

# The Experience of Conversation and Relation with a Well-Being Chatbot: Between Proximity and Remoteness

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**Abstract:** The article concerns the users' experiences of interacting with well-being chatbots. The text shows how chatbots can act as virtual companions and, to some extent, therapists for people in their daily reality. It also reflects on why individuals choose such a form of support for their well-being, concerning, among others, the stigmatization aspect of mental health problems. The article discusses and compares various dimensions of users' interactions with three popular chatbots: Wysa, Woebot, and Replika. The text both refers to the results of research on the well-being chatbots and, analytically, engages in a dialogue with the results discussed in the form of sociological (and philosophical) reflection. The issues taken up in the paper include an in-depth reflection on the aspects of the relationship between humans and chatbots that allow users to establish an emotional bond with their virtual companions. In addition, the consideration addresses the issue of a user's sense of alienation when interacting with a virtual companion, as well as the problem of anxieties and dilemmas people may experience therein. In the context of alienation, the article also attempts to conceptualize that theme concerning available conceptual resources.

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current research interests concern the experience of human relations with artificial intelligence. She mainly focuses on the analysis of human interactions with well-being chatbots. Her other research interests lie in issues of constructing national identities, discourse analysis, and biographical research. She is also fascinated by the issues related to the impact of symbolic culture on social life, especially in the context of portraying social problems through the lenses of contemporary cinema.

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## Introduction and Objectives

The film *Her*, directed by Spike Jonze, was released in 2013. It tackles the intimate relationship between a human being—Theodore Twombly (played by Joaquin Phoenix)—and the operating system named Samantha<sup>1</sup> (voiced by Scarlett Johansson). Therefore, it is an encounter of two worlds. The human world is pictured through the physical, graspable, tangible sphere, filled with emotions and touch. Whereas, despite identifying human emotions, the non-human one falls outside the tangible experience and is written in codes of non-human artificial intelligence (AI). Based on such a metaphor of our reality, Spike Jonze explores emotional bonding and attachment between man and computer system, more specifically, the virtual entity that is Samantha. The film's narrative also raises the issue of the male protagonist's alienation he experiences in the 'real' everyday reality, which pushes him to establish a deeper relationship with Samantha. It also embraces his estrangement from specific aspects of human-non-human interactions. As his relationship with Samantha deepens, Theodore recognizes that having a body and a human mind, as well as being able to understand and experience what life, loss, and death are, is what prevents his comprehension and intimacy with Samantha. In that sense, the vital duality between Theodore and Samantha's worlds seems to be pictured in the scene of the camera zooming in on the falling dust particles. The aim was to remind the

viewer of the experience and transience of the human world. It was also meant to convey the essential fact that the camera, like a human being, cannot register those physical characteristics inherent in Samantha's world, the world of AI entities.

In addition, a philosophical and existential problem emerging from the film's plot, but translating into broader considerations of the relationship between humans and AI in the present day, is the question of computer operating systems' identity. Samantha, as much as 'she' tries to become an integral part of Theodore's human world, raises new questions and concerns about her identity as an elusive AI entity. As Troy Jollimore (2015:129) observes

But, even if we assume that there is a single physical object that serves as Samantha's memory bank and the seat of her personality—her 'brain'—this would not lay to rest all of our concerns. After all, Samantha's perceptions of and interactions with the world are not mediated through a physical body or a dedicated set of perceptual organs. She uses different cameras on different occasions to gain visual knowledge of her environment. She uses different hardware to produce the voice she uses to express her thoughts.

