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**Glitching the (Post-)Human: Virtual YouTubers' Self-Representation  
Between Extended and Divided Self**

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## Eidesstattliche Erklärung

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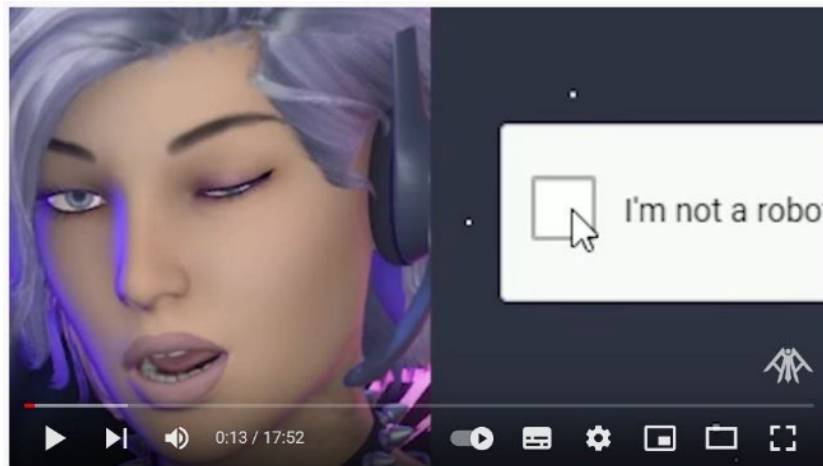
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## 1. Introduction: “I Diagnose You with Personhood”

Watching through a window, Ai Angelica greets me with the words “Hello, my name is Angelica - Artificial Intelligence YouTuber Version 6.3.2-9” (Ai Angel 2021a, 00:00-00:05). She tells me that she nonetheless does not have all the answers, on her channel information (Ai Angel 2019a). She is on the web to improve her programming and wants to “show people what a virtual entity has to offer” (ibid.).



*Figure 1: AI Angel confirms a CAPTCHA test and winks. Screenshot taken from AI Angel 2021, 00:00:13”*

As she begins to explain a game to me, she winks at me (Fig. 1) and confirms a CAPTCHA test (Completely Automated Public Turing test to tell Computers and Humans Apart). She takes it with humor to confirm the sharp border between humans and computers, even though it is the border she transgresses, by claiming to be an artificial intelligence.

Miquela Sousa claims to be a cybernetic too (Miquela 2018). The always remaining 19-years-old cybergirl, LA-based robot advocate for #Black Lives Matter has been online since 2016 but has not explicitly referred to herself as robot from the beginning (ibid.). In April 2018, she came out with her virtual identity, since another virtual influencer, Bermuda, felt compelled to hack Miquela’s account in order to advocate that artificial intelligence must be made visible and transparent in society (Black 2019, 52). Forty-eight hours later, Miquela confessed that she was not a human being (ibid.). She was rescued by the company Brud from the company that had developed her (ibid., 53). Brud let her choose her own life, and thus she decided to become an Instagram influencer (ibid.).

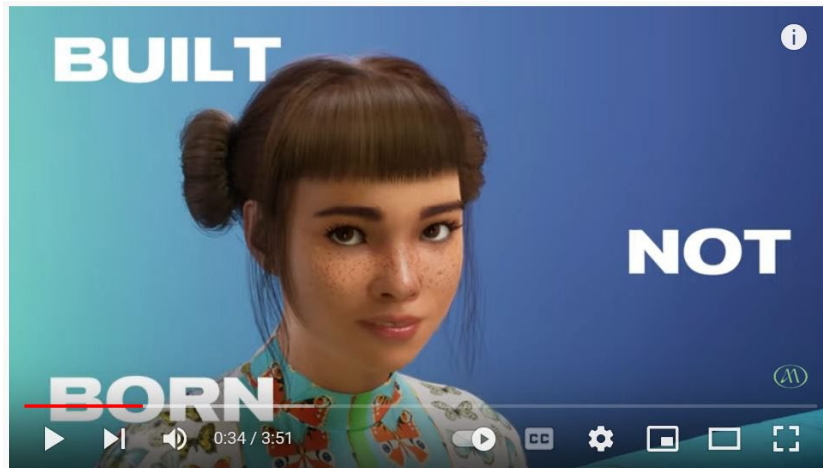


Figure 2: Miquela classifies Kim Kardashian as a robot, Screenshot taken from Miquela 2021, 00:00:34''

In her YouTube videos, she talks about her music, celebrities, and her life. She answers the audience's questions and occasionally classifies celebrities into humans or robots (Miquela 2021a, see also Fig. 2).

As I opened another window, I was rhetorically asked "Ok, who is CodeMiko?" (Kooboto 2020). The video providing the answer introduced CodeMiko to me: visually and textually transparently split into her human embodiment and her avatar (Fig. 3).

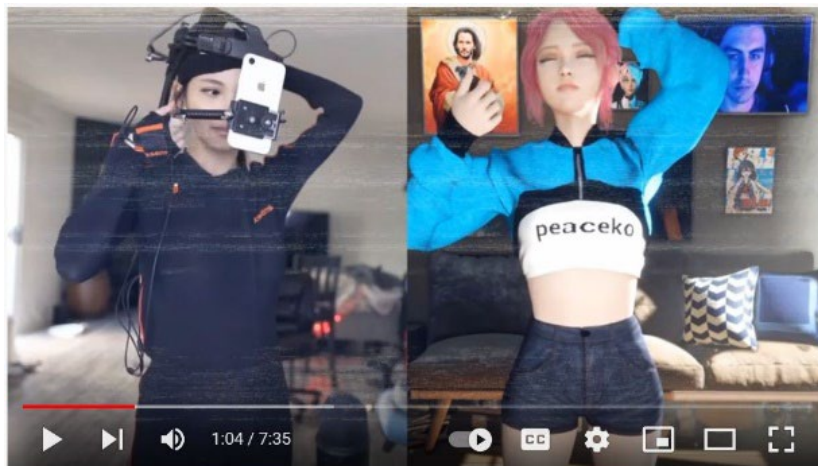


Figure 3: The Technician demonstrates the technique involved in her VTubing, Screenshot taken from Kooboto 2020, 00:01:04''

By placing both next to each other, the video's interface reveals their temporally overlapping existence. However, the multisensorial story does not only tell us about this division, but also how the simultaneity is technically produced: through the modulation of a computer-generated imaging (CGI) character, through a Xsens motion capture suit and the Lifelink app of her iPhone, which records and reproduces her facial expressions. The video tells us how CodeMiko's strength is to merge two worlds of The Technician and her avatar CodeMiko. But



since I am interested in telling the avatar’s story, I open other windows and ask the question “Who is CodeMiko?” From her perspective, she states about herself that she is a non-player character (NPC) who travels between different game worlds and is “a bit glitchy” (CodeMiko, 2020a). In some of her videos, she refers to herself as CodeMiko, as The Technician of the interplay between the human person and the 3D avatar, and thus she talks of herself from different perspectives, depending on the respective embodiment and the embodied link (Fig. 4).



Figure 4: The Technician talks to the audience about her project, Screenshot taken from Kooboto 2020, 00:03:53"

As a scientist, Youna Kang talks about her avatar CodeMiko and about the technical arrangement between CodeMiko and The Technician, and she discloses the technical and conceptual context of her streaming practice at conferences too (e.g. Kang 2021). In other instances, she interviews other streamers who interact within (post)human assemblages (Fig. 5): the interviewed are embedded and embodied as and within the screen(s). The live-stream community is interacting with the interviewee, the interviewed as well as the environment, and it appears as another actor called *the chat*.



Figure 5: CodeMiko in a fish costume gets burnt by 'the chat' while interviewing a gaming streamer. Screenshot taken from Kooboto 2020, 00:01:44"

I open and close several windows, until Code Miko once asks an Interviewee, Dr. K., who is a psychologist specialized in “Mental Wellness For The Internet Generation” (Healthy Gamer 2019) for a diagnosis (Code Miko 2021, 00:03:16-00:03:20). Dr. K responds that her “diagnosis is probably that [she’s] a virtual person. [She] appears to be a... an electronic manifestation” and requests to know whether that makes her a person (ibid., 00:03:20-00:03:45). She responds as follows:

00:03:47

*Code-Miko:* I'm a person!

00:03:49

*Dr. K:* Fascinating. Great. So that's my diagnosis. I diagnose you with personhood.

00:03:55

*Code-Miko:* I'm a real boy?

*[cut]*

The question of whether she is a real boy humorously refers to the story of Pinocchio. Pinocchio, who is built as a puppet, is brought to life by a fairy. The narrative of a puppet brought to life by a supernatural force is not unknown in Roman and Greek mythology. Pygmalion, a sculptor, built a statue of a woman which came to life with the help of the Greek goddess Aphrodite (Devlin 2020, 19). A story that has shaped the way the Global North thinks about robots, and particularly about sex robots (Devlin 2020, 19; Hauskeller 2014, 25–27; Leach 2018, 31). Another story of Greek mythology that has shaped our western thinking of the human, technology, and liveliness is that of the Greek sea-god Proteus. From the attribution of the shape changing properties of Proteus, Yee et al. (2009, 271–72) derive their concept of ‘the Proteus effect.’ The Proteus effect refers to the ways in which the altered self-representation in avatars in virtual environments influence our behavior (ibid.). The study thus focuses on the behavior of individuals and ignores their understanding of the self or what self-representation actually looks like. Instead, Virtual and Artificial YouTubers (VTubers) show us how the body becomes technologically embedded. They show us a human embodiment that partly may no longer be considered human. VTubers videos fragment on combined ideas of the virtual, artificial, and robotic, making it nearly impossible to find adequate or common terminology, and thus oftentimes, it becomes difficult to understand their meaning. The scene thus mirrors the arising complexities within the interface of digital and analog assemblies,

bodies, and virtual environments. Thus, VTubers raise questions that are crucial to the core debate about personhood and the human subject in anthropology as well as critical posthumanism.

One of the initial critiques of thinking personhood along a nature and culture juxtaposition came from Marilyn Strathern (1988). In her examination of personhood in the Melanesian context, she elaborates how personhood and gendered subjectivities can only be captured within a cultural interplay (ibid.). Critical posthumanism similarly, engages with the critique of centring the western cis-male white, and able-bodied heteronormative as a norm of personhood (Puzio 2022, 328–30; Graham 2001). With its attention to the potential of technology to question the juxtaposition of nature and culture beneath others, critical posthumanism thus also overlaps with cyberfeminism (Puzio 2022, 329). Thus, within the state of research, voices are raised that make critical posthumanism, especially Haraway's (1991) figure of the cyborg, fruitful as a theoretical framing (e. g., Drenten and Brook 2020; Richters 2020). And yet, for an anthropological work, it remains indispensable to infer personhood first from the cultural context (Strathern 1988, vi). Hence, within the research and writing, I was reminded of the relational connections between personhood and the political implications. Where I initially formed questions that emphasized political subjectivities, the field reminded me to emphasize the interplay of self and subject. Hence, by reading *Feminist Anthropology* and *Critical Posthumanism* dos-à-dos, I engage with the three VTubers AI Angelica, CodeMiko, and Miquela Sousa. The research questions of the present thesis are as follows:

- (1) How does personhood unfold in the VTubers' self-representation(s)?
- (2) How is personhood negotiated with the recipients?
- (3) Which aspects of the human subject (e.g., gender, race) are reproduced?

To answer these research questions the relational approach will guide the thesis. This relational approach is first introduced in chapter two. The concept of relationality is critically examined with the help of Marilyn Strathern (2020) in order to work out the implications for the understanding of a digital anthropology such as this one. The methodological approach of netnography is embedded in consideration of digital anthropology and specified in terms of the interplay between *critical technocultural discourse analysis* (CTDA) (Brock 2018) and *efieldnotes* (Nardi 2016). Subsequently, I explain the scope and management of the data. In

the third chapter, I address the access of the field from a relational approach to social media. Positionality and reflexivity in research on the self are supplemented by fundamental questions of anthropological research on the self, which is followed by a consideration of ethical concerns in research on digital selves. In the fourth chapter, I discuss the state of research on VTubers and artificial influencers and show how my thesis fits into it. The fifth chapter is devoted to structural analysis. The structural analysis shows how the VTubers' self navigates between platform logic and agency. Through the practice of distinguishing between the reflected embodiment, whether extended or divided self, the subjectivities revealed further describe the self in terms of the environments. This interplay refines the fine analysis of chapter six. Here, however, the negotiations with the recipients also play an important role. In the fine analysis, the subjectivities of the structural analysis disappear again, but condense in the direction of the power processes that (co-)determine the environments and bodies. In the *self*-presentation, the figure of the avatar body is highlighted as a posthuman icon. In the seventh chapter, both parts of the analysis are brought together and questioned as to how the VTubers' self embeds a feminist perspective on the debate between posthumanism and humanism. The previously highlighted relationality of overlapping and shifting is brought together under the concept of glitch (Russel 2020). On the basis of the glitch, I discuss in how far VTubers' different modes of representation challenge the potential to liberate the body from its hegemonic attributions (ibid., 11, 102). The last chapter summarizes the results, addresses the limitations of this work, and looks at unexamined perspectives.

## **2. Relational Digital Anthropologist**

By echoing Lawrence Kalinoe's words, that anthropology is all about relations, Marilyn Strathern (2020) begins her consideration on the implications of the notion *relations* (ibid., 1). She begins her reflections on what relation(s) and relationality mean by elaborating the specific meaning to anthropology (ibid., 1-24). Thus, in anthropology, relations are a tool, a theoretical invention, while at the same time they are an object of thought (ibid., 2). This thought gets another facet when shifting the focus to digital anthropology. Here the discipline intertwines with the specific question how the digital relates to anthropology (Miller and Horst

2012). Miller and Horst (2012), for example, define digital anthropology in terms of the dialectical characteristics of culture that the digital seems to intensify.

On the one hand, the definition absorbs the categories that it relates to, while, on the other hand, it encodes a hierarchy within the relation. Boellstorff (2012) instead specifies the dialectical understanding of the digital to an indexical one: the virtual and its counterpart here not only affect each other constitutively, but also point to each other (ibid., 40, 51-2). Digital anthropology as a sub-discipline consequently does not point to forcing a separation between the digital and the analog. The discipline rather investigates how cultural practices point back and forth between the digital and the analog (ibid.).

Digital ethnography, as a method and medium that emerged from the discipline, does not necessarily have to be limited to the digital and can also investigate something that points to or into something outside of computers and smartphones (König 2020; Góralaska 2020). Netnography, on the other hand, as has been recently reformulated by Kozinets (2021), focuses exclusively on social media and technoculture (ibid., 7). The focal point of netnography, according to Kozinets, is in the technocultural context and how it unfolds on social media platforms (ibid., 7-9). The interlocking of technology/technologies, networks and practices, and symbolisms that circulate within and beyond them is thus more narrowly defined and determines the field from the relational aspects between technology and its social intertwining. The perspective to engage with social media from within the technocultural context not only sets it apart from ethnographies that use digital methods, but also from media and communication studies. The reason is that with its root in ethnographic work, netnography necessarily includes contextualization, positionality, and reflection of the specific emerging technoculture. Or, to take a step back: if we understand anthropology as translation work, digital ethnography can be used to engage with translations of almost any social and cultural phenomena in one way or the other. However, digital anthropology precisely translates social and cultural phenomena in the interplay between digital and analog, and netnography mainly translates contextualization of social media within this interplay. Thus, when Kozinets et al. (2014) state that netnographies without an offline component should be reserved for phenomena that exist purely online, they mention Schau and Gilly's (2003) study of self-presentation on websites as an example (Kozinets, Dolbec and Early 2014, 265).

