the assistance from social interaction, specifically, the "more knowledgeable others". He suggested the potential learning space is situated between the learners "out of reach" and "within own capability". It depicts "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers" (p. 86).



Figure 2. Zone of Proximal Development (ZPD) (Wheeler, 2015)

Furthermore, the philosopher of higher education Ronald Barnett provided a more metaphysical dimension. In his book *A Will To Learn* (2007), he classified the pedagogical spaces by various kinds of risk. The epistemological, practical, and ontological risks correspond to intellectual, practical space and space-for-being. A few years after terming "supercomplexity" (2000) to describe the dissolution of principles among universities, he published his insightful article, *Learning for an unknown future* (2004), where Barnett highlighted the urgency of new pedagogical challenges in late capitalism and postmodernity at the crossing of the 20th century. His thinking joined the dialogue with Ulrich Beck's (1992) *Risk Society* and Zygmunt Bauman's (2000) *Liquid Modernity*.

## 3. "Minecraft": Research Ouestion

I borrowed the name of a sandbox video game "Minecraft" developed by Mojiang Studios in 2011. The game is set in a space with infinite terrain, but all the activities, including discovering, extracting raw materials, making tools, and building earthwork, territorialises the players' craft world. This paper was considered a "Minecraft" regarding most of the international students' broken learning journey due to the Covid-19 pandemic. They were automatically driven to set off for a learning adventure, where they were entangled with risk, uncertainty and supercomplexity.

In Barnett's (2020) latest article *Towards the creative university*, he demonstrated the new mission of being a student. "Learning creativity can occur in the absence of pedagogical creativity" because "students can take ownership of their learning in a myriad of ways and secure a degree of autonomy for themselves. They have agency independently of the structures to which they are subject" (p. 12). The "agency" here refers to students themselves, the devotion of their minds and whole bodies. However, more importantly, students have to be granted the space if expecting they to be creative (p. 13). Nevertheless, "space is not there. It has to be worked at and worked for" (Barnett, 2007, p. 145). His words directed me to reflect on the ongoing risk and learning spaces during the outbreak, deriving such inquiry about how to autonomise learning creativity through identifying the potential learning spaces? Making the inquiry more accessible and correlating to the Covid-19 pandemic crisis, the research question is generated as follows: *How to take our human bodies as an approach to recognise and manage the new potential learning spaces through the crisis epistemologies?* 

While speaking out, "learning can take place anywhere" is reasonable but cliche. Few people had fully noticed the "potential spaces" bearing transformational learning and creative practices. As proposed in this paper, the notion of "potential learning spaces" refers to neither the physical, virtual or hybrid learning spaces nor the dimension of formal or informal learning spaces, but a spatial ontology and epistemology configured by affect and the bodies.

For David Turnbull (2002), knowledge and geography categorised spaces into four general types; discursive, cognitive, existential, and material. Those concepts indicate that "they tend to flow into each other and maybe constitutive of larger general forms like social space and knowledge space" (p. 135). In this paper, the learning spaces may touch on all types. By interpreting in a discursive way, they could be materialised or be found in existence, with the premise of cognitive acknowledgement.

## 4. New Bodies

For this section, I started with archaeological navigation of the ancient scenes where the learning occurs. The

mobility of the bodies enables learning to take place in the holistic cultural and social fabrication, placing outdoors, debating while walking, and teaching along the travel trajectories. It is found that our bodies serve as biomedia managing the entry and exit of knowledge. As such, the body's affect takes the shape of our learning.

## 4.1 Mobility

The human bodies have the capacity to structure the actual learning spaces. Through the classic painting *The School of Athens* (Figure 3) by the Italian Renaissance artist Raphael, painted in the 4th century, the Greek philosophers Plato and Aristotle immerse in their dialogue while walking down steps. Pythagoras sits with a book, surrounded by students. Euclid bends over with a compass with concentration, and Ptolemy holds a terrestrial globe with other astronomers.



Figure 3. The School of Athens

Each figure masters a top authority across the disciplines from philosophy to astronomy, from geometry to arithmetic. However, when observing the parts, every figure frees their learning postures and simultaneously territorialises others' learning space. It interprets an ideal interaction and transdisciplinary atmosphere in this open public space.

The art piece is static, but the composition of the free body postures displays an interactive knowledge dynamism. The comment from the Biennale Architettura 2018 of the National Pavilion of Greece explicated the dynamic betwixt opposition and unity, "Neither inside nor outside, not quite a room, but also not simply space for circulation. It is monumental but also generous and almost casual. It is not a classroom, and yet we see scholars and students debating, teaching and studying" (Argyros & Neiheiser, 2018).

Archaeologically, in 497 BC ancient China, the most influential educator Confucius spent 14 years travelling from kingdom to kingdom with his students to propagate ideas and thoughts. The rhetoric took place at any time wherever people were gathering, and questions arose. During those wars and turbulent years, Confucius risked his life moving from space to space, educating people with his political advocacy throughout his journey (Figure 4).



