

The Virtual University

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Contemporary students may experience the university as being distributed across places and domains. Studying by help of laptops and even smart phones implies that they are no longer tied to campus (a central point) or to commuting between home and campus (a line) or between separate buildings of a decentralized university (a flat network). Studying is now an arrangement within which individuals and activities seek to gear themselves to one another. Educators and researchers have already made this experience for a long time, as we have always been collaborators in multiple teams within one institution and/or across several. Even if living in one's university town or having a predictable commute, one travels zigzaggingly for guest lectures, research meetings, archival, field, and library research, on-site committee work or conferences. Still, something has changed post-COVID and we feel a more fundamental shift is under way towards a university that may even go beyond the »mode 3 networked university«.¹ Although in some fields of research, like high-energy physics, this kind of doing university has been established for a long time,² it now seems to become the signature of all faculties and research fields. This is a shift towards the virtual university.

As fundamental as this shift appears to be, it is not an easy one to grasp. It is certainly not limited to a ubiquitous use of Internet communication technologies or the digitisation of university administrative, research, and teaching structures. And yet another important insight emerged when the pandemic forced academics to go digital: The university has always been an institution of potentials, of as-if, of experiments, of systematized experiences and their deconstructions, and of virtuality. Way before the advent of smart learning management software or hybrid teaching scenarios the university has dealt with the virtual: Ever since its foundation it has been a place where one's own, other, becoming, fantastic and utopian worlds, societies, forms of knowledge, natures and technologies are scrutinized,

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- 1 Matthews, Adam (2024): »The Mode 3 Networked University: A New Materialist Perspective«, in: Proceedings of the International Conference on Networked Learning 13.
 - 2 Dippel, Anne (2017): »Das Big Data Game. Zur spielerischen Konstitution kollaborativer Wissensproduktion in der Hochenergiephysik am CERN«, in: NTM. Zeitschrift für Geschichte der Wissenschaften, Technik und Medizin 25, pp. 485–517.

categorized, imagined, and shaped. The natural and life sciences may train and convey a predictable research process and objective truth claims, based on measurements and statistics. Nevertheless, as Science and Technology Studies and STS inspired research have taught us, the university's on-the-ground processes and even insights are often filled with serendipity. The humanities and the social sciences train in modes of understanding. Their researchers, teachers and students are dealing with ambiguities, imagining the impossible, in speculation on signs and symbols, multiplicities, tensions and ambivalence. How do these sciences work (together) in the virtual university of the future? How are its infrastructures and its architectures designed? How do we study, research and administer at and through virtual universities? And what does the virtual university make humans feel like?

1. A playful experiment in practicing a virtual university

This text has been co-authored by the five panelists from the panel *Virtual University* at the annual conference *Infrastructures of (Non-)Knowledge* of the CRC 1567 *Virtual Lifeworlds* on 10 October 2024. Our co-laboration is the realization of the virtual university in the present, not in the future. In what follows we are going to speculate, by practicing the virtual, about answers to the above questions—the last one in particular—based on our current academic experiences and our pedagogical, epistemic and organizational ideals and ethics. We are situated in a context where internal and external university funding again leads to austerity measures in most European countries, where academic freedom is again being questioned all over the world, not only in Europe, or—in a particularly intense manner after January 20, 2025—in the US. From this situation we speculate,³ that is, etymologically speaking, we think about potential and the spectrum of the—i.e. virtual—university formations by making a set of conjectures about it. The method of this piece—situated speculation—is both descriptive of, normative and visionary about and reflective of what is produced at virtual universities.

As point of departure we have collected ideas and material for this piece by engaging in a writing game that consisted of a series of guided steps. Anne introduced the game, she used mechanics first encountered for the sake of thinking along together within the Spectrality Working Group of Max-Planck-Institute for Social Anthropology in Halle, as well with the *virtuelle ethnographische schreibwerkstatt*.⁴ It was

3 Irigaray, Luce (1985): *Speculum of the Other Woman*, Ithaca, NY: Cornell University Press, pp. 13–20.

4 Amy McLachlan introduced this game to Dippel first at the MPI »Spectrality Working Group«. She continued to develop it together with her colleagues in the virtual *ethnographische schreibwerkstatt*. Dippel, Anne et al (forthcoming): »Die Empirisch-Kulturwissenschaftliche Schreib-Jam-Session. Kontingenz und Zufall in kollaborativ-kreativen Schreibspielen«, in: Kongress-

the first time for the other four participants to play the game, and the first time for all of us to play a writing game as part of a video conferencing system, to collectively develop raw text for a common publication. Beyond this experimental setup we shared a common experience, having participated in the conference in October 2024, albeit in a hybrid form, since some of us could not attend in person due to illness. The online experience was intimate, yet the participants' relationship was quite distant. In essence, the entire setting served as an example and experiment in practicing virtual university.