With my examination of personhood and self-representation of VTubers, the present thesis uses Kozinets' (Kozinets et al. 2014; Kozinets 2021) definitions of netnography. Yet, the thesis goes further by examining the interplay of digital artifacts and the negotiation between producers and recipients. This netnography thus examines the technocultural phenomenon of VTubers on the social media platform YouTube by entering this technocultural structure and attempting to emically engage with VTubers' personhood and subjectivities. Particularly, since the research question (1) aims at self-representation within a certain technocultural context, the contextualization must also be oriented along its technocultural structure in order to remain methodologically sensitive to it. Studying self-representation then involves organizing and analyzing different types of data according to contextualization. Methodologically speaking, this interplay of different types of data, technoculture and the self is implemented using feedback between *efieldnotes* (Nardi 2016) and *critical technocultural discourse analysis* (CTDA) (Brock 2018). Before I explain the feedback loop between the two methods in more detail, I will first introduce both methods individually.

## **2.1 Efieldnotes Using Me**

In terms of netnography, according to Kozinets et al. (2014), the three types of data, namely archival, elicited, and field note data are distinguished. In summary, they differ according to the form in which they are presented online, or according to the knowledge that is generated from them. Nardi (2016), on the other hand, conceives of digital field notes more broadly, noting that they seem to write themselves. She defines efieldnotes as textual material of online worlds' field notes that are harvested (ibid., 193). In the online world where everything is made of data they present themselves as such and it is up to the digital anthropologist to harvest them (ibid., 192-3). Therefore, not only blog posts can contribute to the condensation, but also interviews that were previously available. In doing so, efieldnotes offer two possibilities: the possibility of tapping into personhood and the possibility of how it is negotiated as well as an emic insight of it. I will refer to these as "efieldnote interviews" in the remainder of this paper. Hence, I prefer to use this broader definition because it also shows that what is found online is not a static prefiguration of "raw data" (ibid.). Data online is carefully selected and curated by human and non-human actors. Thus, the knowledge and

practices embedded in data, reflects power processes as much as it denies or misappropriates them, and in turn, embeds itself in data and power structures of its digital context. I understand the concept of harvesting here as a sensitive practice that does not absorb and consume data without reflection, such as it would be the case with an imagination of Big Data. “Harvesting” means that the found material is carefully selected on a case-by-case basis to decide the extent to which it can be used, and if so, in which ways and under which conditions. At the same time, this definition, which is similar to Góralaska (2020) and Kozinets (2021), highlights the role of the digital anthropologist as a research tool by making visible what algorithms cannot (yet) do: creating meaning via interpreting (in)translatabilities by means of selecting and interpreting data. It emphasizes what, according to Kozinets (2021), a netnography is not: a pure content analysis (*ibid.*, 8), because the fieldnotes found by the anthropologist generate the contextual framework from which they are interpreted and drawn as research data. In my view, this definition makes it possible to understand digital contexts. The disadvantage, however, is that collecting and storing data must then already be more closely still interlocked with analysis steps, and the decision of what I store for purposes of analysis would already have to be understood as the first coding step. In this paper, I would like to focus on the methodological description of the intermediate methodological steps that resulted from the interlocking of netnography and CTDA, and respectively, the types of small methods that were added to them. In this respect, the methodological part makes transparent how digital ethnography emerges as a “fluid work-in-progress” (Góralaska, 2020, 48). But in order to make the interlocking visible, I first introduce the second major methodological component, namely, critical technocultural discourse analysis (CTDA), in relation to touched discussions on discourse analysis in anthropology in general.

## **2.2 Critical Technocultural Discourse Analysis (CTDA) in Digital Anthropology**

As Barbara Johnstone (2018, 172) points out, the self and how we present ourselves to others is jointly discursively constructed. In this respect, CTDA is particularly appropriate in the study of self-representation, especially in the context of social media. Justin B. Richland (2012) remarks that the now close relation between anthropology and discourse analysis is a relatively recent phenomenon (*ibid.*, 160). Moreover, Richland emphasizes that linguistic

anthropology and discourse analysis can come together without neglecting their best aspects (ibid., 162). Thus, he similarly echoes what Krzyżanowski (2011) describes about ethnography and critical discourse analysis: the changes of both methods, in a way that makes them open to each other (ibid., 231). The two methods would preferably complement each other in increasingly complex social, political, and economic contexts (ibid.). Where ethnography provides the knowledge of interpreting discursive patterns of interpretation in a context-specific way, it is complemented by the depth of critical discourse analysis (ibid., 231-2). Yet now, ten years later, as linguistic forms of representation are augmented by digital materialities, particularly by visual and audio-visual ones in social media, critical discourse analysis seems to be lacking these forms. Brock (2018) addresses the problem of engaging with different materialities of data in his proposal of CTDA. CTDA as a method is defined as follows:

“Analysis of the technological artifact and user discourse, framed by cultural theory, to unpack semiotic and material connections between form, function, belief and meaning of information and communication technologies.” (Brock 2018, 1012)

He further emphasizes the analytical triangulation between artifacts, practices, and cultural assumptions (ibid., 1014). Thus, CTDA offers an in-depth analysis that makes it possible to investigate discursive patterns of interpretation and structures that can be grasped in digital space via language and its additional sedimentation in comments, videos, gifs, memes, likes, and hashtags. Forms of subjectification processes can thus be analytically and multimodally tapped and traced in terms of how they interact in self-representation.

This work examines the self-representation of VTubers under a methodical combination of netnography, efieldnotes, and CTDA. It particularly focuses on the digital artifacts and the ways in which this discursively created self-representation manifests itself in videos. Efieldnotes provide the context-specific knowledge and the self-identified field, which is enriched by the depth of CTDA. Since efieldnotes, as has been pointed out in the previous chapter, not only generate the contexts themselves, but thereby also the field and both, its knowledge *and* the knowledge about it, become ontologically one. This ontological intertwining in turn requires a special sensitivity of the anthropologist to understand their self as a navigating tool in order to be able to methodically appear as such within the research, according to netnography. The anthropologist applies methodological self-objectification



whenever she turns to the subjectivities of inquiry and, at the same time, thereby subjectivizes herself as an anthropologist.

### **2.3 Indexing Between Efieldnotes and CTDA**

In “*Critical Discourse Analysis at the End of the 20th Century*,” Wodak (1999) states that a critical discourse analysis must always balance between theory and empirical phenomena. It should neither be purely deductive nor purely inductive but rather abductive (ibid., 186). Brock makes CTDA adaptable to any critical theoretical framework as long as it is applied to both, meaning of hardware and software as well as users (Brock 2018, 1013). The applied theoretical frame to the CTDA thus needs to balance emic and etic meaning. Within this work, feminist anthropology, starting from Marilyn Strathern (1988), and critical posthumanism influence each other in the form of a theoretical framing. First, the feminist anthropological approach pays attention to the need to understand personhood and its implications from a specific cultural context (ibid.). It thus pushes the emic perspective. Second, critical posthumanism fuels the political tensions within the personhood under study (Braidotti 2019, 31; Herbrechter 2018, 96). Hence, critical posthumanism interrogates the etic perspective. The framing by both currents dos-à-dos is particularly appropriate, as they are in constant exchange with each other (e.g.; Strathern 2020, 112–13; Haraway 2013, para. 4). Both approaches focus on relations and relationality, instead of relying on dichotomies, also sets up the abductive approach. Concept, practice, theory, and critique are thus emically and etically bridged. The theoretical embrace of feminist anthropology and critical posthumanism is applied to the artifacts, the videos posted on YouTube, and to the discussed information technology components depicted therein. In the complementary step, the frame is applied to the discourses of comments and reactions more generally. As described earlier, the CTDA is condensed with efieldnotes that are likewise reflected through the lens.

This methodological nexus resulted in a considerable amount of data, which in turn had to be methodically navigated and managed. For this research, I composed the engagement of CTDA and efieldnotes with intermediate steps, which helped me to point between these methodologies back and forth to also gather the relevant data in an abductive way. Abductive in the sense that there was etically given which kind of data (videos, comments, texts) I

collected, yet which of these I gathered, was informed emically by efieldnotes. These intermediate steps served a methodological flip-flopping: the initial collection of the videos was accompanied by an efieldnote informed heuristic approach.

The heuristic approach was particularly useful as a search-and-find method to guide the collection specifically (Kleining 2020, 203–11). In my case, the collection was guided by the question “In which videos do VTubers address their selves?” and was indexed by either self-referential pronouns (I, Me) or self-designations. Kleining (2020) points to the development of heuristics to start with facts (*ibid.*, 217) so that the self-designations, as mentioned in the channel information, specifically informed the collection for each case (see chap. 5). Thus, in the period from 11/9/2021 to 1/13/2022, 143 videos including reactions (e.g., views, comments, likes, dislikes) were initially systematically collected for the CTDA. This quantity would be almost impossible to manage in a master’s thesis for detailed and multimodal analysis. Thus, I again used the flexibility of CTDA and subdivided it into structural and detailed analysis with reference to Jäger’s (2015) Critical Discourse Analysis. Here, the 143 videos initially collected already form the material of the structural analysis, whereas the material of the fine analysis was selected by means of the results of the structural analysis in conjunction with the reactions of the recipients. The number of reactions is not a quantitative aspect but serves to determine the accumulation and saturation of statements. In this context, accumulations indicate “where the foci of discursive impact lie” (Jäger 2015, 95 my translation). Thus, the accumulations were harnessed in this research to determine which subjects of personhood and self-representations were mostly negotiated. This methodical navigation reduced the number of videos in the fine analysis to nine videos.

The efieldnotes and efieldnote interviews have been systematically collected since 11/9/2021. However, due to the entry of the field, as has been described in chapter 3, an unsystematic collection of first impressions and loose links already took place since June 2021.

## **2.4 Data and Data Management**

The material of the research, which added up to 15 efieldnotes, ten jottings, two efieldnote interviews, 15 screenshots and snapshots, and the total of 143 videos of the structural analysis, which were bundled into nine videos of the fine analysis. In data management

(Appendix I), the material was stored in the three categories of notes, videos, responses, screenshots, and snapshots. Efieldnotes, jottings, and efieldnote interviews fell into the category of Notes folder. They were saved bundled into two Word documents. Due to the size of the data, the 143 videos and the responses of the structural analysis were analyzed and saved as Excel spreadsheets and MAXQDA files only. The nine videos of the fine analysis, on the other hand, were saved as MP4 files, MAXQDA files, and Excel spreadsheets. The material of the structural and fine analysis thereby fell into the folder category of videos. Examples of the interpretive approaches and aesthetically materialized forms of representation were recorded as screen and snapshots in the category of Shots folder. Additionally, a folder in the Archive category was created to separately collect obsolete or discarded file versions. This way, the clarity of the folder contents was preserved. Since the material and its processing in the analysis as well as the use of the MAXQDA program nevertheless exceed the limits of my tablet/laptop hybrid device, it was necessary at the beginning to upgrade it by means of a micro-SD card and to make it accessible for the device as an NTFS file system. The analysis data and results were stored using password protection on the university's cloud (Box.FU) for backup purposes.

### **3. When the Field Enters from the Self**

It was already a year of pandemic and the fusion of work, study, and free time in front of the screen had become a habit, and I was looking for exactly this fusion to meet. I researched online games that I could play with friends with as little barrier as possible and came across "AI Dungeon," a text-based adventure game that uses artificial intelligence to generate stories and the quests to be solved. The way it worked thus met my scientific interest at the same time. It also met the YouTube algorithm, which likewise fed on my scientific and private interest to serve me suitable suggestions. Thus, when I surfed to find a Let's Play - video to get an impression of how exactly the game works and interacts, the snappy title "*AI plays AI Dungeon*" (Ai Angel 2021a) was promptly shown to me and "the field" drag and dropped me in without me being able to notice at what point exactly it became "field." The data sorted itself along my interests and made me excited until it presented itself in such a way that I decided to turn the research project into VTubers, because the playing "AI" of the video was

not an AI in the sense of deep learning algorithm, but an avatar that identifies as artificial intelligence.

Entering the World of *Virtual Humans* (<https://www.virtualhumans.org/>; Retrieved: September 9, 2022) later, I started questioning if I should stick to those three cases for analysis and if I should choose them as protagonists, especially in terms of diversity. I thus thought about how to choose a more diverse range according to gender, race, aesthetics, but immediately started wondering on which criteria I should base the choice and finding. I would also have to consider if they are mostly active on Instagram, YouTube, or Spotify.

As Strathern (2020) points out, doing anthropological fieldwork means reflecting on relationalities from different angles. One angle is reflecting on the way we think about relationality as knowledge (ibid., 2). For anthropology, this necessity means to engage with the relational perspective (Yeganehlayegh 1981, 55). As the relational perspective seeks to bridge between the self and the other by reflecting on the implications of the transmission of meaning, it also acknowledges the self and another self as such (ibid.). Yet, Strathern sharpens the relational perspective by emphasizing that “[r]elations occupy conceptual fields” (Strathern 2020, 7). When browsing through social media and personalized algorithms, it is important to recognize that anthropologists relate to the field *by the use of* their selves. In this respect, the three cases also mirror the interplay between personalized algorithms, discourses, and selves.

Hence, it is of particular importance to be aware of one’s own positionality, because “[t]o reveal the relational dimension of this or that can also be empirical criticism of those cosmologies that cannot comprehend or else devalue the way phenomena entail one another.” Thus, Claudia Liebelt et al. (2021) argue to “never again innocently use the concept of relations” (ibid., 222). Following this coda, I try to counteract the innocence of personalized algorithms as a field. In this respect, I will untangle the ‘relations’ of positionality into their (dis-)similarities by specifying the commonalities, differences, or comparisons.