Figure 4. Confucius travelled around the kingdoms to give lectures

Likewise, the Peripatetic school from around 335 BC to the middle of the 3rd century BC in Ancient Greece, founded by Aristotle, taught philosophy while walking in the Lyceum of ancient Athens. Then the Peripatetic, with the original meaning of "one who walks from place to place", becomes a method to navigate and learn. Walking represents the body motion inducing the mind travel and flows of the imagination. As Randy Cutler wrote, "the assimilation of one's surroundings coupled with rhythmic journeying is an intricate process that arouses the potential for metaphor and analogy" (2014, p. 4).

As mentioned above, the mobility of the body depicts a space for the emergence of new knowledge. Learning took place in the openness, with the bodily collision with the sociocultural surroundings. Those historical visions of teaching and learning provide us with original speculation on the sites for pedagogy. Leander, Phillips and Taylor (2010) criticised the trope of "classroom-as-container" and converted its meaning to an "imagined geography" of education, constituting the mobility for learning to take place (p. 331).

Conventionally, students sit in the chair and face their teachers standing on the podium. As to build on more creativity and sparks for learning, many education designers put forward multiple layouts of the classroom. However, due to the impact of the Covid-19 pandemic, the 21st century learning mobility has been drastically transformed into virtual spaces mediated by digital platforms. What might be missing from the physical body movements to a particular "fingers mobility"? Have we realised the actual learning mobility through this way, or is it just a formal coincidence with the term "mobility"?

## 4.2 Affect

Learning is multidimensional; to construct our interpretation, we must be aware of the theoretical lens and dispositions of how learning occurs (Sprio & Jehng, 1990). First of all, there is a necessity to distinguish this "affect" from the "affect" in affective learning theory, mostly appearing in the pedagogy discourse of "critical affect studies" or "critical emotion studies". These "affect" means the specific emotions and feelings—happiness, shame, love, guilt, anger, and disappointment. For instance, Julie Lindquist (2004) contextualised affective (empathic) experience and affective responses by focusing on strategic empathy in the classroom. Robillard (2006) enacted Lindquist's notion of strategic empathy to analyse the composition practices in which the scholars and students could form an affective relationship. Many scholars who associated affect with emotion had a background in education, language, writing, and narratives. However, in this study, the "affect" is discerned not as personal feelings but relevant to Spinoza's *L'affect*:

An ability to affect and be affected. It is a prepersonal intensity corresponding to the passage from one experiential state of the body to another and implying an augmentation or diminution in that body's capacity to act (Massumi, 2004, p. 17).

Specifically, learning can be viewed as an affective interaction generated among bodies and then pedagogy, echoing Latour's interpretation as "training to be affected" (2004, p. 206). The acting body as a subject, the world is articulated by body engagement—rather than the direct body or emotion, but the "body talk":

to have a body is to learn to be affected, meaning 'effectuated', moved, put into motion by other entities, humans or non-humans. If you are not engaged in this learning, you become insensitive, dumb, you drop dead...The body leaves a dynamic trajectory by which we learn to register and become sensitive to what the world is made of (pp. 205–206).

Connecting it to Latour's latest thoughts on how coronavirus gave us a model for spreading ideas (2020). In his interpretation, people were suggested not to see it as a revenge of nature but as a vast experiment. Unlike the catastrophes driven from outside, the viruses were inside our bodies, or perhaps we were the viruses per se. Since humans could not expel them thoroughly, we must learn to co-exist with them.

Besides, only four years after Latour's raising debate on *How to Talk About the Body? The Normative Dimension of Science Studies*, Patricia Clough (2008) re-examined the bodily matters in response to the influence of post-structuralism and deconstruction in the late 20th century. In her article *The Affective Turn*, she took the body as "biomedia", a biomediated body, to challenge the autopoiesis model of the body-as-organism:

The biomediated body is a definition of a body and what it can do—its affectivity—that points to the political economic and theoretical investment in the self-organization inherent to matter or matter's capacity to be in-formational, to give bodily form (p. 2).

Therefore, regarding the ideas from affectivity, learning resembles a biodynamics matter of the body—the capacity to absorb and organise different kinds of information. Inspired by Nigel Thrift (2008), a human geographer and social scientist who initially proposed *Non-representational Theory*, learning requires "bodies" unparalleled ability to co-evolve with things" (p. 10). The things and objectives, such as information, knowledge, materials, and non-human relatedness of the body, are understood non-representationally through affect. The notion of affect embodies "properties, competencies, modalities, energies, attunements, arrangements and intensities of differing texture, temporality, velocity and spatiality, that act on bodies, are produced through bodies and transmitted by bodies" (Lorimer, 2008, p. 552). In this way, when someone transforms herself, she also transforms others. She collides with the world through the "body talks", while the bodies are being affected by a talk from the world.