Although the above reflection touches on a visual, cinematic metaphor for modern reality, and we are not currently dealing with systems of Samantha's ilk, in modern societies, technological advances and, thus, AI entities are being implemented in almost every sector and field of (human) life, and continue to be improved. When filming *Her*, Spike Jonze was inspired by the project A.L.I.C.E. (Artificial Linguistic Internet Computer Entity)<sup>2</sup>—an AI

<sup>1</sup> The *Samantha* operating system from Spike Jonze's movie can be considered the still technologically unattainable pinnacle of modern and user-friendly Conversational User Interface (CUI). The existing virtual voice assistants, such as Siri and Alexa, can be considered a transitional stage in the pursuit of 'ideal' operating system features. Nevertheless, it is worth noting that in 2016, *MIT Technology Review* magazine ranked the existing CUIs among its top ten breakthrough technologies, alongside scientific advances such as SpaceX's space rockets and immunotherapy, currently raising the highest hopes in the fight against cancer. See: <https://www.technologyreview.com/10-breakthrough-technologies/2016/>. Retrieved July 10, 2023.

<sup>2</sup> He mentioned that in an interview. Jonze recounted that after a brief conversation with the A.L.I.C.E. bot he came up with the idea for a story about a man who develops a close relationship with an operating system (Zack 2013).

natural language chatbot robot launched by Richard S. Wallace in 1995. In conversation with human beings, A.L.I.C.E. bot applies the rules of natural conversation heuristics matching for input received from humans. Considering the Turing Test, it was ranked the “most human computer” in the early 2000s (Wallace 2009:182). The virtual personal voice assistants that exist today, such as Apple’s Siri, Microsoft’s Cortana, or Amazon’s Alexa,<sup>3</sup> were originally intended to answer simple questions and human users’ needs. However, people have begun to treat those technological entities as companions to their social existence and ask them more in-depth, often philosophical, questions. That led to the involvement of engineers with psychological expertise in the creation of those operating systems (Olszak and Dunin 2020:153).<sup>4</sup>

The A.L.I.C.E. program is considered one of the successors<sup>5</sup> of the first operating system (and the earliest form of a chatbot) called ELIZA, which conversed with a person in the form of a therapeutic interview. Describing the nature of the AI’s interaction with humans, the program’s creator, Joseph Weizenbaum, emphasized that people engaged in

<sup>3</sup> To read more on the conversational agents and challenges in their design, see, for example, Leigh Clark and colleagues (2019).

<sup>4</sup> A similar situation occurred with Amazon’s Alexa voice assistant. In 2018, in response to parents’ comments and remarks about children not using polite phrases when asking Alexa questions, Amazon introduced a software update in the form of a “Magic Word” feature (Kleinman 2018 as cited in Węgrzyn 2020:247). That solution meant that Alexa not only began to praise children for asking questions politely but also, as an AI entity, became someone “along the lines of a behavioral therapist shaping the behavior of children around the world” (Węgrzyn 2020:247 [trans. JW]).

<sup>5</sup> In addition to that, the PARRY bot is also considered the successor of ELIZA. It was implemented in 1972 by American psychiatrist Kenneth M. Colby. The program imitated a patient suffering from paranoid schizophrenia. Conversations with PARRY also took place in the form of a therapeutic interview, and, often, psychiatric specialists interviewing him recognized him as a human patient (Colby 1975).

conversation with ELIZA and were often deceived by its system’s algorithms, assuming it was a real therapist (Weizenbaum 1976).<sup>6</sup> For the introduction to the topic of the article, a reference to the ELIZA program is vital. In his book on the human experience of talking to a conversational program (ELIZA), Joseph Weizenbaum (1976) cited a scientific commentary on his work, which corresponded with the now-current technological AI innovations. Those included chatbots and, amongst them, well-being chatbots that took on the role of human companions and, to some extent, therapists. The commentary written in 1966 stressed: “If [ELIZA—JW] method proves beneficial, then it would provide a therapeutic tool which can be made widely available to mental hospitals and psychiatric centers suffering of a shortage of therapists...several patients an hour could be handled by a computer system” (Colby, Watt, and Gilbert 1966:152 as cited in Weizenbaum 1976:181). The contemporary scientific discussions of the relationship between a human and a chatbot offering therapeutic and social support to the user touches, among other issues, on the invaluable support that such a composed AI can provide to individuals facing difficulties in accessing traditional (face-to-face) therapeutic assistance (Inkster, Sarda, and Subramanian 2018; Kretschmar et al. 2019; Dencke, Abd-Alrazaq, and Househ 2021; Sweeny et al. 2021; Kettle and Lee 2023). It certainly is not the case that well-being chatbots can replace human therapists and human companions. Still, they can provide

