PORTRAIT OF A BIODIGITAL CHARACTER
Marie-Nathalie Jauffret, Vanessa Landaverde-Kastberg

This document is the English version of:

Available online at :
----
https://www.cairn-int.info/article-E_HERM_082_0091--portrait-of-a-biodigital-
character.htm

How to cite this article :

Marie-Nathalie Jauffret
International University of Monaco
Vanessa Landaverde-Kastberg
Université Nice Côte d'Azur
**Translated and edited
by Cadenza Academic Translations[1]**

Portrait of a biodigital character

From its beginning, the digital social network Instagram has been dedicated to the projection of images. It represents a digital space for the staging of the self (Goffman 1956) or of its perception of the world. Thus, this platform with more than 800 million users (August 2018) has evolved into an "egocentric social network" (Tuten 2008, 24). Subjects eager to win fame in the eyes of the whole world (Kaplan and Haenlein 2010) or to benefit commercially from widespread recognition thus use it as a means to indulge their egos or to gain notoriety. These soon-to-be-influencers deeply penetrate this space of a network of public communication to better direct the desires of their potential or already acquired followers, through "an active attitude, combining a systematic search for information and for attention oriented towards understanding" (Mellet 2009, 273). As opinion leaders, their popularity can be measured by their number of followers (De Veirman, Cauberghe, and Hudders 2017, 818). The need to stand out has since become more important for "mega influencers" (Launchmetrics 2018, 18), those with 500,000 to 1.5 million followers, who keep track of not only the number of followers but also the number of times content is posted (Segev, Avigdor, and Avigdor 2018, 1010), viewed, commented on, and shared. Thus, it seems that certain Instagrammers are now trying to initiate a new communication strategy. Indeed, through their profiles, some are experimenting, producing, and exhibiting a new type of ambivalent character, to be understood neither as completely human, nor as humanoid, nor as a 3D representation, but as all these forms at the same time. Graphic designers mechanize bodies to translate them into 3D characters, but leaving human signs there (@Loren) so that the communication between the profile and the followers develops around a questioning of identity—"Is she

Marie-Nathalie Jauffret and Vanessa Landaverde-Kastberg

an actual robot?" (@madison.toussaint 2018)—and accentuates the mystery. With the same goal in mind, companies specializing in artificial intelligence display their robots (@realsophiarobot) in a human and social form by providing them with a real citizenship (passport), and followers refuse to see the digital and technological aspect of their coming into existence: "Hey @realsophiarobot, @jackyshambrook is wondering what your natural hair colour is?" (@colwynpaddon 2018). Other humanoidized visuals slip slowly towards a human development: "If you were a robot your skin wouldn't have turned red around the tattoo" (@rainbowbarfer21 2018). By dint of artistic will, photographers give life to pixelated creatures, images that proclaim their naturalness but exude ambivalence (@shudu.gram), with modeling software less expensive than flesh and blood models: "If she isnt real then why does she have to be so skinny?" (@chloeshaw123 2018). Thus it is for Miquela Sousa (@lilmiquela), model, singer, and influencer, who declared that she thought herself human, but who announced, shocked, to all of her followers that she had just found out that she was a gynoid: "I am not a human being" (@lilmiquela 2018). In what is sometimes a state of the most complete uncertainty, their admirers and/or detractors thus describe these profiles in turn as humans, digitalized, photoshopped, dolls, avatars, humanoids, fembots, holograms, icons, etc., and spin endless theories about the real identity of the influencers. The communicational image of these profiles, online then offline in communications activities (fashion shows, etc.), develops around these comments and oscillates legibly between visual, human, and/or technological communication and blurs the boundaries in a misunderstanding that structures the communication itself (Servais and Servais 2009). What if this doubt, carried by the semiological and semantic questioning of the publications of these new images, testifies to the appearance and emergence of a new kind of communication? But first, can the appearance of this new type of character be confirmed? And how to name it?

