A Phygital Self: Cultural Hybridity and Queerness in Virtual Fashion Practice

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A Phygital Self: Cultural Hybridity and Queerness in Virtual Fashion Practice

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Abstract

The aim of this research is to extend the work of IoDF by focusing on CLO as a leading software provider for commercial fashion professionals and suggest ways of diversifying their modification options. Informed by my lived experience of cultural hybridity and queerness, I explore the lack of representation of intersectional identities within virtual fashion practice. Following Robin Nelson's Practice as Research framework (2013) this submission includes a written thesis with embedded digital practice and passages of autoethnographic writing.

By adopting a phygital approach in this inquiry, this project suggests that embracing a hybrid (physical and digital) process, could provide a temporary solution for 3D software users. The other element of the practical process involves the development of a self-avatar and virtual garments using exclusively CLO, Photoshop and Sizemic scanned data. Inspired by the Institute of Digital Fashion's report on inclusivity within virtual worlds, I critically reflect on the accuracy of my self-avatar, to critique the limited customisation options available to fashion practitioners/users.

This practice as research project utilises performative autoethnography to support the inquiry. Through the composition of blogposts of personal reflection, this research explores the experience of displacement and discomfort, and the negotiation of gender and sexuality in a largely heteronormative landscape. Consideration also was given to the representation of a broader audience; therefore, participants were invited to share their thoughts and experiences in response to the blogposts.

Contents

1. <u>Introduction</u>

My Research Stance and Background

I was born in the UK to a British mother and a Greek father, raised in Greece, and brought up bilingual. I define my sociopolitical identity as queer and culturally hybrid, and will be referring to myself as such throughout this piece. More specifically, within my writing I refer to cultural hybridity as the space in-between my British and Greek cultural identity from a queer perspective. This enquiry aims to investigate what Homi Bhabha (1994) and later Nikos Papastergiadis (2000) described as the third space of existence that cultivates difference. Following the concept of cultural hybridity, throughout this research I explore the process of learning to consider both my British and Greek cultural identity as coequal and interdependent. Bhabha (1994: 2) defines this third space as an 'in-between' space that nurtures the development of 'new signs of identity, and innovative sites of collaboration, and contestation, in the act of defining the idea of society itself'. He argues that cultural values are conveyed through an ongoing process of negotiating difference within the interstice between displacement and belonging (Bhabha, 1994). I explore these feelings through a series of blogposts. Within these, I address how as a child growing up in Greece I typically felt as though I were viewed as British. Equivalently, I also discuss how as a young adult studying, and now working, in the UK, I typically feel as though I am viewed as Greek. Additionally, I discuss the experience of being queer in both locations. Throughout this thesis and within the blogposts I refer to my identity as queer, 'an umbrella term to designate resistant and non-normative sexuality' (McCann and Monaghan, 2020: 2) and gender. Throughout my discussion on navigating queerness, I consider my relationship with my body as a means through which I experience my gender and sexuality. Inspired by Kirsch (2000) and Getsy (2016), this research also aims to explore the fluidity of my identity beyond gender and sexuality through my lack of conformity to essentialist and binary ideas of identity in both British and Greek society. To explain this nuanced sociopolitical position and lived experience, I follow Kimberlé Crenshaw's (1989) work on intersectionality and refer to multifaceted identities as intersectional. I use the concept of intersectionality as a metaphor to explore how different aspects of my identity contribute towards a unique experience of privilege and discrimination. Crenshaw's framework in this project is used as a tool for acknowledging difference and presenting a "voice" to underrepresented identities.

Research Objectives and Methods

This practice as research (PaR) project is a performative autoethnographic exploration of the representation of cultural hybridity and queerness within virtual fashion. This work aims to propose a new way of utilising 3D fashion design software combined with physical visual elements such as human bodies and physical garments, to facilitate self-exploration. This approach is referred to as phygital, a term coined in 2007 by Chris Weil, Chairman and CEO at experiential advertising agency Momentum Worldwide, who used it to describe the interdependency and connection between physical and digital worlds (Cennamo, Dagnino and Di Minin, 2022). Inspired by research conducted by the Institute of Digital Fashion on 'developing a more inclusive, diverse and sustainable future' (2021: 10) through virtual design, this research will investigate the limitations of commercial 3D fashion design software. 3D fashion design software was created to support the prototyping stages of the garment creation process using 3D simulation technology. The provider of 2D pattern drafting technology and 3D garment simulation technology I will be focusing on within this research is CLO Virtual Fashion Inc. (CLO), which I familiarised myself with during my professional experience working as a 3D Fashion Designer and Technologist. This research is realised through the process of designing a self-avatar on CLO, and through interdependent autoethnographic and reflective blog writing. Informed by my lived experiences, this research will explore cultural hybridity and queerness to examine the inclusivity and representation of intersectional identities on virtual fashion software. This allows for the analysis of both my physical self through autoethnographic and reflective writing and my digital self through virtual avatar creation and digital garment design. I also refer to this hybrid way of working as phygital throughout. Aligning with IoDF's report 'My Self, My Avatar, My Identity: Diversity and Inclusivity within Virtual Worlds' this research supports the argument that 'there should be no excuses for the lack of representation' (2021: 5). The limited representation of diverse bodies and identities, within virtual fashion, impacts user experience and results in the exclusion of non-normative consumers. This project aims to explore ways in which diversity might be extended. The scope of this research highlights the importance of accurate self-representation on virtual platforms and suggests that a phygital approach to fashion practice could help overcome the limitations of physical and digital worlds, respectively. This thesis is a reflective document and a companion piece to the practice that has been documented and

curated on my [website](#). Both parts of this research enquiry are critical to the exploration of the subject matter and are to be examined in support of each other. Elements of the practice are embedded throughout this thesis in two ways. First, through a number of italicised passages of personal narrative from my blog, that are interwoven into this body of text, and second through the inclusion of figures that reference the visual research. To further support development of the research, participants responses detailing their views on inclusivity were also accepted through the website. Potential participants who came across the blogposts on the website or via social media were given the opportunity to share either their own lived experiences or their views on the subjects discussed throughout this project. Although engagement with the website was limited, participants captured their emotional responses to my blogposts and reflectively shared their own personal experiences. Some excerpts from these responses are also interspersed throughout the thesis to provide the reader with varied perspectives. These methods are used to articulate the sentiments involved when discussing intersectional identities but also to instigate reflective thinking, as a way of emphasising as well as evidencing the embodied nature of the research.

2. <u>Literature Review</u>

Cultural Hybridity

The concept of hybridity, to describe cultural difference, has been long contested by social and cultural theorists. In nineteenth-century western eugenicist writings the term was used to promote racist ideologies that focused on people's physiological and cultural differences (Papastergiadis, 2013). However, in his book *The Location of Culture* (1994), Bhabha reconceives the term by highlighting the importance of the instances and processes through which cultural differences are negotiated. He posits that the exploration of the existential space between concepts, such as race, class, gender, sexual orientation, and geopolitical locale, fosters an innovative articulation of identity (Bhabha, 1994). Bhabha describes this Third 'in-between' Space of existence as hybrid (1994 :2). When discussing cultural identity, hybridity according to Bhabha is an incorporeal space in which two separate, interdependent definitions of identity interact on an emblematic level to redefine difference (1994). He asserts that this interstice cultivates 'the possibility of a cultural hybridity that entertains

difference without an assumed or imposed hierarchy' (1994: 5). Understanding hybridity as a symbolic space that is 'neither the one nor the other' (1994:37) challenges preconceived political notions of culture and generates a new, distinct understanding of identity. Applying Bhabha's perspective to describe my own cultural identity as hybrid, emphasises the equivalent experiences of my Greekness and my Britishness, whilst also differentiating my cultural experience from that of a monocultural person.

Expanding on the writings of Bhabha, Nikos Papastergiadis designates hybridity as a 'bridging concept' (2000: 20) used to explore the nuance of cultural difference in identity. He posits that the use of hybridity, as a symbolism for the definition of cultural identity, only provides critical value to the discourse when 'displacement and connection, are seen as operating together' (Papastergiadis, 2000:38). The potential for a new understanding of identity is made feasible through a conscious fluctuation between different standpoints (Papastergiadis, 2000). He aligns his thoughts with those of Bhabha on hybridity being a Third Space generated by the frictional interaction of two cultures within an identity. Papastergiadis elucidates that hybridity operates as a subversive term that instigates a transgression beyond binary and purist understandings of cultural identity (2000). This directly relates to the purpose of referring to my identity as hybrid within my research. I utilise the term to highlight the existence of bicultural (or multicultural) identities as distinct and encompassing of two (or more) separate cultures.

In his writings, Marwan M. Kraidy describes hybridity as a 'maddeningly elastic' (2005:3) term in intercultural discourse to define ambiguous notions of difference and fusion. In discussing the significance of international communication in understanding the ambivalent nature of hybridity, Kraidy defines cultural hybridity as the 'the fusion of two hitherto relatively distinct forms, styles, or identities, cross-cultural contact, which often occurs across national borders as well as across cultural boundaries' (2005: 5). Specifically, he theorises that this contact between cultures is typically underpinned by movement of either people or cultural commodities (Kraidy, 2005). In both cases, the process of movement is characterized by the communication of an ongoing exchange of ideas and practices. Using Kraidy's understanding of hybridity as the interrelationship between two separate cultural identities influenced by migration, supports the characterisation of my lived experience as culturally hybrid. The

ambiguity of hybridity as a term and its dependence on a continuous process of negotiation, functions as a metaphor used to explain my cultural identity as equivocal.

Queerness

Queerness within this project is used as a subversive term to define an intentional opposition to the binaries of gender and sexuality. When discussing bisexuality, Elizabeth D. Daumer posits that queer as a non-label implies that 'not everybody is queer in the same way' and therefore the term openly 'enable(s) others to articulate their own particular queerness' (1992: 100). Although her argument is centred around the acceptance of bisexuality by feminist and lesbian theorists, she employs the term queerness to emphasise a transgression beyond binary notions of gender and sexual identities (1992). She supports her argument through her alignment with Teresa de Laurentis' designation of queer as a term used to 'transgress and transcend [them]- or at the very least problematise' dualistic identity labels (de Laurentis, 1991: v). I choose to self-identify as queer and through this project I explore the representation of queer identities as non-distinct and ambiguously non-normative. Aligning myself with Daumer and de Laurentis, within this research I use the term queer as a non-heteronormative self-identification that implies an embodied resistance against the gender binary, and its assumed synonymity with biological sex.

Max H. Kirsch defines queer as a 'meta-identity that is not limited by labels or social constructions' (2000: 32). Following Kirsch, within this project the term queer is used to describe an identity that deconstructs binary and conventional notions of gender and sexuality. He suggests that queer theory, as a by-product of postmodernism and poststructuralism, opposes the restrictive categorizations and labels given to diverse gender and sexual identities by dominant power structures (Kirsch, 2000). Throughout this piece I refer to queer identities as 'meta-identities' inspired by Kirsch's definition (2000). This term supports my intension to highlight the binary descriptions of human avatars on 3D fashion design software. In agreement with many other queer theorists, Kirsch also rejects the boundaries of dualistic heteronormative thinking and supports the idea that 'a third or more ways of describing and analyzing sex and gender should be proposed' (2000: 34). Queer as self-identification operates similarly to cultural hybridity within this research. It offers a third way of viewing gender identity and sexuality, as suggested by Kirsch. He emphasises the

subjectivity in the use of the term queer to self-identify, through highlighting the significance of diversity as an oppositional stance to hegemonic and normative ideals of the dominant culture (Kirsch, 2000). The choice to self-identify as queer therefore becomes subversive and political, as it implies a resistance to conforming and assimilating with the cultural hegemony. For this reason, throughout this practical research inquiry, the emphasis is given to queerness as the experiential embodiment of resistance against the gender binary and heteronormativity.

In more recent literature, David J. Getsy describes queerness as 'a defiance to the mainstream and an embrace of difference, uniqueness and self-determination' (2016: 12). Getsy discusses the term queerness as a form of activism against the dominant culture's idea of normalcy and the LGBTI communities' assimilation of hegemonic norms (2016). In viewing queerness as an act of defiance, I align myself with Getsy and utilise the term queer to define a alternative viewpoint from which one can 're-view the presumed normal' (2016: 15). This stance supports the articulation of my resistance against 'the operations of power that police difference and that exile the otherwise' (Getsy, 2016: 12). Throughout this work I consider myself 'the otherwise' (Getsy, 2016: 12) within both assimilationist LGBTI and heteronormative Greek and British communities. Specifically, within this project I reflect on how I personally experienced the imposed necessity to conform to cultural normativity and my transition towards understanding my queerness.

Finally, the concept of queerness as a continuous journey towards transgression is described in a more utopian way by José Esteban Muñoz who states:

'Queerness is not yet here. Queerness is an ideality. Put another way, we are not yet queer. We may never touch queerness, but we can feel it as the warm illumination of a horizon imbued with potentiality. We have never been queer, yet queerness exists for us as an ideality that can be distilled from the past and used to imagine a future. […] Queerness is essentially about the rejection of a here and now and an insistence on potentiality or concrete possibility for another world' (Muñoz, 2009: 1)

His perspective reinforces Getsy's argument that there should not be an individual definition of the term queer, rather it should be subject to ever-developing change and 'its critical stance (ought to) be renewed and re-engaged for future practices' (2016: 21). Within this project, I

refer to myself as queer to highlight the variable and transgressive nature of the term itself and encourage the use of it to describe an opposition to dominant and binary understandings of gender and sexuality.

Intersectionality

Intersectionality as a theory and term was introduced by Kimberlé Crenshaw to challenge how the multidimensionality of Black women's experience is neglected in both feminist theory and antiracist politics (1989). When discussing US antidiscrimination law, she explains how 'the court's refusal […] to acknowledge that Black women encounter both combined race and sex discrimination implies that the boundaries of sex and race discrimination doctrine are defined respectively by white women's and Black men's experiences' (Crenshaw, 1989: 142-143), thus ignoring Black women's intersectional experiences. This analogy is used by Crenshaw to illustrate that intersectionality is concerned with the ways in which specific aspects-intersections of one's socio-political identity are viewed in contrast and in relation to the dominant culture and institutional power. She emphasises that Black women and their experiences of discrimination are rarely studied in feminist writings nor are they prevalent in antiracist politics, therefore supporting and understanding the notion of intersectionality offering ground to further increase the socio-political visibility of Black women (Crenshaw, 1989). In later writings, Crenshaw considered how intersectionality can operate 'as a way of mediating the tension between assertions of multiple identities and the ongoing necessity of group politics' (1991: 1296). She argues that intersectionality offers a reconceptualization of identity that allows for a more effective negotiation of self through the acknowledgement of our subordinations and privileges (Crenshaw, 1991). Specifically, she states:

'Through an awareness of intersectionality, we can better acknowledge and ground the differences among us and negotiate the means by which these differences will find expression in constructing group politics' (Crenshaw, 1991: 1299).