# 5. New Spaces

This section integrates four typologies of potential learning spaces: nomad, liminality, rhythm, and heterotopia. Each space responds to the epistemology of the following questions: How to recognise the characteristic through bodies? How and why does it contain the potential for innovating our learning? How to understand and design such spatial arrangements that could foster our innovation practices?

## 5.1 Nomad

Nomad is a perpetual displacement (Kaplan, 1996). Deleuze and Guattari described the nomad occurs in a smooth space—a vector of deterriteriolisation, a line of flight, and an open dynamic that obtain the potentiality of transformation (Cole, 2013). In contrast, the striated space is hierarchical and rule-intensive (Tamboukou, 2008). The nomad can be sensed and recognised by the movement (extensive) and also the speed (intensive), "the nomad moves, but while seated, and he is only seated while moving. The nomad knows how to wait, he has infinite patience" (Deleuze & Guattari, 1987, 2015, p. 444).

Learning in the nomad, we are required to use our body mobility as a reference to identify the potentiality of the nomadic spaces for learning. Burke and DeLeon (2015) stressed that the movement and the bodies in motion are the key points to a nomadic subjectivity for transformative experiences to occur. "The moving nomadic body points toward liberation practices that can stir the imagination because of its decentering" (p. 14). Erin Manning (2007) used Tango as an example to express nomadic learning. "It is a dance of encounter and dis-encounter, a voyeuristic embrace of repressed sensuality and a complex network of (mis)understood direction." The nature improvised tango "takes place on the edges of neighbourhoods, the magic time between dusk and dawn, in the periphery of the social order" (p. 2).

However, Rachel Fendler (2013), an art educator, argued that the "nomad" in nomadic pedagogy is neither about body travelling nor the actual physical movement but the disruptive actions that resist convention. Nomadic space frames a learning process "whereby learning is the change incurred when subjects enter into unfamiliar territory, in a process of discovery" (p. 787). Indeed, Deleuze and Guattari attached importance to the territorial principle of the nomad but against defining the nomad as a movement,

The nomad has a territory; he follows customary paths; he goes from one point to another; he is not ignorant of points (water points, dwelling points, assembly points etc.). But the question is what in nomad life is a principle and what is only a consequence... A path is always between two points, but the in-between has taken on all the consistency and enjoys both an autonomy and a direction of its own. The life of the nomad is the intermezzo (Deleuze & Guattari, 1987, 2015, p. 443).

By focusing on the boundaries and territory of the nomad, nomad reminds us of the issues of ethnicity. Rosi Braidotti, a contemporary continental philosopher and feminist theorist, who wrote *Nomadic Theory* (2011),

addressed the network of power relations embodied in nomad, "looking for the ways in which otherness prompts, mobilises and allows for flows of affirmation of values and forces which are not yet sustained by the current social and historical conditions" (2013, p. 343). The bodily differences imply different degrees and levels of power and force of understanding. She suggested that we require us to look at the privilege of mobility and critically evaluate the centralisation and decentralisation of the power. Being nomad is being the minority as a new mode of existence.

Insofar, the nomadic pedagogy opens up the opportunities for students to learn in and outside schools, to learn in the eventful space, where "learning emerges as an imagined geography, bridging a reflection on social space and the social imaginary" (Fendler, 2013, p. 17). Connecting to the view of Tim Cresswell, a human geographer and poet, nomad is always attentive to place-making, signifying process and trajectories with mobility, "places do no have intrinsic meanings and essences... the meanings of place are created through practice" (2010, p. 17). In this way, nomad provides evidence of dynamic geographical learning. With the practice of mapping, cartographical tools, and place-making inquiries, the learners can better understand their positions and design the embodiment of learning and innovation practices.

### 5.2 Liminality

Liminal was coined as an anthropological term by Van Gennep in 1967, referring to rites of passage, such as marriage or coming-of-age rituals. In the sociology critique, liminal transitions dissolve social structures which regulate ordinary social interaction, removing limits from everyday life. As defined by the sociology critic Tom Boland,

Liminality is not just a time of questioning and criticism but also a difficult time in which there are no particular standards for behaviour, a frightening, bewildering limitlessness; it is a moment in which society appears arbitrary and culture merely illusionary, a moment of touching the void. Nonetheless, again and again, meaning and structure return and prevail and are even refreshed and renewed by liminality (2013, p. 230).

Liminality obtains the potential of a learning space because it is transformative. It challenges the previous structures, unfolding a "period of reflection" (1967, p. 105) on the temporary custom and construction, which is remarkably shown during the Covid-19 pandemic, where the suspension of everyday "autopilot" stimulated lives to be (re)imbued with new values from heartfelt rather than mundane.