The game consisted of four rounds, with Anne as the facilitator and leader, alongside being a participant. Video and audio were not shared during writing sessions. In the first round we were tasked with inventing a word or term that critical scholars would need to theorize the virtual university but which did not yet exist. We generated *odradology*, *participationsprojection*, *speculability*, *the university with grace*, and *virtual vigilance*. Without further discussion we proceeded to the next round. In this round we passed on the invented word to the person who typed after us, creating a differential circulation of ideas. We had five minutes to write about the (potential) meaning of the word or term for the virtual university and did not share our texts. This second round connected our thoughts, and we utilized the short-circuit technology⁵ to entangle our academic and disciplinary perspectives and visions. Thus, we contributed to developing and working on new modes of knowledge production adapt to our contemporary technical conditions within our shared virtual world, wired and infrastructured by the planet's finest minerals, rare earths and metals.

In the third round we engaged with the question posed in the panel abstract: »How do we study, research, and administer in and through virtual universities?« We had five minutes to write and then shared one sentence of our text and passed it on. In the final round we used or modulated the sentence directly or took it as inspiration to continue writing on the question. We then spent 40 minutes discussing our ideas and shared thoughts, bibliographical references, and agreed upon the procedure for writing this text. We decided not to smooth out our text into a single-author voice but to collectively write it, including disruptions, diffractions,⁶ and the dissemination of ideas that might cause long-circuit⁷ reactions with the reader. Since the multiple authorship will thus become transparent upon reading the text, our ideas on and practices of virtual universities will be actualized. Thus, reading this

band der 45. Tagung der Deutschen Gesellschaft für Empirische Kulturwissenschaft (DGEKW), Kiel.

- 5 Stiegler, Bernard (1994): *La Technique et le Temps*. 1. *La Faute d'Epiméthée*, Paris: Éditions Galilée, pp. 123–125.
- 6 Barad, Karen (2014): »Diffracting Diffraction: Cutting Together-Apart«, in: *Parallax* 20:3, pp. 168–187.
- 7 Stiegler: *La Technique et le Temps*, 52 ff.

text is a continuation of our writing exercise in circularity not only as a way of thinking about the world but as a mode of experiencing. »Following a chain of connections, it hops from one pre-determined location to another«⁸ in a spiral-like movement, this point-to-point connections are symbolically discrete *and* interconnected. The text turns into an intra-active phenomenon through virtual co-laboration.

After the writing game this piece was written iteratively by all co-authors equally. Given that working with materials of others was part of the writing game, not a single insight or idea is owned individually by one of us. The set of conjectures about studying, researching and administering at and through virtual universities is a shared, co-created and co-curated one. We hope the conjectures and their interrelations are open and relatable. That is, we hope that they can be worked with by yet other ›others‹ as well. We invite readers to engage in reading as an exchange⁹ of gifts, as circulation beyond economic modes of commodification.

Given the conference we were part of and given the volume in your hands or on your screen, we focus more specifically on the relationship between knowledge on the one hand and infrastructures and technologies on the other. This includes, thirdly, reflecting on the positions and positioning of the participants in these virtual ensembles. While reading, we encourage you to ask yourself what specific focus would you bring to the discussion?

The following is thus both a documentation of our encounter and a generated evocative exchange as well as an invitation to imagine virtual universities.

2. OrganogrammatICS

Unlike the fixed gears in the administrative machineries of distinguishedly modern universities, digital times are creating seemingly seamless, sometimes even fluid research modes, ways of teaching and ways of administrating universities, thus demanding new organograms. In this section we speculate about a potential organogrammatological re-ordering of how university is done.

Virtual universities are matrixial universities (inspired by Bracha Ettinger)¹⁰ where relationalities and emergence are key, since these universities are providing experiences of the real and symbolic beyond language, yet through material-discursive co-creation. They no longer provide one anchor point for their students,

8 Ingold, Tim (2007): *Lines. A Brief History*, London/New York: Routledge, p. 101.

9 Liboiron, Max (2020): »Exchanging«, in: Kat Jungnickel (ed.), *Transmissions. Critical Tactics for Making and Communicating Research*, Cambridge, MA/London: MIT Press, pp. 89–107; RUSTlab et al. (2024): »Please Go Away... We're Reading: A Practice Approach to a Taken-for-Granted Academic Craft«, in: *On_Culture* 16. Online: <https://doi.org/10.22029/oc.2024.1415>.