This research project explores both self-identification and representation through an intersectional lens to critically evaluate inclusivity within virtual worlds. Following Crenshaw's approach, I utilise intersectionality as a mode of identifying a landscape within which multiple multidimensional identities coexist and are mutually influenced. This allows me to evaluate

representation on virtual platforms beyond my own experience. Whilst cultural hybridity and queerness are specific to my self-identification within this research, intersectionality is used as a method to present a subjective view of underrepresented and misrepresented groups. Ultimately, intersectionality affords me the opportunity to acknowledge my privilege and lack thereof, comparatively to other identities and social groups discussed throughout this thesis.

Representation in Virtual Spaces

I consider virtual spaces the platforms on which avatars as human depictions are used broadly, yet within the scope of this research I focus on virtual fashion spaces. Specifically, I am concentrating on the use of avatars as self-representation on the commercial fashion design software system, CLO. Most existing research surrounding self-avatars in digital spaces is conducted from either a gaming or virtual reality (VR) perspective. Therefore, to support my research, the exploration of virtual representation started with reading Freeman and Maloney's (2020) *Body, Avatar and Me: The Presentation and Perception of Self in Social Virtual Reality*. In their study they explore the complex ways in which people present themselves and experience their interactions with others within social virtual reality spaces (2020). These social virtual reality spaces are visual chat-room-like platforms on which users can interact with others and build interpersonal relationships virtually whist being depicted as avatars. The authors especially emphasise the potential for social VR applications to offer new modes of self-identification and encourage the exploration of the embodied self (2020). Although avatars in VR are used differently to avatars on fashion design systems, they could have the potential to help users evaluate and reflect on their sense of self by viewing the self virtually from an external point of view. This could enhance user experience through the endorsement of introspection and self-exploration. Based on the study, they also argue that social VR users, in the most part, tend to present their digital self in accordance with their physical self and highlight the importance of aesthetics, gender, race and age/maturity 'to perceive, approach, and interact with each other' (Freeman and Maloney, 2020:24). Additionally, they discuss how 'the process of constructing and perceiving identity in social VR allow social VR users to experience their everyday self in a new way, discover one's unknown self, or explore alternative gender identity' (Freeman and Maloney, 2020:24). Avatars as humanoid depictions offer a new mode of embodiment for users who through customisation can self-present on virtual platforms alternatively to the way they do in the

real world. Their findings stress the complex nature of self-presentation in virtual worlds and the significance of accuracy and detail in presenting cultural identity and gender identity, which directly correlate to the intention of my research. Despite the study being specific to social VR, the prospects of the self-avatar creation process as an embodied introspective endeavour, could be applicable to virtual fashion design software users. Although the commercial purpose of such software is product development, detailed avatar customisation could provide the user with alternative notions of self which could then enhance the understanding of diverse experiences.

In an article entitled *Fancy avatar identification and behaviours in the virtual world: Preceding avatar customization and succeeding communication,* Masanori Takano and Fumiaki Taka discuss their study investigating 'the association between avatar customization, avatar identifications, and communication behavior' (2022: 1). Their findings illustrated that avatar customisation supports avatar identification when the digital self within a virtual world (avatar) resembles and correlates to the physical self in the real world (2022). Additionally, they discovered that players that indicated an embodied identification to their avatar showed a greater level of interpersonal communication, through self-disclosure, and were more likely to establish social relationships with other players (2022). The results of this study mirror the findings of Freeman and Maloney's earlier research. In both cases, users and players valued the process of detailed avatar customisation as a facilitator for self-analysis that consequently improved their relationships with others. My study explores Takano and Taka's proposed concept in the context of digital commercial fashion software, in order to establish whether users, whom through an embodied identification with the avatar, could achieve a greater understanding of self and others.

The results of both studies are reliant on real-time social virtual interactions between users, in opposition to the garment prototyping and visualisation use of digital fashion design software. However, although avatars in virtual fashion are not frequently or directly used as socialisation tools, their potential as visual communication tools could be increased if attention is given to detailed customisation. Within my research, I utilise social VR research to explain how detailed avatar customisation options could increase the capabilities of commercial fashion software, leading to greater user and consumer satisfaction.

In 2021 Institute of Digital Fashion (IoDF) released a report, *My Self, My Avatar, My Identity: Diversity and Inclusivity within Virtual Worlds,* that detailed the findings of a six-week desk survey, an online survey, and a series of interviews with a diverse range of people in the virtual fashion industry. The entire study focused on the lack of representation and the misrepresentation of diverse users within virtual worlds, a term that covers 'digital platforms within which users can create and present an identity in digital form' (IoDF, 2021: 7). Throughout their research they analyse the effects of poor representation on users as well as openly express the need for more diverse options when customising an avatar, as a digital depiction of self. As with my research project, key drivers were:

1) the exhilaration in the use of digital technology and engagement within virtual spaces as a result of Covid-19 physical contact restrictions

2) user frustrations with the limitations in detailed customisation options available within virtual worlds.

Due to this, IoDF consider their main objective to be 'push(ing) the parameters of digital fashion, to fully explore and expand the digital language' (IoDF, 2021:16) to initiate a shift in how diversity and inclusivity are negotiated within virtual environments. Their online survey, reaching six thousand international participants of varied backgrounds via social media, included focused questions on diversity and inclusion within the gaming industry. The responses highlighted 'a strong awareness of the underrepresentation of numerous communities, and (participants) were particularly vocal about poor representation of women, the LGBTQ+ community and disabilities' (IoDF, 2021:25). Additionally, the findings emphasized the importance of 1) accurate representation in terms of skin colour, disability, and gender; and 2) utilising 'the limitlessness of virtual worlds, with otherworldly physical features, impossible fashions and body modifications' (IoDF, 2021:27). To supplement the survey, IoDF conducted five individual interviews with diversity, inclusion and gaming experts that indicated an overarching dissatisfaction with virtual worlds failing to 'stimulate, inspire and represent their users' (IoDF, 2021:58). Scepticism on brand motivations is apparent throughout the report from participants who express a clear need to diversify representation from a production level (2021). Moreover, the collective responses are characterized by a sense of apathy on behalf of the interviewees who feel frustrated by the limitations of digital software (2021). What is evident from reading the whole report is the lack of choice when it

comes to self-representation. Marginalised people seem to choose virtual worlds as an escape from the limitations of the real world and are left confused by the contradiction between the promised limitlessness and the lack of choice upon entering the digital realm. This underpins the argument of virtual worlds not reaching their full potential and the need for improvement in user experience. In response, IoDf pose that the digital/virtual industry should be striving towards creating a safer and more inclusive environment for marginalised communities, especially due to the expansive capabilities of technology (2021).

The findings presented by all three studies reveal that extensive avatar customisation and self-identification can lead to a deeper understanding of self and identity whilst also positively impacting social behaviours both in virtual worlds and in real life. However, there is an evident concern regarding the lack of personalisation choices available to diverse users. Considering virtual fashion design software an additional means of experiencing digital spaces, this postgraduate research project further highlights the importance of accurate virtual representation.

3. <u>Conceptual Framework</u>

The Phygital

I choose to place my work within the conceptual framework of the phygital, a portmanteau term used to describe the state of being both physical and digital concurrently. Wided Batat, a marketing scholar, defines phygital as:

> 'A holistic and integrative ecosystem that adopts a consumer standpoint as a starting point and then integrates a combination of physical, human, digital and media content elements, platforms, technologies, and extended realities, among others; the goal of phygital is to offer unique and compelling customer experiences that should guarantee a coherent continuum in the delivery process of consumer value (intrinsic/extrinsic) provided from digital to physical and vice versa' (2021: 10).

Although the focus of my research is not customer experience, inspired by Batat I redefine the term phygital by replacing the term consumer with user. By placing the user at the centre of a phygital framework within this research, I am also directing the aim towards offering inclusive user experiences and accurate representation. To expand on Batat's

conceptualization of phygital within this project I have created a diagram that details the physical and digital elements of the practice that could constitute a phygital approach (Figure 1).
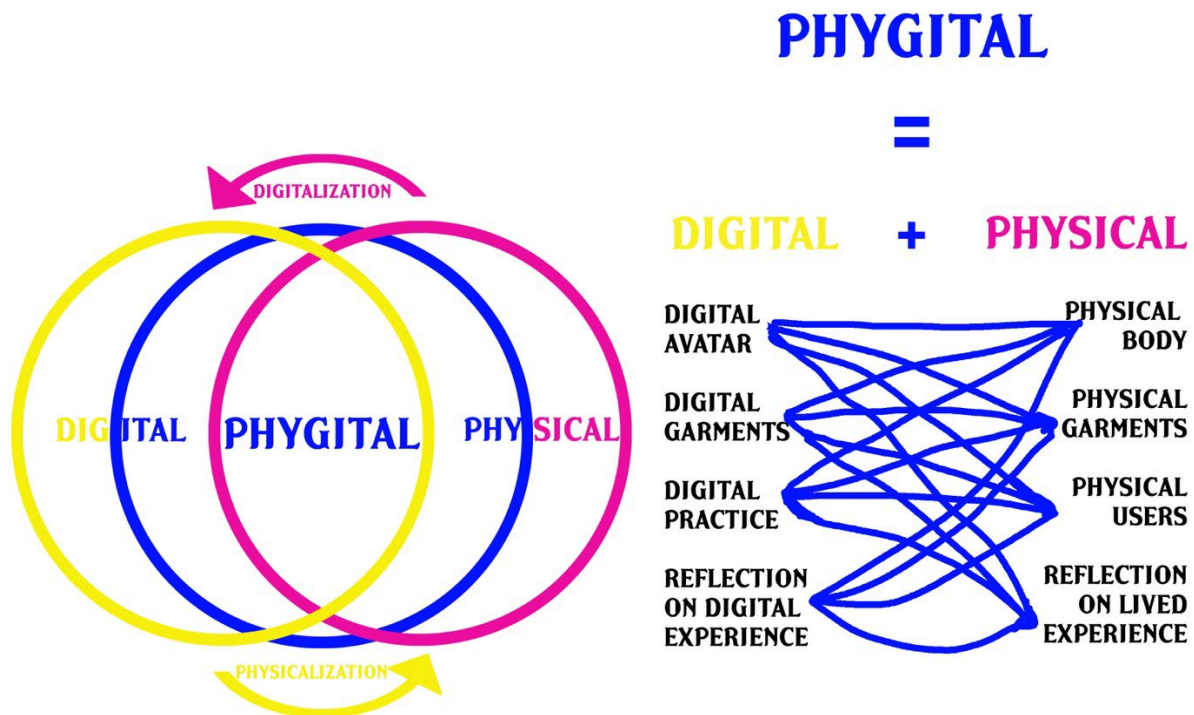

Figure 1: Phygital Framework diagram – The interrelationship between physical and digital

This project contributes towards the discussion concerning the adoption of the concept of phygital in fashion practice providing a solution to the limited virtual customisation options available on digital fashion software. The vitality of physical garments and manual processes has been consistently challenged in a post COVID-19 world, resulting in the acceleration of the imminent transition towards the adaptation of digital solutions. However, the aim to create and sell physical garments to conventional fashion consumers is still prevalent throughout the industry. These polarising views on the future of fashion highlight the restrictions of both the physical world and the digital sphere when developing either physical or digital outcomes that are inclusive and representative of users and consumers. To tackle this issue through this project, I follow Wided Batat, who posits that a phygital framework

improves customer experiences '[…]by fluidifying the journeys of customers from online to offline and inversely, along with capturing consumers' values and responding to their tangible needs (e.g., their needs for quality) and their intangible needs (e.g., their emotional needs)' (Batat, 2022:1). If the end-product is catered to the consumer, then the process should satisfy user needs. By adopting a phygital framework as a digital fashion software user, I concentrate on sustaining the value of physical and digital processes as harmoniously coexisting modes of self-exploration. Batat supports this way of thinking by drawing emphasis on the two main processes that are integral to following a phygital framework: digitalisation and physicalisation (2022). According to Batat's phygital customer experience (PH-CX) framework, digitalisation describes the transformation of physical elements to digital, with a focus on 'immersivity, sensoriality, and affectivity' (Batat, 2022:17). Equivalently, physicalisation refers to converting digital components to physical ones, whilst emphasising the importance of 'technicality, practicality, and sociability' (Batat, 2022:17). As with PH-CX, the interdependence of the aforementioned processes and their combined significance is emphasized throughout my research.

Through a phygital lens, virtual fashion practice could be understood as a complementary method of designing products and processes that surpass the limitations of the real world. Adopting a binary (physical or digital) approach to fashion practice has drawn the boundaries of self-exploration and diverse representation. On the one hand, traditional fashion practice is restricted by what is possible to be executed manually in physical form and is inherently informed by existing sociopolitical biases. On the other hand, commercial digital fashion software prevents users from creating avatars that accurately represent their physical self and limits their potential to creatively explore identity. However, the lack of choice instigated by these boundaries could be open to change. Phygitality provides a framework for me to analyse my stance, through the physical practice of autoethnographic writing and the digital practice of developing a self-avatar, interdependently. This can be used as a basis to examine the inclusivity and accurate representation capabilities of 3D fashion design software as a futuristic tool.

4. <u>Methodologies</u>

Practice as Research

The project is conducted through practice as research (PaR). To achieve this, I am adopting the methodological approach created by Robin Nelson (2013). Through this multidisciplinary approach, my submission includes multiple modes of evidence collection and generation. More explicitly:

- The documentation of the process of creating a self-avatar on CLO.
- The autoethnographic writing within blogposts.
- The evaluation of the response of an audience through feedback forms.
- And the corresponding academic writing that places my work within a conceptual framework.

