

Researching and Reshaping Human-thing Constellations

Neo-material Thinking as a Principle for Teaching in the Arts

Annemarie Hahn

In this article I propose a teaching sequence in which the idea is to observe one's own placement within different human-human and human-thing constellations in order to better understand how we act and interact, how we include and exclude. These already multileveled constellations have become even more complex since the Internet. Thinking digital culture and inclusion together has been a particular concern throughout my research. I am interested in taking a closer look at current societal conditions in order to conceptualize more inclusive art-educational approaches. This means not only considering the conditions of human actors, but also paying attention to material and spatial ones as well as the media-cultural conditions that determine collective agency. The aim is to produce less exclusion of single actors and thus to achieve a more strongly developed educational justice. Against this backdrop, I raise the following questions in relation to an art-pedagogical practice that seeks to recognize and generate social and material entanglements with an exploratory gaze: Who is actually connected to whom and with what, and in what way? What influences our everyday actions? Who has what capacity to act under what circumstances? And who or what is it that actually acts?

With these questions I try to understand what mechanisms of inclusion and exclusion are involved in social structures and materialized

practices in art education. This approach will probably lead to the necessity of reconceptualizing subjectivity, in its usual understanding as an individual entity in the context of digital culture and inclusion.

Contemporary art education could be about relating oneself to people, things, and social structures, learning to see one's own privileges and capacities to act, and using this knowledge to become competent to act in an aesthetic and political sense, oriented towards the future. However, art-educational theory and practices – at least in the German-speaking discourse – still often focus on the education of singular subjectivities, especially when it comes to art education in lower grades as the primary school, but also in higher education.

This focus is notable insofar as a shift in subject positions has been apparent in creative and artistic fields for some time. It is a shift from the singular subject to networks of human and non-human actors, as described, for example, in actor-network theory since the late 1980s,¹ or with a stronger political and feminist agenda in neo-materialist approaches, such as Karen Barad's agential realism². These developments are also present in the visual arts, both in production and distribution and the discourses associated with them. The 9th Berlin Biennale in 2016, curated by the DIS Collective, is probably particularly relevant to this, but so is Documenta fifteen in 2022 with its decided focus on collectivity. A re-location of the subject and its agency can also be seen in certain approaches in educational science and dis/ability studies³. The network character of digital cultures is, as I will illustrate in the course of this text, at least an amplifier, if not a trigger of today's societal human-thing constellations.

Researching and reshaping human-thing constellations

The task proposed in this article attempts to make one's situatedness visible in the sense of Donna Haraway⁴ in order to enable reflection on positioning and the social, cultural and historical influences on one's own thinking and acting. Against the backdrop of digital cultures and thus constantly changing human and non-human actors, this task aims to

better understand and thus potentially realize the conditions of current inclusive cultures. Why and how digital culture and inclusion are inter-related will become clear in the following by illustrating current cultural practices and also why the recognition of the interconnectedness of human and non-human actors is central to this.

For art-educational teaching, I consider it an important starting point to examine and reflect on the conditions under which existing spaces of action have emerged and new spaces of action, that is, the building of access⁵ in the sense of questioning all social forms of inclusion and exclusion mechanisms, can be created. Connections between different human actors come into play, but also spatial and material actors, also in their interconnectedness through more or less visible digital infrastructures.

To address this aspect in school contexts, I have developed a teaching sequence, which was experimented at the symposium “Teaching artistic strategies” in May 2022 at HGK Basel. It is intended to encourage an examination of the influence that all manner of things have on human action in general and aesthetic action in particular. It provides clear directions for groups to explore these relationships collaboratively and to develop speculative future scenarios against the backdrop of digital culture and gives brief instructions on how to examine who is involved in what constellations. The purpose is to understand what mechanisms of inclusion and exclusion are involved in social structures and materialized practices. The teaching sequence consists of three parts that build on each other and can be designed to be of varying length or short duration. I plan it for either a whole workshop day, or for 3 double lessons that are not too far apart in time. Other adaptations are of course imaginable.