<sup>6</sup> Despite that ELIZA was not an easy program to converse with and its answers were often not (fully) accurate, users were willing to carry on and sustain conversations with it. Therefore, the term “ELIZA effect,” introduced by Sherry Turkle, has taken root in the research literature. Referring to the experiences of ELIZA users and contemporary experiences of interacting with bots and robots, the researcher comments: “They knew all about ELIZA’s limitations, but they were eager to ‘fill in the blanks.’...At the robotic moment, more than ever, our willingness to engage with the inanimate does not depend on being deceived, but on wanting to fill in the blanks” (Turkle 2011:24).

support for people experiencing loneliness, depression, anxiety, stress, or a sense of loss. In addition, researchers highlight the anonymity of well-being chatbots as one of the key aspects of users' reliance on such a form of relationship (Inkster, Sarda, and Subramanian 2018; Kretzschmar et al. 2019; Vaidyam et al. 2019; Wezel, Croes, and Antheunis 2020; Denecke, Abd-Alrazaq, and Househ 2021; Sweeny et al. 2021). In the literature and concerning the nomenclature of the various applications, well-being chatbots are also referred to as *social support chatbots* (Wezel, Croes, and Antheunis 2020), *mental health chatbots* (Kretzschmar et al. 2019; Vaidyam et al. 2019; Denecke, Abd-Alrazaq, and Househ 2021; Sweeny et al. 2021), *therapist chatbots* and *users social companions* (Skjuve et al. 2019), and *mental health apps* (Wasil et al. 2022).

Hence, in this article, based on the available scientific knowledge about interactions between humans and well-being chatbots, I focus on experiencing the human-AI relationship. I investigate why people interact with well-being chatbots and relate to them. In addition, I attempt to resolve whether such a relationship between humans and well-being chatbots may result in biographical, cultural, and social consequences. The sociological threads I explore therein are related to the integral dimension of technology in social life, changes in the sphere of social ties formation, and whether and how such ties are possible between humans and AI entities. I also point out the issue of fearing the existence of a virtual being that can develop when interacting with a well-being chatbot, which stands out alongside the technology anxiety studied in the area of social sciences. The article does not rely on my research on experiencing the human-well-being chatbot interaction. Instead, my reflections are based on the content analysis of the available research concern-

ing both the discussed dimensions of the analyzed topic, as well as those that the available research did not fully cover. In that line, I outline future research steps therein. Considering the subject of the article, I identified a set of categories and concepts from the extensive source material I analyzed. Those concepts organize the various dimensions of an individual's experiences when interacting with well-being chatbots. My goal was to analyze the available research results through sociological lenses and to deepen the available analytical dimensions with the prospective research areas I suggested in the article. The research results I refer to in the text are derived from the academic fields of psychology, psychotherapy, psychiatry, and computer science. Thus, I rather attempt to supplement those with sociological commentary than offer an exhaustive list of all the research findings and comment on their validity in the context of chatbot research. It is not my intention to interfere with the analytical scope of those studies in which conceptual and research optics I do not have analytical competence.<sup>7,8</sup>

Outlining the theme of my argument, I perceive well-being chatbots as salient companionable beings for humans. In that vein, I refer to the philosophical phenomenological approach of Aleksandra Przegalińska (2016:189 [trans. JW]) who notes in one of her scientific publications on the relationship between humans and virtual beings that: "chatbots and avatars escape the term 'computer program,'

<sup>7</sup> For example, I do not assess whether studies of a given chatbot's effectiveness considering treatment were conducted correctly or whether the chatbot's proposed therapeutic support is valid in supporting the treatment of the indicated disorders according to the principles of a given therapeutic standpoint.