Sharing the same concern as Ronald Barnett, James Conroy (2004), an education philosopher, argued that the forces of consumerism and globalisation threatened the democratic society. Accordingly, he took liminality as a "heuristic metaphor", a critical approach to operating the in-between categories and spaces—the margins of society, calling attention to cultivating a sense of the liminal in order to let students adopt critical positions themselves (p. 60). To be precise, he believed literature, poetry, and the arts present liminal forms to "bring the student in her marginal state" (p. 163) and to encounter their own spaces in the world.

Meyer and Land (2003) found that the difficulty in understanding threshold concepts may leave the learners in the liminal space in the project Enhancing Teaching and Learning Environment. They characterised the threshold concepts as transformative (significant shift in the perception of knowing), irreversible (unlikely to be forgotten or unlearned only by considerable effort), integrative (new integration of understanding, thinking and practising), and possibly often bounded and potentially troublesome. Therefore, the liminal space entails a conceptual and an ontological shift in the learners' subjectivities. It offers reference to teaching strategies and learning outcomes (Meyer & Land, 2003). In terms of this perception, how could the learners and teachers justify their positions when staying in liminal spaces?

Liminality produces clear emotional signals to the learners, so the answer to the question also embodies how the liminal space feels. On the one hand, the perception of psychological changes acts as critical evidence. As Meyer and Land (2005) discussed, when learners cross thresholds, the insights they gain could be captivating. However, it might also bring unsettling feelings and a sense of loss, demanding a change of subjectivity. Learners frequently gain the feeling of failure, defeat and loss of self-confidence (Kiley & Wisker, 2009).

On the other hand, it is assumed that not actual spaces are considered sheer liminal spaces. Still, the orientation to regard certain conditions as a threshold could facilitate understanding how the dissolution of customary familiar ways of seeing and the formulation of new beliefs occur. By acknowledging the liminality, the learners are more willing to stay in the liminal space with patience. They will be more confident to resist the uncertainty, uncomfortable, and sense of loss. The creative potential generated in the liminal space will not be tapped unless held in that tension until crossing the threshold.

## 5.3 Rhythm

Rhythm inherits the affective potential to affect our body as a way to learn. Echoing affective bodies and affective learning mentioned in the previous section, Julian Henriques (2010), a professor of Culture Studies and an author of *Sonic Bodies*, creatively proposed understanding the transmission of affect via the propagation of vibrations. In his words, "affect is expressed rhythmically—through relationships, reciprocations, resonances, syncopations and harmonies" (p. 58). We mobilise the body as a set of rhythmic relations (McCormack, 2013, p. 32). We can sense and grasp the rhythm through the open sensory, the intensities of feeling, the attentive eyes and ears, a head and a memory and a heart (Lefebvre, 2004, p. 36).

According to Henri Lefebvre, a French philosopher and sociologist in the 20th century, his educational critique originated from his critique of everyday life and the social production of space. For Lefebvre, rhythm is energy: "Energy animates, renders time and space conflictual" (Lefebvre, 2004, p. 60). Considering "human nature pedagogically reproduced in universities and schools", he raised the question of the pedagogy of body: "how to re-educated bodies for space?" (2014, p. 34). In order to answer this question, we must situate ourselves both inside and outside of social life. To be precise, the paralleled relation and the distinctions between three social spaces are needed to clarify, which are *perceived space* (including the rhythm of social space and rhythm of body and nature), *conceived space* (abstract, mental and bureaucratic, the rhythm of which are linear, regular, and measurable), and *lived space* (unconscious, imaginary and symbolic dimensions of experience) (Middleton, 2017).

Thus, rhythmanalysis helps to reframe our understanding of the body by how these three spaces attune with each other. Then, sensing the rhythm of these social spaces and people in everyday circulation indicates power placement (Allen, 2003). Almost at the same time when John Allen, a professor in Arts and Social Science, published his book *Lost Geographies of Power* (2003), Zygmunt Bauman gave an example of "mastery over time" in his book Liquid Modernity (2000). The managers perform power—by "immobilising their subordinates in space through denying them the right to move and through the routinisation of the time-rhythm they had to obey the principal strategy in their exercise of power" (p. 10). The workplace example can also be transferred to places of learning for noticing the contradictions in everyday practice and the knowledge power production.

Rhythm informs the learners to engage in everyday life and "to vivify the entire body with all its rhythms and senses" (Lefebvre, 2005, p. 35). As Lefebvre's "pedagogy of appropriation" suggests, teachers and students are supposed to engage in the collective critique of everyday life (Middleton, 2017). Different speeds of animate movement spaces formulate the daily sense and knowledge. Critical pedagogy can take the rhythm as an embodied temporal perspective on learning social, cultural, and natural ecology. Being aware of the spatial-temporal rhythm allows us to foster sensitivity and make better conversations with the environment and ourselves.