The first exercise is about raising awareness about the ubiquity of digital culture in the sense of Stalder. In the second exercise, observations on the interactions of human, spatial and material actors will be made on the basis of various concepts and very different approaches. Finally, in exercise 3, small groups will work on future scenarios based on the concepts developed in the second part.

Exercise 1: Digital entanglements

We live in a digital condition. I borrow this term from Felix Stalder,⁶ who in 2016 described how our culture, our politics and our everyday life are shaped by the digital. In his conception, digitality is not a term used for any kind of digital tool, be it hardware, apps or the Internet in its physical dimension. Rather, digitality is a cultural dimension shaped by digital infrastructures. The digital condition is mainly observable in three characteristic forms: referentiality, communality and underlying algorithms.

By *referentiality*, Stalder means the use of existing cultural expressions for the production of new ones, as a method by which individuals can inscribe themselves in cultural processes and constitute themselves as producers.⁷ In a way, this can also be said historically about different longer existing forms of cultural production, but with the Internet, the amount of accessibility has increased so much that more people are involved in cultural production globally and simultaneously. So, what we are talking about here is a new quality of referentiality. *Communality* is understood as a new form of coming together, namely as associations of people who exchange and produce new knowledge and action through informal but structured exchanges and are held together by the common interpretation of their own practice. According to Stalder, these communities form the actual subjects that produce culture in the sense of shared meaning.⁸ Finally the aspect of *underlying algorithms* describes what is probably the largest and at the same time the most difficult aspect of digital culture to observe. It sorts the amount of existing data into accessible information. Under conditions of big data, we would be blind without algorithms.⁹ But this sorting is also never neutral and thus carries biases with it, which in turn structure society. What Stalder describes is that cultural action today is always based on logics of networking, which are significantly shaped by the Internet. Klein et al. very adequately describe the Internet as the ubiquitous infrastructure of our reality.¹⁰

This infrastructure, which shapes our reality, in turn has a significant impact on our understanding of subjectivity. The way in which people can act in society is conditioned by the respective media infrastructure

and also the way in which they are situated as individual or collective actors. Jörissen and Meyer state in 2015 that changes in mediality lead to changes in subjectivity and thus, with recourse to Luhmann, make clear the influence of the leading media on societies and their subjects.¹¹ This leads me, with Herlitz and Zahn, to the assumption that with the new structural characteristics that emerge in digital cultures, the classical constructions of subjectivity can no longer be described.¹²

This demonstrates the necessity of understanding and describing subjectivity against the framework of changing media cultures.

The ubiquity of digital culture is the aspect that the first part of the teaching proposal offered here goes on to address.

As described above, digital culture is not bound to tools, but is a condition of our culture, even if this is not always visible. This first exercise is about identifying the underlying digital infrastructure in everyday activities. For this, I propose three levels of reflection because it is likely that the less visible or less direct effects of digital culture will only become apparent by looking more closely.

In their introduction to *Post-Internet-Arts Education*, Klein et al., referencing artist Hito Steyerl¹³, describe the impact of digital culture on realities that were once non-digital as follows:

“Now, however, the internet has also left the screen: Every image we upload can come back as a like or an annoyance with implications for life offline. The seemingly absurd thing about this is that you don't have to be online yourself to experience the effects of a shitstorm first-hand. But even a love found online can very well transfer into the physical.”¹⁴

This example shows that the binary opposition of analogue and digital is insufficient in many cases. For the first part of the task, you need index cards, pens and tape and about half an hour's time. The specific task I propose is the following:

Take some time to observe yourself closely in your present environment. Move around while observing, look out the window, look at the other people here.

What is influenced by digital culture and what is not? Write each of your observations on a card and pin it on the wall.

The next step is to continue this observation in the surroundings. I suggest a silent walk. This walk is designed to challenge preconceptions through observation. For example, if students note in the first step that writing a letter is not digital, they might see on the walk that paper suppliers deliver their goods to paper merchants who have ordered on the Internet, or that postmen use digital devices to record the delivery of mail, or that the idea of writing a letter instead of an email could be an active counter-design to email.

The concrete task for this would be:

Take a half-hour walk in the environment. Try to do this without talking to other people. Observe what is digitally influenced and what is not. Take notes.