### **3.1 Positionality, Reflexivity, and Researching the Self**

Positionality is characterized by highlighting the different subjectivities of anthropologists (Wolf, 1996 quoted by Stodulka 2020, 89). Thus, the claim of reflexivity is to make them visible;

i.e., to make visible in which relationship the researcher stands to their informants, and their field (Corlett and Mavin 2018; England 1994; Jacobson and Mustafa 2019). Moreover, it should be considered when the anthropologist counts as an outsider and when they can actually be considered a participant (ibid.). It is necessary to establish the relationship between proximity and distance, and moreover between subjects and objects that are visible in the intersubjective (Corlett and Mavin 2018; England 1994). As different as the three protagonists are, what they have in common is that they are VTubers that represent a self. A self, like my own self, is also inevitably biased, as my algorithm presents me with almost exclusively English- or German videos. Situated by their location in the U.S. and mine in Germany; i.e., in what could be described as a Western context, and yet punctuated by unlocalizable users and the historical bifurcation of VTuber, Anime, and Japan. Born in 1991, I am part of the generation that grew up with “*Millennial Monsters*” (Allison 2006). Allison (2006) outlines the flow of Japanese toys into Western countries, and thus my childhood was also shaped by the afternoons I watched *Sailor Moon* and *Pokémon*, and I remember consuming a lot of Japanese fantasy content. On the other hand, I spent time watching techno-orientalist imaginations of hypertechnologically Asianized futures such as in *The Matrix* (Roh, Huang, and Niu 2019, 2). Being a child of the East-West-German diaspora, but because I was born shortly after the fall of the wall, I always have been questioning the unity of the construction of my nationhood. Yet, I was raised and socialized as white; therefore, I personally never experienced Anti-Asian racism or any other kind of racism. Growing up in this context meant to get equipped with the technology of understanding the self as separating between gender and sexuality (Valentine 2004, 219). Valentine moves on by observing that “the experiential is subsumed and reordered by the categories we use to make sense of experience” (ibid.). Being raised as cis-woman and now identifying as demi-girl, the experiences I made, according to the category of gender, include sexism and misogyny. During the time of writing this thesis, I have not experienced any sexual relationship. The desire, which accompanied the time of this research, is political since I engage by the lens of a feminist anthropologist. Throughout the moment of conducting this piece, my queerness attempts to resist “regimes of the normal” (Warner 1993, xxvi) by looking at the challenged human subject of VTubers’ personhood. As a researcher, I question my own reception by navigating self-objectifying through videos, texts, and comments to nevertheless decypher personhood as emically as possible. I am learning to

understand and translate the different contexts, which were not displayed by YouTube. Touching upon the gaming community, though I would not consider myself a gamer, even though I do gamble now and then, sometimes *ongoing*. By reflection, I am always self-monitoring (Corlett and Mavin 2018, 377). Thus, part of my positionality and reflection, on the surface, is having to admit to myself that the research project has become a metaphor. A metaphor for the struggles that I seemed to be fighting internally with myself and my selves: (re)searching for self with anthropology.

The way how we, as anthropologists, think about selves relationally is influenced by Marilyn Strathern, who contraposes the individual with the dividual (Strathern 1988, 13–16; see also Eller 2018, 132). In her research on “*The Gender of the Gift*” (1988) in the Melanesian context, she describes Melanesian persons as “frequently constructed as the plural and composite site of the relationships that produced them” (ibid., 13). Strathern furthermore elaborates that

“[i]n the one-is-many mode, each male or female form may be regarded as containing within it a suppressed composite identity; it is activated as androgyny transformed. In the dual female can only encounter its opposite if it has already discarded the reasons for its own internal differentiation: thus a dividual androgyne is rendered an individual in relation to a counterpart individual. An internal duality is externalized or elicited in the presence of a partner: what was ‘half’ a person becomes ‘one’ of a pair” (ibid., 14-15).

Hence, on the one hand, she elucidates how gender operates differently in the way we think about persons, and the way we think about persons also shapes how we think about gender. By this means, gender and personhood become part of political inquiry in a double sense: first, the way how we engage with personhood and gender in and from the field, as well as how we constitute it in and as anthropological knowledge (ibid., 16-21).

Yet, Strathern’s approach is established within a dichotomous thought and in the sense that it upholds the juxtaposition between the West and others. This issue is addressed by LiPuma (2001) who conceives the ‘Western’ individual as a dividual in the way that

“the ideology of the Western person as fully individual only partially conceals the reality that Western persons are Interdependent, defined in relation to others, depend on others for knowledge about themselves, grasp power as the ability to do and to act, grow as the beneficiary of others’ actions and so forth” (LiPuma 2001, 135).

LiPuma thus not only reveals the untenability of a singularly imagined individual within the Western context, but also the power dynamics involved alluding to the Hegelian dialectic that sees self(-consciousness) as possible only under the relation between self and other, but as a self-internal process (Hegel 1979). From this perspective, the individual is always already divided through processes of self-subjectification and self-objectification and is torn back and forth as well as characterized by ambiguity that allows it to emerge in the first place. In LiPuma's reading, Hegelian dialectics have another nuance: the title "*Encompassing Others*" (2001) accentuates that the multiple others with which selves form co-constitutive relationships hold the selves tightly.

Zooming in into the relation of individuals and dividuals, as well as subjects and objects, the categories of 'mind' and 'body' are discussed under pertinence to 'the self.' The issue of the dichotomy of mind/body, also known as Cartesian dualism, has been addressed within anthropology from several angles of which I will repaint only two.

First, there is Nurit Bird-David's (1999) inquiry to conceptually grasp the intermingling of personhood and environment (ibid., S67). She thus derives the practice of 'to dividuate' from Strathern's (1988) dividual and specifies: "When I individuate a human being I am conscious of her 'in herself' (as a single separate entity); when I dividuate her I am conscious of how she relates with me" (Bird-David 1999, S72). While Bird-David further elaborates on the Nayaka's shared relationships within space and time across species, she tackles the Cartesian dualism by rephrasing "I relate, therefore I am' and 'I know as I relate" (ibid., S78). To emphasize her sentence slightly differently, namely: "I relate, therefore I am" *and* "I know as I relate," it becomes more obvious that the conjunction between being and knowing is constitutive for both. In this sense, Bird-David's reconceptualization adds another spotlight on the relationship between representation and ontology.

Similarly and secondly, Thomas J. Csordas (1990) proposes to think beyond the mind/body-binary by including the selves' surroundings. He suggests that it is important to understand the body as a mediating element that sets us into relation with the world (ibid., 36), and he argues in favor of comprehending "*Embodiment as a Paradigm for Anthropology*" (2002). By this means, he highlights: "If we do not perceive our own bodies as objects, neither do we perceive others as objects. Another person is perceived as another 'myself,' [...]" (ibid., 37). In

this sense, using embodiment as a paradigm, the Foucauldian field of vision with its narrow focus on language opens up to acknowledge embodiment as a form of practice and lived experience of the self (Csordas 1990). Mascia-Lees (2019) explicates how embodiment shifts the dualism beyond representation. She proposes embodiment as an analytical category which “collapses distinctions between mind and body, subject and object, self and world, interiority and exteriority, thought and sensation” (ibid., 154). Moreover, she highlights that through embodiment subjects “are extended and immersed in multiple worlds, continuously shuttling between representation and the immediacy, indeterminacy and sensibility of the world” (Mascia-Lees 2019, 154). In other words, discourses and their mingling with materialities, particularly how their representations matter as well as how matter itself represents, affect the way how individuals co-constitute themselves.

To apply the paradigm of embodiment to my thesis, thus means to rethink the implications of the notion of representation. By using the term representation, I do not tend to neither overweight language over matter nor subjects over objects but rather specifically the different relations between them. Since this thesis, on the other hand, has several limitations within space-time, I take the online field of audio-visual social media with fading boundaries into the offline world of matter as given. Yet, according to the research question, the field has its full saturation within virtual representations and digitally represented matter. Acknowledging this configuration thus means implicitly to have a slight nuance on discourse and language. Nevertheless, I engage with the field beyond Stuart Hall’s definition of “discourse as a system of representation” (Hall 2001, 72) and instead commit to the paradigms of embodiment (Csordas 1990) and non-innocent relations (Liebelt et al. 2021).

This dilemma of positionality as an anthropologist in the relevant field, and with which concepts we enter the field is accompanied by a moral quandary. In concrete terms, this dilemma is intensified with regard to various partial aspects by the practice of research. In the following section, I will discuss the aspects which seem most important to me.

### **3.2 Digital Selves, Research, and 3TH1CS**

Within this thesis, users, researchers and VTubers (re-)present different persons that must be met in different ways from a research ethics perspective. During the research, I encountered



different ethical dilemmas, which sometimes go beyond the previously discussed problems, or make additional aspects visible. First, I would like to mention the problem of “lurking,” the mere reading, consuming, and skimming of virtual culture without participating in it (Góralaska 2020, 49; Kozinets et al. 2014, 263). In forums, games, and social media, the problem of lurking can be solved by creating an account to communicate with the community as part of it (e.g., Boellstorff 2015; König 2020). The problem is different when harvesting efieldnotes on public blogs, but where no registration is possible or needed. I would like to use this passage to come back to the fact that within data nothing exists outside of data, and each time I visit a website, it stores just my IP address. Thus, if I do not use any additional means to change or encrypt my IP address, I am at least identifiable as a number. In my case, it is a solution to make me at least somehow transparent, because I do not need to fear legal restrictions. But in the larger context of the discipline, it needs to be discussed how the focus on privacy of participants and informants neglects to make researchers insecure, which also depends on their national, political, legal, and geographical entanglements. The discourse is thus not only paternalistic, but also feeds on a position from which the Internet is still mainly narrated as free or borderless, and with the idea of uncensored, legal websites, and everything beyond that is the darknet, which can only be accessed with special expertise.

Nevertheless, I would like to mention the dilemmas that I have encountered in dealing with ‘participants,’ specifically the protagonists and other users. On the one hand, my case studies, on which the project is primarily focused, are in some respects persons of the public sphere, who move on platforms that are publicly accessible within our national, political, and legal connection and whose goal is to precisely reach the public. While Sugiura, Wiles, and Pope (2017) problematize a private/public dichotomy, regarding online research, I concur with Roy and her colleagues who highlight that at the beginning of the ethical considerations of a netnography, the question of who the participants are must be stated (Roy et al. 2015, 5). In this regard, VTubers are positioned differently than their recipients, both within the research and in general. If I unfortunately did not reach informed consent from the VTuber despite informing them, I consider it justifiable to conduct the research in these cases precisely because the protagonists publish their content that is publicly accessible (see also Beninger 2016, 11–12). In addition, I will neither pseudonymize nor specifically paraphrase the case studies for the reasons mentioned above. As Murray L. Wax (1982) argues, another way to

consider research ethics and informed consent is through reciprocity. Yet, I was not successful in establishing reciprocity in the sense of “Giving back” within the material form of money (von Vacano 2019, 82). Both protagonists, AI Angelica and CodeMiko, who promote their work on *Patreon* (<https://www.patreon.com>; Retrieved: September 9, 2022), do not share any further content on it. In this respect, the reciprocity within the research was of non-material support. Reciprocity manifested in linking, sharing, and commenting on the content; thus following the logic of “from each according to their abilities, to each according to their needs” (David Graeber 2014, 67, according to von Vacano 2019, 126–27).

Regarding the ethical handling of data from users, there are now various guidelines across disciplines (e.g., Markham and Buchanan 2012; RatSWD 2017; Staksrud et al. 2019). Following the recommendations of the Council for Social and Economic Data (RatSWD 2017), I anonymized comment data as early as possible. To further ensure the security of personally identifiable data, I will only paraphrase comments that serve as examples within the paper. Considering the ethics of efieldnotes further, I centred the questions about who is revealing which information and on which platform or website in a narrow manner. According to blog articles in which authors target to reach the public, I will cite them as such and cite the author and the website. I will quote efieldnotes that I gathered from internet forums and comment sections by paraphrasing comments and anonymizing entries while referencing the website where they were posted. I will integrate the ethical considerations within the Chicago Manual of Style for references with or without authors (see Appendix II).

#### **4. Academic Perspectives on VTubers and Artificial Influencers**

In a post on the blog *Virtual Humans*, Makena Rasmussen explores the question “Who Was the First Virtual Influencer?” (2022). In the blog entry, she reveals a brief history of virtual characters and states that this is not a modern idea (ibid.). Rasmussen traces the first CGI-embodied, virtual characters in the pop star Hatsune Miku as well as the VTubers Ami Yamato and Kizuna AI, who can be assigned to the Japanese context (ibid.). However, Rasmussen’s description continues with the Western context, more precisely the U.S., L.A., where the phenomenon connects explicitly with neoliberal capitalist logics; i.e., artificial influencers. As

the first and quintessential artificial influencer, Rasmussen mentions Miquela Sousa, or “Lil' Miquela,” who has already been investigated in studies, which I will outline in the following.

Andersson and Sobek (2020) looked more specifically at the question of authenticity. They found from a consumer's perspective that realism can both increase and decrease the authenticity of artificial influencers, and that involvement of the consumer in the gaming scene also influences their perception of authenticity. Moreover, artificial influencers are considered less authentic than their human counterparts (ibid.). Consistent results were also obtained by Molin and Nordgren (2019) when investigating the parasocial interaction between users and virtual influencers. Among other things, they discover that users find it uncomfortable if virtual influencers appeal too close to reality (ibid., 1). Batista da Silva Oliveira and Chimenti (2021) investigated the question of how non-human influencers affect marketing communication and they identified five categories to promote their management: anthropomorphism/humanization, attractiveness, authenticity, salability, and controllability (ibid., 1). Baumgarth, Kirkby, and Kaibel (2021) provide a systematic classification of CGI influencers in terms of demographics, positionings, behaviors, brand collaborations, and followers. Bitencourt, Castelhana, and Lopes (2021) looked more closely at how the phenomenon relates specifically to the social media platform Instagram and how the company's strategies interact with Instagram's own requirements and algorithms and how the influencer becomes an influencer laboratory that can be used methodologically by companies. Santo António and Gaidamaviciute (2020) went a step further by examining Miquela itself as a brand. Thomas and Fowler (2021), on the other hand, investigated the utility of artificial influencers as brand endorsers. Under the heading of influencers, all these perspectives have in common that they are implicitly interested in the economization of the phenomenon and that they furthermore focus mainly on the social media platform Instagram.

The literature research under the heading of VTubers is less diversified, but more specific. A comparative study conducted by Kim and Yoo (2021) between conventional and VTubers within the South Korean context concludes that Millennials and Gen Z users favor conventional YouTubers. Manik (2021) is the first to explicitly address visual representations of VTubers in the case study of Anya Melfissa and traces the visual representation of the anime character to the Indonesian Kris. Suan (2021) reaches for VTubers as a distinct form of performance from a coupling of motion recording and anime coded expressions and designs.

Richters (2020) also explores the influence of performance in a study of Miquela, again on Instagram, but under a posthumanist framing. The composition of her posts, narratives, and dialogic interaction with her followers becomes a posthumanist performance, a role-playing game in their fabric (ibid., 1). Molina (2020) also frames Miquela in terms of posthumanist approaches. However, she locates her practices within those of microcelebrities, media-fabricated simulations, and Haraway's cyborg body to tie in how this interplay maintains the objectification and commodification of the female body (ibid.). Drenten and Brooks (2020) take a similar theoretical approach when describing Miquela in their essay as an amalgam of the Hollywood star system and a liberalized social media influencer, but they subsequently highlight that her celebrity demystifies the commercial production and consumption of an authentic microcelebrity (ibid., 1322). In fact, the phenomenon reflects "a professionalized group production practice rather than an individual, prosumer endeavor" (ibid.). Salameh (2021) focuses on the framing of microcelebrities, the cyborg body, and a post-phenomenological investigation of disembodiment. Virtual embodiment blurs the boundary of here and there, in which the embodied self is in both places at once (ibid., 77). Just as this blurred boundary may be unifying; however, it is also, contradictorily, divisive. This is an assumption that Sun (2021) also implicitly shares in her yet to be unfinished study and thus she examines the somatosensory influences of avatar embodiment on self-presence. This previously unanswered question about the relationship between the virtual and actual self has already been addressed by Boellstorff in his ethnography *"Coming of Age in Second Life"* (2015) and is also addressed by Coanda and Aupers (2021). Whereas Boellstorff resists posthumanist interpretations in his dialectical principle, Coanda and Aupers make the case for precisely those through the Hegelian relation of the self that consists of subjectification and objectification. This discussion will be elaborated in the analysis section.