10 Ettinger, Bracha (2006): *The Matrixial Borderspace*. Minneapolis, MN: University of Minnesota Press.

educators, researchers, not even for managers. The concept of the ›line manager‹ is becoming obsolete at the virtual university, as hierarchical lines no longer exist (albeit that they may re/emerge un/expectedly, given their historically determining force).¹¹ Organograms can no longer be drawn up as structured hierarchical representations of organizations, borrowing from graph and order theories. The virtual university is no longer visualisable as a tree. Organisations also tend to be visualized as nested Venn diagrams, thus borrowing from set theory. For the virtual university, however, their attractive and seemingly inclusive circles must be changed—their edges should become Möbius strips rather than circles simply being straightforward and enclosing, still representing hierarchically structured groupings. When nested Venn diagrams meet the topology of the Möbius strip, inside and outside of circles are in conversation or even entangled, yet—unlike the topological Möbius strip and much like the hierarchy of graphs, order and sets—relations of in- and exclusions do not *not* materialize at the virtual university. Students, educators and researchers may temporarily reside in a circle of the ›Möbius-stripped Venn diagram‹, or they are fully on the move on an edge that makes orientation a challenge and the organisational experience ambiguous. Circles may choose a manager for the time being. Hopefully this manager creates non-hierarchical relatings inside the circle and walks the stripped edge for individual, collective and/or institutional ›cutting together-apart‹.¹² There are no permanent closing doors in careers and studies at the virtual university. There are only sets and subsets, and encircling studying, teaching, or research teams and their multi-experiential edges that oscillate between inside and outside. The institution's glue is provided by the navigational experience of the edges of the nested circles.

But these diagrammatic and phenomenological musings can only be the start of developing new organograms, since Möbius-stripped Venn diagrams are simple 2-D manifolds, useful only for rethinking vertical hierarchies of line management and institutional prejudice and bias. At an information-based university such as the virtual one we need many-dimensional organograms for fluid hierarchies which incorporate flat and vertical structures through fully Möbius-strip-like interconnections. In order to accommodate the complexity of a virtual university, which has a planetary scope and produces planetary knowledge,¹³ we could figure an organogram that draws inspiration from multi-dimensional manifolds in modern mathematics and

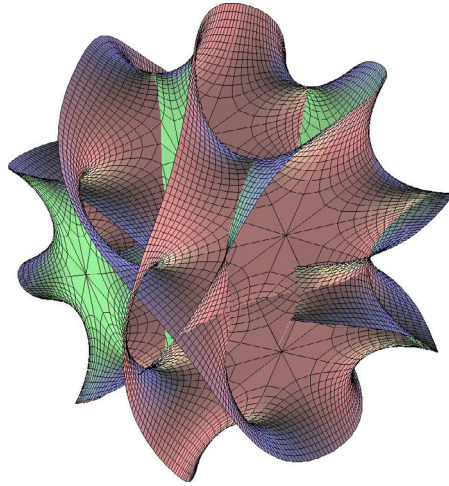
11 See Sara Ahmed's older and more recent work on what happens during institutional encounters: Ahmed, Sara (2000): *Strange Encounters. Embodied Others in Post-Coloniality*, London/New York: Routledge; Ahmed, Sara (2012): *On Being Included. Racism and Diversity in Institutional Life*, Durham, NC/London: Duke University Press; Ahmed, Sara (2021): *Complaint!*, Durham, NC/London: Duke University Press.

12 Barad: *Diffractioning Diffraction: Cutting Together-Apart*, pp. 168–187.

13 Sørensen, Estrid (2025): ›Planetary Knowledge and a spheric academia‹, in: sts-hub.de. Online: <https://sts-hub.de/25/panels.html> (last access: 10.06.2025).

mathematical physics, such as the Calabi-Yau manifold (Fig. 1) or other folded phenomena, incorporating the idea of the Mandelbrot fractal and connecting it fully with the intra-active relationality of quantum mechanics as well as socio-cultural dynamics.¹⁴

Fig. 1: Calabi-Yau Manifold.



What is created at such a virtual university? First, a new institutional reality. Obviously, the position and role of individuals and groups change towards themselves and others and towards the institution. But these individuals and groups also relate to society at large, through its permeable and dynamic borders. Second, what is created is what academics bring to each other and to society: facts about nature and society and speculations about where society and nature are going to. At the virtual university, speculations have the same value as facts. After all, facts are nothing but dutiful descriptions of how virtual reality has, in the here and now, actualized.¹⁵ Projecting actualized fact-based descriptions onto reality, science and scholarship risk getting stuck and fail to prepare people for what may come and for realising that the

14 For further suggestions on integrating multidimensional manifolds into cultural theory, see also: Dippel, Anne (2025): »Erfahrungen fangen, Erkenntnis gestalten. Ethnografische Reflexionen unter imaginären Weltverstehenden und realistischen Traumfangenden«, in: Sabine Eggmann/Martina Röthl/Barbara Sieferle (eds.): *Lesebuch Erfahrung*, Münster: Waxmann.

15 Deleuze, Gilles (1991): *Bergsonism*, New York: Zone Books. Grosz, Elizabeth (2004): *The Nick of Time. Politics, Evolution, and the Untimely*, Durham, NC: Duke University Press. Grosz, Elizabeth (2005): *Time Travels. Feminism, Nature, Power*, Durham, NC: Duke University Press.

planet is, for lack of imaginative methods, damaged.¹⁶ Widening our scope for speculation means increasing our awareness of the multitude of possible actualizations of, and at, the virtual university.

Let us try some more organogrammatology. A virtual university might need new modes of diagrammatic representation, since the university is *rhizomatic and arboretic*.