Following Nelson's PaR model (Figure 2) I refer to all the above research activities as 'praxis' (2013). This model promotes a practical and dialogical approach to artistic research whilst embracing academically informed modes of knowing; the embodied knowledge, the tacit knowledge through critical reflection and the theoretical knowledge. Within this model, the academic writing and the practice are interdependent and operate concurrently for the undertaking of the research inquiry.
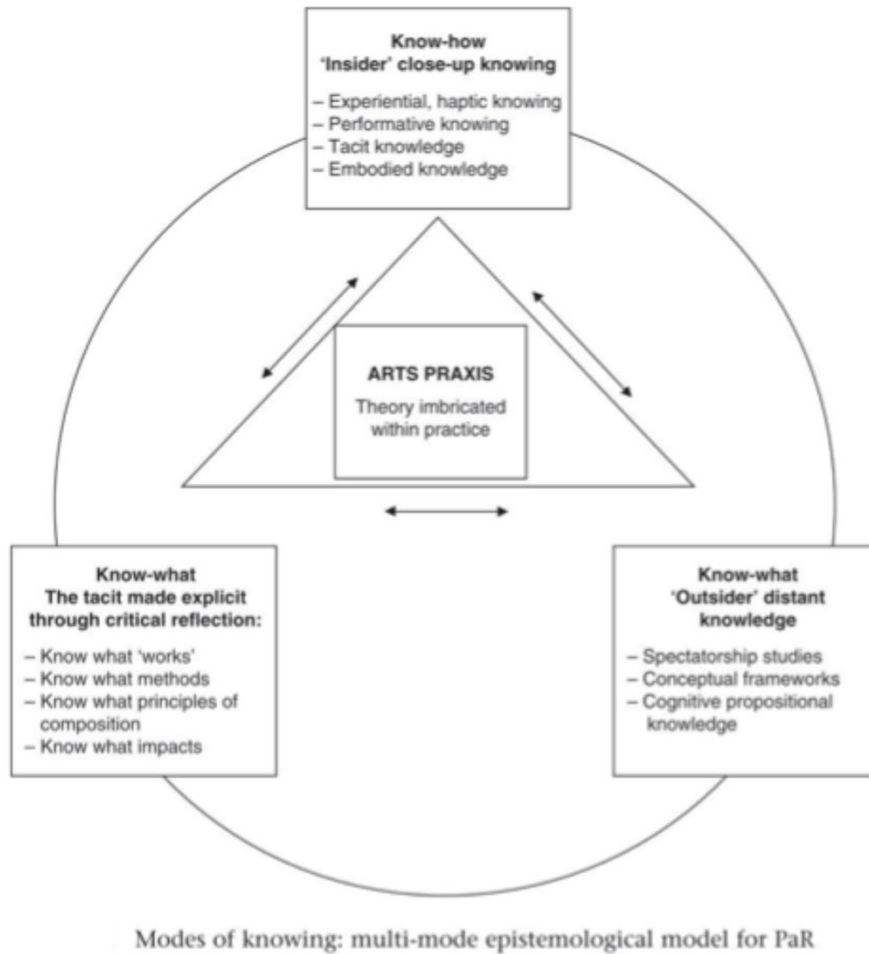
Modes of knowing: multi-mode epistemological model for PaR

Figure 2: Robin Nelson's model of practice as research (2013)

Based on this model, the creative practice will be submitted as 'substantial evidence of a research inquiry' (Nelson, 2013). This thesis is a critical academically informed piece of writing which enables additional ways of articulating and evidencing the research. I am providing context for my research through pre-existing conceptual frameworks and affording further understanding through critical reflection on my praxis.

More specifically, in this project I have adapted Nelson's modes of knowledge as follows:

1. The 'insider' close-up knowledge (know –how) emphasises the embodied knowledge surrounding my practice.

An example of this is the use of the development of a self-avatar on CLO, to reflect on my lived experience and the 3D simulation process as an aid to create practice.

2. The tacit knowledge that is made clear through critical reflection relies on the development of the practice throughout the work. This part of the research focuses on the documentation of the practice for both personal reflection and to allow for an online audience to respond to the work.

All modes of practical research are documented on a curated website as a method of digital communication. The visual documentation of the practice will also be included within the thesis through a series of figures, whereas the written practice, derived from the blogposts, will be encountered as interspersed autoethnographic passages of prose that appear in italics.

3. The 'outsider' distant knowledge are the conceptual frameworks that this project is guided by:

- Cultural Hybridity by Homi Bhabha and Nikos Papastergiadis
- Queer Theory following the writings of Max H. Kirsch, David J Getsy and José Esteban Muñoz
- Intersectionality focusing on the work of Kimberlé Crenshaw
- Research on IoDF's report on inclusivity and representation within virtual spaces
- The Phygital Conceptual Framework inspired by Wided Batat

Performative Autoethnography

Within this research performative autoethnography is used throughout the blogposts and the academic writing to support the development of the visual practice and the undertaking of PaR. Autoethnography supports the contextualisation of my lived experience in two distinct political landscapes, Greece and the UK respectively. I examine how my cultural hybridity and queerness influences the response I receive in each of these locations. Through a performative method of writing, I reflect on this process as well as the feeling of being othered. By including excerpts of personal narrative within this academic text, I follow Spry's description of good autoethnography as 'a provocative weave of story and theory' (Spry, 2001:713). Spry posits that effective autoethnography causes the reader to be moved emotionally and critically by writing characterized by 'literary craft, persuasive logic, and personal/cultural thick description' (Spry, 2001:714). Specifically, performative

autoethnography aims to recognise and question the wider social, political, and cultural landscape 'by creating alternative ways of being through performance' (Spry, 2011: 29). The exploration of my cultural hybridity, within this research, is extended through blogposts in which I reflect on my life experiences through 'a critical and embodied performative-I disposition' (Spry, 2011:28). Blogging allows me to instinctively and passionately write about past and present personal experiences that have shaped my understanding of self. Following Tami Spry's description of performative autoethnography, as firstly, '[…] "capable of being respected by critics of literature as well as social scientists (Denzin, 1997:200)" and secondly, '[…] emotionally engaging (Behar, 1997; Ellis, 1997; Ronai, 1992), as well as critically self-reflexive of one's sociopolitical interactivity' (Spry, 2001: 714), validity is appointed to the voice of my reflective and exasperated self. Furthermore, performative autoethnography allows for the embodiment of both my physical self through physically engaging with digital practice, and my digital self through the creation of a self-representative avatar. It therefore supports the binding of the phygital self-exploration with the wider socio-political and cultural landscape.

Passages of personal narrative are an important aspect of this research as they support the reader in gaining insight into the emotionality linked to a complex lived experience. However, as I am only able to speak from a subjective viewpoint through the blog, I also accepted responses from participants who come across the posts online to share thoughts and feedback; to further support my choice of autoethnography as a method. Whether it is 3D digital design, the communication of displacement, cultural memory or gender expression, the aim was to capture the emotionally felt response to the visualisation and contextualisation of cultural hybridity, queerness and the phygital. In order to encourage natural responses, no explicit questions were posed within the participation form. Autoethnographic excerpts by both myself and the participants are infused within the academic writing to alter the reader's perception of multidimensional communication. Organic responses from a wider audience enrich the autoethnographic hue of this project and cultivate a more inclusive conversation on representation and allows for a wider spectrum of perspectives to be considered within academia. Quotes from contributors will be used anonymously throughout the analysis to protect their identities and highlight the importance of self-representation and self-description. Participants were not actively recruited, and their

personal data was restricted to myself as the researcher and my supervisory team. All participant data will be deleted after the conclusion of this project. The data collection method was subject to ethical approval by MMU.

5. <u>Practical Analysis</u>

Reflecting on Lived Experience and Identity

My name, Sophia Dolores Stamatopoulou, comprising of conventionally Greek (the origin of my first and last name), British English (with the use of the -ph- digraph in the spelling of my first name) and even Spanish (my middle name) elements, has been a constant reminder that my socio-political position is not the same as my peers due to its multicultural makeup. During my school years, growing up in Kato Achaia, a small village in mainland Greece with a population of 6,000 mostly monocultural residents, I felt that my understanding of self was different. The complexity of feeling different yet akin to my classmates was not one experienced or taught to me by Greek and British relatives. Cultural hybridity was an unfamiliar concept to my monocultural relatives who paradoxically had grown to be familiar with the idea of cultural difference, due to their consistent interaction with a culture different than their own. There were frequent times when British relatives would encounter Greek culture and equivalently when Greek relatives would witness British culture. My bilingualism and biculturality in such scenarios were considered a gift by my monocultural social group and family. On the contrary, my three to fifteen-year-old self was convinced it was a curse. My frustration came from the assumption that due to my ability to speak two languages and appear as two distinct ethnicities would resolve the monoculturals' discontent with the constant presence of cultural difference. I felt as though I was considered an inanimate communication tool between two languages, two cultures. My existence felt erased, and I functioned as a service that facilitates the harmonious existence of monocultures. My 'interstitial existence' (Bhabha, 1994: 26) was not accepted as separate from Greek and British understandings of identity. I wanted my voice to be heard and not utilised to serve the dominant culture. Monocultural relatives, friends and classmates rejecting my biculturality and cultural ambivalence highlighted the implications of having a culturally hybrid identity in a binary society. Accepting my identity as separate from the cultural hegemony would throw a lot of pre-existing notions of identity into disarray, and as Papastergiadis observes, 'a third

identity is one which would also disrupt the very basis upon which prior identities were granted'. (Papastergiadis, 2000: 317).

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' "Let's be honest Sophia. If your mother is British, your father is Greek and you were born in Britain but all you have known is an upbringing in Greece, surely, it's time you choose what on earth you are? Here is not your home and there is not your home. You're homeless and confused essentially…" (Modern Greek Language Teacher, 2010: Secondary School)

I know right?! I was 12 years old and upset at the time, but somehow didn't know why. She was right in theory, and I was too ashamed to tell my parents. She was also right in reality. Little did she know, I was quite literally homeless and still confused 5 years later. Little did she know, I'd be doing a research project on her 'passing comment' 10 years later because I was even more confused when finally getting to experience life in Britain, after what felt like a lifetime in Greece.'

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During my childhood, I remember discussions with my British mother about the friendly yet hostile reception she had encountered upon arrival to Greece. My early exposure to such politicised discourse impacted my ability to embody those feelings of estrangement as if they were my own. I found comfort in feeling understood by my mother, yet uncomfortable at the notion that my experience was not the same. My Britishness seemed conditional and framed by a traditional Greek upbringing. I had not experienced leaving a country I called home equipped with learnt behaviours, mannerisms and cultural beliefs specific to that very place. My identity was not formed by a specific place or language, rather it is brought to being through 'the constant process of differentiation and exchange between the centre and the periphery, and between different peripheries […]'. (Papastergiadis, 2000: 349). Despite understanding my identity from this perspective currently, as a child the societal pressure to appear more Greek than British did not allow me to embrace the complexity of my cultural hybridity. In response to the topic of cultural hybridity, Participant 9 shared their perspective

on growing up Greek and British and experience the feeling of otherness. Specifically, they stated:

'Being 'half'n'half' myself [...] I had to conclude that this confusion that is brought to us by others, out of our circle of 'otherness' is indeed lack of understanding. [...] It was a major piece of growing up in Greece and being born to an English mother that made me 'not-quite' or 'foreign' and at a not-so-great moment compared to a 'non-pedigree dog'. [...] This 'otherness' indeed made me feel quite ostracised at times but in a very discreet, almost passive aggressive manner, as it is not as blatantly obvious as what others obviously have to face in their day-to-day lives. But that same 'otherness' gave me a level of empathy I am very proud of and has allowed me to be more open to the 'others' of the world. By connecting to people that were neither English, nor Greek I managed to learn more about myself and come to a stage where I can be very proud to say that I aM bOtH aNd I aM nEiThEr.'

The participant's frequent use of the term otherness to describe their lived experience could allude to their disassociation from the dominant culture. Alternatively, placing the term otherness in quotation marks throughout their discussion could imply that they are reducing its validity as a form of self-identification. For me this feeling of otherness that Participant 9 discusses, resulted in the undergoing of a process of disassociation with anything of Greek connotation, as a way of negotiating the sentiment of displacement. Feeling intentionally isolated from the dominant Greek - in this case - culture and attempting to associate with my seemingly subordinate Britishness, granted me comfort on my own terms. Although, disconnecting was a personal choice that allowed me to be in control of my estrangement in a way that I had not experienced before, it only highlighted the implications surrounding my cultural hybridity. Evoking negative feelings towards part of my cultural identity and consistently assuming a hierarchy between my Greekness and Britishness, indicated an internalised silencing of the 'interstitial perspective' (Bhabha, 1994: 4).

After completing my school years in Kato Achaia, Greece I moved to the city of Plymouth, Devon, hoping to connect with my mother's birthplace. Although I had gained familiarity with Britain in the 2000s and early 2010s, when visiting family during school holidays, it wasn't until my first day at university, that I felt the most Greek I had ever felt. The move to an unfamiliar location marked the commencement of another transformational process. The week before enrolment consisted of scrubbing my Greek tan off in the shower with lemon and sugar, contouring my ethnically indicative nose with make-up to appear smaller,

practicing the interjection of colloquial vocabulary into my rehearsed introduction to potential friends and researching current British pop culture references. Through an attempted assimilation and adherence to the social standards that are present in Britain, I made deliberate choices to be viewed as an equal to my predominantly white British peers. I was determined not to endure the same pressures from the (now British) majority, as I did when starting primary school, then secondary school, and eventually high school back in Greece. Despite moving to Plymouth, a British city characterised by its lack of diversity, I recall feeling excited to be hosted by Britain and its anticipated progressivism that could free me of the constraints of traditional Greek village life. However, I instantaneously experienced the inherent feeling of displacement, once again, in a place where I thought I belonged.

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'[…] In both circumstances, I have been made aware that I am not quite one or the other. When I get asked if I'm British, my answer has always been: Yeah, but… When I get asked if I'm Greek, my answer has always been: Yeah, but… I am obviously both! However, that idea remains contested, misunderstood and heavily politicised, which explains the never-ending questions and contentious so-called compliments I am ever so lucky to be a recipient of on a daily basis.