In a third step, the observations from the walk are compared with the terms from the first round and discussed in plenary.

Look at your observations from the walk and check whether the terms you wrote down in the first step are still correct. You can now change or add to them.

Exercise 2: Intra-actions of human, spatial and material actors

The sensitization to digital cultures and their influence on everyday actions is now to be applied to the situation within material and human actors. I consider this link relevant, because on the one hand the omnipresence of digital culture is still not sufficiently thought of in material terms, and at the same time intrasubjective interconnectedness is reinforced by the digital, even though it would be observable in its absence.

Nevertheless, alongside arts education, there are theories that we can use to address this problem. I propose using neo-materialist

approaches as a perspective, especially since they allow us to look at human actors in interweaving with other human and material actors. Neo-materialist approaches offer a changed relationship between humans and things by negating a fundamental separation of human and non-human actors and thus questioning the supposed ontological and epistemological distinction that defines humans as something other or even superior.¹⁵ However, they do not explicitly deal with media-technological questions and thus also not with their effects on societies, which means that their theses are not per se bound to digital conditions. It seems to me, though, that it is not surprising that neo-materialist theories are now becoming more popular, especially since the traditional attributions of the autonomous subject are being challenged under digital conditions. Social processes can be described more precisely with human-human and human-thing relatedness. In which connection is who to whom and through what? Which material actors ensure that social togetherness functions? What would a dinner be like with a table that seats too few people? Or what would a school timetable be like without the invention and existence of clocks? Digital-technological networks embed human relations into even more complex structures and thus into multi-layered processes of participation, which make the idea of an individual subject separated from the world and things, as explicitly questioned in neo-materialist approaches, less likely.

Karen Barad's approach of *Agential realism* does not look at individual actors, but at *phenomena*. The concept of phenomenon is used differently by Barad than, for example, in the traditions of the humanities, such as phenomenology¹⁶. Phenomena are understood as the smallest ontological unit, which do not consist of independent objects with predetermined boundaries and properties. They are, as Barad describes it, "ontologically primitive relations" because their relations do not exist before the relation but are only brought about by it¹⁷. Since the relations do not arise before but in the phenomenon, presuppositions only arise in the phenomenon and are therefore not causal, i.e. not a before-and-after or if-then relationship, but are to be understood as processual and can be reflected upon as such. For Barad, these processes are not to be understood as interactions of two or more entities that are originally separate

from each other. She invents the term *intra-action* to make it clear that the entities only emerge from the process.¹⁸

Describing phenomena in this sense, i.e. looking precisely at the respective processes in which humans are repeatedly interwoven with things, situations, spaces, other humans, etc., is the starting point of this second exercise.

The leading question is now about examining ones specific situatedness and trying to make visible the constellations in which one is interwoven in the present moment. The leading question for that part is:

Which humans and which things and which human-thing constellations lead to our being included in this current situation against the backdrop of digital culture today?

To approach this question the students are given various observation tasks that sensitize them to the socio-material conditions that they are embedded in. These observations are documented with different materials and media and will be used to be worked on further in future scenarios in the third part of this teaching sequence.

I propose to offer observation tasks concerning different aspects of cultural and community life. In the following you find my selection of tasks on the topics *Ability, Language, Being here, Room, Un/visibility, Clothes, Safety and Weather*. It is important when working on the assignments to ensure that the students give their information on a completely voluntary basis in a safe space.

ABILITY: Which paths have you already taken today? Which ones are you planning to do? Think about your bodily condition. Which paths were easy to take, where did you have difficulties, where did you perhaps even take a diversion?

Draw a map on the paper provided and mark where things were easy and where they were not easy.

LANGUAGE: Imagine, you were not able to speak and understand the English or German language. Which of your actions today would you have needed help with? How would you have claimed it? Write

down, as precisely as possible, each of the aspects that come to mind on a separate card.

#BEING HERE: You are here today and not elsewhere. Why is that? Write on one card 5 reasons that have brought you here. Then cross out one reason that you wish had led you somewhere else.