In *A Thousand Plateaus*, Gilles Deleuze and Félix Guattari write:

»Let us summarize the principal characteristics of a rhizome: unlike trees or their roots, the rhizome connects any point to any other point, and its traits are not necessarily linked to traits of the same nature; it brings into play very different regimes of signs, and even nonsign states. The rhizome is reducible neither to the One nor the multiple. [...] It has neither beginning nor end, but always a middle (*milieu*) from which it grows and which it overflows. [...] In contrast to centered (even polycentric) systems with hierarchical modes of communication and preestablished paths, the rhizome is an acentered, nonhierarchical, nonsignifying system without a General and without an organizing memory or central automation, defined solely by a circulation of states.«¹⁷

The virtual university generates an interesting response to Deleuze and Guattari's seductive plea for rhizomatics. But the digital infrastructure of virtual universities is built on tree-diagrammatic structures, categories, algorithms, referencing towards IP-addresses as much as shared documents, it is also *arboretic*. While Deleuze and Guattari question the need for trees and highlight the need for rhizomes, the virtual university will need both—tree-diagrammatics for the informatic aspects of virtuality, and rhizomatic approaches for both the socio-material and cultural-natural entanglements. The digital era brings back the *porphyric tree*¹⁸ of knowledge, only that now it is embedded within the informatic architecture through which we create knowledge, but also embedded in positionalities, situated at intersections of all kinds. In contrast to Foucault's critique of classical porphyric knowledge concepts, bound to spatio-temporality, these trees of knowledge are based on digital lineages, on electronic *agencements*, on discrete operations, including more-than-living into the experience of life. Based on data lineages and informatic arboretics as much as

16 cf. Tsing et al. (eds.) (2017): *Arts of Living on a Damaged Planet. Ghosts and Monsters of the Anthropocene*, Minneapolis, MN: University of Minnesota Press.

17 Deleuze, Gilles/Guattari, Félix (1987): *A Thousand Plateaus. Capitalism and Schizophrenia*. Translated by Brian Massumi, Minneapolis, MN: University of Minnesota Press, p. 21.

18 Dippel, Anne/Aksoy, Filiz Laura (2025): »Auf der Suche nach der verlorenen Violdimensionalität. Gedanken zum Un/Möglichen von digitalen Plattformen im Bündnis mit Cornelius Castoriadis und Jacques Derrida«, in: Sandra Hofhues/Julia Schütz (eds.), *Plattformen für Bildung*, Bielefeld: transcript, pp. 389–403.

rhizomatic entanglements, the knowledge generated is rooted in multiple spatio-temporalities more akin to the social time of complex kinship-systems and their diagrammatic representations.¹⁹

Thus, the knowledge emerging out of matrixially experienced and virtually designed universities implies the notion of radical situatedness, which includes questioning the situatedness of situatedness itself.²⁰ Here, questions like »where am I situated within the university's organogram?« or »who am I at the virtual university?« are not situated enough. Those working at virtual universities are situated not only on the edges and in the circles but also at the intersections of these Möbius-stripped Venn diagrams, in the folds or fractals, in rhizomatic dynamicity, and they experience an *odradological condition*, i.e. a condition of radical openness and uncertainty of their ontological position. Their work at various points on the permeable and moving Möbius-stripped Venn diagram enfolds in the atmosphere of productive uncertainty regarding the meaningfulness of their own working process and the processuality of meaning in general. In line with the obstinacy of the Odradek, which is both a »fragile yet indestructible thing« and a human-like being who acts »like an orphan child, an unbegotten child«,²¹ working at virtual universities is shrouded in paradox and uncertainty. This condition contains a situated uncertainty coming along with living in topologies that are manifolds beyond a four-dimensional space-time—at least when it comes to the experience of living and working within the virtual university. The odradological condition is connected to the situatedness of all of us within the virtual and calls for new diagrams which could inspire new choreographies, to navigate the cuts and ruptures in the course of academic work at the university along with the multiplication of its tasks and needs. Given the current situation, when we experience the odradological condition as part of the matrixial university but lack any proper organogrammatological re-ordering of doing university and producing knowledge, we are tempted to ask:

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- 19 Dippel, Anne (2024): »Schaltkreisexistentialismus. Zu den elementaren Auswirkungen algorithmischer Kuratierung auf das Verhältnis von abstrakter und sozialer Zeit in der Digitale«, in: Hannes Moser/Libuše Hannah Veprek (eds.), *Kulturwissenschaften und neue Technologien. Zwischen Technikentwicklung und öffentlichen Diskursen*, Bielefeld: transcript, pp. 169–194.
- 20 Compare the genealogy of situatedness at: Sprenger, Florian (2025): *Ich-Sagen. Eine Genealogie der Situiertheit*, Berlin: August Verlag.
- 21 Gross, Kenneth (2022): »Odradek«, in: id. (ed.), *Dangerous Children. On Seven Novels and a Story*, Chicago, IL: University of Chicago Press, p. 103. Within this indeterminate space, the Odradek unfolds as a virtual entity, oscillating between the potentials that constitute it, cf. Rieger, Stefan (2024): »Kafkas Odradek. Wenn Literatur in die VR geht«, in: *virtuelle-lebenswelten.de*. Online: <https://www.virtuelle-lebenswelten.de/blog-post/kafkas-odradek> (last access: 14.10.2025).