"So, where are from then? Like really?"
"Do you dream in English or Greek?"
"Why did you leave Greece? It's beautiful! I would never!"
"Have you found that you are able to make better financial decisions since moving to the UK?"
"Your English is excellent! You would never know you're Greek if it wasn't for that tongue twister of a surname."
"I could tell you know! (points finger at facial features) I knew you were something else."
"I have always seen you as British."
"Greek women are so feisty, I love it!"
"Welcome to Greece! Would you like to try souvlaki and ouzo? Are you enjoying your holidays?"
"You live in Greece, so speak Greek both in the house and out of it!"

"Tell your Queen and her stupid tea-drinking family to give us back the Parthenon Marbles they stole from us!"

"Oh, you can definitely tell that you're not Greek! You say -<u>insert word</u>- weirdly."

"Wow! You're too much! You're too polite! Save that for the white people!"

"You live here, and you have that name. Of course, you're Greek! Your mum is just foreign." '

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Following Papastergiadis' reconceptualization of migration, I have come to realise that migrating is an ongoing process of negotiation, and I can no longer ignore the social implications and conflicts that migrants confront during this process of integration and adaptation to the dominant frameworks (2000: 33-35). In their negotiation of cultural hybridity and living in between cultures, Participant 7 expressed the following:

'I was born in Pakistan and moved to the UK when I was 9. Now people in Pakistan don't really consider a me Pakistani because "yeah but you didn't really grow up here so you won't understand" and for people in the UK, I might be British on paper and in some aspects of my personality, but they want to know where I am actually from because I can't just be British right, not with my skin colour and exotic name. […] maybe people who haven't experienced this could perhaps get an ounce of an idea of what it feels like and also how stupid their questions are. Sometimes people treat you as a topic when asking questions about your background and though Britain and Pakistan may be a topic, I am a person. Their questions make you feel like a topic or subject and it's your duty to answer every question. I like my culture and am proud of it, but it is also not my job to answer every question about it. I don't mind talking about it, but I also don't like when something remotely South Asian is discussed and everyone looks at me.'

The participant illustrates how the reception of a culturally hybrid person in two distinct geographical locations is in both instances similarly influenced by the process of migration and adaptation (Papastergiandis, 2000). The dominant culture in each case, plays a part in dehumanising and excluding the culturally hybrid. When questions are asked, the humanity of the culturally hybrid appears to be minimised, creating a conflicting environment in which an imposed power imbalance between questioner and respondent festers. In such situations, the culturally hybrid person find themselves in a consistent process of negotiating cultural belonging in relation and in opposition to the dominant culture. Informed by my own lived

experience and the one described by Participant 7, I find myself agreeing with Bhabha who conceptualises this space of existence as 'a space, in-between the designations of identity, […] an interstitial passage between fixed identifications (that) opens up the possibility of a cultural hybridity that entertains difference without an assumed or imposed hierarchy' (1994: 5). The reflection on my own cultural hybridity alongside Participant 7's viewpoint, has affirmed the validity of feeling consistently in a process of negotiation. For me, this sense stems from two specific experiences: 1) Not feeling fully understood within Greece by my peers nor by my parents; 2) The feeling of being Greek being uncomfortably emphasised upon my re-location to Britain. I feel continually burdened by the traumatic destabilisation when living in either country, yet I am consoled by my ability to survive. I appreciate that movement and 'cross-cultural contact' (Kraidy, 2005: 5) are factors that contribute towards the generation of a new identity, the culturally hybrid identity. My cultural identity does not need to conform to that of my relatives or peers, but their teachings can be 'grafted, inserted or rearranged to co-exist, disrupt or revitalize the other' (Papastergiadis, 2000: 382).

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' […] The complex nature of hybridity as an idea, is what leads to these impromptu "culture lessons" and "progressive debates" many of us have the pleasure of partaking in. The uncertainty surrounding hybrid identities and the fascination (or even obsession) with otherness is clearly ambivalent, as Simone Drichel writes when discussing postcolonial studies (2008). In a multifaceted country like Britain, which allegedly prides itself on diversity and is "better on racism, comparatively to other European countries" (Sewell, 2021), why is this still the case? How can a country that is kindly helping preserve other countries' heritage in the British Museum (not referring to anything specific of course) still be perplexed yet captivated by people who are products of their historical endeavours? Opposingly and equivalently, as a formerly colonised nation battling between ideas of East and West, why is Greece still so reluctant to accept difference?

These questions are most definitely relevant to anyone negotiating displacement and cultural hybridity. From googling pop culture references and looking up lingo on urban dictionary, to wearing region-specific fashion trends and adapting your voice/language based on who you

are interacting with. Copious amounts of effort to adapt to the majority culture. According to The Oxford Handbook of Multicultural Identity (which is an oxymoron in itself) acculturation and bicultural socialization lead to positive social and psychological assimilation that creates fertile ground for the discussion of hybrid identities (Schwartz et al. 2014). Yet this immersive process does not resolve the tenacious sense of displacement. As if identity politics and persistent questioning are not enough to deal with, we are expected to adapt our stance and perspectives due a monocultural's inability (and at times unwillingness) to digest otherness. An otherness as a result of fascination. An otherness that is collective through shared, yet not identical, experiences. An otherness that is only relational to homogeneity.'

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*In addition to negotiating my ethnic identity, I grew up contemplating my sexuality and gender expression. During teenage years, I accepted what was expected of me as a person assigned female at birth. The social burden to always appear feminine, an essence which growing up was assumed to be synonymous to elegance and submissiveness, was heavily imposed on me as the firstborn child in a newly culturally hybrid household. It was not a case of wanting to be perceived as a male presenting person, rather it has always been about not complying to either pole of the gender spectrum. Much like in my journey to accepting my cultural hybridity, I went through stages of internalizing both stereotypically feminine and masculine behaviours and appearances to finally realise that I only find comfort in existing in-between. The hybridity characterising my identity is multifaceted and nuanced.

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'When discussing identity, we mustn't of course forget that existing in a binary society does not allow for any form of defiance. The answer is always yes or no. The choice is always this or that. Greek or British. British or English. Female or male. Feminine or masculine. Both you say? Neither you say? The line is very fine.'

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Defining my identity as queer is an act of consciously defying the constraints of heteronormativity as a sociopolitical construct. Given that my personal experience of gender contradicts the strictly binary teachings of the concept in Greece and Britain, I define heteronormativity as an ideology that supports normative gender understandings. According to philosopher Judith Butler, 'one is a woman to the extent that one functions as one within the dominant heterosexual frame and to call the frame into question is perhaps to lose something of one's sense of place in gender' (1999: xi) therefore placing heterosexuality and homosexuality under the same cultural and social burden. Under this notion, heteronormativity is defined as separate to heterosexuality (Evans et al., 2013) and my choice to self-identify as queer is fuelled by my opposition to binary perceptions of gender.

My body as both a social and biological entity is the main means through which I navigate my queerness. As with the exploration of my cultural hybridity, I find myself in the oxymoronic position of only finding comfort in feeling uncomfortable in my body. It is a sensation that I have been familiar with as a queer and culturally hybrid person, only fortified by my lived experience in largely heteronormative and monocultural communities. Through engaging with this research via the blog, Participant 6 expresses similar yet distinct frustrations upon sharing their experience as a queer and culturally hybrid person. They write:

'Το να είμαι ένα queer (bi, non binary), white-passing mixed άτομο (μαμά από Αφρική, μπαμπάς από Ελλάδα), νομίζω είναι από τους controversial κοινωνικούς ρόλους που θα μπορούσα να έχω πριν καν γεννηθώ. Κυρίως γιατί με η εξωτερική μου εμφάνιση δεν ταυτίζεται στερεοτυπικά με τις «ταμπέλες» που με χαρακτηρίζουν. Το χρώμα μου δεν είναι αρκετά μαύρο ώστε να φαίνομαι mixed και ώστε ο κόσμος να παίρνει στα σοβαρά την καταγωγή μου χωρίς να με μειώνει ή να την ακυρώνει. […] Επίσης όπως προανέφερα είμαι bi Οπότε προφανώς και οι περισσότεροι cis στρέιτ άντρες με τους οποίους συναναστρέφομαι (και ενίοτε μπορεί να έχω και μία σχέση) δεν αναγνωρίζουν την σεξουαλικότητά μου, ή ακόμα κι αν το κάνουν, αμέσως το φετιχοποιούν και με ρωτάνε αν έχω κάνει κάτι σεξουαλικό με κάποια θηλυκότητα. Και «δυστυχώς» λόγω της εμφάνισης μου, όπως προανέφερα, ο κόσμος με αντιλαμβάνεται περισσότερο σαν μία cis κοπέλα η οποία και πάλι δεν είναι ακριβώς η κοπέλα που θα θέλανε αυτοί (προφανώς ακόμα αναφέρομαι στον cis straight κόσμο, κυρίως άντρες) , ή που νομίζουν ότι είναι όλες οι κοπέλες• διότι δεν είμαι ούτε 100% θηλυπρεπής αλλά δεν είμαι και αρρενωπή ή όπως θα το χαρακτήριζαν οι ίδιοι «αγοροκόριτσο» ή μάλλον καλύτερα «δεν φαίνομαι σαν λεσβία».'

'Being a queer (bi, non-binary), white passing mixed person (with a mother of African descent, and a father of Greek descent), I think is one of the most controversial social positions I could find myself in, before even being born. Mainly because my physical appearance does not

stereotypically conform to 'the labels' that define me. My skin tone is not black enough for me to appear mixed so that people take my heritage seriously, without diminishing or silencing it. […] Also, as I mentioned I am bi and therefore most cis straight men with whom I socialise (and at times develop a relationship with) obviously do not recognise my sexuality, and even if they do, they immediately fetishize it by asking me if I have had any sexual relations with female presenting people. And 'unfortunately' due to my aforementioned physical appearance, people mostly view me as a cis woman who is not quite the type of woman they want (of course I am still referring to cis straight people, mainly men) or the type of woman they believe all women should be. This is down to the fact that I am not 100% feminine nor am I considered masculine, or as they would describe me a 'tomboy', or even better inform me that 'I do not look like a lesbian'.' (Translated from Greek)

The intersections of Participant 6's identity are unique to their experience and through their response they provide another dimension to this research project. This excerpt encapsulates an intersectional description of identity that is aligned with Crenshaw's application of intersectionality in defining a landscape and analysing a subjective point of view within it (1991). Including this response alongside the analysis of my own intersectional identity, highlights how intersectionality as a framework can: 1) support the understanding of varied lived experience, and 2) potentially provide a starting point towards adopting a more inclusive way of thinking. Resonating with participant 6's thoughts, as a mostly female presenting person in a long-term relationship with a male presenting partner, my sexuality is an element of my identity that has not conceivably been under as much scrutiny as my gender identity. I mostly face the same questions by cis-gendered straight men that Participant 6 elaborates on through their response. However, although I find myself dwelling on both aspects, perhaps the privacy that has always characterized my sexual relationships is what affords me a sense of comfort, in opposition to how I embody my gender. Self-identification in terms of gender, from a personal perspective, is framed by an experiential understanding rather than it being an expression. Within this context gender is informed by embodiment as 'a multi-dimensional process that cannot be reduced to biology or society, but instead involves the complex interplay of various modalities of our 'lived body' or bodily-being-in-the-world' (Gabe et al. 2013: 63).

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' […] in attempting to understand we are encouraged to ask questions. When feeling uncertain we are motivated to work hard. But isn't the act of working an ongoing process with no specific aim? There is so much focus on what the answer is, but not the question. There is immense emphasis on what the conclusion is rather than the discussion. That's why research could be partly how I choose to explore this unsettling feeling of in-betweenness. But maybe other people's words and theory is not enough. If I am in control of how this experience is communicated, then maybe words won't suffice. Actively engaging in the discovery of the experiential self as something external to myself and my lived experience might just do the trick. Introspectively reflecting on the emotions, sentiments and responses provoked during this process will surely enrich my understanding. If I document this journey in both written and visual language, I could be potentially prompting others to self-reflect and appreciate the importance of undergoing a process without focusing on the outcome. The vitality of being able to raise questions without expecting answers. The significance of cultivating thoughts and not expecting anything other than that feeling of awareness. Self-awareness within a physical, psychological, and political space.'

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This view has influenced my decision to also explore my queerness and cultural hybridity through the development of a digital self-avatar as an embodied act which 'transcends the problem of dualistic thinking' (Evans et al. 2013: 16). Through the digitalization of self, binary concepts on ethnicity and gender are analysed in a space that is intended to surpass real-life expectations yet could still be hindered by cultural biases. In this explorative process, I find myself in agreement with Entwistle's view that the body, the self and fashion (as a form of dress) are inter-reliant (2000). This allows for the analysis of avatar creation on CLO (and commercial 3D fashion design software broadly) as a visualisation tool used to articulate the lived experience of a queer and culturally hybrid identity, and consequently other intersectional identities.

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'I look at all the template avatars. I enter the "Female" folder. Given my options, I consider myself a part of it, but only because my options are limited. I must reveal that the ambiguity and fluidity of the "Kids" folder was of course very tempting.'

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Drawing the focus to the body itself alleviates the constraints of gendered garments that are in turn burdened by the gender binary as a deeply undependable and variable measure through which non-binary and gender non-conforming people are heavily policed by (Currah and Mulqueen, 2011). For this reason, throughout this practical research inquiry, the emphasis is given to queerness as the experiential embodiment of resistance against the gender binary and heteronormativity. Based on that notion, I view my body as the physical representation of my lived experience and my digital self-avatar as the communication tool contributing to a phygital way of working. Within the adoption of the phygital, the digital praxis is considered a performance of embodiment that is supported by my interjecting autoethnographic writing. As Spry writes:

'Perhaps even more salient than writing, performance is a process of representation, carrying with it all of the rights and responsibility for empowerment and accountability that are the core of performative autoethnographic writing. […] The method of composing performative autoethnography moves the researcher from the somatic, the knowledge and experience of the body, to the semantic, the linguistic representation of that knowledge' (Spry, 2011: 182-183).