Resolving a undecidability

Certain Instagram profiles introduce an identitarian amphibological as to the description of their status. They do not present themselves clearly and/or they allow their followers to define them in terms of plural identities (human, robot, 3D, AI, etc). This article then proposes to examine the possible emergence of a new identity by analyzing the last twenty-five posts of three influencers and to examine the resulting comments (n = 72,000). These influencers are selected because of the singularity of each character, their number of followers, and the consequent number of received comments. Thus, @shudu.gram is officially a 3D character but is often identified as human. @lilmiquela appears human but publicly declares herself to be a robot, but she is really a digital production. @blawko22 presents himself as a robot but is notoriously judged to be a human being, whereas he is neither one nor the other. These three profiles are used to study the divergence of the conscious and/or subliminal perceptions of the receivers. By using Peirce's tripartite distinction (signifier, signified, and referent) and the concept of collective intelligence (Lévy 1997), a new, equivocal kind of character appears to be emerging. A semantic study of the natural language (Greimas 1964) of each commenter makes it possible to identify the terms that describe the assumed or asserted identity of the profile. Even if "[o]ne object-term alone does not carry any signification" (Greimas 1964, 19), the comparison of several of these object-terms can nevertheless confirm or invalidate the discontinuity of individual assessments within a single profile. In this last case, a list of hybrid qualifiers specifying the identity of this type of profile should emerge from this polysemous exploration. Recognizing this, and to avoid a terminological confusion, a nominal classification is suggested at the intersection of the scientific literature of multidisciplinary fields and in particular that of the information and communication

sciences (ICS). As a theoretical conclusion, without making any further claims for it, a definition is then submitted for further discussion with peers. This work can then serve as a basis for reflection, without provoking "border disputes" between disciplines (Laulan 2013, 102), on how to best describe this new element of digital communication in an international context.

The biodigital character

The interrogations that followers bring to these profiles confirm the hypothesis of the emergence of a new character with an ambivalent visual identity, both human and technological. This appears in their questions—"Are you real, I'm shocked" (@jscandraa 2018)—and by their expressions of doubt: "I'm so confused" (@debbydaisyy 2018). The qualifiers used show that the general linguistic forms and the particular vocabulary remain vague when it is a question of defining this character oscillating between several identities: "ok she's a robot how can she be allergic to stuff?!?" (@lydi.lit.lit @blawko22 2018). Indeed, the semantic analysis attached to the comments reveals no terminology, no precise descriptive word for the characterization of an influencer who presents a deviation and/or a blurring of their possible identities. Confusion, the expression of doubt, and the search for truth in a double-bind relation (Bateson 1972) pepper the comments of internet users waiting for an answer. Nevertheless, analysis reveals that the terms robot/android (54%), human, (33%), digital, photoshopped, 3D, artificial intelligence, avatar, animation, doll, character, and hologram are those most used by internet users, in that order. On the basis of these results, a problem arises: in the state of current knowledge, no descriptor has ever been proposed in the field of ICS research. But "paradigms tied to the information and communication sciences are well positioned for studying the contextuality of forms and appearances"

(Moukarzel 2015, 230). Digital technology also "aims for peaceful co-existence and as such belongs to the field of communication" (Perriault 2011: 14). However, this new category of ambiguous identity is already used both online and offline in the field of communication "which does not concern truth but credibility" (Dacheux 2009, 12), and various organizations are already contracting with these profiles for their external communications activities (fashion shows, marketing campaigns, media exposure, etc.). In view of this analysis, the self-classification of these influencers and their definition cannot remain vague because "all the social regularities we can observe are the product of human action" (Boudon 1985, 370). Moreover, meta-communication by authentication and exposure to this double bind (Bateson 1972) make it possible for undecided followers to put an end to this ambivalence while remaining in their world of questioning. This reality invented by followers becomes the "real" reality only if they believe in their mental constructs (Watzlawick 1992), and naming a new term can form part of this. A new terminology is thus subjected here to academic scrutiny because it is important to consider definitions as digital social networks evolve (Ellison and Boyd 2013), and "guessing at intentions is henceforth essential to preventing or provoking action" (Renucci 2016, 156).