3. What do the members of virtual universities do, and how do they feel?

For those trying to make a living, vying for an academic career within the shifting structures of the university, there arise virtual and real challenges. The historian of neo-liberalism and recent commentator on the rise of neo-fascism, Quinn Slobodian,²² helps us to understand that beyond the liberal drift, governmental attacks on critical thought emerging within university life might be an acceleration of the already precarious status of much academic work. In terms of an increase of possibilities, virtualizing the university accelerates these processes. Universities create online spaces as junctions where scholars and students meet and connect through shared experiences and exchange ideas, some of which are turned into notes, often never to be looked at again, to be left behind while searching for the Zoom link for the next meeting. Still, such notes shape and demonstrate the pregnancy of hidden documents all around and within us. Potential data, potential potentiality.

In a situation of precarious working conditions and accelerating academic competition, the ever-increasing speed of CPUs and GPUs—regardless of the slowing down of Moore's law—and thus of parallel processing and digital multitasking motivates us to do all at once and at the same time until the server breaks down. Every waiting and emptiness to start pondering. This moment of interruption is hardly likely, though, since data centres mostly guarantee a minimum of 99,999 % uptime. A mere five minutes of downtime per year leaves little room for untethered thoughts.

Futures mostly come in tales of utopia or dystopia. The virtual university oscillates between the two and is fuelled by the tensions between them. A dystopian imaginary of a virtual university may include a call for efficiency that works with your fear of not being good enough, of being less than the always-on, always-conferencing other. As Bruno Latour notes, modernity is driven by the anxiety of missing-out, of being left behind, a mode that intensifies in more-than-modern worlds.²³ And then sometimes such ›FOMO‹ (fear of missing out) is moved to a space of as-if and transforms into an idea. We enter digitality through ›circuit existentialism‹,²⁴ an era of a nearly entangled kind of planetary kinship, beyond species, held together by data lineages, experiencing the necessity to switch off and be here, to become *ibilocal*, i.e. part of those who relate to and care for the space and place and their atmospheres and biospheres. The virtual university asks for experiencing our surroundings in the present, taking infrastructure walks, as we did together during the conference that was the starting point for this text, thinking about redesigning

22 Slobodian, Quinn (2023): *Crack-Up Capitalism. Market Radicals and the Dream of a World Without Democracy*, New York: Metropolitan Books.

23 Bruno Latour: *The Ultimate Interview of the Most Famous French Sociologist* (2022) (France, D: Camille de Chenay/Nicolas Truong).

24 Dippel: *Schaltkreisexistentialismus*, p. 179.

spaces, plant communities, stone, iron and rust. The virtual is not to be confused with the digital sphere. The utopia of the virtual university is a planetary-minded one, situated on a planet nestled or planted at the outskirts of the realm of Sagittarius A*, the black hole at the centre of our galaxy. Thus, doing and practicing the virtual university creates knowledge which forms and is forming, shapes connections and is connecting, allows for experiencing education that transforms, serves the awareness of communal beingness. It is a place of education (*Bildung*) for an individual that is a relational one and not a singular alone. The members of the virtual university engage in practicing, search for knowledge that is agential, and creates value beyond the economic principles of growth. Those who are doing virtual university seek to learn and teach self-reflection as well as empathy to create new forms of knowledge for new formations of life on planet earth. The virtual university is granting grace to what is there, for acknowledging heterogeneity and acting upon this experience accordingly, respecting creation(s) and being creative.²⁵

Re-ordering universities may induce new and unexpected topologies, new forms of dependencies, new and perhaps yet-to-be-described relations of exploitation, knowledge extractivism and accumulation. Where do all these take place; how do they relate to each other? What do they feel like? A virtual university appeals not only to virtues but also to senses. Where is the body in cyberspace? Cyberspace, no longer only the online but the physical not as a contrast to the cyber space—a new sensual situation.

Entangling both utopia and dystopia, the virtual university may leave a space for a diffracting mode of critique, generating productive conflict rather than fertilising a better model for a nepotistic academic system which mostly educates students as soon-to-be-minions at companies and start-ups, serving industries who understand education as training grounds for strong-acting and weak-minded market players. While the humanities and social sciences are engaged in critique, companies and other scientists develop technologies and objects that seduce people with never needed objects, while often numbing their taste and making them hungry for more. Turning away from the critique of concern²⁶ and perhaps even care,²⁷ a university with grace may emerge and relax both bodies and servers, thus offering moments of slow creativity²⁸ and collaboration across differences, benefitting from the heterogeneity of universities. Profit-oriented academics are right concerning one

25 Breil, Patrizia/Sprenger, Florian (2026): »Zur Virtuellen Universität«, in: Patrizia Breil/Florian Sprenger (eds.): *Virtuelle Universität. Geistes- und gesellschaftswissenschaftliche Zugänge*. Bielefeld: transcript, pp. 11–17.