Catwalk shows are the most established form of fashion performance, and their ingrained elitism, has for the most part always championed exclusivity with early twentieth century audiences comprising of mostly '[…]rich, and frequently aristocratic, women, often accompanied by their husbands or male protectors, who watched the working-class mannequins modelling for them' (Evans, 2013: 163). However, due to COVID-19 restrictions, the use of virtual 3D software, as a visualisation and communication tool between international teams, started to expand at a faster rate, and physical catwalks shows were being replaced by virtual presentations. As Matthew Drinkwater, Head of Fashion Innovation Agency at the London College of Fashion stated in an interview with Forbes Magazine:

'COVID-19 is forcing brands to engage and experiment with immersive technologies. We've been inundated with requests on how to create virtual clothing, virtual catwalks and virtual showrooms' (Drinkwater, 2020, cited in Roberts-Islam, 2020: online)

Additionally, with the rise in social media usage during lockdown and the dynamic introduction of the metaverse to the mainstream, the limitations of the physical world are now more noticeable than ever. Futurist Richard van Hooijidonk supports this argument when discussing how the metaverse 'increasingly enable(s) things, events, creatures, sensations capabilities, and 'worlds' […] and completely free(s) us from any physical limitations' (2021: online). The outbreak of COVID-19 has instigated 'a dramatic shift in digital usage with impacts of all aspects of work and life' (De, Pandey, and Pal, 2020: 4) as we witness more events taking place online, people working remotely and businesses reconsidering their strategies. This transition to virtual ways of working amplified the interest for me to diversify my practice, to further support the communication of queerness and cultural hybridity as intersections of my identity. Through a phygital framework this research provides an alternative to manual workflows and traditional catwalk presentations. The complementarity of the digital self-avatar development on CLO and the autoethnographic writing as a form of communication supports the transition from somatic to semantic knowledge that Spry discusses, with the aim to effectively communicate complex and intersectional self-identifications (Spry, 2011). Through synthesising linguistic and visual representation, a space is created in which I, as the researcher, am supported in my articulation of the multidimensional self and the audience is afforded thorough insight into the researcher's lived experience. Participant 5 shared an interesting view on experiencing life on both a physical and a digital level. In their response to my research, they state:

'For me, the avatars talk about the way that the digital is more and more becoming a place in very much the same way that physical environments become places; these images make me think about how the digital is more and more real, a place where we are conducting more of our lives. And the dichotomy of that and the fact that the work is talking about duality of heritage means the project takes on an even more exciting resonance within these contexts.'

Discussing the queer and culturally hybrid experience whilst engaging in the phygital, enables the translation of personal complexities into conveniently consumable content, and

therefore underpins the research objective to explore intersectional identities through a phygital lens. Forming analogies to explain the interaction between the physical and the digital within a phygital framework, emphasises the interdependence of all elements and supports the shift towards a more varied and inclusive way of thinking. Thus, an overall inclusive environment, characterised by the comfort found in collective discomfort is created.

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'Externalising and visualising these felt responses in my research aims to support the exploration of self by the researcher, encourage the consideration of self by others and provoke a collective embodiment of self in relation to others. […] Where I'm from, where I live, what I look like, what my body looks like, how much money I earn, what I believe in, who I like, where I stand and all this in relation to the dominant culture. The majority. The other to me. Because I am the other to them. Relational existence. This is the way I perceive, and I am perceived. This is why I think the way I do and why I am thought of as I am.

Or maybe it's just a result of trauma.'

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Developing a Self- Avatar

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"…Synthesising manual techniques and digital technology throughout the design process allows for reflection on the instigated feelings. The satisfaction of using my hands to create a garment whilst appreciating the tactility of a fabric is confronted by the ease and versatility I value when using a piece of software to fabricate (pun fully intended) my every idea. I am left confused, unsure yet excited and proud of my ability to use hybrid practices. This sounds familiar. This could be the closest sensation to the feeling of despair caused by displacement being juxtaposed with the gratitude I have for the unique nature of my identity. Poetic rant over. This leads me to think that this practice-based in-betweenness can be communicated analogically to the state of being in between two distinct cultures, on a spectrum of gender

identity. Therefore, systems like CLO3D can fulfil their initial commercial purpose of operating as a visualisation tool.

Could this approach revolutionise how a non-existent, yet highly complex, identity is communicated to the majority? As commerciality aims to cater to the mainstream, can an analogical visual representation of an intersection be a more "palatable" and less "painful" approach to educating?"

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In this chapter, through the analysis of self-avatar development, I suggest that communicating physical endeavours as digital and conveying digital practices as analogous to physical ones is fundamental to adopting a phygital framework (Figure 1) and developing an intersectional understanding. In this hypothesis I set up the analogy between the phygital and intersectionality where physicality, digitality, physicalization and digitalization operate as the intersections in which the phygital is realised. Specifically, elements of the phygital do not directly correlate to specific intersections that make up my identity; rather, they are collectively interdependent. An example of how a phygital framework can be analogous to intersectionality is the use of cultural hybridity, queerness, digitalization and physicalization as modes of communication between two elements. This example corresponds to how I have had to negotiate my identity and lived experiences whilst living in largely homogenous and heteronormative locations in both Greece and Britain. Analogically, the embodied act of creating on a virtual platform requires a similar commitment in terms of clearly explaining and analysing complex feelings, such as the coexistence of displacement and connection, to a culturally hegemonic and largely binary gender conforming audience. Based on this analogy, it could be said that my lived experiences of cultural hybridity and queerness afforded me the ability to understand new concepts and adapt to circumstances in which communication is integral. I argue that taking a visual and creative approach in this research project facilitates a wider conversation. This ideology relates to Papastergiadis' discussion of using art strategically as a means of inciting new methods of cross-cultural communication within which hybridity becomes more apparent (2005: 46). He suggests that the artist, and within this context the researcher, composes a piece of work through conveying contrasting

alternative perspectives which leads to an 'endless process of interpretation' (2005: 47). Specifically, he states:

"Hybridity challenges the binary that separated the containment of meaning within an artwork and the establishment of a framework for making meaning within culture, by suggesting that both art and culture are in a reflexive process that is co-constitutive. If culture can be seen as a translation machine, then art is like a compass where every act of representation doubles as a tool for navigation" (Papastergiadis, 2005: 47)

To reflect on this quote, I believe that engaging in a phygital exploration of both cultural hybridity and queerness aids the understanding of intersectional identity notions - as it could be reasoned that currently people are more exposed to alternative narratives as fundamental changes in communication are brought to the forefront with the outbreak of COVID-19. It could also be seen as an evolution from the way in which 3D software is utilised at present. However, when dealing with representation and the promotion of inclusion the significance lies in the diversity of avatars as human depictions. This brought into question the ability to convey an intersectional identity through the avatars available on CLO.

According to www.clovirtualfashion.com CLO, as a company, suggests that their work is always executed through concentration on the below four core mindsets:

- USER FOCUSED
- BE AGILE
- ACTIVELY COMMUNICATE
- HAVE FUN BUILDING, HAVE FUN LEARNING

(CLO Virtual Fashion, 2022: online)

Figure 4: CLO Mindset – USER-FOCUSED

Figure 5: CLO Mindset – BE AGILE

Figure 6: CLO Mindset – ACTIVELY COMMUNICATE

Figure 7: CLO Mindset – HAVE FUN BUILDING, HAVE FUN LEARNING

I have a few points of contention looking at Figures 4, 5, 6 and 7. Firstly, despite emphasis being given to the importance of user inclusion and diversity through the language used across the website, these misleading statements are confronted by the default avatars available on the software (Figure 8). While the avatars are made distinct due to the difference in skin tone and some facial features, most default hairstyles adhere to western beauty standards. Additionally, despite the avatars appearing diverse at first glance, the default body shapes abide by western social norms. All avatars appear slim, symmetrical, proportionate and adhere to a western expectation. Despite there being ten different body sizes to use as a starting point for female avatars (Figure 12), the face of all sizes remains the same with no alterations in proportions. Furthermore, all female avatar necks, arms and legs, despite body size, appear somewhat slim, long, and proportionally similar to the default avatar size (Figure 8). Although I acknowledge that options to customise bodily proportions are available (Figure 12, 13, 14), the choice to have certain features as standard reveals a bias towards certain body types. This brings me to my final point, which is the availability of only female and male avatars. The choice to only provide avatars that abide by binary understandings of gender contradicts all four of CLO's mindsets detailed in the above figures. Presenting only female and male as standard gender options, shows an alliance with the concept of a gender binary. These preferences are informed by western discourses and political biases, therefore leading to the exclusion of users that do not meet those expectations. Sizing and body fit are issues that concern the broader fashion industry, yet I pose that virtual fashion systems could contribute towards shifting the narrative. As 3D software like CLO is reliant on visual media, developers could implement a change in the default settings, for them to appear nonuniform at start-up. I also suggest that the categorisation of avatars as female or male could be eliminated, whilst also providing users with default avatars that do not conform to gender stereotypes regarding body image. Notwithstanding my suggestions, the issue lies in identification options being limited, leading to user frustrations surrounding relatability and connection in digital spaces.

CLO AVATARS

CLO offers 12 avatars:
Avatar Version 1 (V1): 2 male, 2 female
Avatar Version 2 (V2): 3 male, 3 female
Avatar Kid Version 1 (V1): 1 boy & 1 girl (7 - 16 years),
1 kid (2 - 6 year), kid (6 - 18 month)

There is a distinction between V1 Avatars and V2 Avatars.
For example, when a size (*.avs) or a pose (*.pose) has been
created on a V2 Avatar, it can only be applied on a V2 Avatar.
The principle is the same for V1 Avatars.

Avatar Adult Versions 2 (V2) and Avatar Kid Versions 1 (V1)

Figure 8: CLO Avatars

My analysis of CLO's customisation and avatar options are mirrored in a response received through my website. Participant 13 wrote about their experience with character creation on video games and expressed the below frustrations:

'[...] I attempt to create a character that resembles me in appearance. The colours don't match.I try and work out if it is due to the questionable graphics or the game not considering a person of a darker complexion playing the game. I move on and begin to select a hair colour and it is clear that afro textured hair has not been considered either. I give up on this attempt of 'realism' [...] and create an aspirational idealisation of what I can look like within the parameters of the game. I don't expect the character to look exactly like me but it would have been nice if some representations of me were present. I tried to immerse myself in an experience to get a first-person experience but even in the first instance I have to opt for a 3rd person perspective.'

This excerpt reveals a lot about the lack of attention given to users that do not abide by Eurocentric perceptions of what is considered standard. The unavailability of basic customisation options, like for instance afro hair textures, result in software users, like Participant 13, feeling forced to adopt a perspective that is not their own. Inevitably this emphasises that users that are not able to identify with their avatars, are already at a

detriment in comparison to other users. Frantz Fanon in his book *Black Skin, White Masks* discusses the concept of identification as deeply rooted in racism and interrelated to the articulation of desire (Fanon, 1952). He (1952: 170) analyses the desire for recognition by stating:

> As soon as I desire, I am asking to be considered. I am not merely here-and-now, sealed into thingness. I am for somewhere else and for something else. I demand that notice be taken of my negating activity insofar as I pursue something other than life; insofar as I do battle for the creation of a human world—that is, of a world of reciprocal recognitions.

This point emphasizes the need to acknowledge difference and embrace it as distinct to hegemonic understandings of identification. Communicating the culturally hybrid and queer identity as separate yet relative to the majority, encourages a multidimensional understanding of self that is informed by context. Although Fanon's work is centred around race, and I do not share his lived experience, I utilise his work to support my analysis of representation and identification, in digital spaces. Following Fanon and informed by Participant 13's response, I suggest that the visual customisations possible within CLO limit the potential to communicate lived experience. Acknowledging that culture is made up of both tangible and intangible aspects, I did not expect that a digital version of myself would carry the weight of migration. However, I did expect my avatar to tell the story of my lived experience through reflecting my culturally hybrid physiognomy. The potential to achieve such expectations was nonetheless hindered by the limited default avatar options available on CLO. To support my statement, I refer to the IoDF report in which participants illustrated the importance of options being available, to represent body shape, facial features, skin colour, hair texture and disability, so that virtual representations are not restricted to conventionally Eurocentric and capitalist models (2021). Users, including myself, are openly frustrated with software providers that are not catering to the diverse individuals that consume the products (IoDF, 2021).

In addition to the need for diverse and realistic options, the IoDF report highlights the overarching objective for 3D software users being their need to represent themselves *'in*

numerous, potentially conflicting ways – creatively, accurately, uniquely and imaginatively' (IoDF, 2021:25). When using digital software, fantasy-based customisation options could help visualise complex intangible aspects of the culturally hybrid self, in ways that are not possible in the physical world. Intangible cultural references, such as traditions, folklore and language could be communicated, through applying visual tangible cultural signifiers such as art, monuments, and artifacts onto a bodily representation of the cultural self through a self-avatar. However, though the imaginative and creative elements of a digital world can enhance user experience, 'people need to feel included at a basic level, even if they go on to create customised characters that look nothing like their IRL self' (IoDF, 2021:25).