## 5.4 Heterotopia

According to Of *Other Space* by Michel Foucault (1986), the notion of heterotopia represents a certain kind of spatial comprehension for criticality (Hetherington, 1997). It is neither imaginary nor perfect as a utopia but problematises the received order and knowledge (Topinka, 2010, p. 56). It does also exist in real places. The Postman's Park (Figure 5.) in central London serves as a real-world example to capture such kinds of spaces in urban. The name of this public garden originated due to its popularity as a lunchtime site with postmen from the nearby old General Post Office. However, the garden embodies the juxtaposition and combination of many spaces in one site and simultaneously produces heterogeneous meanings for the human body. The resting benches for a coffee break could shape space for a temporal body; the history of the civilian hero memorial could function as an experienced body; a tranquil terrain in-between the office buildings for mediation could be interpreted as offering space for a ritual body.



Figure 5. The Postman Park (Lawrence, 2020)

Heterotopia, summarised by Tomasini (2020), is "as spaces of crisis that hide what is out of sight; as alternative spaces/institutions that house individuals that exhibit deviant behaviour; as spaces that juxtapose objects from different times and places" (p. 239). Contextualising heterotopia into pedagogical space, what kind of sites could be viewed as heterotopia? How can the space be recognised and characterised as heterotopia? How to design and manage the heterotopia experience, practices, and other formations?

The human body is the medium for examining heterotopia. Those embodiments of heterotopia can be identified through the mediation of the body, "a site of relation," and "a sort of mixed, joint experience". We can draw intrinsically or strategically from the deviated categories to open new alternatives through the mediation of the body. For Foucault, the notion of crisis heterotopia "are privileged or sacred or forbidden places, reserved for individuals who are, in relation to society and to the human environment in which they live, in a state of crisis" (1986, p. 24), which seemed to spring up during the Covid-times. However, Foucault also clarified that in the contemporary, the crisis heterotopia is being replaced by the "heterotopias of deviation", referring to "individuals whose behaviour is deviant in relation to the required mean or norm are placed" (p. 25).

"Heterotopias of deviation" is particularly evident during the quarantine, self-isolation and the lockdown, configuring a reflective moment for understanding the relations between the familiar spaces and self-positions. Lozanovska et al. (2020) discussed the impact of the pandemic in *Other Spaces of Quarantine*. They focused on architecture, indicating that those anodyne architectural types are violently but only temporarily transformed. The dwellers have been asked to "historicise the spaces under the new politics of widespread lock down and quarantine" (p. 417). They used heterotopia to explain the transformative meanings of some familiar public spaces,

with the global spread of Covid-19, a new taxonomy of defamiliarised spaces that deny the rituals of everyday sociality has forced us to rethink and reconfigure our lives... a range of ordinary spaces were expediently alienated as viral incubators and were programmatically transformed (p. 417).

They continued to give examples of the disturbing transition points of airports, train stations, the borders of nations, hotels, and homes. Almost all the people had somehow sensed a contradictory role of residence during the lockdown. The law of "stay-at-home" and "work from home" transformed the home from a personal resting shelter to a restless digital and politicised space.

Taking the "heterotopias of deviation" as a thinking tool helps us recognise the emerging exceptional spaces we occupy. Through the lens, we could reconsider the relations between the body movements and environment, the transforming symbols and meanings within those spatial disturbances, transformation and unfamiliarity. For example, in the study of Gammon and Ramshaw (2021), they found that nostalgia-based activities became effective strategies for all generations to endure the lockdown, such as writing, home-baking, watching classic films, memorable concerts, and traditional board games. Home not accommodated the human body but also "a mixture of leisure and nostalgia during difficult times, for some, perhaps offers a palliative respite through social interaction, distraction, and escape" (p. 134). People detached themselves from the present by using solid

nostalgia to perceive the privilege of taking control of the near future, in which the home is a heterotopia transaction.

Rather than taking the lockdown as an opportunity to create something new, people were actually nurtured to create heterotopias spontaneously. Such that the heterotopia home is taken as the rehearsal of imaginative reality. People would inevitably rationalise their identities on these controversial sites. The contradictions people encountered within the spaces enabled them to rethink the heterotopia. Heterotopia would position beyond "a site of resistance" but a learning space for criticality, adventure, experiment, and new possibilities.

#### 6. Conclusion

As we live in uncertain times facing restless risk and crisis, there is an urgency to manage ourselves for autonomous learning. We teach ourselves, and at the same time, we teach others. The learners are supposed to take the body as an agency. The body not only works to make the learning happen but also biomediates the dynamic of new knowledge. By focusing on the learning creativity requested for contemporary university education (Barnett, 2020), the students should be aware of the multiple learning spaces that obtain the potential for innovation, transformation, and authentic becomings. In terms of the concern, this paper aims to provide insights into how to take our human bodies as an approach to recognise and manage the new potential learning spaces through the crisis epistemologies? Four typologies of learning space are analysed in this paper. The theoretical framework of summarising each space, with the characteristics for recognition, principles for management, and methods for creativity, are listed in Table 1. By mobilising these four abstract concepts around learning behaviours, the finding pushes the boundaries of learning transformation. It also contributes to the new ways of knowing, inspiring learners to re-vision the familiarities and changes around their daily experiences.