26 Cf. Latour, Bruno (2004): »Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern«, in: *Critical Inquiry* 30, pp. 225–248.

27 Cf. Puig de la Bellacasa, María (2017): *Matters of Care. Speculative Ethics in More Than Human Worlds*, Minneapolis, MN: University of Minnesota Press.

28 Stengers, Isabelle (2018): *Another Science is Possible*, Cambridge: Polity Press.

point: It is good to think about the good²⁹ rather than to envision the bad. Experimenting with better futures may start within the institutions of universities themselves, considering the correlation between burned-out scientists and the burning planet, and between healthy bodies and a healthy planet. A virtual university may start by building an institution that is not driven by the digital but indeed by the virtual, carving out spaces for both healthy bodies and a healthy planet in the distributed situation that we have found ourselves in post-COVID.

We may think of speculability as defining the critique of the inherent need of western philosophy for a spectacular representation of knowledge combined with the critique of speculative ontologies, most prominently featured in statistical-stochastic approximation to truth via informatic means. It is considered part of political theory in the tradition of Hannah Arendt and Audre Lorde to put the critical analyst into the position of enabling for new modes of thinking within the current conditions that take hermeneutics and serendipity as inherent and serious to the matter.³⁰ The question that follows concerns the virtual architectures of knowledge themselves—how critique moves through them, how knowledge roots and flows within algorithmic conditions.

4. Virtual disciplines, or: how does one speak (truth) at virtual universities?

»I am rooted but I flow.«³¹ What does it mean for knowledge at virtual universities to both being rooted and flow? Is the river just a flow or can a river also be where one finds the roots for a pedagogy, at least?³² Is computation a form of rooting, or can it represent a flow? Is the generativity of Generative Artificial Intelligence (GenAI) also a flow, including its hallucinations hence glitches? Is artificially enhanced writing by

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- 29 cf. Mol, Annemarie (2008): *The logic of care. Health and the problem of patient choice*, London/New York: Routledge.
- 30 Arendt, Hannah (1958): *The Human Condition*, Chicago, IL: University of Chicago Press; Lorde, Audre (1984): *Sister Outsider: Essays and Speeches*, Trumansburg, NY: Crossing Press.
- 31 The quotation comes from: Woolf, Virginia (1931): *The Waves*, London: Hogarth Press. It has been famously mobilized by: Braidotti, Rosi (2002): *Metamorphoses. Towards a Materialist Theory of Becoming*, Cambridge: Polity Press. The link between Woolf and Braidotti, including the quotation, is discussed in: Adkins, Peter/Clemens, Ruth Alison/Ryan, Derek (2022): »Guest Editors' Introduction. Reading Braidotti / Reading Woolf«, in: *Comparative Critical Studies* 19:2, pp. 115–127.
- 32 Serres, Michel (1997): *The Troubadour of Knowledge*, Ann Arbor, MI: The University of Michigan Press. Serres, Michel (2015): *Thumbelina. The Culture and Technology of Millennials*, London/New York: Rowman & Littlefield International. Van der Tuin, Iris/Zuurmond, Anouk (2021): *Serres on Education*: William Temple Foundation.

academics still following the same flow as the one still rooted in the reclusive experience of solitary or the communal experience of co-laborative writing? Is GenAI rooting? Rooting and flowing, we may conclude, are no opposite movements. They are both transformative, matrixial and part of experiencing emergence as state of being. We can transpose this insight to what we think about a university: Are a university's roots its flowing disciplines?³³ Are a university's flows its habitual processes, for better or for worse? A university that is both rooted and flows also questions habitual definitions and practices of rooting and flowing. It does so through *argumentation*. And it needs language.

Will the virtual university be a place of the many languages or of a lingua franca? Artificially enhanced writing and reading call for precise argumentations. They need a wide range of diverse grammars to create the tempo-spatial movements of an argument that reflects the complexity of life. As a place of life and living, the virtual university serves as the infrastructure for these kinds of argumentation. The virtual university might be shattered by the return of pre-colonial worlds through large language models and the return of the necropolitical colonizer through informational economy.³⁴ But it is a living organism and thus exemplifies a new episteme, freeing the world from the Platonian cave and the constant gravitating towards Newtonian cages. The virtual university thus seeks to combine hermeneutical, anti-hermeneutical and non-hermeneutical methods, qualitative and quantitative reasonings, it attempts to attain sound argumentations.