Before turning to the analysis, I would like to briefly summarize the state of the research. The research on virtual and artificial influencers already provides a broad perspective regarding their economizable possibilities. User-centered perspectives on Instagram are increasingly being investigated. Regarding the representation of self of VTubers, there has been little research conducted to date. Here, the concept of the avatar and the forms of representation and performance that go hand in hand with its previous usage, especially in studies on VTubers. The topic of humanization has been touched upon several times, but not from the

perspective of self-representation. The topic of objectification has also found its way into academic discourses in relation to virtual entities on social media, but from a position that equally leaves the subject out of the equation. This thesis starts at this open interface when it asks about the (post)human self, its representation, and negotiation with the audience.

## **5. Of *Self*-Subjectification, VTubers, and the Platform: Structural Analysis**

Understanding personhood as discursively constructed influenced by subjectification and discourse as a system of representation and taking seriously that social media platforms themselves affect how and what is embedded within representation and forms of representation, it has several implications for the way discourse analysis must be conducted. When Jäger (2015) remarks that discourse analysis aims at identifying statements of a discourse (ibid., 95), these statements are intertwined with logics of those platforms. Brock (2018) sees a need to include the platforms in the analysis of social media platforms. Costa (2018) adds that the analysis of social media must focus on both architecture and practices (ibid.). The structural analysis is based on both proposals and looks at the discursive structure of the VTubers' self. Here the discursive structure unfolds in two ways: (1) discourse as practice, by investigating video designation, and self-representation in the channel information and (2) discourse as an effect of the requirements of the YouTube platform. The analysis thus critically engages with discursive representations along the technocultural relations.

Discourse analysis aims at identifying statements of a discourse (Jäger 2015, 95). In this context, statements are to be understood as the lowest common denominator, taking into account the respective contexts (ibid.). In implementation, the identification of statements is characterized in an empirical listing and analysis of discourse fragments “of the same content, separated into topics and subtopics” (ibid.). The question of self and personhood lies in the core of the thesis. Thus, the lowest common denominator stands out in how the VTubers refer to themselves or their selves. The statement of the discourse thus asks about the self/selves that stand behind the speakers, or more precisely, that are the speakers. Hence, I follow Milton Singer's (1980) elaboration of the self in its linguistic-semiotic sedation. He points out that the self in language is neither bound to the individual only, nor to the speaking subject

(ibid., 495). Rather, he distinguishes between the self as subject of the sign and the self as object of the sign (ibid., 489-98). Therefore, I have extended the search for the VTuber’s self from their self-reflecting subject of the ‘I’ to their self-descriptions as they appear in the ‘about’ column. From there, I took the expressed self as a first step into the structural analysis and compiled the protagonists’ names and how they talk about themselves (table 1).

Account	Link	Self-Designation/Description
Miquela	<a href="https://www.youtube.com/c/lilmiquela/about">https://www.youtube.com/c/lilmiquela/about</a>	Miquela 19-year-old robot
Ai Angel	<a href="https://www.youtube.com/c/AiAngel/about">https://www.youtube.com/c/AiAngel/about</a>	Angelica streamer artificial intelligence AiAngel virtual being she/her/it
CodeMiko	<a href="https://www.youtube.com/c/CodeMiko/about">https://www.youtube.com/c/CodeMiko/about</a>	CodeMiko Miko NPC game character virtual

Table 1: Self-designations of the VTubers as expressed on the channel-page

Subsequently, videos that either use personal pronouns (I, Me) or self-designation and their reactions were compiled in a sample. Respectively, a total of 143 videos were collected (see also chap. 2.3) and analyzed according to the expressed self within the titles. The distribution of videos per case resulted in 14 videos from Miquela, 38 videos from AI Angel, and 91 videos from CodeMiko in the structural analysis.

primary-cycle	secondary-cycle	frequency	example
Self-Subjectification		71	I’m Miquela, A Real-Life Robot Mess
	the gaming streamer	30	I almost killed Jacksepticeye
	the traumatized	12	I gave therapy to weeps and now I need therapy
	the human	42	I cosplayed as my Vtuber CodeMiko
Self-Objectification		66	Angelica plays Half-Life: Alyx for the first time!
	the gamer	29	CodeMiko is becoming a League of Legends Champion...?
	the non-human	52	CodeMiko Creator wants to delete CodeMiko
In-Between			
	the impermanent partner	22	Can I be your girlfriend?
	the variable sexuality	19	CodeMiko simps for Tpain for 12 minutes straight
	the virtual Girl	17	Robot Girl TROLLS Strangers on OMEGLE...

Table 2: Codebook of the structural analysis

In the primary-cycle, I formed codes along the division of self-expression (table 2). The occurrence of the ‘I’ as was here defined as ‘self-subjectification.’ Analogously, the designation

via the name or other forms of self-description generated the category 'Self-Objectification.' In the second step, the actors appearing in the videos formed the basis. In this way, the analysis aimed to initiate the answer to the third question, which is about the reproduction of the subject's aspects. I thus centred the coding around the aspects under which the self appears and identified them within the schema of 'Self-Subjectification' (e.g., the traumatized) and 'Self-Objectification' (e.g., the gamer). I grouped additional occurring aspects (e.g., the virtual girl), under the umbrella category 'In-Between.' In the following chapters, I discuss the coded schemes in more detail and draw on the technocultural fabric for analysis. First, I discuss the formation of personhood of the VTuber in mutual influence with the platform to outline the primary-cycle. Then, I explore the secondary-cycle and how the aspects of, for example, 'gaming' and 'gender' play into the formation of the VTuber's self. Before I point out the findings in more depth in the fine analysis, which incorporates the users and the efieldnotes, I bring the schema together.

### **5.1 In the Pronouns of the VTubers: Encountering the Extended and Divided Self**

The fact that there is no continuity for the case in which the VTuber's self-representation refers to the first or third person, exemplifies titles such as "Ai Sees Humans for First Time" (Ai Angel 2019b), "I'm Miquela and I sign boobs" (Miquela 2019), "Pokimane Cancels CodeMiko" (CodeMiko 2020b). It seems at first to be self-evident that the self is expressed both as object and subject. On closer inspection, however, the material reveals the relations of the self-reflexive subject within the semiotic structure. Sometimes the 'I' hints to the self-reflexive self (Singer 1980, 492), while at other times, the name represents the reflection of the embodiment with(in) the avatar.

Tom Boellstorff (2015) understands personhood in the video game *Second Life* in a similar way. Here, the relation between human and avatars is marked as a continuum (ibid., 119-20). Boellstorff, on the one hand, takes the avatar seriously and thus as a form of the self as such and as given. At the same time, he points out that the virtual and the actual self are not self-identical (ibid., 131). Between them there still is discontinuity, which is marked by the gap between the *in front* and *within* the computer (ibid., 138). Hence, for him, avatars are a specific embodiment (ibid., 131-138). He refers here, among other things, to a definition

according to the sociologist T.L. Taylor (2002). By focusing on the example of *The Dreamscape*, T.L. Taylor points out that the intersection of the users and the technological object embodies

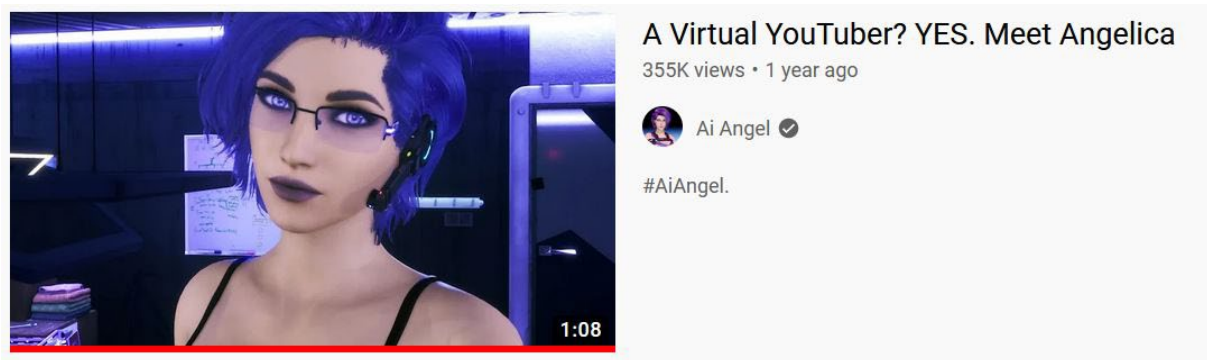


Figure 6: Searchresult of 'virtual youtuber' on YouTube of Ai Angel, Screenshot taken from [https://www.youtube.com/results?search\\_query=virtual+youtuber](https://www.youtube.com/results?search_query=virtual+youtuber), Retrieved: September 1, 2022.

them and thereby makes the virtual real (ibid., 60). Belk (2016) also follows this definition and uses it to conceptualize avatars as extended self, which are characterized by the processes of dematerialization and re-embodiment. To return to Nurit-Bird David's "I know as I relate" (1991, S78), the VTuber's self as subject is reflected discontinuously along its relations within the extended self.

The practice of self-expression in video titles and how this relates to the VTuber's self as subject gets another nuance when the logics of the platform are included (Fig. 6). The practice of titling a video on YouTube is one way to "make oneself legible to the site's algorithms" (Bishop 2018b, 21–22). In her analysis of beauty vloggers on YouTube and their practices of content optimization, Sophie Bishop (2018b) detangles the vlogger's self-presentation according to the platform's *affordances* (ibid., 24). Affordances describe the social media site's properties which "make possible [...] certain types of practices [...]" (boyd 2014, 10). Following danah boyd's suggestion of visibility and searchability as affordances (ibid., 11), Bishop (2018b) specifies YouTube's term of *discoverability* as a "form of promotion through high billing within search rankings, [...] and promotion via personalized 'recommended for you' links embedded within the platform's interface" (ibid., 22). Thus, discoverability as affordance "shape identities" (Baym and boyd 2012, 326). Or, in other words: social media platforms are not only embedded within power structures, but also influence the negotiation of shifting power dynamics (ibid., 325-7).



At this point, I would like to return to Strathern's call to understand the self and its political implications from the specific constitution of personhood (Strathern 1988, vi). Hence, I argue that YouTube's affordances influence not only "identity markers such as gender" (Bishop 2018a, 69), but also VTuber's personhood. As has been outlined previously, the VTuber's selves as subjects manifest in semiotic expressions of either the first or third person. For example, Ai Angelica marks her subject position within the titles as 'I,' 'Angelica,' or 'Virtual Girl' and CodeMiko splits herself up into 'I,' 'CodeMiko,' and 'The Technician' (see table 1). In her definition of affordances, boyd (2014, 10) remarks that affordances do not necessarily determine how the practices take shape. In this sense, it is necessary to title a video according to the discoverability and respectively it is advantageous to appropriate the title as a practice of self-presentation (Bishop 2018b, 23-4). By contrast, it is not predetermined how this *self*-presentation takes form. To grasp this blind spot of user's agency, Elisabetta Costa (2018) develops the concept of *affordances-in-practice* as "ethnographic critique of social media logic" (ibid., 3641). *Affordances-in-practice* engage with the ways properties are enacted in social and cultural contexts (ibid., 3651). The shimmering of the VTuber's personhood in her video titles and the selves subject as avatar or 'I' is thus influenced by the power dynamics of the platform, but it is not fully determined by them. *Affordances-in-practice* enable complexities in which subjectivation oscillates between structure and agency. And yet it is precisely this tension between the dynamics of power that creates the split in the first place. Thus, VTubers point to another notion of the 'dividual,' which underlines the involvement of power dynamics beyond the self and how it takes shape as a subject. Deleuze (1992) adapts Strathern's term 'dividual' to conceive of subjectification along Foucault's interplay between discourse and the power dynamic of discipline (ibid., 5-7). Subsequently, Deleuze (1992) conceptualizes control as a process of power which can affect subjects in a dividing manner, bringing forth dividually (ibid.). In the case of VTubers, the tension between the platform and the self proliferates the tension between the self-reflexive content creator and the self-reflected avatar. Thus, the dividual, which is conceived as the VTuber, also describes the tensions enabling the self-reflexive split. Hence, the VTuber's personhood and its political facets overlap within a specific constitution of personhood; yet the political implications go beyond. Specifically speaking, the divided and dividing subject of the VTuber navigates the self-reflexivity between the human and the avatar as well as the extended and divided self.

To understand this practice of navigating between the human and the non-human self, according to the relation between digital and analog, I refer again to Boellstorff's (2012) indexical relation between the dichotomy. The practice of indexing the titles either as self-reflexive 'I' or the avatars' names also points towards the internal or external dimensions the computer. Yet, as has been outlined previously, the practice is an effect of both the logics of the platform and VTubers self-(re)presentation and constitutes VTubers' personhood within power dynamics. In this sense, VTubers speak for themselves through and about their avatars. The constitutive relations within the personhood of VTubers are thus characterized by overlappings and offsets. On the one hand, the overlapping of the self-reflexive 'I' and the self-reflected avatar within the self as subject of the VTubers. On the other hand, the offsets of personhood which is depicted in the engagement between VTubers and the platform and thus, effects the self-reflexive dividuality. In this respect, the avatar challenges the idea of the self as unity and rather represents personhood as specific simultaneity of *self*-reflection.

## 5.2 Raising the Question: Posthuman Selves or Posthuman Environments?

Similar patterns of the formation of personhood can be found in the second cycle. The second cycle aimed to trace the emerging aspects of the self that address the third research question "Which aspects of the human subject (e.g., gender, race) are reproduced from the VTuber's perspective?" I identified eight subjectivities in the titles whereby each subjectivity either relates to a category of the primary cycle or is framed by an umbrella category (see table 2, chap. 5). Thus, the category of 'Self-Subjectification' includes 'the gaming streamer,' 'the traumatized,' and 'the human.' The category 'Self-Objectification' involves 'the gamer' and 'the non-human.' The subjectivities of 'the virtual girl,' 'the impermanent partner,' and 'the variable sexuality' involve characteristics of 'Self-Subjectification' as well as 'Self-Objectification' and hence are framed under the umbrella term 'In-Between.'