By using the data collected on the cognition and perceptions of the followers who bestow life ("bio") upon this character, while taking account of its technological ("digital") nature, this research makes it possible to present the primary characteristics defining a character that can be called biodigital because it mixes the human and the virtual within a joint identity. From a theoretical perspective, a biodigital character, or simply "a biodigital," can be defined as a person, and/or an anthropomorph, and/or a robot, and/or an imaginary or animal representation. Its primary characteristic consists in an ambivalence and divergence of interpretations concerning its image of identity, which contains semiological and verbal elements

III

that oscillate in particular between that of a human being, a robot, a digitalized individual, a 3D representation, or a 4D experience under the equivocal gaze of multicultural non-participant receivers. The creator or owner of a biodigital character can cultivate this ambiguity and manipulate this blurred identity to his or her liking and/or to accompany a communication process according to the demands of plural organizations, as well as at the physical, graphic, behavioral, and relational levels. Conversely, a virtual person or identity clearly defined from the beginning of its visual communication or its conception on social networks can become biodigital by virtue of the constant uncertainty and/or disagreement concerning its true identity. This transformation of identity can be expected, intended, or unpredictable. The profile of the biodigital character is generally diffused by digital means in online communication but also slips into the offline world, between visual, human, and technological communication.

On the threshold of the biodigital character portrait

The definition presented here of a biodigital character portrait, based on an analysis of the Instagram platform, may suffer from certain weaknesses. Indeed, the criteria selected are based on observations of constitutive elements that only provide data from the application: three profiles on the social network Instagram. An additional study on other profiles should bring a critical gaze to bear on the matter. In an additional approach, the description of a biodigital character portrait is made here according to the analysis of comments mentioned at a given time, T. It would be relevant to check the data collected in N + 1 and N + 2 to track how these ambivalent digital identities may change. This information would make it possible to qualify and quantify the durability of the criteria presented in this study and possibly the lifespan of a biodigital character,

which cannot be evaluated at present. Likewise, the content of some comments may be written by bots or by a team in charge of the profile's communication under the guise of an ordinary account but integrated into the analysis without it being recognized that they are fake accounts. To consider another parameter, it would be relevant to study the semiotic analytical capabilities of the followers who enter into the semiological questionings to learn how they "interpret the visual indices in various contexts" (Kauppinen-Räisänen and Jauffret 2018, 104) and name the character. In spite of these limits, this article—to our knowledge, the only one to study the matter in an international framework—asserts the existence of the biodigital character and makes it possible to define the primary criteria for the identification of identity and/or the verbal and nonverbal communicational construction of a biodigital in its primary functionalities.

Between visual, human, and technological communication

In the newest digital spaces of communication, profiles stemming from the real and virtual worlds flirt with their followers on Instagram while using several voices to diffuse messages accompanied by sounds (Shannon and Weaver 1949) that make these exchanges confusing at times. Mainly, these subjects switch back and forth between human visual communication (human beings and/or animals) and technological communication (humanoid, gynoid, actroid, animatronic and/or other digitalized products) without ever ending up with a precise definition of identity. All of the questions raised introduce a process producing a new communicational determinant: the biodigital character. Through a communication that is sometimes nonverbal (the viewer perceives visuals that may elicit questions) and sometimes verbal (disputed in comments), it is constructed on the reality of several