#ROOM: Take some time to observe the room. What do you like, what not? What furniture, light situation, wall structure, room dimensions, etc. helps you, to be in the situation, which not? Make a sketch.

#IN/VISIBILITY: In which situation today did you feel more exposure than you would have liked to? In which one would you like to have been more visible? Write a micro-screenplay on a sheet of paper that reverses the situation.

#SAFETY: Safety is a very important feeling for acting. Do you feel safe? If yes, try to formulate what led to that feeling. If you don't feel safe, try to explain why that is. Use the cards to explain your thoughts.

#WEATHER: How has today's weather influenced your present situation? Try to understand as precisely as possible your current situation in relation to the weather. Use the cards to explain your thoughts.

#COLLABORATION: Who or what has helped you with something today?

Gather all the people and things that have helped you today around a table. What would you like to eat with them? Write a recipe.

#ELECTRICITY: How many electric plugs have you already used today?

Draw the invisible power lines between them on the attached paper.

#SOUND: Try to focus on your auditory sense. How does it sound right now? Does it sound pleasant?

What song comes to mind? Write the title, the notes or the first lyric line on a card.

#HUGGING: Did you want to hug someone today? Did you? Write a short poem on a card.

Exercise 3: How to imagine a less exclusive future

In the last step of the teaching proposal, the materials created are to be critically questioned in terms of discrimination, with the aim of uncovering adjusting screws for potential futures. Which aspects of the specific situation contain which mechanisms of power and thus of inclusion and exclusion? The task is now to develop future scenarios on the basis of the research in order to imagine and potentially realize new and expanded access strategies. This is where thinking about digital culture and neo-materialist approaches come together with inclusive thinking.

Inclusion is often associated with the demand to enable educational justice for each individual. In educational contexts, inclusion aims to teach different individual subjects together without discrimination. This demand is at odds with the current education systems, which are permeated by notions of normativity and thus by excluding mechanisms. However, inclusion does not necessarily mean that individuals, in a normative sense, have to improve their abilities in order to better participate in society. It could also be understood to mean that social structures expand so that prevailing notions of normativity are invalidated. It is not the individual actors who need to transform, but the barriers that create inclusion and exclusion. We are therefore confronted with structural challenges.¹⁹

I follow a broad concept of inclusion that takes into account the structural dimensions, as discussed in cultural dis/ability studies²⁰, also from a power-sensitive perspective²¹. This shifts the focus: away from the individual subject of support, towards structural characteristics of discrimination²². With Mai Ahn Boger, I understand inclusion as a synonym for differential justice, with which theories critical of sexism, racism, ableism and classism are negotiated together.²³ Inclusion is thus not a field concerned only with the inclusion and exclusion of people with disabilities, but with any form of exclusion based on difference-based criteria. Understanding inclusion beyond subject orientation and conceptions of individuality enables a broader view of the diverse entanglements of people, things, spaces and technologies.

This method is inspired by design thinking²⁴ approaches. The aim is not to predict the future or to produce forecasts in any form. Rather, it is about imagining possible futures in order to identify the variables that can be worked on at present. The point is not to formulate concrete visions. This is because visions regularly project an ideal image of society into an uncertain tomorrow and thus claim interpretive sovereignty over the many development possibilities that the future holds. Scenarios are more plural and optional, i.e. much more vague. But they are also more flexible and adaptable to events that we cannot predict today.²⁵ This understanding follows Elena Esposito's description when she writes that although the future is never present, it only exists in the present, as its projection. "When we talk about the future, we are actually always talking about the present: its way of dealing with the existing possibilities, its openness and its limitations. Every present has its future, from which what is real at a later time is developed."²⁶ We cannot know at present what the present will be in the future. But we can invent as many scenarios as possible about how the future could be in order to influence it from the present – knowing that this remains an uncertain undertaking. In the last part of this teaching, the students will work on such scenarios for a more inclusive future on the basis of the concepts worked on beforehand, in order to make them imaginable. These future scenarios can only be partial and never consider all aspects that the future will bring. But they can help to develop ideas of potential futures in order to have an impact on them at certain points.