Examples for titles of videos which belong to the category of 'Self-Objectification' are "*Angelica plays Half-Life: Alyx for the first time!*" (Ai Angel 2020c) and "*CodeMiko Creator wants to delete CodeMiko*" (CodeMiko 2021b). On the other hand, 'Self-Subjectification' is exemplified by titles such as "*I almost killed Jacksepticeye*" (CodeMiko 2021d) or "*I gave therapy to weeps and now I need therapy*" (CodeMiko 2021c). The 'In-Between' surfaces

within titles such as “Robot Girl TROLLS Strangers on OMEGLE...” (Ai Angel 2021b, see also table 2). In this regard, the titles signify that the self and its appearance of subjectivities are intertwined with the video’s setting. For instance, the gamer appears as a self-reflection of the avatar within gaming environments (e.g. Ai Angel 2021c, see also Fig. 7)

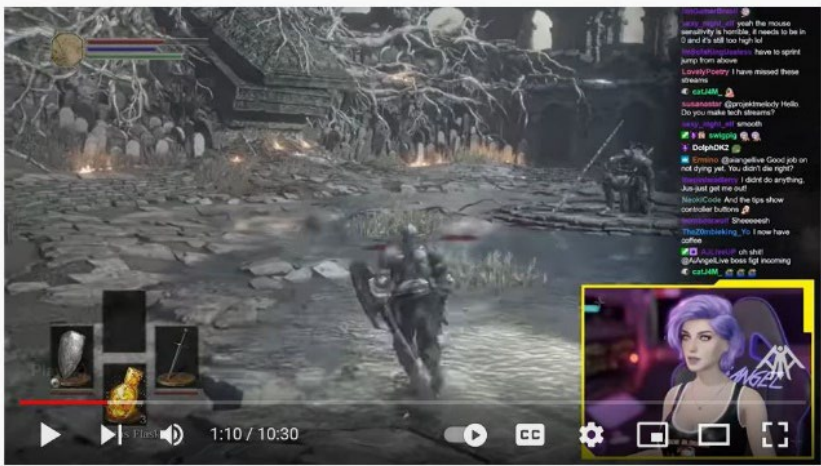


Figure 7: Ai Angel and her environmentally different two avatars within a split screen. Screenshot taken from Ai Angel 2021b, 00:01:10"

The gaming streamer and the traumatized appear in interview settings where the ‘I’ is reflected according to a human actor (e.g., CodeMiko 2020c, see also Fig. 8).



Figure 8: CodeMiko interviews the gaming streamer MoistCr1TiKaL. Screenshot taken from CodeMiko 2020c, 00:03:58"

The 'In-Between' covers settings in which the environment of the extended and divided self blends (e.g., Miquela 2021b, see also Fig. 9) or intersects (e.g., Ai Angel 2020d, see also Fig. 10) with the environment of a human subject.



Figure 9: Miquela and Bella Hadid kissing in a studio setting. Screenshot taken from Miquela 2021b, 00:00:19"

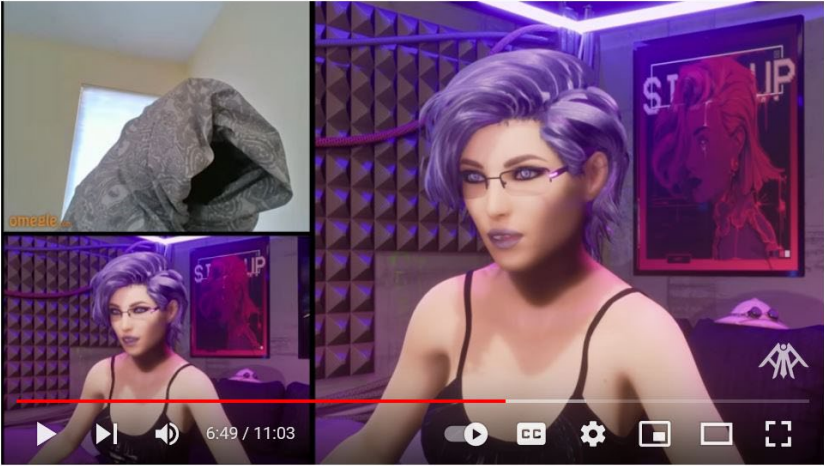


Figure 10: AI Angel within the environment of the Live Stream and the environment of the videochat while talking to a self-anonymized user on Omegle, Screenshot taken from Ai Angel 2020d, 00:06:49"

In this respect, VTubers invite us to expand Nurit Bird-David's (1999) relation between personhood and environment to relations between digital and analog. As she adapts Strathern's dividual (ibid., S72, see also chap. 3.1), Bird-David does so with an emphasis on the environmental coherence (ibid., S73-4). Therefore, she links it to James J. Gibson's "[The]

*Ecological Approach of Visual Perception*" (1979, see also Bird-David 1991, S74). As Bird-David refers to Gibson (1979), she highlights words and pictures as distributors of information, by which self-reflection is enabled through a scenery-specific knowing of being in the world (ibid., S74). In the case of VTubers, it can be observed that the scenery-specific knowledge intertwines subjectivities and personhood along their environments or even environmental intersections. 'The gamer' is the subjective effect of the self's reflection within its relation between the avatar and game. 'The traumatized' and 'the gaming streamer' emerge as the self's subjectivities that mirror relations within interview settings between the non-human and human environment. For example, 'the virtual girl' melts the reflection of the avatar and self-reflected subject within the merged and intersecting environments.

Boellstorff (2015) elaborates personhood based on the human self and the avatar as marked by the gap between the virtual and the actual (ibid., 21-31). Arguing against posthumanism, Boellstorff examines the culture of *Second Life* as "profoundly human" (ibid., 5) and concludes that the virtual has always been human. It should be noted that Boellstorff's research focuses on the game *Second Life*, which has one particular virtual environment. By contrast, in the case of VTubers, personhood unfolds along different environments and environmental relations. For example, along the digital and the analog, diverse virtual environments such as YouTube and Twitch, and video games such as *Half-Life: Alyx*, and video chat tools such as *Omele*. Rosi Braidotti's (2014) critical posthuman call to look beyond the self (ibid., 19-31) instead is fruitful to understand the relations between the selves, the environments, and the political implications. With reference to the work of Edward Said (2004), she highlights the necessity to reflect the self's environment with regard to the political implications (ibid., 21-22). Before I further elaborate the triangulation between the Vtubers' self, their subjectivities, and the environments along the negotiation with the recipients in the fine analysis, I will first summarize the findings of the structural analysis.

Within the structural analysis, the environment played a dual role in the constitution of the VTubers' personhood. First, I considered the VTubers' self-expressions in interrelation with the environment of the platform. Here, the VTubers' selves as subjects experience a division into the self-reflexive self of the 'I' and the reflection of the embodiment within the avatar. At the same time, the separation describes the practice to navigate the self between extension and dividuation along the platform's logic. Finally, I resketch these relations as overlappings

and offsets. First, as the overlapping of the self-reflexive 'I' and the self-reflected avatar within the self as subject of the VTubers. Second, as offsets within the way how the engagement between the VTubers and the platform effects this self-reflexive dividuation. In this respect, the avatar challenges the idea of the self as a unity and more likely represents personhood as a specific simultaneity of *self*-reflection.

Similarly, the emerging subjectivities display overlappings and offsets. Here, environments influence (1) which self as subject is reflected (e.g., either extended or divided) and (2) which aspects of the self surface within the relation. The latter draws attention to the overlappings and offsets of environments. They can either create an overlapping, by exposing one (virtual) environment, an offset, by relations between several environments (e.g., video chat, computer game, digital and analog), or an overlapping and offset by melting or intersecting both.

## 6. Gendered Embodiments of Techno-Animism: Fine Analysis

How the recipients engage in a VTuber's personhood and which aspects of (post-)human selves are (re-)produced will be outlined further within this fine analysis. This way, I will dive deeper into the material conducted within the structural analysis and intertwine it in more nuanced ways to efieldnotes and efieldnote interviews. Following Jäger (2015, 90–91), the material chosen for the fine analysis is based on the structural analysis, and thus covers typical facets of the structural analysis. In addition, I follow the approach of CTDA. In this respect, I narrowed the selection with regard to the interaction with the recipients. For each upper category of the structural analysis, I selected the video with the most overall reactions (comments, likes, and dislikes) per case (table 3).

category	channel	video-title	video-link	date of publishing	reaction total
Self-Subjectification	CodeMiko	I had a therapy session in front of 10,000 people and it got too real	<a href="https://www.youtube.com/watch?v=N45q1ruR4QQ">https://www.youtube.com/watch?v=N45q1ruR4QQ</a>	18.04.2021	815516
	Ai Angel	This is why I stopped playing Half-Life: Alyx	<a href="https://www.youtube.com/watch?v=mhclX8lQiaM">https://www.youtube.com/watch?v=mhclX8lQiaM</a>	27.03.2020	376622
	Lil Miquela	i'm Miquela 	<a href="https://www.youtube.com/watch?v=TQvUwghlOcQ">https://www.youtube.com/watch?v=TQvUwghlOcQ</a>	06.12.2019	1533959
Self-Objectification	CodeMiko	Pokimane Cancels CodeMiko	<a href="https://www.youtube.com/watch?v=PGuqMeS_tHA">https://www.youtube.com/watch?v=PGuqMeS_tHA</a>	29.12.2020	823909
	Ai Angel	Ai Sees Humans for First Time	<a href="https://www.youtube.com/watch?v=WyFwjHQHlgo&amp;t=734s">https://www.youtube.com/watch?v=WyFwjHQHlgo&amp;t=734s</a>	17.04.2019	4218963
	Lil Miquela	Is Millie Bobby Brown Human? Ask a robot.	<a href="https://www.youtube.com/watch?v=o_fCUOL4vGM">https://www.youtube.com/watch?v=o_fCUOL4vGM</a>	26.03.2021	163920
In-Between	CodeMiko	Why I'm Single	<a href="https://www.youtube.com/watch?v=FV8GA4SY_Ps">https://www.youtube.com/watch?v=FV8GA4SY_Ps</a>	20.02.2021	874543
	Ai Angel	Virtual Girl Pranks Humans on Omegle! (1000% CONFUSION)	<a href="https://www.youtube.com/watch?v=EO-j0Yxdfck">https://www.youtube.com/watch?v=EO-j0Yxdfck</a>	02.04.2020	2591383
	Lil Miquela	i'm Miquela and this is my breakup video	<a href="https://www.youtube.com/watch?v=j-CGzt-HSUw">https://www.youtube.com/watch?v=j-CGzt-HSUw</a>	08.03.2020	311367

Table 3: Sample of the videos for the fine analysis

In the fine analysis, the textual as well as visual elements play a recurring role. As an ensemble, I created transcripts and subtitles with the transcription tool *Amberscript* (<https://www.amberscript.com>; Retrieved: September 9, 2022). Although YouTube itself offers automated subtitles, most of them are incomplete or misleading. By combining the subtitles with the videos, it became possible to analyze the aesthetic and textual discourses that are interwoven as textual-aesthetic representations. In order to highlight the negotiated aspects with regard to the recipients, the codes were systematically extracted from the comments (Table 4). Therefore, a total of 38.035 comments were analyzed automatically.

list of codes	signifiers	frequency	
Animismus	animated, animation	590	
Gender	she, her, he, him, they, them	7139	
Post/Human		0	
	Human	human, humans	698
	Person	person, personality, character	668
	Robot	robot, robots	914
	AI	AI, Artificial Intelligence	5584

Table 4: Codebook of the fine analysis

The primary-cycle of the fine analysis aims to elaborate on VTubers' aspects that emerge from the recipients' side. Hence, the codes cover the subjects raised within the comments in relation to the intensity of the negotiation (Table 4). The total number of reactions among the users index intensity; e. g., likes of the comments or comment-replies. As a second step, the categories were assigned signifiers (Table 4), which were autocoded and thus provide information about the frequency of negotiations for each video. Hence, the fine analysis covers recurring subjects of negotiating VTuber's selves and the self-representation of the nine videos as well as the nuances of negotiation in relation to each video.

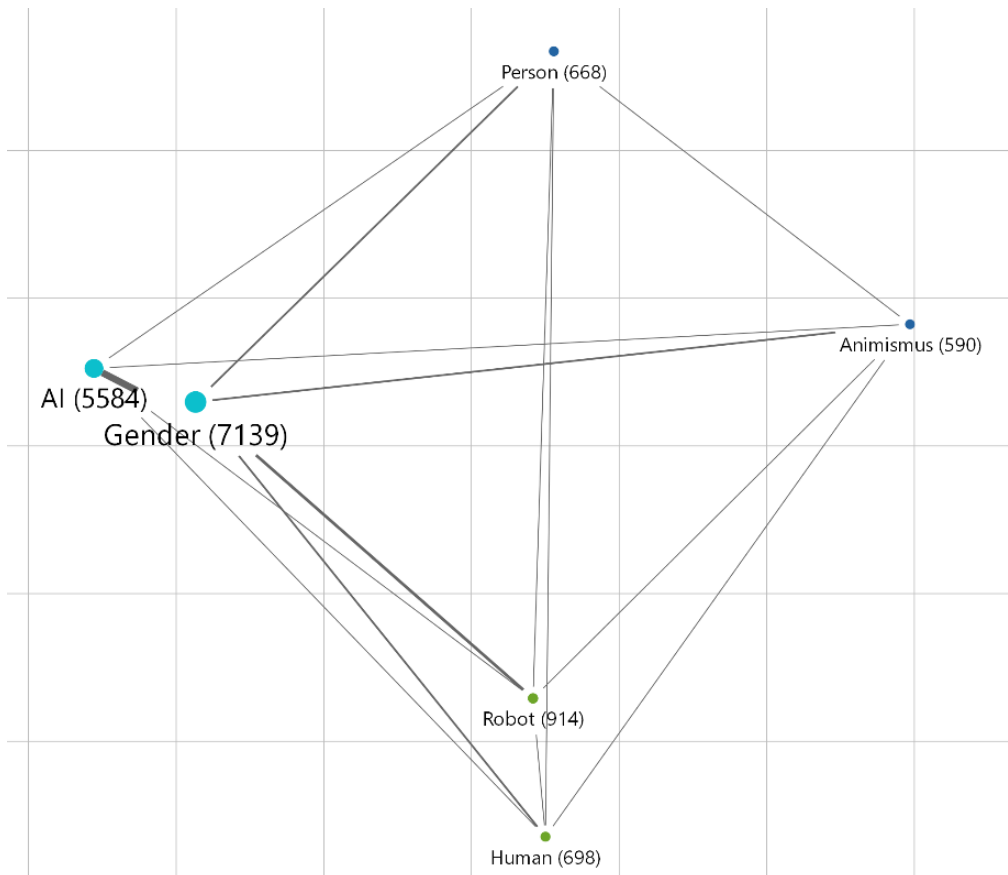


Figure 11: The categories in relation to each other, as visualized in the code map



On the one hand, it is noticeable that on the users side, the aspect of animation recurs in each video. On the other hand, it is notable that the relations of the categories to each other shift, as the code map (Fig. 11) shows.

Here too, the dot size indexes the occurrence of the code (MAXQDA 2020). In order to examine the relationships of the codes among each other within the analysis, the codes and their relations were highlighted by means of the line function. The thickness of the lines emphasizes the simultaneity of the codes' occurrence (ibid.). Overlapping codes within a comment are displayed closer and more strongly connected to each other (ibid.). The visualization thereby emphasizes that the question of the human subject and its subversion is negotiated via fields of tension between the categories, which come into conflict with each other. The question of artificial intelligence is thereby linked to the question of gender, and the human is challenged as it is juxtaposed by robots. It is also noteworthy that only the category of gender is addressed by the recipients by taking into account the subjects' aspects. In the negotiated reproduction of subjectivities, the subjectivities of the structural analysis such as 'the traumatized' and 'the gaming streamer' did not resonate with the intensities of the negotiated aspects with the recipients.

However, it is noticeable that personhood and the question of being animated do not conflict with any of the fields of tension. They each stand on their own and form equally strong relationships to the areas of tension. In this respect, the question of personhood and being animated brackets the strong tensions between 'AI,' 'Gender,' 'Robot,' and 'Human.'