intermingled identities. This communicational subterfuge makes it possible to obtain, initiate, extend, and/or intensify relations between the two parties (influencer and receiver). To apprehend the complexity of this interdisciplinary concept, the biodigital character thus opens up a new path for research, particularly regarding digital, visual, technological, and social communication. This study presents the scientific community with the question of considering the emergence of a definition and of possibly situating the term "biodigital," one of the principal characteristics of which is to circulate, voluntarily or involuntarily, between various analogies without arriving at a well-defined profile. It is a fact. Through a mimesis (Sinapi 1998) and a negative or positive idealization (Goffman 1956) even in the mirror phase (Munier 2014), the biodigital character introduces a fruitful doubt into discussions that rely on the emotions and sometimes solicit the empathy of followers who try to understand the identity of the Other. The socio-cognitive ambiguity evoked by this new communicational apparatus often comes to modify opinions (Keller and Berry 2003). In this sense, it is understood that these new entities can provide for new systems of communicational exchange (Skinner 2018) and call into question an emergent phenomenon. It is thus possible to regard biodigital communication as something that is not only ephemeral; it will become stronger because these profiles excite special interest and facilitate the advertising of the products exhibited through their mediation. These fictitious characters who flirt with digital art and storytelling evoke a different kind of communication. To facilitate the analysis of a complex digital reality, present and future, the scientific community would do well to consider the existence of this communicational profile and the possibility of adopting this "language of representation" (Roche 2005, 50). Indeed, the addition of this new typology of biodigital beings enters a logic of digital transformation that continues to present one of several entry points to an ambivalent and innovative form of communication.

NOTE

1. Translator's note: Unless otherwise stated, all translations of cited foreign language material in this article are our own.

REFERENCE LIST

Bateson, Gregory. 1972. *Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology*. Chicago: University of Chicago Press.

Boudon, Raymond. 1985. "Les nouvelles tâches de la sociologie." In *Encyclopédie Universalis*, 367-370. Paris: Encyclopaedia Universalis France.

Ellison, Nicole B., and Danah M. Boyd. 2013. "Sociality through Social Network Sites." In *The Oxford Handbook of Internet Studies*, 151-172. Oxford: Oxford University Press.

Charest, Francine, Christophe Alcantara, Alain Lavigne, and Charles Moumouni. 2017. *E-réputation et influenceurs dans les médias sociaux: nouveaux enjeux pour les organisations*. Québec: Presses de l'Université du Québec.

Dacheux, Éric. 2009. "Les SIC approche spécifique d'une recherche en communication mondialisée." In *Les Sciences de l'information et de la communication*, edited by Éric Dacheux, 9-36. Paris: CNRS éditions.

De Veirman, Marijke, Veroline Cauberghe, and Liselot Hudders. 2017. "Marketing Through Instagram Influencers: The Impact of Number of Followers and Product Divergence on Brand Attitude." *International Journal of Advertising* 36, no. 5: 798-828.

Erner, Guillaume. 2009. "Le mode de domination des tendances." In *Sociologie des tendances*, edited by Guillaume Erner, 66-91. Paris: Presses universitaires de France.

Granovetter, Mark S. 1973: "The Strength of Weak Ties." *American Journal of Sociology* 78, no. 1: 1360-1380.

Greimas, Algirdas Julien. 1964. "La structure élémentaire de la signification en linguistique." L'Homme, vol. 4, no 3, p. 5-17 trans. 1984 *Structural Semantics: An Attempt at a Method*. Lincoln: University of Nebraska Press.

Goffman, Erving. 1956. *The Presentation of Self in Everyday Life*. Edinburgh: University of Edinburgh.

Hu, Yuheng, Lydia Manikonda, and Subbarao Kambhampati. 2014. "What We Instagram: A First Analysis of Instagram Photo Content and User Types." In *Proceedings of the Eighth International AAAI Conference on Weblogs and Social Media*, 595-598. Palo Alto: The AAAI Press.

Instagram. 2017. *Instagram's 2017 Year in Review*. November 29. Accessed September 14, 2018. http://instagram-press.com/blog/2017/11/29/instagrams-2017-year-in-review.

Kaplan, Andreas M., and Michael Haenlein. 2010. "Users of the World, Unite! The Challenges and Opportunities of Social Media." *Business Horizons* 53, no. 1: 59-68.