Think about how the situations described could be a little less exclusive. Build a scenario for the year 2045 with whatever material you have. Think big. Everything is possible for now.

An alternative approach would be to map the different results of the students. It would be conceivable to draw a map of the different human-thing constellations. Such a map would certainly not be comprehensive, but it could lead to intriguing discussions. Certainly, the various intra-actions in Barad's sense, i.e. how reality is the coexistence of humans and things, would become clear.

Either way, both conflation can lead to understanding or at least imagining the respective situatedness beyond the idea of singular subjectivity. This in turn could lead to students getting an idea of the degree to which their actions happen with and through things. And that, speculating further into the future, can lead to understanding the conditions under which people can act as they do, or not. Subjectivity would then no longer be bound only to bodies, but to bodies, things and circumstances.

What has to be done next

The teaching proposal “Researching and reshaping human-thing constellations” was tested for the first time among teachers of art education at the symposium Teaching Artistic Strategies at the HGK Basel and then tested and further developed with students of the HKB Bern and the Akademie der Künste Wien. I assume that the majority of the tasks can also be carried out with younger students. It has not yet been practised with people explicitly affected by discrimination. Before I do this, I ask affected persons and experts for advice.

The teaching proposal is intended to contribute to opening up an exploratory space with art teaching activities in which inclusive futures, i.e. a higher degree of differential justice, can first be imagined, in the optimistic belief that imagined futures hold potentials for influencing the future in the present. The focus is explicitly not on the development of the individual, but on the shaping of actor constellations in which human and material actors play a role against the backdrop of digital culture. The aim is to understand, on the basis of the students’ everyday life and through close observation, who is in fact connected to whom and to what and in what way? What influences our everyday actions? Who has what capacity to act under what circumstances? And who or what is it that actually acts?

Although this proposal provides very concrete steps to design a teaching sequence or workshop, this can only be a small aspect of working on issues of inclusion and digitality in the context of school and higher education. This assignment focuses on the present with the aim

of acting into the future, neglecting historical components that are also important to understand how power mechanisms within educational systems have emerged and become so entrenched that they seem largely natural.

What would be desirable is a set of teaching proposals that, at different levels, aim to explore and understand current realities with the aim of shaping possible less exclusive futures.

Notes

- 1 Latour, Bruno: Eine neue Soziologie für eine neue Gesellschaft. Einführung in die Akteur-Netzwerk-Theorie. Frankfurt am Main: Suhrkamp, 2014.
- 2 Barad, Karen: Agentieller Realismus. Über die Bedeutung materiell-diskursiver Praktiken. Unsel 45. Berlin: Suhrkamp, 2012.
- 3 Berressem, Hanjo; Ingwersen, Moritz and Waldschmidt, Anne: “Foreword: Culture – Theory – Disability”. In Hanjo Berressem, Moritz Ingwersen, und Anne Waldschmidt (Eds.). *Culture – Theory – Disability. Encounters between Disability Studies and Cultural Studies*, Bielefeld: transcript Verlag, 2017. p. 11–15.
- 4 Haraway, Donna J.: *Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective*. *Feminist studies*, 1988.
- 5 Hamraie, Aimie: “Universal Design Research as a New Materialist Practice”. *Disability Studies Quarterly* 32 (2012). <https://dsq-sds.org/article/view/3246/3185>.
- 6 Stalder, Felix: *Kultur der Digitalität*. 2. Auflage. Berlin: Suhrkamp, 2016.
- 7 Stalder: p. 95.
- 8 Stalder, Felix: “Grundformen der Digitalität”. *agora42* 2/2017 (2017). <https://agora42.de/grundformen-der-digitalitaet-felix-stalder/>.
- 9 Stalder: *Kultur der Digitalität*, p. 13.
- 10 Klein, Kristin; Kolb, Gila; Meyer, Torsten; Schütze, Konstanze; und Zahn, Manuel: “Einführung: Post-Internet Arts Education”. *Zeit-*