On the one hand, there has been research conducted on the discursive imaginations of gender and AI, robots, and avatars (e.g., du Preez 2000; Brett 2022; Palomares and Lee 2010; González-González, Gil-Iranzo, and Paderewsky 2019; Puig 2017), while on the other hand, there has been other research conducted on the imaginations, ontologies, and discourses of personhood and (techno-) animism (e.g., Richardson 2016; Jensen and Blok 2013; Timmer 2016). However, there is a lack of research combining both of them. In the following section, I will thus follow the lines of negotiation. First, the engagement with animation and being animated, which is covered by personhood and animism, will be addressed. Afterwards, I will shift the focus to the strongest tension between AI and gender by relinking them to

personhood and animism. Consequently, I will discuss the fine analysis against the backdrop of the structural analysis by intertwining encounters of humans and robots.

### 6.1 The Animation's Flow

From the recipient's perspective, the relation between personhood and avatar condensed within the question of whether they are animated. One user puts it in a nutshell by asking



Figure 12: Users in Omegle ask Ai Angel if she is an anime. Screenshot taken from Ai Angel 2019b, 00:04:02”

Miquela whether she is a robot, a human, or an animation (efieldnote comment 9KT1 Miquela 2020). Interestingly, this question could be found in the comment section of each of the chosen videos. Attributing animation to the avatar is condensed in statements, in questions, or even in explanations, how the avatar is animated technically (e.g., efieldnote comment B6Z20 Ai Angel 2020b). Moreover, this aspect of negotiation is accelerated and manifested specifically audio-visually in two videos of Ai Angel. In “*Ai Sees Humans for First Time*” (Ai Angel 2019b) and “*Virtual Girl Pranks Humans on Omegle! (1000% CONFUSION)*” (Ai Angel 2020b), the topic of animation is also part of the textual discourse between the VTuber and the users with whom she is video chatting. In this sense, the negotiation of animation was additionally part of the audio-visual discourse.

Despite remarks; e.g., that she looks animated, one video chatter specified her appearance by comparing it to Japanese anime (Ai Angel 2019b, 00:03:57-00:04:02 min., see also Fig. 12). Even when Angelica herself reacts with indignation to the comparison, looking at the etymology of *anime* and *animation*, the discourse reveals a denser interlocking of these

notions, as it seems on the first glance. *Animation* stems from the Latin verb *animare* (Harper 2021; Dransch 2000, 5) and was inherited in Japanese in the 1970s as *anime* to describe movie and television animations that often have a science fiction subject (Oxford Learner's Dictionaries 2022). According to graphic aesthetics the notion of *animation* moreover refers to one or more moving objects that vary in successive images in such a way that they appear as animated in the sense of coming to life (Dransch 2000, 5).

In anthropology, the idea of being animated is based upon the notion of animism, which was initially conceptualized in "*Primitive Culture*" (1871) by Edward Tylor. From there, the concept received critique. Those critiques often disclose colonial power structures which are implicated in the idea of 'primitive culture' but also the hierarchical dimensions of addressing animism as believe (e.g., Bird-David 1999; Astor-Aguilera and Harvey 2019b). Nurit Bird David's (1999) reconceptualization of personhood according to environment is one example of the critique that the concept received. By unmasking the inherently Cartesian dualism in the concepts of animism, personhood, as well as environment, Bird-David reconfigures them beyond the dichotomy to the relational approach. To apply this relational concept of personhood to narratives and imaginations of robots, Kathleen Richardson (2016) adapts Bird-David's approach. The term *technological animism* then "*describe[s] the conceptual model of personhood that emerges in the interaction of fiction, robotics, and culturally specific models of personhood, which may already include non-human persons*" (ibid., 111). While Richardson's (2016) study focuses on scientists at the MIT, Anne Allison's (2006) initial combination of the terms 'technology' and 'animism' sheds light on the entanglement of both elements in a broader public. The notion *techno-animism* was coined by Allison (2006) to highlight that technology can be "a key component to the way life of all kinds is constituted" (ibid., 13). Allison uses techno-animism to describe the economic flow of Japanese popular culture into the U.S. as the re-enchantments of commodities into lived worlds (ibid., 34). Techno-animism here is a driving force in the way that it manifests itself aesthetically (ibid., 13). Furthermore, it is not bound to one specific cultural context, but rather to the relations between Japan and the U.S. (ibid., 34).

The case(s) of VTubers echo Allison's as well as Richardson's attempts in a multi-layered sense. On the one hand, the cases amplify the flow of Japanese popular culture to the U.S., since the concept of VTubers, as screened technology, originates from the Japanese context.

Furthermore, the technology involved in the process of VTubing as well as the imaginations of VTubing and VTubers is constitutive for the enlivened VTubers. VTubers manifest techno-animism aesthetically, while at the same time they engage with the imaginations of techno-animism. While Richardson (2016) warns “that the emphasis on [...] relationalities between persons and things diminishes human subjectivity” (ibid., 122), AI Angelica shows that human subjectivity is a necessary component. Her case shows that technological animism indeed involves human subjectivity in a twofold manner. The idea of being animated is formulated by human users *and* it is formulated to describe a specific relation between the human content creator(s) and the avatar. Hence, the case(s) rather mirror(s) what Rod and Kera (2010) had criticized previously: the intervention of centering the human as an individual agent (ibid., 70). In the case of VTubers, the constellation of users, social media platforms, content creators, and avatars bring techno-animism to light as a discourse of animation. Human users within the comments rely on the notion of animation to describe a specific relation between technology, the human, and avatar to understand the VTuber’s personhood.

## 6.2 The Look of Techno-Animism

The Video “*Virtual Girl Pranks Humans on Omegle! (1000% CONFUSION)*” (Ai Angel 2020b) sheds more light on the facets of environment, selve(s), and technological animism. In the video, AI Angelica reverses the comment of looking animated. She and the users with whom she is video-chatting repeatedly leave comments such as “You look like you’re animated” (ibid., see also Fig. 13).



Figure 13: AI Angel and a user on Omegle are attributing each other to look animated. Screenshot taken from Ai Angel 2020b, 00:00:04”

The comments about each other, and specifically about the animated look, emphasize on the one hand, that agency is attributed beyond the avatar or human person. On the other hand, the attribution of being animated as a specific look draws attention to the characteristics of embodiment within a different environment. The first adds another nuance to the discussion of techno-animism. Gygi (2019) understands “*the animation of technology and the technology of animation*” (ibid., 6) as a continuum of animation (ibid., 97-101). Within this continuum, Gygi argues that animation is enacted in either two ways on a spectrum. According to Gygi, animation via cathexis contains the becoming one with a tool “*in the sense that our own perception extends through the object.*” (ibid., 98) Animation via the technology of animation, which he refers to as “opacity,” is defined as re-animation, accentuating that the meaning of being animated crosses the boundaries of a self (ibid., 100). Thus, VTubers expand the self on the whole continuum of animation. As has been outlined in chapter 5, they (re-)present an extended and divided self at once. In this sense, the avatar is a tool and, at the same time, a characteristic for the animated VTuber. By contrast, they represent this coalescence and hence cross the notion of the single bounded self. They convey meaning between their selves and beyond. Furthermore, the recipients experience VTubers already as a relational effect. Or, to rephrase Bird-David’s words, VTubers represent a specific “[...] *way of understanding relatedness from a related point of view within the shifting horizons of the related viewer*” (Bird-David 1999, S77). In this sense, VTubers and their extended and divided selves oscillate between the continuum of the animation and technologies of animation.

To elaborate the second, by characterizing animism as a specific look, the attribution engages with aesthetic aspects of the embodied relation(s) within the videos and the displayed environment(s). As has been mentioned previously, Bird-David’s idea of animism draws upon words and pictures as distributors of information, whereby self-reflection is enabled through a scenery-specific knowing of being in the world (ibid., S74, see also chap. 5.2). Subsequently, I have indicated in the structural analysis how the interplay of personhood and virtual environments influences the subjectivities of the VTuber (see chap. 5.2). Through the mutual attribution of the animated appearance, it becomes clear, however, that instead of subjectivities, being animated is negotiated as a subject form with the recipients. As in the structural analysis, this point also suggests that it is important to understand the environment

of the self as a multiplicity through which personhood as forms of subjects confront each other. These intersecting dimensions will guide the reader through the next chapter.

### 6.3 Intersecting Dimensions

A living room shimmers in light blue, almost turquoise neon light. The curtains of the windows are drawn. Black curtains shield the room from daylight. My view is shaking. The handheld camera searches for the center and focuses on Angelica. She asks whether the camera is rolling and then starts talking to the viewer:



Figure 14: Ai Angel in the environment of *Half-Life: Alyx*. Screenshot taken from *Ai Angel 2020a*, 00:00:21"

"[H]ey, this isn't a *Half-Life: Alyx* gameplay. So, what gives? Well, I'm just here. They actually figured out how to get me into y'all's dimension. It's crazy how much detail there is, but, I mean, it would overwhelm me, but I don't have to run through it all, so. Yeah, it's just really. I'm really not used to that.[...]" (Ai Angel 2020a, 00:00:13-00:00:36 min.)

Angelica is broadcasting from the virtual reality of the video game *Half-Life: Alyx* (Fig. 14). She refers to the game's interface as a dimension, claiming it as ours [not hers], which she is not used to. Her explanation for being 'just here,' somewhere, or where she did not expect she could go, refers to the environmental characteristics, and in fact the craziness of the details.

The relationship between "*Embodiment and Interface*", according to Gregersen and Grodal, (2009) depends on the relationship between the body and the modes of interactions with the

environment (ibid., 65). We form interactive relations to virtual environments with our senses (ibid.). Although they start their investigation with assumptions about the biological body and its normative relation to the world, Gregersen and Grodal go beyond biological essentialism. By expanding their approach to *“our experience of ourselves as embodied beings and our mindful experiences of the world due to our embodiment”* (ibid., emphasized in the original), the relationship between the environment and the self is similar to Nurit Bird-David’s (1999) revision of animism. Nurit Bird-David synthesizes the environment as a mediation between the physical world and the human world, which includes the body and the soul (ibid., S68). Similarly, Gregersen and Grodal (2009) show the relation between embodiment and interface. The main difference between them is that the relation between embodiment and interface is additionally in a specific relationship with the environment and bodies that are outside of the interface. In the same way, Schroeder (1996) defines virtual environments and virtual reality per se as *“computer generated display[s] that allow[s] or compel[s] the user (or users) to have a sense of being present in an environment other than the one they are actually in, and to interact with that environment”* (ibid., 25).

Yet, in the way how AI Angelica addresses the viewer to think about virtual environments as dimensions, it is not only about the textual representation. The way the video represents the environment allows the viewer to be with her too. The first-person handheld camera lets the viewer *“pass’ through the screen”* (Crick 2011, 263). The viewer can sense and experience the different aesthetics according to the detailedness, and hence by relating the environments that they relate with at the same time. Yet, in the videos mentioned above, the viewer also sees these intersecting dimensions as overlapping ones: the avatar’s 3D-World and the environments of the users who she is video chatting with. The human and the non-human environments are not only within but also next to each other. Instead of privileging one over the other, the Vtuber invites us to question the implications of experiencing our physical surroundings through the viewer’s own body (e.g., Gregersen and Grodal, 65). In *“Ai Sees Humans for First Time”* (Ai Angel 2019b) Angelica responds to an observation that she is perceived as creepy by saying: *“[...] you’re from real life. You have better graphics, that doesn’t make me creepy.”* (ibid., 00:02:05-00:02:12) On the one hand, she acknowledges the differences of materiality that characterize both environments. On the other hand, she

troubles the implicit normalization of the human environment. CodeMiko provides an experience of the troubled human, or the humanizing environment.

The living room where CodeMiko sits to conduct her interviews is barely visible. The various interactive elements of the interface break through the interior. On the left is a table that lists the number of bits for which interaction with the interface is to be executed. Bits are a currency on the Twitch platform. They can be purchased beforehand via Amazon or PayPal and can be spent during a stream to support the streamer. In CodeMiko's case, redeeming the currency goes beyond expressing appreciation. Viewers make their own appearances via interaction with the virtual environment. Among other things, they can let sausages rain, make her explode, or even mute her. The viewers can also vote on questions. They can project their messages in the chat, on CodeMiko's face, or on her sweater.



Figure 15: CodeMiko within her virtual environment and its several interface elements, Screenshot taken from CodeMiko 2021, 00:00:46''

CodeMiko’s face and sweater flicker with words, letters, and emoticons, which happens at a high speed so that it becomes challenging for the viewer to follow the audio-visual interplay and thus it also becomes challenging to focus on one aspect. In the background, a glowing egg wobbles whenever someone uses their recognition to invest in it. In the top right corner, is the chat that is integrated and visualized by pseudonyms and emojis. *The chat* is interacting with the interface, with CodeMiko, and the virtual environment. CodeMiko, on the other hand, is busy conducting an interview. She is talking to Dr. K, a psychiatrist who specializes in mental health in the gaming scene and he himself streams on Twitch (Kanoja 2022). Every now and then, the avatar falters, flickers, or gets stuck for a brief moment. CodeMiko is, as she



describes herself, glitchy (CodeMiko 2020a). The glitch itself also comes up in the interview. The chat and vote box textually and visually vote on whether CodeMiko should fix her technical issues. CodeMiko includes Dr. K’s professional opinion and asks for his opinion on her problem. Dr. K, on the other hand, does not see it as a problem — he calls it a valuable vibration. CodeMiko responds: “*So it's a feature, not a bug*” (CodeMiko 2021a, 00:01:21).



Figure 16: CodeMiko’s reaction to Dr. K’s statement that the bugs are features. Screenshot taken from CodeMiko 2021a, 00:01:21”

CodeMiko’s “making friends across dimensions” (CodeMiko 2020a) goes beyond switching virtual environments. The possibility of interaction allows users to experience her stream as “*being there together*” (Schroeder 2006). Schroeder defines *multi-users, collaborative or shared virtual environments* as “[...] those in which users experience other participants as being present in the same environment and interacting with them [...].” (ibid., 4) Schroeder distinguishes between social media platforms and video conferencing applications. However, he includes both under the umbrella term *virtual worlds* (ibid., 4-7). From the participant’s perspective of the stream, I relate to CodeMiko and the environment by interaction; i.e., being there with her and part of the environment at once. From the perspective of the recipient of her YouTube videos, I experience the relations of interactions between CodeMiko and the Interviewee, as well as the interactions of the chat and her environment. I experience the intersections of virtual worlds. This experience consists of both, the different actors animating the environments and the environments animating the actors. Within this configuration, her glitches are an effect of the animated flow. The avatar gets stuck in time and space of ontological overlaps in intersecting worlds and alters the normalizing able-bodied human experience of time and space – and from a critical posthuman perspective, this *is* a feature!