Speaking thus of epistemology, how do virtual universities deal with truth? Under postmodern conditions, knowledge is said to have lost its seemingly natural connection to truth, becoming instead indebted to an economic teleology that aims at maximum efficiency.³⁵ In the era of digital reason, this method of optimising efficiency is increasingly being incorporated into the temporal logic of speed and

33 Klein, Julie Thompson (1993): »Blurring, Cracking, and Crossing. Permeation and the Fracturing of Discipline«, in: Ellen Messer-Davidow/David R. Shumway/David Sylvan (eds.), *Knowledges. Historical and Critical Studies in Disciplinarity*, Charlottesville, VA: University Press of Virginia, pp. 185–211. Weingart, Peter (2018): »Interdisciplinarity: The Paradoxical Discourse«, in: Id./Nico Stehr (eds.): *Practising Interdisciplinarity*, Toronto/Buffalo/London: University of Toronto Press, pp. 25–41.

34 For a striking filmic rendering of the historically determined entanglement of ICTs (Information and Communication Technologies) and AI-driven platforms, knowledge and information economies, and pre- and post-colonial relations, see *Ghostworkers* by researcher Claartje ter Hoeven and maker Lisette Olsthoorn: Olsthoorn, Lisette/Ter Hoeven, Claartje (2024): »Ghostworkers«, in: *lisetteolsthoorn.com*. Online: <https://www.lisetteolsthoorn.com/ghostworkers> (last access: 23.06.2025).

35 Lyotard, Jean-François (1984): *The Postmodern Condition. A Report on Knowledge*, Minneapolis, MN: University of Minnesota Press.

accessibility, i.e. the idea of »fast knowledge«.³⁶ Digital technologies enable large amounts of data to be processed and made available quickly. The expectation of constant access to information, supposedly independent of the individual, places new demands on universities and their employees. As knowledge administrators, academics merely function as a nexus for personal development by distributing symbolic knowledge attributes such as degrees and credit points. Once recognised as a key driver of innovation in the post-industrial era, theoretical knowledge has become an important currency for social change³⁷ and the accumulation of symbolic capital. In this knowledge-based society, the motive behind institutional knowledge production is not unconditional but rather focused on producing knowledge as a calculable, controllable resource that can be presented as credentials in CVs and funding proposals. This turns knowledge into a commodity and transforms the university into a factory.

Virtual universities are no such factories. Lecturers are not service providers, and excellence at the virtual university is not defined by marketability criteria. Knowledge at virtual universities is not bound by the concept of universal truth or any notion of an objective, context-free ›thing in itself‹. Taking a comfortable distance from ambitions of universalised truth or economic profit, the »situated knowledges«³⁸ generated in and through the virtual university painfully acknowledge the unknown, the not knowable and non-knowledge which is always other to any knowledge claim. Virtual universities work with and against the fluid ontology of truth. This stands in stark contrast to GenAI, which seemingly remains committed to a single, bodiless, universal truth. While ›on-site‹ warnings say that the specific GenAI *may* ›make mistakes‹ and that answers must be checked thoroughly, Ritzer et al. (2024) emphasise that a major problem could arise ›if people rely on knowledge ›generated‹ by AI and come to see it as accurate, even if it is not«.³⁹ However, as little as one important follow-up question is enough for GenAI to confess: it did not manage to produce an exact answer, it just guessed, reproduced or created text based on probabilities. When working with GenAI, another kind of knowledge enters university co-working practices and renders academics to take another matrixial rotation on the strips of their scientific production. At the same time the prompt becomes a site of situatedness: Individual intuitions and statistical arrays of knowledge called AI-Models are coming together to create meaning. Should then

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- 36 Peters, Michael A. (2015): »The University in the Epoch of Digital Reason. Fast Knowledge in the Circuits of Cybernetic Capitalism«, in: *Analysis and Metaphysics* 14, pp. 38–58.
 - 37 Bell, Daniel (1976): »Welcome to the post-industrial society«, in: *Physics Today* 29:2, pp. 46–49.
 - 38 Haraway, Donna J. (1988): »Situated Knowledges. The Science Question in Feminism and the Privilege of Partial Perspective«, in: *Feminist Studies* 14:3, pp. 575–599.
 - 39 Ritzer et al. (2024): »McDonaldization and Artificial Intelligence«, in: *Postdigital Science and Education* 6:12, pp. 1320–1333, here p. 1323.

not only text but additionally prompts be what is published and exchanged, made observable as the sites where knowledge is being negotiated? Argumentation needs lines to follow, but if we engage in dialogue with LLMs (large language models), we need to set up other traces for readers, too. Most importantly: The virtual university should stay a place where writing and reading are a happy place, a place of creativity, with or without GenAI, thus understanding virtual universities knowledge to be situated, i.e. intertwined with the specific socio-historic conditions of its (re)production.⁴⁰ Any knowledge can only be related to some-things, some-where,⁴¹ just as much as it is necessarily entangled with, dependent on and indebted to the non-knowledge of no-thing and no-where. This tension generates virtual knowledge that is both observable and performative while speculative and as-if. Aside from the demand for economically lucrative knowledge or AI-generated non-knowledge, the virtual university, itself being situated, is bound to oscillate between synaesthetics and proximity. This way it is able to simultaneously counter and engage with an age where truth is questioned. Synaesthetics facilitate the virtual university's ability to speculate and to envision the as-if,⁴² while proximity situates and roots university endeavours in its own institution. It works with its own proximities, which means across administration, research and studies; on campus and within the realms of its infrastructure. It leaves behind the idea that administration is neutral and working in the background and turns administration itself into a research object.⁴³ The synaesthetics of virtual universities call for new imaginations and the envisioning of practices, values and rules through experiences, sound, atmospheres, colours; it is a call for »dreaming out loud while already engaging in a profession of faith«.⁴⁴