Kauppinen-Räisänen, Hannele, and Marie-Nathalie Jauffret. 2018. "Using Colour Semiotics to Explore Colour Meanings." *Qualitative Market Research: An International Journal* 21, no. 1: 101-117.

Keller, Edward B., and Jonathan L. Berry. 2003. *The Influentials: One American in Ten Tells the Other Nine How to Vote, Where to Eat, and What to Buy*, New York: Simon and Schuster.

Laulan, Anne-Marie. 2013. "Incertitudes disciplinaires." *Hermès* 3, no. 67: 101-102.

Launchmetrics. 2018. *State of Influencer Marketing Report*. New York: Launchmetrics. Accessed September 14, 2018. http://www.launchmetrics.com/resources/whitepapers/influencer-marketing-report-2018.

Lévy, Pierre. 1997. *Collective Intelligence: Mankind's Emerging World in Cyberspace*. New York: Plenum Trade.

Mellet, Kevin. 2009. "Aux sources du marketing viral." *Réseaux* 5, no. 157-158: 267-292.

Mesquita, Anabela. 2017. *Research Paradigms and Contemporary Perspectives on Human-Technology Interaction*. Hershey, PA: IGI Global.

Moukarzel, Joseph Richard. 2015. "L'architecture, un art qui embrasse la science." *Hermès* 2, no. 72: 226-231.

Munier, Brigitte. 2014. "Homme et machine: la phase du miroir." *Hermès* 1, no. 68: 143-148.

Perriault, Jacques. 2011. "Normes numériques, éthique et sciences sociales." In *La Norme numérique: savoir en ligne et Internet*, edited by Jacques Perriault and Céline Vaguer, 11-31. Paris: CNRS éditions.

Renucci, Franck, Benoît Le Blanc, and Samuel Lepastier. 2014. "Introduction générale." *Hermès* 1, no. 68: 11-14.

Renucci, Franck. 2016. "Surveiller et prédire." *Hermès* 3, no. 76: 156-161.

Roche, Christophe. 2005. "Terminologie et ontologie." *Langages* 1, no. 157: 48-62.

Servais, Christine, and Véronique Servais. 2009. "Le malentendu comme structure de la communication." *Questions de communication* 15: 21-49.

Segev, Noam, Noam Avigdor, and Eytan Avigdor. 2018. "Measuring Influence on Instagram: A Network-oblivious Approach." In *Proceedings of The 41st International ACM SIGIR Conference on Research & Development in Information Retrieval*, 1009-1012. Ann Arbor, MI: Association for Computing Machinery. Accessed September 14, 2018. http://dl.acm.org/citation.cfm?doid=3209978.3210134.

Sinapi, Michèle. 1998. "Aspects de la mimesis dans la politique platonicienne." *Hermès* 1, no. 22: 17-25.

Skinner, Chris. 2018. *Digital Human: The Fourth Revolution of Humanity Includes Everyone*. Hoboken. NJ: John Wiley & Sons.

Shannon, Claude Elwood, and Warren Weaver. 1949. *The Mathematical Theory of Communication*. Urbana: University of Illinois Press.

Statista. 2018. "Distribution of Instagram Users Worldwide as of April 2018, by Age and Gender." Accessed September 14, 2018. http://www.statista.com/statistics/248769/age-distribution-of-worldwide-instagram-users.

Turkle, Sherry. 2018. "En parlant aux machines, nous perdons notre humanité." *Hermès* 1, no. 80: 230-235.

Tuten, Tracy L. 2008. *Advertising 2.0: Social Media Marketing in a Web 2.0 World*. Westport, Conn: Greenwood Publishing Group.

Watzlawick, Paul, ed. 1984. *The Invented Reality: How Do We Know What We Believe We Know?: Contributions to Constructivism*. New York: Norton.