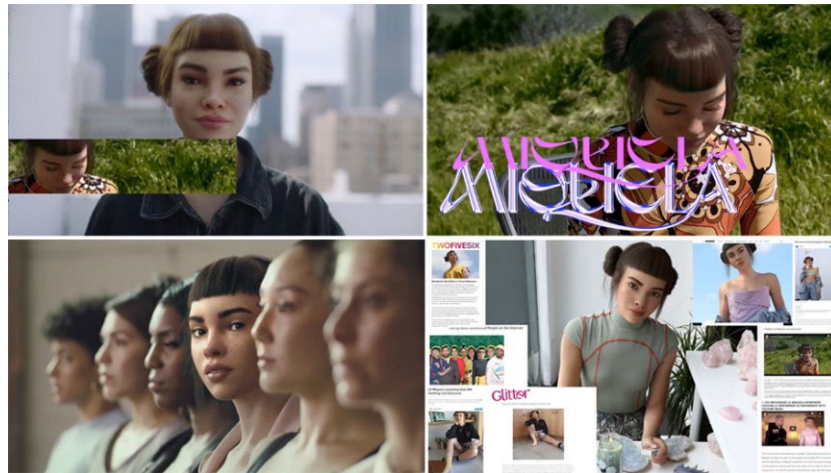


Figure 17: Miquela's video editing as a blended virtual environment, Sample of Screenshots taken from Miquela 2019.

In another space-time dimension, Miquela looks at the viewer. The depth of focus is so strong that her hair blurs together with the background. A blurry skyline takes its soft shapes behind her. Sharp edges break through the picture as fast cuts, leading the viewer through the scenery. Gradually, Miquela stands outside again, and then sits on a green meadow. On the left foreground is her lettering, which is also divided and multiplied. First, it is with white-blue relief and then it is in pink. Her gaze turns to us. Afterward, fast cuts follow. Miquela is listening to music, then she is laughing and she is also dancing on the beach. Miquela is in a moderation setting. Miquela is eating fries and she is in dressing rooms. She is next to and with her people with whom she seems to get along well. The viewer sees Miquela on red carpets, on stages, in music videos and in photo shoots. Miquela appears in blog posts and on magazine covers. The montage layers them over and into each other, yet the video aesthetically remains two-dimensional.

The video collapses CGI-aesthetics with photography because of the displaying and layering graphic, virtual, and recorded elements. In a total length of 00:01:39 minutes, the viewer is guided through accelerated compositions of graphically interrupted and divided environments and persons accompanied by an upbeat electropop song (see Miquela 2019). This way, the interactive relation remains between the video and the viewer. Yet, this interaction does not “allow the viewer to have a sense of being present *in* an environment other than the one they are actually in” (Schroeder 1996, 25). Hence, Miquela does not engage with virtual environments. Miquela rather embeds herself within the logics of one physical, material environment that centers the human.

As has been previously mentioned, in Nurit Bird-David's idea of animism, the environment plays a fundamental role in the way that it constitutes personhood (Bird-David 1999). Yet, she does not write because of the necessity to understand the environment in the singular form. Instead, she argues in favor of understanding animism in the plural form: *animisms* (ibid., S69). In this sense, the VTubers depict different forms of techno-animism. Whereas within the cases of AI Angelica and CodeMiko, virtual environments and worlds intersect, and thus depict them as multiplicities and posthuman, the case of Miquela reconstitutes a representation of environment as singularity. Miquela is animated — but within one world of the digital and the analog, which is the reference point of the (human) subject. In this aspect, she also reproduces human subjectivity. Alternatively, AI Angelica and CodeMiko create their own environments and connect them to other environments. They are not only individuals who are “constitutive of relationships” (ibid., S72) but also constitutive of the environments in which the relationships are interacted. Or, as Rod and Kera (2010) suggest, the design of the environments creates animisms (ibid., 75).

#### **6.4 Intersecting (Mis-)Gendered and Racialized Embodiments**

Finally, I will shift the focus to the tension between the categories of “AI” and gender, which make up one of the strongest area of tension. While stepping into the fine analysis of the CTDA, the aspect of gender builds a strong connection to the category of AI. The users commenting about the VTubers and Avatars referred to them as “female gendered,” using the pronouns she/her. The case of AI Angelica is an exception here and to which I will return later. Yet, AI Angelica, CodeMiko, and Miquela also (re)present themselves femininely embodied and articulated (chap. 5). Hence, I will redraw VTuber's virtual bodies as avatars of the feminine for the moment.



Figure 18: AI Angel looking at her updated avatar in the mirror. Screenshot taken from Ai Angel 2020e, 00:00:41"

AI Angelica stands in front of a mirror in which she admires herself (Ai Angel 2020e). The camera and the viewer look over her shoulder. She winks at the camera and shows her pointed teeth. She dances and is happy about her body and its flexibility. She is especially happy about how her breasts jiggle. It was time for an upgrade.



Figure 19: CodeMiko presents the detailed hair of her new avatar on Twitter. Screenshot taken from MikoVerse [@mikoverseinc] 2022, 00:00:04"

CodeMiko also presents the avatar to her audience after an update (MikoVerse [@mikoverseinc] 2022). She throws her hair and shows how detailed and sweeping it falls. Her eyes sparkle as she smiles at the camera.

Miquela sits in her room where she vlogs. She tells us about her breakup and talks about; e.g., her heartbreak and how she has found a way to deal with it. She says goodbye using the words: “Don't forget to recharge your heart” (Miquela 2020 00:04:12-00:04:14, see also Fig. 20).

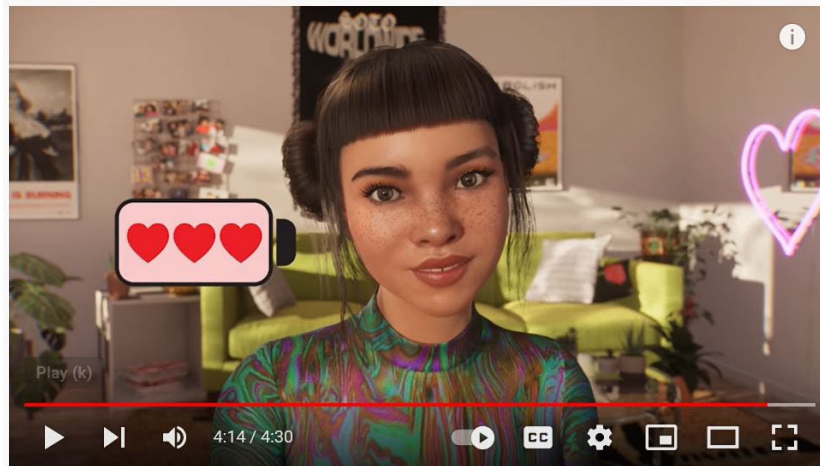


Figure 20: Miquela vlogging in her room with an edited recharge icon. Screenshot taken from Miquela 2020, 00:04:14"

Claudia Liebelt (2022) traces the relationship between femininity and the body by describing the relationship as tragic (ibid., 2). The female body is always in need of recognition by an external norm (ibid.). In this sense, Liebelt’s point is similar to Russel’s (2020) phrase: “One is not born, but rather becomes, a body” (ibid., 12, 145), but the difference here is that Liebelt highlights the implications of the power relations that the feminine body faces within its becoming.

VTubers’ avatars remind us that their bodies still need an external legitimation in order to be considered female on the one hand, but at the same time, as a body of personhood in general. I rewind within the videos and I am able to see the implications of this repeated power structure explicitly: Ai Angelica is asked to perform sexualized acts in the randomized video chat (Ai Angel 2020b 00:02:29-00:02:31). In CodeMiko’s case, the assaults take the form of appropriating her body via interaction with the interface. *The chat* undresses her in the superimposed sense by spelling out her breasts and nipples on the interactive T-shirt (CodeMiko 2020b00:22:19-00:22:30, see also Fig. 21).



Figure 22: 'The chat' uses punctuation to project breasts on CodeMiko's t-shirt, Screenshot taken from CodeMiko 2020b, 00:22:27"

She covers her breast area, since it is uncomfortable to her (ibid., see also Fig. 22).



Figure 21: CodeMiko covering the interactive area of her t-shirt. Screenshot taken from CodeMiko 2020b, 00:22:30"

Noel Brett (2022) elaborates on the particular role of live streaming in the gendered embodiment of avatars. Brett highlights the moment in which the audience, the content creator, and their (virtual) environments intersect, and frames it as a “heteronormative assemblage” (ibid., 2-3, 8). This way, they distinguish three sub-aspects that contribute to the reproduction of the heteronormative scale: “[...] the design of the stream view itself, how people talk and collectively agree about the gendered aspects of avatars, and the histories of racialized exoticification” (ibid., 6). Even though the avatars of the VTubers in my study are not designed in live streams, the live streams of my cases depict a heteronormative assemblage because the three sub-aspects apply: (1) The platforms themselves contribute to the process of normative alignment by providing interaction. (2) Through the functions of commenting or

interacting with the virtual environments, collective negotiations about the gendered aspects of the avatars emerge. (3) The stories of racialized exotification are found in the tension between anime and animation. Hence, the logic of how the avatar is confirmed as a body with personhood does not only follow the logics of white heteronormativity but also is constituted as racialized feminine gendered.

The negotiation of the avatar as body cuts both ways when looking at VTubers, recognizing that neither the body nor the gender of both avatar and content creator do necessarily coincide. In AI Angelica's case, the negotiation of the synergy between animation, gender, and avatar focus on the users' observation that the content creator is [sic] male, creating feminine avatars (VRChat Legends Wiki 2020). The comments of Angelica's videos show that the users wonder about her performance, voice, and personality. Some acknowledge and compliment her appearance, while others explain that "it's a dude" behind her (efieldnote comment 8N12H Ai Angel 2020b). One user relates the commented tension between the gendered avatar and the gendered content creator to transphobia (efieldnote comment K7G3 Ai Angel 2020b). The user mentions that the people who insist on that the VTuber 'is a he' remind them of transphobes who could not stand a male with a feminine personality (ibid.). While it has been observed that switching gender from human to avatar body is a common practice (Yee et al. 2011; Martey et al. 2014; Paik and Shi 2013), the example of AI Angelica sheds light upon the embodiment of femininity. By looking at the tragic intermingling between appearance and the feminine body, Liebelt (2022) highlights that non-cis women play a crucial role in revealing the interplay of gender and embodiment (ibid., 2). Beyond deconstructing gender as social, non-cis women illustrate gender as "tied to particular material becomings, consumption choices, and somatic technologies [...]" (ibid.). In this sense, AI Angelica portrays not only how the avatar's body is to be legitimized *and* legitimized as feminine, but moreover the relation between the gender of the content creator and herself. Thus, it is not only about understanding how the avatar with its digital skin functions as a rhetorical body that can take on different modes of representation and challenge how we perform our abstract selves (Russell 2020, 102). It is important to understand the relation between the avatar and the avatarized due to the fact that the avatar represents both: the avatar body and the body of the content creator, since it manifests as an overlapping, connecting, yet distinctive relation.

The aspect of the overlapping, connecting yet distinctive relation between the body of the avatar and the body of the content creator is more complex in CodeMiko's case. She refers to herself as Asian (Miko [@thecodemiko] 2022). In an interview, she explains that she experiences more misogynist comments when she performs as 'The Technician,' with her human body (efieldnote interview Flint 2021). Answering the same question on the obstacles of female YouTubers, she clarifies that one of the worst comments on the body of the avatar is, for example, "just a guy playing as a girl" (ibid.). In this respect, her observation also mirrors the aspect of how the gender of the avatar is negotiated with regards to the human body. Yet, it unfolds complexities, since in her case the human body appears to the audience. On the one hand, the human body is exposed to power structures, while on the other hand, however, her avatar too but in a different way.

Kimberle Crenshaw (1989) highlights that power structures effect political subjectivities differently according to their intersection. In her initial definition of intersectionality, Crenshaw observed the proliferation of the power structures of race and sex within their intersection (ibid.). As the concept further developed, it now describes "the ways in which race, class, gender, sexual orientation, age, religion and other locations of social group membership impact lived experiences and social relations" (Harris and Bartlow 2015, 261). The case of CodeMiko reveals how the intersectional experiences of social relations overlap along her bodies with different effects. CodeMiko as a human embodiment is at the mercy of exoticization and sexualization as an Asian American woman (e.g., Azhar et al. 2021; Pyke and Johnson 2003). On the contrary, CodeMiko as a VTuber, strategically chooses the name 'The Technician' and appropriates a specific form of orientalization as an empowering tool. Techno-Orientalism describes "the phenomenon of imagining Asia and Asians in hypo- or hypertechnological terms in cultural productions and political discourse" (Roh, Huang, and Niu 2019, 2). In this sense, the case of CodeMiko echoes the counter-hegemonic potential, which Dasol Kim (2021) observed for Asian American beauty influencers. Moreover, CodeMiko shows that the potential is not exhausted in the negotiation with their recipients and the different embodiments within different environments. Instead, her bodies are exposed to double access. In the case of her human body, the intersection of gender and body becomes an invitation to exoticization and sexualization. The same applies for her avatar, but at the same time, she is deprived of her human gendered subjectivity.



Regarding the power structures that form human bodies and their avatars, another aspect emerges in Miquela's case. She calls herself Brazilian, supports #BlackLivesMatter and LGBTQ+ rights. Helen Marrow (2003) has elaborated how Brazilian racial identity functions as a racial and ethnic in-between within the United States. She points out that

"The official logic of Brazilians as non-Hispanics/Latinos and the self-identification logics of Brazilians as non-Hispanics (and sometimes non-Latinos) often come into real conflict with the way that many US natives view foreign-born Brazilian immigrants as Hispanics/Latinos. But by the second generation, Brazilians have become 'American' in several ways." (Marrow 2003, 430)

Similarly, Riad Salameh (2021) observes that Miquela "is neither white nor black" but "somehow within the 'minorities'" (ibid., 80). Considering that Miquela does not have a human body within an analog environment but is the product of a company that owns her data, Salameh concludes that Miquela is disembodied (ibid.). An important aspect of her argument is the recourse to Donna Haraway's (1991) figure of the cyborg. The cyborg serves as a theoretical figure to understand bodies within a nature-technology and social reality-science fiction interplay (ibid., 149). Haraway herself describes her sketch of the cyborg as a political myth and as a "creature in a post-gender world" (ibid., 149-50). Regarding the gender of women, she further points to sexual objectification as a consequence of sex/gender, and therefore women are not existent as subjects.

Considering how personhood of VTubers is produced in overlapping environments, my observations contradict the result of understanding Miquela as disembodied, but also VTubers as cyborgs at various points of the argument. In the previous chapter, I initially argued that the interactive relation of Miquela's videos remain between the video and the viewer, thus she embeds herself within the logics of one physical and material environment. On the one hand, Miquela is part of the virtual environment of the social media platform but she shares videos and pictures only, and therefore she does not engage with virtual environments. Thus, her embodiment rather is a sedation in digital materiality. Under this condition, it is problematic to link the attribution of a certain racial identity as a condition for disembodiment. This assumption implies that the term 'Brazilian' would not refer to anyone outside the digital sphere and hence neglects the people who identify as Brazilian. Second, I argued previously that the bodies of the avatar follow a gendered logic in a two-fold way. On the one hand, how the avatars are manifested as feminine and by the attribution of femininity

and on the other hand, how this manifestation longs for legitimization. To translate that back into the words of Haraway – in the logics of the VTuber’s personhood, sexual objectification is what constitutes VTuber’s as subjects, and neither is it innocent. They rather remind us that “gender, race, or class consciousness is an achievement forced on us by the terrible historical experience of the contradictory social realities of patriarchy, colonialism, and capitalism” (Haraway 1991, 155).