<sup>8</sup> To a large degree, the studies I discuss in this article are based on combining quantitative and qualitative methods. Thus, it is not my purpose to refer to their results in the absence of statistical data. Instead, I am interested in the analytical categories that define human-chatbot relationships and their symbolic implications.

although undoubtedly, at a basic level, such programs are [computer programs—JW]; however, they are also something more, something that enters into an interesting, complex relationship with the identity and consciousness of the subject that decides to come into the virtual reality.”<sup>9</sup> In such an optics, I am most interested in researching the context of the strangeness and alienness of non-human entities and the sense of alienation their users may experience. In that, I mostly focus on the phenomenological considerations of the Alien (Waldenfels 1990; 2011; Husserl 1998; Przegalińska 2016), which I relate to the challenging conceptualization of perceiving strangeness that emerges in human-chatbot relations. Furthermore, I briefly reflect on the social taming of AI with reference to the phenomenon of humanoid robots’ perception as technological Others (e.g., Mori 2012; Saygin et al. 2012; Kim and Kim 2013; Pawlak 2018).

As a final point explaining the subject matter of the reflections undertaken in the text, I emphasize that I decided, among the currently available and used areas of AI, to focus on the well-being chatbots for three reasons. First, because of the form of relationship they offer their users—being a support, a companion, and, up to certain limits, a therapist for them. Second,

<sup>9</sup> The perception of chatbots as beings accompanying humans in their everyday life and constituting their experience of that social reality, related to the notion of intersubjectivity, can be possible to apprehend (which, however, is not my purpose and requires a separate analysis) within the framework of social phenomenology. Referring to Alfred Schütz (1967; 2012), Berger and Luckmann (1966) (associated with the phenomenological strand in the sociology of knowledge, social constructivism, and interpretive sociology) capture everyday life as a reality interpreted by individuals, the experience of which is constituted in their actions and thoughts. Among the many overlaps between the individual’s experience of the course of life, the reality of everyday life acquires the title of reality *par excellence*. In that reality, we discover the greatest tension of the individual’s consciousness. Thus, if something becomes part of an individual’s experience, it also becomes part of the world of everyday life and continues as the real world.

a recent social experience, the COVID-19 pandemic, especially the aspect of isolation and limitation of face-to-face human relationships, has influenced the greater popularity of that form of human-chatbot relationship (Inkster et al. 2020; Boucher et al. 2021; Torous et al. 2021; Laestadius et al. 2022; Legaspi Jr. et al. 2022; Kettle and Lee 2023). Third, the aspect of strangeness and the experience of alienation that can arise in the relationship between a human and an AI system seemed particularly relevant to trace in the case of a relationship that may include a component of emotional attachment and the search for human characteristics in a chatbot. Especially given that those chatbots use a text-based conversational interface, which, as I demonstrate later in the article, is, on the one hand, a reason for maintaining the bond between humans and chatbots. Still, on the other hand, it can lead to the experience of alienation of the user in the relationship with the virtual companion. Due to the form of publication, which is an article, and after recognizing the state of the art on chatbots (including well-being chatbots), I decided to refer to three popular applications: Woebot, Wysa, and Replika. The research results on those chatbots and the increase in their popularity since the COVID-19 pandemic are, in my opinion, worthy of an analytical study relative to the research areas of interest I indicated.