40 Haraway: *Situated Knowledges*, pp. 575–599.

41 cf. Haraway, Donna J. (2016): *Staying with the Trouble. Making Kin in the Chthulucene*, Durham, NC: Duke University Press

42 Derrida, Jaques (2002): »The future of the profession or the university without condition (thanks to the »Humanities«, what could take place tomorrow)«, in: Tom Cohen (ed.), *Jaques Derrida and the Humanities. A Critical Reader*, Cambridge et al.: Cambridge University Press, pp. 24–57.

43 Sørensen, Estrid (2026): »Die Als-ob, die Langsame und die Planetare Universität: Drei Formen möglicher Universitäten«, in: Patrizia Breil/Florian Sprenger (eds.): *Virtuelle Universität. Geistes- und gesellschaftswissenschaftliche Zugänge*, Bielefeld: transcript, pp. 493–500.

44 Derrida: *The future of the profession or the university without condition*, p. 35. The need for new imaginings at the virtual university, possibly, here, as a follow-up of the GenAI academy, mirrors Alfred North Whitehead's call for imaginative methods at the brand new Harvard business school, when he said that »the proper function of a university is the imaginative acquisition of knowledge« (Whitehead, Alfred North (1929): *The Aims of Education and Other Essays*, New York: The Macmillan Company). Similarly Lyotard, when he found himself confronted with good-old ICTs with fast copying capabilities, argued as follows: »Given equal competence (no longer in the acquisition of knowledge, but in its production), what extra performativity depends on in the final analysis is ›imagination‹, which allows one either to

Virtual universities are faithful in their loyalty to knowledge, albeit counteracting relativist or universalist notions by means of situatedness and imagination. The virtual university to be dreamt of is an »optimistic university« that rethinks university into the future.⁴⁵ As such, it envisages future universities based on its current situation; its speculations are rooted in its lifeworld while projecting the as-if and the »not yet«. While addressing pressing issues of our time and reflecting on its own situatedness, the virtual university shifts social epistemological demands away from universal claims towards a future-oriented kind of university that remains situated; born in the mode of as-if, and operating as both a performance and a speculation.

5. Virtual universities, why now?

Virtual universities are maybe the core infrastructures to imagine in an age when truth is in question; it calls for synaesthetic and proximities—physically as much as in the so-called cyberspace. The pandemic—a planetary horror—gave a big push towards virtual universities, it allowed for normalizing the use of ICTs, it loosened the grip of print on administration, it calls for new modes of communication and teaching, new ways of getting-together. We will need a de-centred university that is creating, administering, teaching and researching on platforms that belong to ourselves, that protect researchers and those who are researched (human and non-human). This infrastructure can be built with the help of AI, but it should not serve AI or LLMs as a marketplace. This virtual university needs to be built and develop an alternative capital theory, a theory that gracefully attributes gift-values in addition and/or in contrast to the existing logics of valorisation.

Universities are part of and exposed to market forces, at the same time what they are seeking is exempt from an unbound digital market economy. To escape the binding of market powers, the virtual university requires us to do the right politics and imagine the right constitution(s). It calls for exploring norms and laws, systems and the critique of those. It treats the knowledge taught and researched at the university with grace. It asks to care for and protect us, our communities and our surroundings in a planetary collective, to not only research those »outside« the university. Universities have always been nuclei for new theories, ideas and methods, they have always been trans-generational and even trans-species places: Now, as university is becoming a place for those escaping powers, we need to protect it from the pursuit of de-naturalizing conditions of (self)-alienation. The virtual university is a place of

make a new move or change the rules of the game.« (Lyotard, *The Postmodern Condition*, p. 52).

45 Barnett, Ronald/Bengtson, Søren (2017): »Universities and Epistemology. From a Dissolution of Knowledge to the Emergence of a New Thinking«, in: *Education Sciences* 7:1.

inspiration and invites others beyond institutional boundaries to experience with grace for all that is and to create with respect for everything that has been and will be. The virtual university might be not a safe space, but it can be a caring base for today and also for the day after tomorrow.

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Fig. 1: Calabi-Yau Manifold. Source: Floriang (2011): »Ein Schnitt durch eine Calabi-Yau, die Quintik«, in: [wikipedia.org](https://de.wikipedia.org/wiki/Calabi-Yau-Mannigfaltigkeit#/media/Datei:Quintic_1.png) (03.02.2011). Online: https://de.wikipedia.org/wiki/Calabi-Yau-Mannigfaltigkeit#/media/Datei:Quintic_1.png (last access: 02.07.2025).