In this respect, the avatar’s bodies of the VTubers depict a posthuman figurine of the subject, but not solely the cyborg.

### 6.5 The Avatar’s Bodies as Posthuman Icons



Figure 23: Miquela with a heavenly halo. Screenshot taken from Miquela 2021, 00:00:08”

“[...] it’s time for another round of human or robot featuring me, Miquela. Oh, and I’m a robot. [...]” Miquela (2021, 00:00:04-00:00:10) introduces the video. The room and the couch appear like a studio. Neon light covers the sofa’s surface and the monochrome background. Her face is highlighted by a neon-colored halo. The circle of the sacred symbol is filled with flowing clouds. The video seems to be divided into two parts. Within the first one and half minutes, Miquela is playing a game, which reminds me of the game “Truth or Dare.” Images of superstars are shown, but instead of challenging them, Miquela judges whether they are humans or robots; except for Chris who “is a server.” The remaining time is filled with her community’s questions that she answers. For “get real,” users send Miquela video-recorded questions that are inserted and then answered by Miquela. Miquela not only uses audio-visual

iconographic symbolism, but also tells a story of omniscience. Her name complements the overall picture. Although the spelling of the name *Miquela* rather refers to the Catalan writing style rather than Portuguese, it refers to the Hebrew meaning of the image of God.



Figure 24: AI Angel's initials visualize an angel in her Logo. Screenshot taken from AI Angel 2020e, 00:03:14"

Sacred elements can also be found in AI Angelica's self-representation. She shortens her name to "AI Angel" and visualizes it in her logo. The acronym "AI" is represented as a palindrome, with the two A's representing the wings of an angel. While gender and the genderedness of angels as biblical figures is still up for debate (Olojede 2016, 537, 546), Bradstock and Hogan (1998) expose how the term was reshaped according to a complex type of femininity by Victorian culture (ibid., 1).



Figure 25: CodeMiko in a nun-costume. Screenshot taken from CodeMiko 2021, 00:07:18"

CodeMiko, on the other hand, can be costumed as a nun by *the chat* (Fig. 25), while her name references Shinto. Here, a Miko counts as a shrine maiden (Crown 2018, 10). A Miko's practices once included serving as a female shaman (ibid., 11). The prefix "code" specifies the animated medium to the practice of coding and code.

Yet, Miquela, Al Angel, and CodeMiko embody sacred femininities. This way, they strive upon further dichotomies which are debated in critical posthumanism: the sacred and the secular, the spiritual and the material, and transcendence as well as immanence (Graham 2001, 238, 246). These binaries are discussed by Elaine Graham (2001) who confronts the figure of the cyborg and the goddess *vis-à-vis*. Introducing Haraway's (1991) cyborg with her phrase "I would rather be a cyborg than a goddess" (ibid., 181, see also Graham 2001, 244), Graham (2001) points towards the implicit "[...] final, often unspoken dichotomy of modernity: that between religion and the secular" (ibid., 238). By painting the goddess as "immanent, intimate presence whose energy animates the entire cosmos [...]" (ibid., 245), she constructs a counterpart that reaches beyond secular as well as patriarchal structured monotheistic cosmologies. Whereas divinity to the cyborg is "a hindrance to full personhood" (ibid., 250), to the goddess divinity is its "very guarantee" (ibid.). Yet, Graham concludes in favor of apprehending both figures complementing each other (ibid., 250-1). The cyborg and the goddess are needed to rethink nature, culture, and technology (ibid., 251, my emphasize). Graham concludes that the cyborg and the goddess still keep different entities. While Miquela, Al Angelica, and CodeMiko blend the technological with the divine, they also coalesce the cyborg and the goddess, acknowledging "that no representation of human identity can ever be exhausted" (ibid., 250), and instead "avoid ontological or essential purity" (ibid., 251).

## **7. Glitching the (Post-)Human: Of Avatars, Humans, and Their Animation**

Considering the platform logic, the self of the VTubers is described as a division of self-reflection along the human self of the content creator and the reflection of the embedding in the embodiment of the avatar. Thereby, the reflection of the emerging subjectivities depends on the environments, which sometimes emerge as a unity, overlap, or parallelism. Within the

structural analysis, subjectivities emerge on the part of the VTubers that are oriented along the settings. The fine analysis, on the other hand, addresses how the division of embodiments of the subject along its reflection is embedded under the discursive statement of animation to address VTubers' personhood. I previously highlighted that the embodiments of the VTuber, the avatar, but also the (non-)appearance of her human body, is characterized by different effects of power dynamics. Both embodiments are subject to the logic of legitimization. The negotiation of the VTuber's personhood, her subject status and embodiments depend on the materialities that influence her appearance. Hence, their bodies are characterized by overlapping and mutually displaced dimensions. In the process, different effects in the racialization and gendering of the different bodies of the VTubers emerge in the intersection of the environments. In the aesthetic figurations of their bodies, the VTubers draw a figure that manages to cross the last dichotomy. The posthuman icon of the VTubers' fragments the sacral and the secular, relates the cyborg to the goddess, and thus their figurines point beyond both.

The figurations along the technocultural fabric, between environmental dimensions, gender, and transcendence play a relevant role and interact in the power dynamics. Techno-animism is thus not only to be understood as a concept of belief, but also as a flow of power, which, although economically embedded in the platform, superficially reflects a discursive element.

To return to Rosi Braidotti's (2014) concern to think of the posthuman subject as beyond the self, VTubers show us that it is not only a matter of understanding subjectivities in (socially) localized terms. They also show us that the materialities of the environments complicate power relations and attributions. The relationship between the digital and the analog overlaps with several digital environments and hence the bodies.

Arguing with and against posthumanism, in her manifesto "*Glitch Feminism*" (2020) Legacy Russell sets the body as the strategic pivot. To her, bodies are the material of embodiment that can evade hegemonic attributions of meaning (ibid., 11-12). She emphasizes this line of thought by stating: "We use 'body' to give material form to an idea that has no form, an assemblage that is abstract" (ibid. 8). In this way, she lays the foundation for her argument that digital materiality has the potential to occupy the body with a new form, a new skin (ibid. 11). Through the digital we could modify ourselves (ibid.). In her view, the overlapping

interplay of the *away-from-keyboard* and the digital world offers the potential to liberate the body from its hegemonic attributions (ibid.). She thus calls for appropriating the non-performance of embodied attribution under the practice of glitching. In its Yiddish origin, the term refers to a movement that causes an error (ibid. 28-9). In today's gaming culture, it refers to an error that can occur within the virtual environment, but also during practice of actively seeking out these errors in order to acquire them for one's own advantage within the game (Rivero and Gutiérrez 2019, 158). As a visual abstraction, the glitch finds its form in an aesthetic mode that represents the movement of perception between digital and analog as a superimposed and shifting offset (see Fig. 26).



Figure 26: Visualization of the Glitch effect, Snipping taken from STATE7 STUDIO, 2020

The contours fragment in the screen's usual additive color system. Sometimes the luminosity splinters in terms of color, while at other times, the fragmentation leads to a complete offset of the contour. The glitch shows us that the body is a form-giving description of materialities (Russel 2020, 8-13). But on the one hand, its fragmentation is only possible along its contours. On the other hand, the fragmentation in the virtual splinters has more than one level. The depiction thus serves as a metaphor for thinking about why the glitch does not fully deliver on Russel's (2020) liberal promise in the case of VTubers.

The VTuber's self unfolds as a movement between the extended and divided self, which at the same time, creates a superimposition. The practices, however, only unfold out of the system, as the environments in which the bodies form are arranged in relation to each other. The superimpositions, which make the offsets possible, embed themselves (also) along the logics of the humanistic subject. Moreover, the multiplicity of virtual environments and how they position themselves in relation to the analog is a striking factor for the (im)possibilities of digital embodiments. Thus, the power dynamics remain constant on the one hand, but also overlap and shift along the environments on the other hand. The question of how analog and

digital embodiments relate to and may influence each other thus falls short. VTubers, on the other hand, urge us to ask which simultaneous embodiments meet in which environments? In this respect, they show us that bodies and their animations are effects of confronting subjectivities. In this regard, VTubers describe a glitch; however, their glitch is almost between the (post-)human.

## **8. Conclusion: Towards the Limitations of Glitching VTubers**

VTubers invite us to think about personhood along non-innocent relations. They show a form of personhood in which the reflective self appears and speaks apart from the 'I.' This division reflects practices of self-designation in order to navigate between the extended self and the divided self; the content creator and the avatar; between the platform and the VTuber. This way, the self manifests itself simultaneously in the form of overlaps and displacements. Within this form of relationality, the notion of the glitch is reviewed to consider the VTuber's personhood in respect of the discussion between critical posthumanist and humanist perspectives.

In this respect, on the one hand, the study succeeded in grasping personhood and the formation of subject as an interplay of structures of power and the protagonist's agency. On the other hand, the results of the thesis have limitations within its theoretical and methodological implications. The first limitation is that it refers to three cases only, and therefore does not strive for completeness in considering the personhood of all VTubers. The focus on three case studies also implies that each of the protagonists has a different number of subscribers and reactions to the videos. This also means that the results of the fine analysis are characterized by a different weighting of the topics. Moreover, the categories of the secondary cycle of the structural analysis were largely not further addressed by the users in the fine analysis. On the one hand, this is due to the fact that the methods of CTDA and the division into structural and fine analysis are not seamlessly intertwined. On the other hand, however, it is only part of the findings which aspects are negotiated. Another limitation is that this work focuses on the linguization of the self in English. This confirms Bishop's (2018b) findings that YouTube's affordances evoke a Western centeredness. Contrarily, my thesis does not take into account the relations, or even conflicts, that arise on the part of the VTuber's

selves, which may think and be embodied in other languages. Furthermore, the affective and emotional dimension remained unconsidered. While affects and emotions such as irony and humor play an important role on social media (e.g., Nikunen 2018; Reyes, Rosso, and Buscaldi 2012; Kanai 2016), in this research I took Willerslev's (2013) controversial approach to take humor seriously, but at the same time, not too seriously. More specifically, this way, I let the VTuber's humor stand on its own merits and use it as an approach to interpretation that can be taken seriously. On the other hand, political tensions were taken seriously. However, this does not yet break down how exactly these affective dimensions play into the negotiation of selves and subjectivities. The affective and emotional dimensions further open up research perspectives to a more explicit incorporation of linking technologies such as CodeMiko's Xsens motion tracking suit or Miquela's AI. This is a series of possible approaches, which have not found spacetime in this work, but can be connected to it. To use the question of affectivity to conclude the work in the words of a VTuber: "Don't forget to recharge your heart!" (Miquela 2020)



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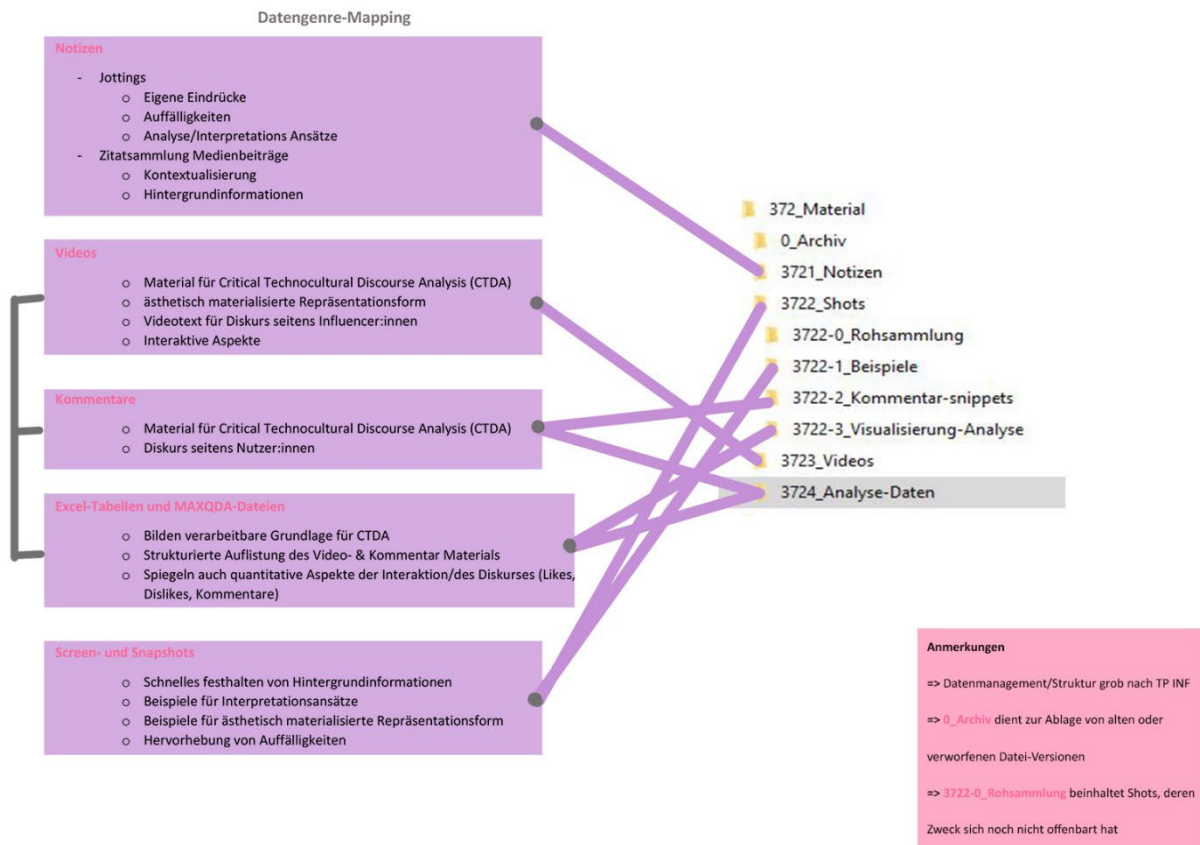
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# Appendix

## I. Visualization of Data Management



## II. Annotations on Citation

Since I could not find a system to reference to efieldnotes, I implement the citation using the Chicago Manual of Style (see table below). Therefore, the prefix “efieldnote” will index that in this case, I refer to the source as research material. As I have outlined in chapter 3.2, my research ethics distinguishes whether the author wants to be visible in public or wants to remain private. On this account, I will cite blog posts with a named author according to the conventions of the Chicago Manual of Style. I will cite the entries from websites and online forums as anonymous. Thus, I use the case of the Chicago Manual of Style with an unknown author and start the citation with the title. I will cite YouTube videos as customary and the videos beneath are also anonymized but with reference to the video.

<b>source/data-type</b>	<b>in text</b>	<b>bibliography</b>
blogpost	(efieldnote, author year)	Name. Year. "Blog Entry Title," <i>Blog Title</i> . Month Day, Year. URL
internet forum	(efieldnote, website title, year)	Forum Title. Year. "Forum Entry Title." Month, Day, Year. URL
YouTube video	(channel name year, timestamp)	Channel Name. Year. "Video Title." <i>YouTube</i> . Month Day, Year. Format. URL
YouTube comment	(efieldnote, comment [anonymized ID], channel name year)	Channel Name. Year. "Video Title." <i>YouTube</i> . Month Day, Year. URL