Table 1. The theoretical framework of four typologies of learning space

	Recognise (Characteristics)	Manage (Principles)	Design (Methodologies and methods)	Reference
Nomad	<ul><li> smooth space</li><li> "in-between"</li><li> transforming</li><li> with speed and movement</li></ul>	<ul> <li>understand the power relation</li> <li>resist convention</li> <li>reflect on ethnicity</li> <li>seek new modes of existence</li> <li>practice denationalisation</li> </ul>	<ul><li>mapping</li><li>cartography</li><li>geographical ethnography</li><li>place-making</li><li>a/r/tography</li></ul>	Burke & DeLeon, 2015; Cole, 2013; Cresswell, 2010; Deleuze & Guattari, 1987; Fendler, 2013
Liminality	<ul><li>liquid space</li><li>"in-between"</li><li>marginal</li><li>emotional difficulty</li></ul>	<ul> <li>transformational learning</li> <li>threshold learning</li> <li>the epistemological and ontological turn</li> </ul>	<ul><li>reflective narratives</li><li>pedagogical inquiry</li><li>threshold concepts</li></ul>	Boland, 2013; Conroy, 2004; Meyer & Land, 2003; Kiley & Wisker, 2009
Rhythm	<ul> <li>repetition</li> <li>improvisation</li> <li>linear or cyclical</li> <li>affective</li> <li>with speed and movement</li> </ul>	<ul> <li>critiques of everyday life</li> <li>open sensitivity</li> <li>understand the power relation</li> <li>initiate to create the lived experience</li> </ul>	<ul><li> observation</li><li> rhythmanalysis</li><li> sensory ethnography</li></ul>	Allen, 2003; Bauman, 2000; Henriques, 2010; Lefebvre, 2004; Middleton, 2017
Heterotopia	<ul> <li>differential space</li> <li>marginal</li> <li>deviant</li> <li>disruptive</li> <li>contradictory</li> <li>transforming</li> </ul>	<ul> <li>disturb the familiarity</li> <li>upset the existing structure</li> <li>challenge the previous order and knowledge</li> <li>re-examine individual identities</li> </ul>	<ul><li>juxtaposition</li><li>archaeology</li><li>critical thinking</li></ul>	Foucault, 1986; Lozanovska et al., 2020; Tomasini, 2020; Topinka, 2010

This paper also aims to raise the awareness of the epistemology of the potential spaces that allow the "invisible" learning and innovation to emerge. By identifying the new bodies and new spaces for learning, the homogeneous traits can be found in nomad, liminality, heterotopia, and rhythm. The diagram of the transdisciplinary relations of the four innovative territories is revealed in Figure 6. It will help learners to grasp a visual understanding of these terms. By managing and designing the learning epistemologies, people can develop their sensitivity to make better conversations with the changing world and develop an authentic self.

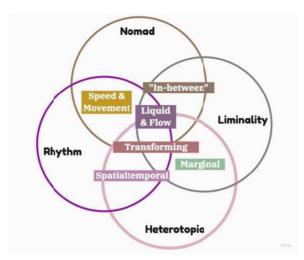


Figure 6. The transdisciplinary relations of the four innovative territories

#### References

- Allen, J. (2003). Lost Geographies of Power. Oxford: Blackwell. https://doi.org/10.1002/9780470773321
- Argyros, X., & Neiheiser, R. (2018). *The School of Athens Venice*. NEIHEISER ARGYROS. Retrieved from https://neiheiserargyros.com/projects/the-school-of-athens
- Barnett, R. (2000). University knowledge in an age of supercomplexity. *Higher Education*, 40(4), 409–422. https://doi.org/10.1023/A:1004159513741
- Barnett, R. (2007). A will to learn: Being a student in an age of uncertainty. UK: McGraw-Hill Education.
- Barnett, R. (2020). Towards the creative university: Five forms of creativity and beyond. *Higher Education Quarterly*, 74(1), 5–18. https://doi.org/10.1111/hequ.12231
- Bauman, Z. (2000). *Liquid Modernity* (pdf). Retrieved from https://giuseppecapograssi.files.wordpress.com/2014/01/bauman-liquid-modernity.pdf
- Beck, U. (1992). Risk Society: Towards a New Modernity. SAGE Publications Ltd.
- Boland, T. (2013). Towards an anthropology of critique: The modern experience of liminality and crisis. *Anthropological Theory*, *13*(3), 222–239. https://doi.org/10.1177/1463499613496731
- Braidotti, R. (2013). Nomadic ethics. Deleuze Studies, 7(3), 342-359. https://doi.org/10.3366/dls.2013.0116
- Burke, K., & DeLeon, A. (2015). Nomadic Teaching, Vagabond Dreaming: An Examination of the Spac That Schools Might Become. *Review of Education, Pedagogy, and Cultural Studies*, *37*(1), 4–20, https://doi.org/10.1080/10714413.2015.988489
- Cahapay, M. (2020). A reconceptualization of learning space as schools reopen amid and after COVID-19 pandemic. *Asian Journal of Distance Education*, 15(1), 269–276. Retrieved from http://www.asianjde.com/ojs/index.php/AsianJDE/article/view/469
- Clough, P. T. (2008). The affective turn: Political economy, biomedia and bodies. *Theory, Culture & Society*, 25(1), 1–22. https://doi.org/10.1177/0263276407085156
- Cole, D. R. (2013). Lost in data space: Using nomadic analysis to perform social science. *Deleuze and Research Methodologies*, 219–237. https://doi.org/10.1515/9780748644124-014
- Conroy, J. C. (2004). *Betwixt and between: The liminal imagination, education and democracy*. New York: Peter Lang.
- Cresswell, T. (2010). Mobilities I: Catching up. *Progress in Human Geography*, *35*, 550–558. https://doi.org/10.1177/0309132510383348
- Cutler, R. L. (2014). On Speculative Walking: From the Peripatetic to the Peristaltic. *International Contemporary Art*, 121, 10. Retrieved from https://cmagazine.com/issues/121/on-speculative-walking-from-the-peripatetic-to-the-peristaltic