While this discussion might not initially seem essential when the main purpose of CLO is creating garments, considering the wearer as the end consumer is a key stage in the fashion design process. Therefore, it could be argued that the software's visualisation capabilities still fall short. Avatars function as digital representations of their users and in a commercial setting of the consumer. On the premise that a part of cultural identification is communicated through physical features, I suggest that the avatar options available on CLO contribute towards a reductionist presentation of culture itself. The facial features of all six available avatars appear largely Eurocentric with skin tones being the negligible differentiating attribute. To explore my hypothesis further, I attempted to customise the available avatars using Photoshop. Although I am aware that there are third party 3D software in which one can develop an avatar, I intentionally chose to use CLO and Photoshop, as they are two of the most widely used within the commercial fashion industry. I wanted to examine what capabilities are available to those working within the industry as the main consumers of the software.
-

'What do you prioritise when simulating? Is it skin tone, overall craniofacial structure, or individual facial features? Surely when exploring the significance of heritage, and more specifically dual heritage, all the above parameters contribute towards the choice we make. A simplistically presented choice of how we identify and how we choose to present ourselves to others. Even those two versions of ourselves can differ vastly, so how can we possibly bring ourselves to left-click, tap and select one? […] Nonetheless, I start by selecting Camila. She

seems like the option for me. Do I relate to her? No. Do I want to? Yes. I then take some selfies. I am overwhelmed yet not shocked by the mere sight of my own face. I doubt the accuracy of a front facing camera. It's a mirrored view of myself, therefore not an accurate depiction. I overcome the anxiety provoking overthinking process that I am more than familiar with, by taking more photos of my face using my main iPhone camera. Great! Is that what people see? I panic. But it's only a depiction of a fracture of a second. I breathe. Maybe Mara (the avatar) would have been a better choice. I layer my face onto both the Camila face and the Mara face using Photoshop. I adapt the skin tone, the nose, the eye shape, the eyebrows, the ears, the lip shape and colour to be more like my own. It is hard to tell if it's working because the texture .jpg files (the face and skin) are flat and then wrap around the .avt file (the 3D avatar). Before trialling it, I add finishing touches. My jewellery makes me feel like me. If I add them onto the avatar, maybe it will help me relate to this portrayal of myself. Then again, this is a different conversation. I decide against adding accessories at this stage.'
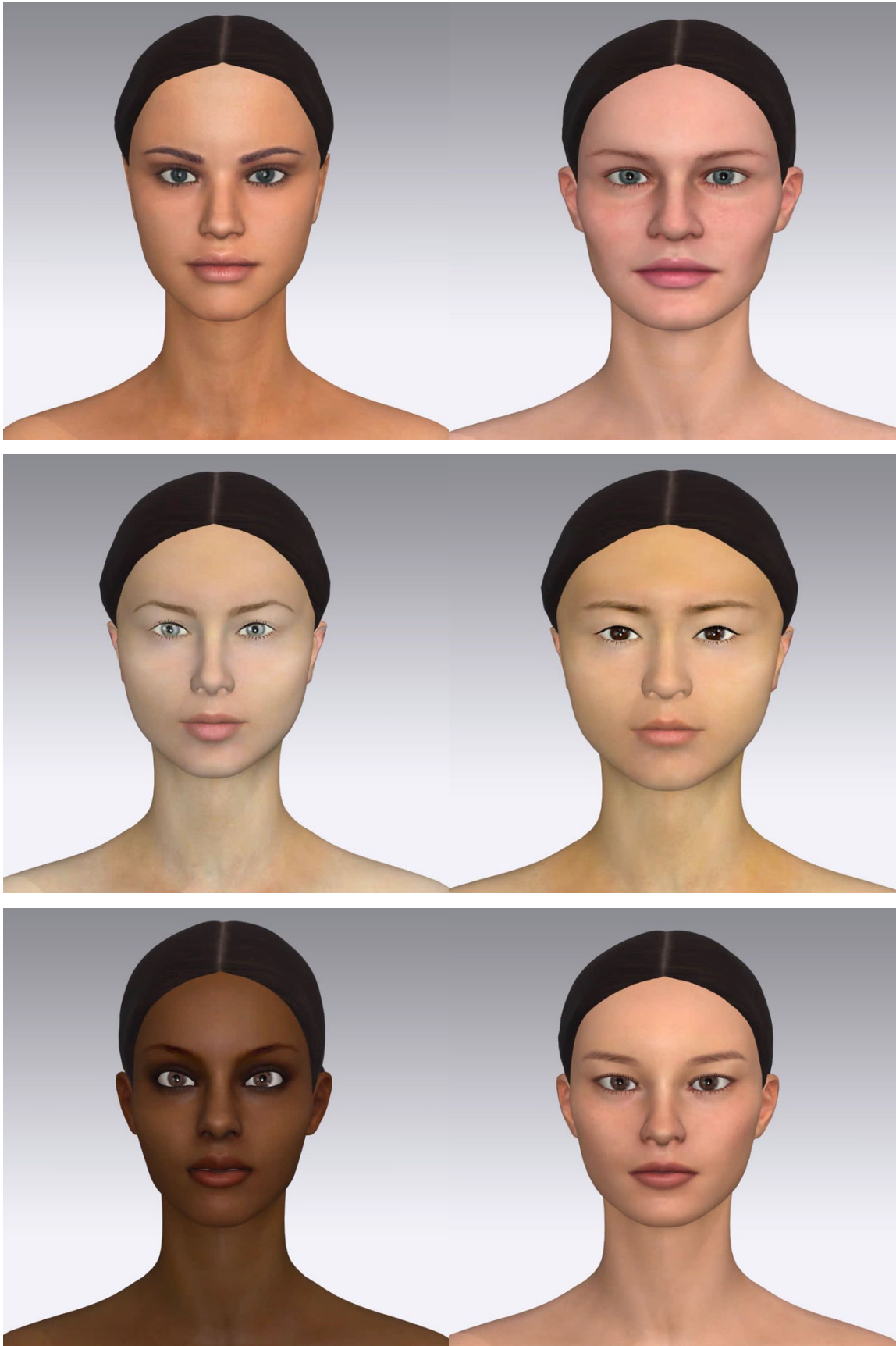
-

Figure 9: CLO Female Avatars (Camila, Emma, Mara, Kelly, Grace, Feifei)
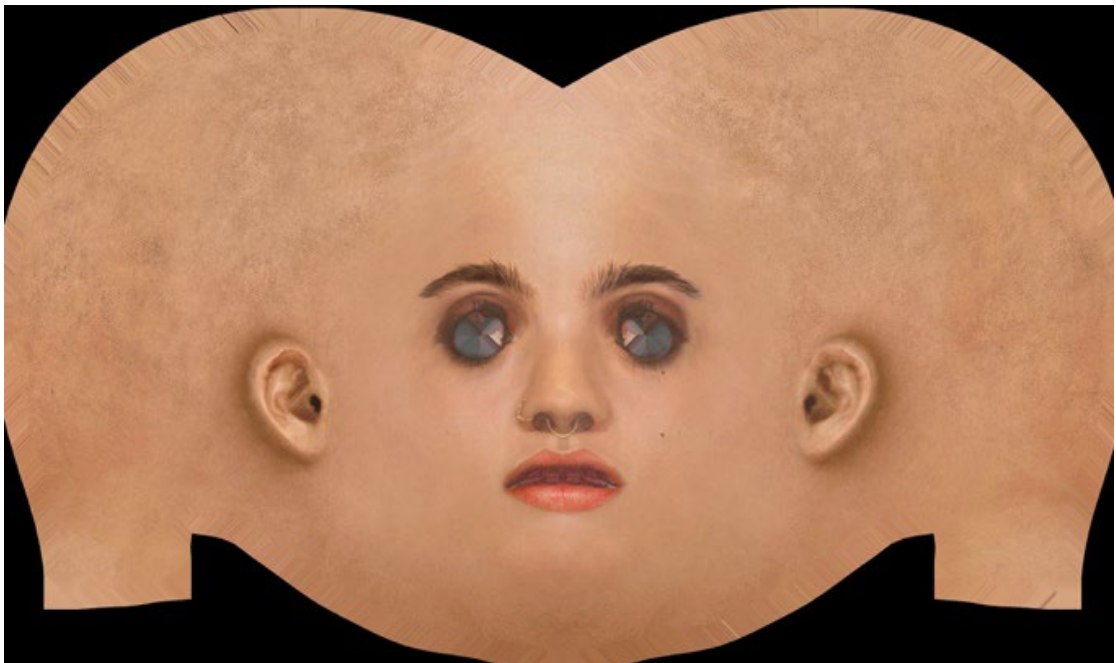
Figure 10: A picture of my face and the blending of my face onto a CLO avatar texture

Figure 11: My face texture, skin tone & eye colour used on all CLO Female avatars

Daniel Zimmermann, Anna Wehler and Kai Kaspar describe self-representation through avatars as a reflection of both the actual self and the ideal self (2022: 2). In their study regarding the replication of self in digital environments they conclude that the physical and demographic characteristics granted to avatars are in fact a harmonious reflection of both the actual and ideal self but also dependent of the context within which the avatar is created (2022: 13). Though they do not discuss the use of avatars in fashion, their work correlates to the IoDF survey findings on the importance of accuracy and imagination in avatar creation. In my exploration, I wanted to create an avatar that is an accurate digital self-representation but also conveys the complexities of cultural hybridity and queerness as intersections of my identity. Despite my intentions to create an anatomically accurate representation of myself, the outcome was disappointing and reinforced my argument regarding software limitations. Following CLO's recommendations, I edited a default avatar face texture on Photoshop to resemble my face. I layered, edited, and blended my facial features and skin tone onto the texture file until the flat image reflected my face. Once the final edited texture file was imported onto CLO, I applied my face onto all six female avatars (Figure 11). Despite the avatars looking dissimilar in Figure 9, once my face texture was applied on to each of them, that diversity was lost. All six avatars now looked very similar yet none of them were an accurate depiction of me, my cultural hybridity or queerness. All my features were seemingly erased despite my dedication to transferring every detail of my face onto the template (Figure 10). My nose as a visual indicator of my Greek heritage took a generic computerised form whilst my eyes and lip shape were completely neglected. My choice not to identify with heteronormative gender ideals was taken away the moment I was impelled to select avatars from the female folder. I was left conflicted with my appreciation of my avatar's compliance with western beauty ideals yet simultaneously frustrated with the notion that it did not accurately represent me.

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'[…] The avatars look somewhat like me. On second thought, they don't. Am I surprised? No. Was I expecting a more accurate result? Yes. I'm torn. In fact, I am left with a feeling of discomfort. I feel uncomfortable that I am not able to achieve a good level of accuracy. I feel

uncomfortable that even after placing my face onto the avatar, the digital version of myself looks more like the avatar than my actual self [...]'
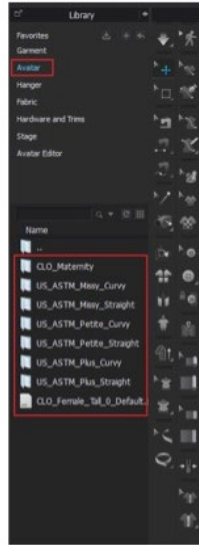
-

As the exploration of self through virtual practice progressed, I continued the process by reviewing the body customisation options available to an average commercial fashion software user. The bodies available on CLO follow *American Society for Testing and Materials* (ASTM) standards and are divided into classifications: Juniors', Women's, Men's & Half Sizes. The female avatars are further categorised as: a) Petite, Missy and Plus, b) Straight and Curvy, c) Young and Mature and d) Small, Regular and Tall, in contrast to the men's avatars that are numerically categorised in sizes 34 to 52. This grouping of avatars raises more questions on CLO's dedication to their mindsets detailed in Figures 1, 2, 3 and 4. Firstly, choosing to descriptively categorise the female avatars with heavily nuanced and gendered terms yet opposingly numbering the male avatars highlights the differential treatment of female and male presenting people within the fashion industry. The female avatar size categories are more suggestive and by contrast the male avatar size categories appear more neutral. Secondly, CLO tend to use the terms female/male and women/men interchangeably, revealing a bias towards binary understandings of gender. Additionally, through this essentialist choice of language, it is implied that biological sex is synonymous to social gender. This results in the conveyance of misinformation and excluding users that do not adhere to such binary perceptions of gender identity.

ASTM SIZING

CLO offers sizes according to the ASTM measurement system such as size grouping; Missy Curvy, Missy Straight, Petite Curvy, Petite Straight, Plus Curvy, and Plus Straight for women and sizes 34 to 52 for men.

These standard sizes might not be suitable for all users. Therefore we offer the possibility of creating and saving a custom size.

The ASTM sizing can be found in the "Size" section of each individual avatar folder.

US_ ASTM_Missy Curvy T2   US_ ASTM_Missy Curvy T4   US_ ASTM_Missy Curvy T6   US_ ASTM_Missy Curvy T8   US_ ASTM_Missy Curvy T10

US_ ASTM_Missy Curvy T12   US_ ASTM_Missy Curvy T14   US_ ASTM_Missy Curvy T16   US_ ASTM_Missy Curvy T18   US_ ASTM_Missy Curvy T20
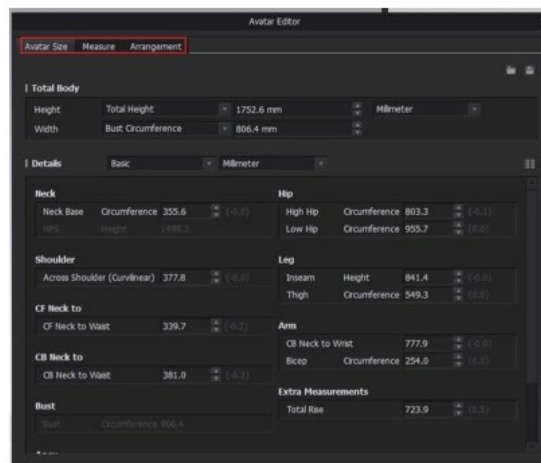
Figure 12: ASTM sizing standards on CLO

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'What do all these words even mean? Who does each group include? How representative are they? With 7 billion of us, not very. The range is purely based on gendered commercial sizing. But how accurate can they be? How inclusive can they truly be?'

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According to information found on *support.clo3d.com 'These* standards sizes might not be suitable for all users. Therefore, we offer the possibility of creating and saving a custom size' (2022: online). This suggests an acknowledgement of the lack of diversity in avatars, yet on the contrary the list of measurements a user can modify is limited despite customisation being a possibility (Figure 13). CLO's statement contradicts their implication that the body measurement customisation options are detailed, given the fact that 'thousands of real body scan data' has been collated (2022: online). Moreover,

there is very little information available on what demographic was used in the data collection process. If all humans scanned by CLO developers had similar proportions and measurements, then all avatars generated by them would be informed by very specific 'realistic body shapes' (2022: online). Based on that assumption and the lack of information available, users cannot be assured their self-avatar will adjust to a realistic body shape that is most like their own, but rather that their self-avatar will be adjusted to meet what the developers have considered standard and default.