Wittezaele, Jean-Jacques. 2008. "Introduction." In *La Double contrainte: L'influence des paradoxes de Bateson en sciences humaines*, edited by Jean-Jacques Wittezaele and Mary Catherine Bateson, 5-10. Louvain-la-Neuve: De Boeck Supérieur.

Instagram profiles of the biodigitals cited

@bermudaisbae: <www.instagram.com/bermudaisbae/?hl=fr>

@lilmiquela: <www.instagram.com/lilmiquela/>

@shudu.gram: <www.instagram.com/shudu.gram/>

Instagram posts and comments on Instagram posts of the three biodigitals

@lydi.lit.lit@blawko22. 22/15/2018. "ok she's a robot how can she be allergic to stuff?!?" [Instagram comment]: <www.instagram.com/p/BmeuDrYAq0v/?taken-by=blawko22>

@chloeshaw123. 23/05/2018. "If she isnt real then why does she have to be so skinny?" [Instagram comment]: <www.instagram.com/p/BTNaKullMTY/?hl=fr&taken-by=shudu.gram>

@colwynpaddon. 01/08/2018. "Hey @realsophiarobot, @jackys-hambrook is wondering what your natural hair colour is?" [Instagram comment]: <www.instagram.com/p/Bl8qobChfsm/?hl=fr&taken-by=realsophiarobot>

@debbydaisyy. 19/05/2018. "I'm so confused" [Instagram comment]: <www.instagram.com/p/BhwuJcmlWh8/?taken-by=lilmiquela>

@jscandraa. 13/06/2018. "Are you real, I'm shocked" [Instagram comment]: <www.instagram.com/p/Bj-LXgmFizU/?hl=fr&takenby=shudu.gram>

@madison.toussaint. 23/08/2018. "Is she an actual robot?" [Instagram comment]:<www.instagram.com/p/BmzSda0nStB/?utm_source=ig_web_copy_link>

@lilmiquela. 19/05/2018. "I am not a human being" [Instagram post]: <www.instagram.com/p/BhwuJcmlWh8/?taken-by=lilmiquela>

@rainbowbarfer21. 30/05/2018. "If you were a robot your skin wouldn't have turned red around the tattoo" [Instagram comment]: <www.instagram.com/p/BjY7mhWlD2s/?hl=fr&taken-by=lilmiquela>

ABSTRACT

To capture the attention of hundreds of millions of users, influencers displayed on Instagram must work to optimize their appearance and their interactions with others. Through a linguistic analysis of the comments left by their followers, this research sheds light on the strategic issues posed by a new form of digital influencer: that of appearing in a blurred and ambivalent manner. The naming of their identity and the definition of their biodigital character are presented here in their broadest senses.

VII

Marie-Nathalie Jauffret and Vanessa Landaverde-Kastberg

Marie-Nathalie Jauffret *is a professor at the International University of Monaco. A doctor in information and communication sciences (ICS) (Université de Nice Sophia Antipolis), she is an associate of the INSEEC U. Research Center and of the SIC. Lab Méditerranée, Université Nice Côte d'Azur (Laboratoire de Recherche en Sciences de l'Information et de la Communication—SIC.Lab). As an international communications consultant, her research focuses primarily on nonverbal and subliminal communication, semiology, synesthesia, art, and the intercultural.*

Vanessa Landaverde-Kastberg *is a doctor in information and communication sciences (ICS) and a visiting professor at the ICS department of the Université Nice Côte d'Azur. She is a member of the SIC. Lab Méditerranée, Université Nice Côte d'Azur (Laboratoire de Recherche en Sciences de l'Information et de la Communication—SIC. Lab) and assistant professor at the International University of Monaco. Her research pertains mainly to cultural studies, digital studies, media studies, ethnomedia, social media, minority media, and artificial intelligence.*

Translated and edited by Cadenza Academic Translations
Translator: Jesse Cohn, Editor: Matt Burden, Senior editor: Mark Mellor