- Deleuze, G., & Guattari, F. (1987, 2015). *A Thousand Plateaus*. Capitalism and Schizophrenia (London: Continuum).
- Dugdale, S. (2009). Space strategies for the new learning landscape. *Educause Review*, 44(2), 50–52. Retrieved from https://www.learntechlib.org/p/105200
- Ellis, R. A., & Goodyear, P. (2016). Models of learning space: integrating research on space, place and learning in higher education. *Review of Education*, 4(2), 149–191. https://doi.org/10.1002/rev3.3056
- Falloon, G. (2011). Making the connection: Moore's theory of transactional distance and its relevance to the use of a virtual classroom in postgraduate online teacher education. *Journal of Research on Technology in Education*, 43(3), 187–209. https://doi.org/10.1080/15391523.2011.10782569
- Felix, G., & Guattari, D. (1987). *A thousand plateaus: Capitalism and schizophrenia* (Trans. by Massumi, B.). University of Minnesota, Minneapolis.
- Fendler, R. (2013). Becoming-learner: Coordinates for mapping the space and subject of nomadic pedagogy. *Qualitative Inquiry*, 19(10), 786–793. https://doi.org/10.1177/1077800413503797
- Foucault, M. (1986). Of Other Spaces. Diacritics, 16(1), 22-27. https://doi.org/10.2307/464648
- Gammon, S., & Ramshaw, G. (2021). Distancing from the present: nostalgia and leisure in lockdown. *Leisure Sciences*, 43(1–2), 131–137. https://doi.org/10.1080/01490400.2020.1773993
- Goodyear, P., & Retalis, S. (2010). Learning, technology and design. In *Technology-Enhanced learning*. Brill Sense. https://doi.org/10.1163/9789460910623\_002
- Henriques, J. (2010). The vibrations of affect and their propagation on a night out on Kingston's dancehall scene. *Body & Society*, *16*(1), 57–89. https://doi.org/10.1177/1357034X09354768
- Hetherington, K. (1997). The Badlands of Modernity: Heterotopia and Social Ordering. London: Routledge.
- Kaplan, C. (1996). *Questions of travel: Postmodern discourses of displacement*. Durham, NE: Duke University Press. https://doi.org/10.2307/j.ctv1131b10
- Kiley, M., & Wisker, G. (2009). Threshold concepts in research education and evidence of threshold crossing. *Higher Education Research and Development*, 28(4), 431–441. https://doi.org/10.1080/07294360903067930
- Latour, B. (2004). How to talk about the body? The normative dimension of science studies. *Body & Society*, 10(2–3), 205–229. https://doi.org/10.1177/1357034X04042943
- Lawrence, C. A. (Photographer). (2020). Lessons in Valor and Its Myths, from London's Memorial to Heroic Self-Sacrifice. The New Yorker. (Image). Retrieved from https://www.newyorker.com/news/letter-from-the-uk/lessons-in-valor-and-its-myths-from-londons-memorial-to-heroic-self-sacrifice
- Leander, K. M., Phillips, N. C., & Taylor, K. H. (2010). The changing social spaces of learning: Mapping new mobilities. *Review of Research in Education*, 34(1), 329–394. https://doi.org/10.3102/0091732X09358129
- Lefebvre H. (2004). Rhythmanalysis: Space, Time and Everyday Life. London and New York: Athlone.
- Lefebvre H. (2005). *Critique of Everyday Life* (Vol 3: From Modernity to Modernism). London and New York: Verso.
- Lefebvre H. (2014). *Toward an Architecture of Enjoyment*. Minneapolis, MN: University of Minnesota Press. https://doi.org/10.5749/minnesota/9780816677191.001.0001
- Lindquist, J. (2004). Class affects, classroom affectations: Working through the paradoxes of strategic empathy. *College English*, 67(2), 187–209. https://doi.org/10.2307/4140717
- Lorimer, H. (2008). Cultural geography: Non-representational conditions and concerns. *Progress in Human Geography*, 32, 551–559. https://doi.org/10.1177/0309132507086882
- Lozanovska, M., Pieris, A., Haghighi, F., Taylor, W. M., Hou, J., Smitheram, J., & Chee, L. (2020). Other Spaces of Quarantine. *Fabrications*, *30*(3), 416–429. https://doi.org/10.1080/10331867.2020.1857609
- Manning, E. (2007). Politics of touch: Sense, movement, sovereignty. U of Minnesota Press.
- Massumi, B. (2004). Notes on the Translation and Acknowledgements. A Thousand Plateaus, 16-19.
- McCormack, D. (2013). Refrains for Moving Bodies. Durham, NY: Duke University Press.