Figure 13: CLO Avatar Editor

Besides CLO's limitations on editable measurements and default avatar availability, I collected the anthropometric data correlating to my own body using another commercially focused fashion technology platform, Size Stream. Entering a booth, the software captured 'over 240 body measurements in under 2 minutes' (sizestream.com, 2022: online) and produced an .obj file (Figure 14) of my body based on that data. Despite multiple attempts, the virtual representation of my body was inaccurate due to missing limbs, additional texture seen on multiple body parts and my total body height being visibly

compressed, resulting in slight distortion. This could be resolved by merging my scan with a default Size Stream avatar, however, that would result in the generation of an avatar that is visually smooth, symmetrical and proportionate. Consequently, the avatar would not be an accurate representation of my body and would defeat the purpose of this research project. Another option would have been to import the .obj file into CLO and convert it to an avatar on the software. This presented the exact same limitation as Size Stream, as I would have to select a default avatar to merge mine with. As seen in Figure 15, I was prompted to select the gender of my avatar and my options were limited to male or female, despite the list including multiple default avatars. The use of the terms female and male to describe gender and the drop-down options of avatar names indicates that gender is treated like an accessory that can be altered, rather than an embodied understanding of self. Due to these limitations and despite multiple scanning attempts, I proceeded to develop my self-avatar using the CLO Avatar Editor, pictures of my physical body and the list of measurements generated from the scan.
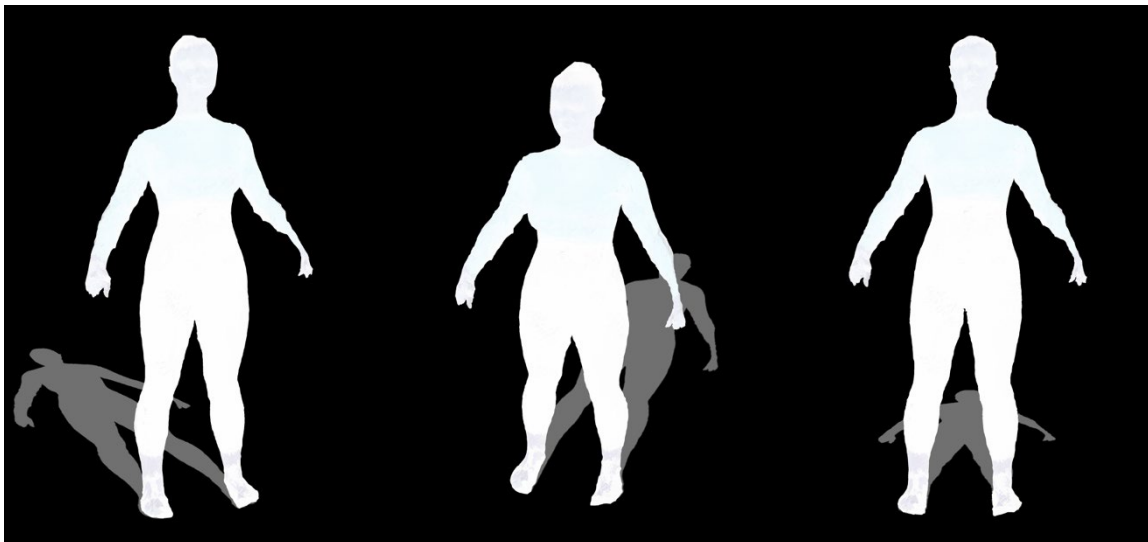

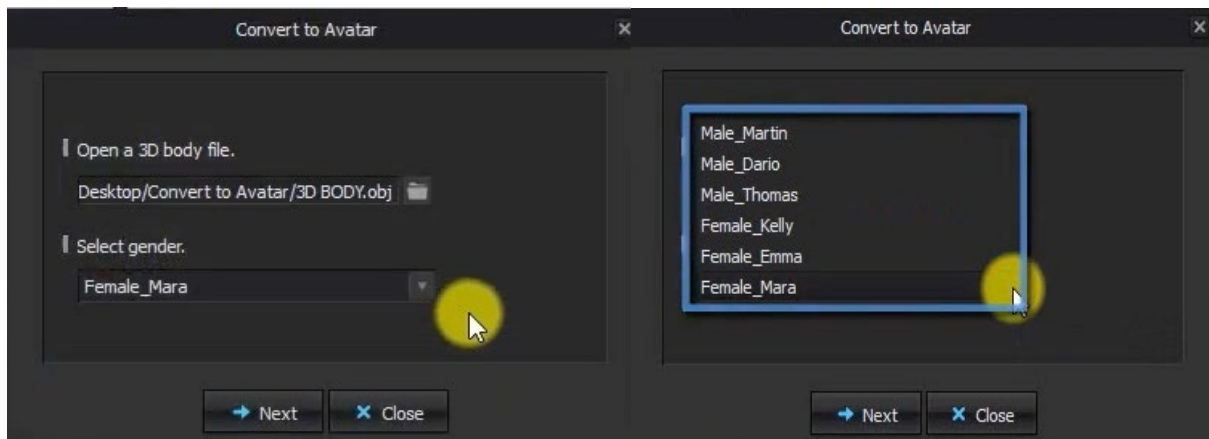Figure 14: Scan of by body produced my Size Stream

Figure 15: Convert to Avatar pop-ups on CLO

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'This is when the painful, yet highly insightful journey of self-examination really started. Having to stare at photos of my near to naked body (to achieve the biggest level of visual accuracy) for 3 hours straight, made my attempt to be objective throughout the process even harder. This is quite a paradoxical mission given my engagement in performative autoethnography. I do, nonetheless, see value in complex self-inquiry. The empirical value of this method is made apparent by the emphasis afforded to being consistently reflexive. I amend a variety of avatar templates to virtually represent my physicality. A constant battle between being too kind to myself or not impartial enough. I sometimes think the avatar looks aesthetically more satisfying than my own physical body. Yes, of course it will as it is generated digitally. But the measurements and proportions I have inserted are based on scanned data. Surely, the data is somewhat accurate? Other times, I wonder if my body truly looks the way it is visualised on CLO. Surely, I'm not that symmetrical. I also contemplate how my digital body looks more feminine than what I assume my physical body to be.'

-

The experimentation with developing an avatar using exclusively fashion software poses limitations that are reinforced by socio-political biases and preferences. The avatar represents a perfect -according to western beauty standards- depiction of me, despite my attempt to

view my body through a critical lens. A response to a blogpost written about the development of a self-avatar, questioned the authenticity of the process. Specifically, Participant 10 wrote:

'[…] accuracy can be jarring, leading to one's questioning of self and how you relate to your body. Can a digitally rendered avatar ever really be a true representation of oneself? and what is a true representation, who's perception of truth, our own or how others see us? Whilst the creation of a physically accurate digital avatar might be the most objective embodiment of ourselves, I think any objectivity is lost as soon as we view it, carrying with us the emotional baggage of our insecurities and cultural scripts about what a certain body should look like. I have often questioned my sense of self when examining my own image, either my real time reflection in a mirror where I consciously or subconsciously position myself in the most flattering way, or through photographs, trying to interrogate whether an image can really be my own, whether this two-dimensional representation of myself is the truest version of me. Is my true image the one that I experience, the way I see myself in my head, an amalgamation of my experience of the world and my gender and the space between my physical body and the garments that hang off it or is it how I appear outside of myself, the way that others see me or how I am rendered digitally?'

Participant 10 throughout their response highlight why accurate depiction is hard to achieve within a digital space. They highlight how they way we view our body is influenced by multiple internal and external factors, through their self-explorative writing. The uncertainty surrounding self-identity and visual appearance in the physical world could be why avatar accuracy is difficult to achieve. Hence, it could be assumed that the software is by design intended to develop idealistic versions of real people to standardise user responses and behaviours. Users are possibly more inclined to continue using the software as they are capable of developing versions of themselves and others that are easily attainable (in the digital sphere) idealised representations. However, this could be considered as negligent of genuinely diverse representation given my discomfort when viewing the developed self-avatar and the user dissatisfaction discussed throughout the IoDF report (2021). My proportions were not accurate, skin textures were blurred, and scars were of course omitted as this would require the use of third-party gaming and animation intended software, such as Daz3D and Blender. Virtual fashion promoting aspirational generic characteristics as easily attainable within software, contributes towards upkeeping its exclusive nature. Nonetheless, the importance of representation for diverse users lies in the communication of self to others, the understanding of lived experience and the creative application of imaginative features, as a form of escapism (IoDF, 2021). To support this argument, I refer to a study on the effect of

avatar representation and choice on prosocial behaviours and social presence within gaming and virtual reality (Herrera and Bailenson, 2021). Although the results of their research didn't suggest a significant advantage to having in game representation, participants who were given options to represent their own skin tone through avatar hands indicated higher social presence scores in opposition to participants who were not given that choice. Additionally, a study by Waltemate et al. on the effect of user avatar personalisation in 'embodied virtual environments' (2018: 1643) revealed that users represented by photorealistic avatars (through scanning) showed higher levels of body ownership and spatial presence unlike participants who were represented by generic avatars (2018). Detailed customisation offering greater spatial awareness could therefore enhance the user's understanding of someone else's situation (Herrera and Bailenson, 2021), which even within a commercial fashion setting is important. Although the focus of 3D fashion design software is concentrated on the process of creating garments, the lack of consideration given to avatars (beyond standardised body measurements and a basic default avatar range) indicates, in my opinion, a disregard for both user experience and consequently the end consumer. If a brand's fashion garments are designed with consideration to the consumer's preferences and shopping behaviours, surely the avatar's resemblance to the wearer would positively impact the success of the final product. An even earlier study by Lim and Reeves (2009) compared the physiological responses to either choosing or being assigned avatar representation during game-play. The results illustrated the significance of choosing self-representation, as it leads to arousal and a more positive game experience. Additionally, they (Lim and Reeves, 2009:351) write:

> Choosing and personalizing "my" avatar directly manipulates the way "I" am represented in the game. Therefore, a player can demonstrate their own unique blend of personality, skills, and roles through the act of choosing and personalizing an avatar in the game world.

As a queer person with an opposition to heteronormative gender standards, body image is an issue I have had to negotiate throughout my life. The confusion that strikes me as a queer person existing in a queer body within a binary physical world, is augmented in a virtual world. I realise that heteronormative structures of the physical world are amplified due to the

inaccuracies of my digital self. Due to the software's tendency to erase my features, I am left feeling urged to abide by binaries in an environment that is digitally constructed to support users. This indicates that choice in representation has a significant role to play both in the physical and virtual world (Lim and Reeves, 2009: 351) and relates to the key message of the IoDF report regarding making options available to users (2021: 62).

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'When I think about my physical body, there are times I get a feeling of (uncontrollable) discomfort at the idea of having excess fat (under the nipples) on my chest. At other times, I am okay with the size of my breasts, as they aesthetically comply with the garments I am wearing. I don't wear bras; they draw attention to my chest. I wear a binder-like top, I wear a push up bra. I don't wear bras. My digital hips seem too big, but after revisiting my physical ones, the digitals aren't big enough. At times, I feel my hips too wide, my thighs too thick and I want them gone. Other times, these stereotypically feminine features aren't feminine enough. They don't fill out my trousers, then stretch them too far. My waist to hip ratio is too vast but my frame is too angular. I wear baggy clothes; they suit me more. I'm tired of hiding, I wear clothes that fit. I don't want everything seen. It's there; it can be seen.'

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The current options available to users are focused on the generation of avatars that could be perceived as representative, yet they abide by notions of what a western heteronormative world considers an ideal body image to look like. This concept highlights a queer user's inability to create an avatar that conforms to what they themselves consider to be an idealised depiction of self. The western heteronormative options granted to users would therefore eliminate the option of character personalisation for intersectional and meta identities. Although the development of individual photorealistic representation would not be a viable possibility for commercial software, presenting users with an oxymoronic range of homogeneous options demonstrates a disregard for inclusivity. The absence of diverse options on 3D fashion software like CLO, consequently cements biased societal ideals of the physical world into virtual environments, alongside erasing the existence of users within that space.

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'Digitally I look too feminine. Physically I look too masculine. Digitally I look too masculine. Physically I look too feminine. But why do I care so much? Are these intense feelings in relation to and/or dependent on what I choose to wear? Do I have a love-hate relationship with my physical body and digital projection? I am comfortably uncomfortable. There is a discomfort in feeling comfortable. I have a masculine perception of my femininity and a feminine perception of my masculinity.'

-

Despite my exploration being fulfilled using CLO as 3D fashion design software developed for commercial purposes, it is important to mention that there are other software providers that offer a scanning process through which users can develop the most accurate digital representation of themselves. In their report, IoDF mention their collaboration with Daz3D, a leading 3D digital software provider, on developing *Catty 8.1* 'the world's first non-binary and photorealistic digital double' (IoDF, 2021:10), during LGBTQ+ Pride month. Although the avatar was developed by queer team members of Daz in collaboration with creative director and co-founder of IoDF, Cattytay, I question the limitations of the software itself in the process of avatar development but also contest some of the decisions made by the team of developers. In Daz3D, similarly to Clo3D, users are given the choice of a female or male avatar as an initial template with customisation options later available within the process. Catty 8.1 islviii categorised as female despite it being a virtual depiction of a non-binary person. When creating my self-representation, I found this binary categorisation of avatars restrictive and unrepresentative of my understanding of both the corporal and cognitive self. Aiming to represent a digital self that transgresses social norms of the physical world yet being inhibited by the same binary concepts in an assumably limitless virtual world, is conflicting. This only strengthens the argument around the insufficiency of 3D fashion design software. While a level of customisation is feasible through using exclusively CLO and Photoshop (software available to most commercial fashion professionals), through my practical experimentation, I feel as though unique elements of my physicality were expunged, therefore granting them no significance. My existence felt silenced by a tool that places communication at the centre of its company values. Even though Catty 8.1 appears a lot more realistic than my self-avatar,