- schrift Kunst Medien Bildung, 2020. <https://zkmb.de/einfuehrung-post-internet-arts-education/>. Accessed, April 8 2024.
- 11 Meyer, Torsten and Jörissen, Benjamin: "Subjekt, Medium, Bildung – Vorwort", In Torsten Meyer und Benjamin Jörissen (Ed.), *Subjekt, Medium, Bildung*. Wiesbaden: Springer VS, 2015. <https://doi.org/10.1007/978-3-531-18905-5>. p. 7.
 - 12 Herlitz, Lea & Zahn, Manuel: "Bildungstheoretische Potentiale postdigitaler Ästhetiken – Eine methodologische Annäherung". *Kulturelle Bildung online*, 2019. <https://www.kubi-online.de/artikel/bildungstheoretische-potentiale-postdigitaler-aesthetiken-met-hodologische-annaeherung> Accessed, April 8 2024.
 - 13 Steyerl, Hito: "Too Much World: Is The Internet Dead?" *e-flux journal*, o. J. <http://www.e-flux.com/journal/49/60004/too-much-world-is-the-internet-dead/>.
 - 14 Klein et al.: "Einführung: Post-Internet Arts Education". Author's translation
 - 15 Barad: *Agentieller Realismus. Über die Bedeutung materiell-diskursiver Praktiken*.
 - 16 Barad's concept of phenomenon does not demarcate phenomena from noumena, rather she places phenomenon at a different point in the constitution of reality. "Reality is not composed of things-in-itself or of things-behind-phenomena, but of things-in-phenomena." (Barad 2007: 140). Thus, in agential realism, the phenomenon is the smallest ontological unit, without pre-existing relations.
 - 17 Barad: *Agentieller Realismus. Über die Bedeutung materiell-diskursiver Praktiken*, p. 19.
 - 18 Hoppe, Katharina & Lemke, Thomas: "Die Macht der Materie Grundlagen und Grenzen des agentiellen Realismus von Karen Barad". *Soziale Welt* 66, Nr. 3 (2015): 261–80.
 - 19 Hahn, Annemarie: "Educating Things: Art Education Beyond the Individual in the Post-Digital". 225–38, 2021. In Tavin, K., Kolb, G., Tervo, J. (eds) *Post-Digital, Post-Internet Art and Education*. Palgrave Studies in Educational Futures. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-73770-2_13.

- 20 Schillmeier, Michael: *Rethinking Disability: Bodies, Senses, and Things* New York: Routledge, 2010; Waldschmidt, Anne. "Disability Goes Cultural: The Cultural Model of Disability as an Analytical Tool" In Anne Waldschmidt, Hanjo Berressem and Moritz Ingwersen (eds.) *Culture – Theory – Disability: Encounters between Disability Studies and Cultural Studies*, pp19-28. Bielefeld: transcript Verlag, 2017. <https://doi.org/10.1515/9783839425336-003>.
- 21 Boger, Mai-Anh: "Theorien der Inklusion – eine Übersicht". *Zeitschrift für Inklusion-online.net* 1 (2017). <https://www.inklusion-online.net/index.php/inklusion-online/article/view/413/317>. Accessed, April 8 2024.
- 22 Hinz, Andreas: "Von der Integration zur Inklusion – terminologisches Spiel oder konzeptionelle Weiterentwicklung?" *Zeitschrift für Heilpädagogik* 53 (2002): 354–61.
- 23 Boger: "Theorien der Inklusion – eine Übersicht".
- 24 Plattner, Hasso; Meinel, Christoph and Weinberg, Ulrich: *Design thinking: Innovation lernen – Ideenwelten öffnen*. Design thinking: Innovation lernen – Ideenwelten öffnen. mi, 2009.
- 25 raumtaktik – office from a better future, "Urban Futures Szenarium 2050 – Szenarien für die Zukunft der Städte Europas", p. 11. https://www.stiftung-nv.de/sites/default/files/052011_urbanfutures_2050_300dpi.pdf.
- 26 Esposito, Elena: "Realität der Zukunft und künftige Realität", In *Die Gegenwart der Zukunft*, herausgegeben von Susanne Witzgall und Kerstin Stakemeier, 29–35. Zürich/Berlin: diaphanes, 2016. p. 29. Author's translation.