- https://doi.org/10.1515/9780822377559
- Meyer, J. H., & Land, R. (2005). Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning. *Higher Education*, 49(3), 373–388. https://doi.org/10.1007/s10734-004-6779-5
- Middleton, S. (2017). Henri Lefebvre on education: Critique and pedagogy. *Policy Futures in Education*, *15*(4), 410–426. https://doi.org/10.1177/1478210316676001
- Radcliffe, D., Wilson, H., Powell, D., & Tibbetts, B. (2008). *Designing next generation places of learning: Collaboration at the pedagogy-space-technology nexus* (pp. 1–20). The University of Queensland. Retrieve from
  - https://www.researchgate.net/profile/David-Radcliffe/publication/237249564\_Designing\_Next\_Generation\_Places\_of\_Learning\_Collaboration\_at\_the\_Pedagogy-Space-Technology\_Nexus/links/5fb33dff45851518f dacabe0/Designing-Next-Generation-Places-of-Learning-Collaboration-at-the-Pedagogy-Space-Technology-Nexus.pdf
- Raphael. (Painter). (1509–1511). *The School of Athens* (Painting). Retrieved from https://commons.wikimedia.org/wiki/File:Raphael\_School\_of\_Athens.jpg
- Robillard, A. E. (2006). "Young Scholars" Affecting Composition: A Challenge to Disciplinary Citation Practices. *College English*, 68(3), 253–270. https://doi.org/10.2307/25472151
- Schwartzman, R. (2020). Performing pandemic pedagogy. *Communication Education*, 69(4), 502–517. https://doi.org/10.1080/03634523.2020.1804602
- Spiro, R., & Jehng, J. (1990). Cognitive flexibility and hypertext: Theory and technology for the nonlinear and multidimensional traversal of complex subject matter. *Cognition, Education, and Multimedia: Exploring Ideas in High Technology*, 205, 163–205.
- Tamboukou, M. (2008). Machinic assemblages: Women, art education and space. *Discourse: Studies in the Cultural Politics of Education*, 29(3), 359–375. https://doi.org/10.1080/01596300802259129
- Temple, P., & Fillippakou, O. (2007). Learning spaces for the 21st century. Higher Education Academy.
- Thrift, N. (2008). *Non-representational theory: Space/politics/affect*. London: Routledge. https://doi.org/10.4324/9780203946565
- Tomasini, F. (2020). Solidarity in the Time of COVID-19? *Cambridge Quarterly of Healthcare Ethics*, 1–14. https://doi.org/10.1017/S0963180120000791
- Topinka, R. J. (2010). Foucault, Borges, heterotopia: Producing knowledge in other spaces. *Foucault Studies*, 54–70. https://doi.org/10.22439/fs.v0i9.3059
- Turnbull, D. (2002). Performance and narrative, bodies and movement in the construction of places and objects, spaces and knowledges. *Theory, Culture & Society*, 19(5–6), 125–143. https://doi.org/10.1177/026327602761899183
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Watts J. (Reporter). (2020, June 6). *Bruno Latour: 'This is a global catastrophe that has come from within'* (Interview). The Guardian. Retrieved from https://www.theguardian.com/world/2020/jun/06/bruno-latour-coronavirus-gaia-hypothesis-climate-crisis
- Wenshi Vally. (2019). *Confucius travelled around the kingdoms to give lectures* (picture). Retrieved from https://www.wenshigu.com/ysmw/qwys/64043.html
- Wheeler, S. (2015). *Learning in the digital age: Theory and practice* (pdf, p. 60). Retrieved from https://www.heacademy.ac.uk/system/files/downloads/key\_note\_day\_1\_\_steve\_wheeler.pdf

## Copyrights

Copyright for this article is retained by the author, with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).