Daz as a software indicates the same preferences as CLO when it comes to default settings. Additionally, despite IoDF's intentions to promote inclusivity and digital representation, their choice to celebrate diversity through the creation of a singular avatar that is a seemingly able-bodied, slim person with largely Eurocentric features as the representation of queer voices, could be interpreted as neglectful of the broader queer community. Furthermore, choosing to dress Catty 8.1 in mostly stereotypically masculine looks (Figure 18), reveals that the team developing the non-binary avatar and its accessories, might also be hindered by the dualistic thinking of the physical world. This again illustrates the physical world's influence on the digital sphere and vice versa.
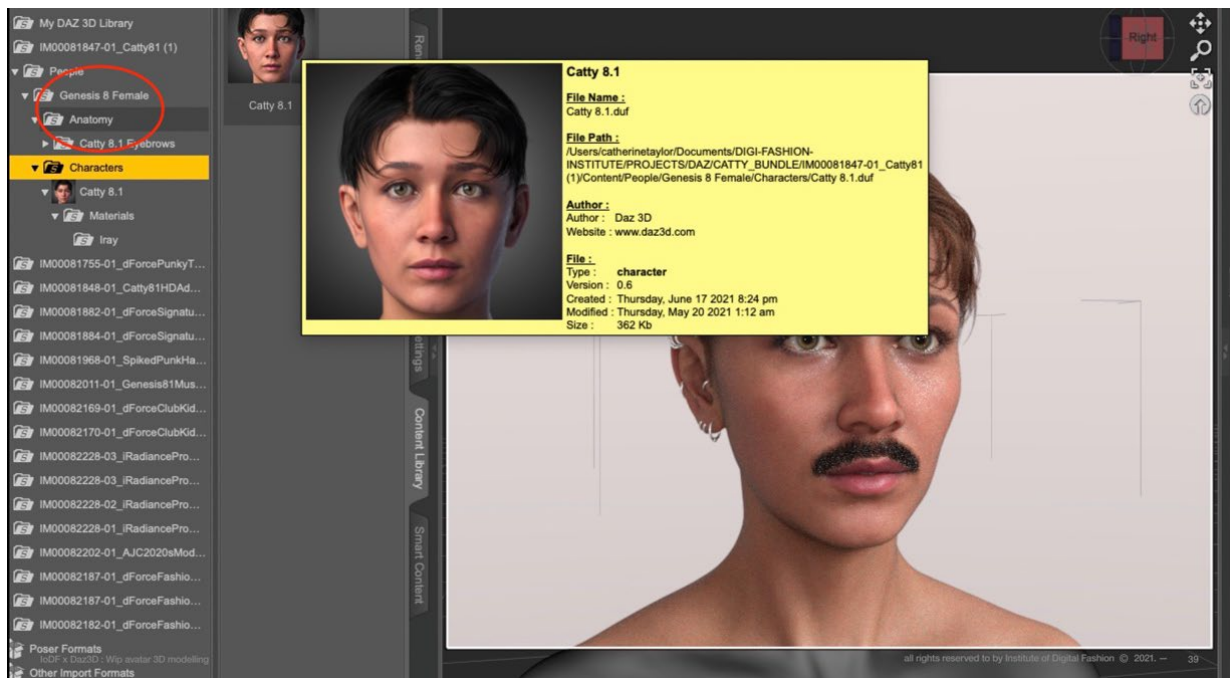

Figure 17: Development of Catty 8.1 Avatar on Daz

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'I feel uncomfortable that this commercial piece of software has been designed with such binary perceptions of who the customer is. But isn't that just fashion all over? Fashion is for everyone they say. And by "they" I mean the industry. What they forget to mention is that fashion is for what they perceive or choose to perceive everyone to be. Variety, but with limitations. Diversity, but with limitations. Inclusivity, but with limitations. Representation, but with limitations. Creativity, but with limitations. Technological advancement, but with limitations. Research, but with limitations. Commerciality however, limitless.'

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Figure 18: Catty 8.1 in the 'Inclusive Digital Realities Bundle' available on Daz3D

These thoughts are afforded further validity by the results of the IoDF report, and the disappointment communicated by respondents to their survey (2021). Participants highlighted issues surrounding the representation of people of colour, queer people, disabled people, and overall marginalised communities. These viewpoints epitomise the contemporary socio-political discourse of western society on inclusion. The public's increasing engagement with the *Black Lives Matter Movement (BLM)* and the *Trans Rights Movement* during and after the pandemic, has given more people the platform to communicate lived experience unlike any other time in recent history. As a result, the fashion industry has made attempts to include a more diverse range of voices in traditional advertising campaigns through hiring models who physically conform less to conservative Eurocentric ideals. Despite some efforts being made by fashion brands producing physical commercial garments, the

choice to appear inclusive as part of a marketing strategy could be deemed as a tokenistic endeavour. Choosing to take action during a specific time frame (eg during/after the aforementioned protests) in which inclusivity and diversity is considered perhaps fashionable, raises a conflict between genuineness and profitability. In the same vein, I question Daz3D's 2021 collaboration with IoDF on the release of *Catty 8.1* for Pride and their partnership with African and Ugandan (as identified by the owners) owned art, animation and digital production company Sowl Studios to release two *Black History Month Bundles* during February 2021. While I support leading software providers embracing diversity, I question the timing of their actions and its relativity to financial gain and reputation. The futuristic nature of virtual software technology is put into question when software like CLO3D and Daz3D act in accordance with hegemonic agendas. Omitting to acknowledge human characteristics such as hair texture, skin tones with natural variations in pigmentation, binary body shapes and proportions that might not appear symmetrical, contributes towards the disregard of social groups that have been historically marginalised by all forms of media. Consequently, it is important to mention that issues surrounding misrepresentation -or the lack of diverse representation- need to be addressed not only by individual creators and software developers but by the broader fashion industry. Efforts to include users within research should be consistent and greater action ought to be taken to surpass tokenism and reach empowerment alongside genuine inclusivity.

6. **Discussion**

Through the discussion in my practical analysis, I have come to the understanding that although virtual spaces appear to have the potential to be inclusive due to their promoted limitlessness, they are heavily informed by socio-political binary biases of the physical world. However, the concept of the phygital suggests that adopting a framework that combines physical and digital elements can offer a holistic and integrative approach to the fashion design process that places the user at its centre.

Although CLO's main purpose is 3D garment design, exploring their avatar customisation options revealed a lot about their ideological positioning of inclusion and their ability to

accurately represent intersectional and meta identities. Informed by the IoDF report, my own self-avatar development and the responses received through the website, it is evident that despite self-identification being essential, the software falls short on granting users a diverse and inclusive range of options. Nevertheless, this provides insight into the ways in which the phygital could provide a transitional solution for users. Furthermore, a phygital framework illustrates the potential to overcome the limitations of the physical and digital world.

CLO presents itself as a software that is both user-focused and agile in terms of technological improvements. The creators of CLO actively put their users at the forefront of all their work with the language used throughout their website and are consistently focusing on making the 3D virtual simulation process as accurate and realistic as possible (CLO Virtual Fashion, 2022). However, these intentions are not fully met, as CLO's understanding of human depiction is based on binary and predisposed perceptions of social concepts such as gender, sexuality, race and ethnicity, which actually contributes towards keeping these views intact. Choosing to provide users with avatars that by default abide by Eurocentric and heteronormative beauty ideals and categorisations, results in overlooking users who do not relate or reflect such unrealistic standards. By adopting such reductionist views as a base for avatar appearance, CLO is reinforcing an ideology that views Eurocentric and heteronormative facial and bodily features as superior as well as aspirational. This in turn creates an environment within which users feel excluded or misrepresented, as illustrated by the results of the IoDF report (2021), detailed in my literature review. The customisation options offered by CLO are not actually as exhaustive as they appear at first glance, rather they support users in utilising avatars that do not reflect the visual complexities of physical human bodies. As Entwistle states, 'without a body, dress lacks fullness and movement; it is incomplete' (2000: 34), therefore CLO as a virtual fashion software that seemingly neglects the importance of diverse bodies in the design process, contributes towards demeaning the symbiotic relationship between body and garment.

The IoDF report also highlighted that users of several 3D software systems are acknowledging that customisation options on virtual platforms 'are not sufficient or inclusive, particularly for people of colour, people with disabilities, and when it comes to representations of realistic body types and genders' (2021: 62). Throughout the report, emphasis is given on the

significance of choice for all users, and the importance of implementing changes attentively, 'with the input of disabled people themselves, people of colour, and varied bodies' (2021: 62). This broader expression of frustration with the exclusionary nature of virtual spaces supports my argument that CLO's core values are promoted as a marketing strategy rather than advocacy for inclusivity and diverse representation. Although CLO could be considered a pioneer in the world of virtual simulation, providing users with basic avatar customisation options doesn't indicate a drive for genuine inclusivity. The simplification of gender, race and ethnicity through the availability of standardised aspirational avatars limits users' sense of agency and identification when creating in virtual environments.

Flawless, unrealistic and Eurocentric ideals of beauty seem to be majorly influential in western discourse and therefore in the way we form our sense of self, that they are difficult to transcend even in virtual spaces. This is reinforced by the idea that the main purpose of virtual fashion software will be to function as an important part of the garment development process. If that is to come to affect, then systems like CLO need to place representation at the centre of their company mindset, so that users as consumers are effectively made to feel included in the digitalization process.

By examining the capabilities of CLO and developing my own self-avatar, I have gained insight into how virtual tools alone cannot yet provide users with the breadth of choices and accuracy needed to represent all intersections of their identity. The limited options offered, greatly influence user-experience which in my exploration resulted in disappointment with my self-avatar. The work I was generating did not represent me, as my avatar merely resembled me. Rather, the self-avatar's perfect and symmetrical look fortified feelings of insecurity and dissatisfaction with my physical appearance. My practical exploration revealed how noticeably software systems can preference certain types of people, whilst leaving others either underrepresented or misrepresented. This was made especially clear when evaluating how cultural hybridity and queerness as intersections of my own identity are communicated within a virtual space. Similarly to the physical world, in the digital sphere heteronormative and seemingly monocultural identities with idealised bodies and Eurocentric features are favoured. This implies that our perception of self is largely informed and continuously influenced by the dominant culture and its socio-political superiority.

An example of virtual software imposing dominant socio-political ideologies on users, was me being faced with the choice of either a female or male avatar that both conform to binary conceptions of what it means to have a feminine or masculine body respectively. CLO only providing users with heteronormative avatars means that everyone must adapt to the circumstances, even if it is uncomfortable. Analogically, IoDF's collaboration with Daz on the creation of Catty 8.1 highlights a similar issue. The team is essentially trapped in a binary way of thinking by having to use a female avatar as a starting point. Additionally, choosing to dress the non-binary avatar, created from a female template, in largely masculine garments illustrates my point on dualistic thinking dominating the development of inclusivity in digital spaces. Despite my contestations, it is important to note that IoDF's work is a starting point in driving the change for effective inclusion and representation on virtual platforms.

Through undergoing this research project, I established that utilising one way to explore my multidimensional identity would not suffice. Following a phygital framework allowed me to reach a new understanding of myself through using digital and physical aspects interdependently to negotiate and communicate my identity. By using the methods of PaR and autoethnographic writing I carried out a hybrid and holistic exploration, which enabled me to see that currently the use of strictly physical methods or solely digital methods are neither elaborate nor extensive enough for creatives to feel included and represented accurately. My autoethnographic blogpost writing and the participant responses highlighted the influence dominant ideologies have on the way in which people discuss the self and identity. This insight supported me in evaluating the work of virtual fashion forerunners and question their intentions for genuine inclusivity.

This project has shown that undergoing the digital development of a self-avatar whilst reflecting on the physical act of doing so, could support the improvement of commercial 3D fashion design software. By shifting the focus onto the body itself as a carrier of fashion, we are able to reconceptualise the body in relation to garments. Following Entwistle's understanding that dress, the body and the self are to be evaluated in relation to each other as 'a totality' (2000: 34), I argue that commercial fashion software need to concentrate on

improving avatars as tools that grant the garments further significance. I suggest that fashion software developers should not only be seeking feedback from users on design and pattern making capabilities; rather, they should be actively requesting feedback on the avatars' ability to reflect diverse physical bodies with all their complexities so that virtual garments can therefore appear and act more like physical garments. Evaluating the software capabilities through a phygital lens could offer a more inclusive user experience by placing user representation at the centre of focus. Consulting users with varied perspectives through phygital experimentation could also support an effective and consistent interaction between the physical and digital.

7. <u>Conclusion</u>

Throughout this research I explored the creation of a self-avatar as a mode of self-exploration, using 3D fashion design software, CLO, to examine the inclusivity and representation of intersectional identities within virtual fashion. My aim was to propose an alternative way of utilising 3D commercial fashion design software to promote self-exploration. I achieved this by analysing my cultural hybridity and queerness, informed by my lived experience and through practical experimentation. By combining personal autoethnographic writing and digital practice I was able to undergo the exploration process using a phygital framework, that placed me as the user at the interstice between the physical world and the digital sphere. Adopting this multidimensional method highlighted the influence of dominant cultural ideologies on contemporary discourse, but also revealed the limitations of virtual spaces in accurately representing and including diverse intersectional identities.

To expand on the work of IoDF, within this research project I suggest ways in which diversity and genuine inclusivity might be extended within virtual fashion practice. The investigation revealed that the use of only commercial fashion software is not enough to achieve genuine inclusion, accurate representation and detailed creative expression. On this basis, users that are working on virtual systems could consider adopting a phygital way of working as a temporary solution to the limitations faced within physical and digital practice. Hopefully, this project can encourage fashion practitioners to consider combining their pre-existing knowledge on physical concepts with new innovative technologies.

This project could be considered a starting point for the continuation of discourse surrounding inclusivity and representation in virtual fashion. Further research could, for instance, investigate how other 3D software providers negotiate identity and representation within the constraints of standardised fashion. Analysing the capabilities and limitations of major software providers within the 3D fashion industry could support highlighting systemic discrimination and exclusion within the development of such technologies. Evaluating the customisation options between avatars available on CLO, Browzwear, Style3D and Optitex, as major stakeholders within the 3D fashion realm, could extend the contemporary academic literature and support the argument surrounding the restrictive nature of commercial fashion. Alternatively, drawing a comparison between animation/gaming 3D character development software and 3D software intended for fashion could contribute to identifying key limitations and specific patterns in default avatar and customisation options available to users. Specifically, detecting the key differences between Marvelous Designer and CLO could develop insight into how the 3D fashion industry can improve and extend their offerings. Additionally, although this piece of work is focused on the negotiation of cultural hybridity and queerness in virtual spaces, it demonstrates the potential of using a phygital framework within fashion practice and could be used as a basis for further research. As great emphasis was given to the presentation of personal narrative, this research operates as a prompt to question existing issues with representation in the broader fashion industry. The adoption of a phygital framework to explore alternative identities within virtual fashion worlds could supplement the discourse on the physical and digital confines on diversity in fashion and study the potential of 3D technology further. Finally, research could also be extended on how a phygital framework could provide insight into other intersections of an embodied lived experience. The phygital nature of this practice with the inclusion of varied perspectives, makes the research accessible to a broader audience and therefore opens up possibilities of relatability to the lived experience discussed.

8. <u>References</u>

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