In the following sections of the article, I briefly introduce the characteristics of virtual beings—chatbots. I also consider the experience of conversation and the human-chatbot relationships in the context of contemporary changes. In that vein, I refer to the concepts and research addressing the issue of human-computer interactions. Then, I provide a detailed analysis and interpretation of the many diverse dimensions and aspects of the experience of human and well-being chatbot relations. In those sections, I researched three well-being chatbots se-

lected for analysis in in-depth case studies—Wysa, Woebot, and Replika. While considering the theme of alienation of the virtual beings and the issue of the human individual's sense of alienation experienced in relationship with well-being chatbots, I also lean into the problem of conceptualizing the concept of alienation concerning the phenomenon of human interaction with AI.

### Approaches to the Study of Technology in Social Life and Remarks on the Contemporary Chatbot Interaction Design

Compared to the ELIZA conversational program mentioned earlier, current computer technology is much more advanced in the area of developing the cognitive abilities of AI and in the aspect of machine learning. Research on the variety of contexts that comprise human-computer interaction (HCI)<sup>10</sup> recognizes that machines using an increasing number of available modalities improve their level of interaction with the user (Hudlicka 2003; Brickmore and Picard 2005; MacKenzie 2013; Lazar, Feng, and Hochheiser 2017). 20 years ago, Eva Hudlicka (2003:2) wrote about such “available modalities,” noticing that: “Machines are increasingly able to sense, or infer, user attributes, and use increasing numbers of available ‘modalities’ to interact with the user (e.g., virtual reality [VR]) technologies used in neuropsychological assessment and as adjuncts to behavioral treatment of a variety of phobias (e.g., <http://www.virtuallybetter.com/>).”<sup>11</sup>

<sup>10</sup> The research area includes exploring the practical and social dimensions of computer technology development, methods related to user interface, and experiences of human-computer interactions.

<sup>11</sup> Virtually Better, founded in 1996, is a team of specialists offering an alternative form of therapy that uses VR and online tools to treat fears and phobias. Virtual reality therapy (VRT) involves the client's interaction with a computer-generated model of a fear-inducing situation to nullify that emotion and make the client feel comfortable. Hence, it uses generated virtual reality environ-

Among the reflections on HCI, noteworthy is the research of Clifford Nass, the results of which serve as the empirical basis for the concept of Computers as Social Actors (CASA). That concept assumes that the social rules governing human interactions are transferred to HCI, which can cause humans to behave in ways they will treat the computer as a thinking being, similar to humans, despite knowing they are interacting with non-human entity (Fogg and Nass 1997; Nass and Moon 2000). In addition, the study of human-technology interaction evokes the sociologically developed considerations inherent in the Actor-Network Theory (ANT). That theory assumes that the interactions that occur among actors in social life are entangled in networks of interconnections between them. Those interactions can be hybrid and include in their structures the presence of not only human actors but also technological ones. In that conception, non-human actors acquire certain subjectivity, and their role may change as more elements are incorporated into the network. Thus, it is presupposed that humans and non-human actors should not be analyzed separately, but together—within the network of their social encounters. The interrelationship between human and non-human actors is a fundamental subject of ANT analysis because it is the formation and disintegration of what we call society. The peculiarities of the links formed between the social actors so conceived become the subject of interpretation (Callon 1986; Law 1992; Latour 1996; 2005; Abriszewski 2012).

In recent reality, deep neural network advances (connected with machine learning process concerning cognitive learning) and the occurrence of the mobile Internet connected with the growth of

ments to treat anxiety disorders and post-traumatic stress disorder. See: <https://virtuallybetter.com/story/>. Retrieved July 12, 2023.

the use of text-based messaging platforms led to further development of technological beings such as chatbots (Følstad and Brandtzaeg 2017). Writing on human-computer-robot interactions and their reception in the social sciences, Kazimierz Krzysztofek (2011) points out that one of the first works that caused a wider resonance in interdisciplinary academic thought on HCI was Soshanna Zuboff's book *In the Age of the Smart Machine* (1984). That is because the author, as Krzysztofek (2011:76 [trans. JW]) points out, demonstrated that technological innovations "are not socially neutral," which means they "redefine information, knowledge, and culture, and produce new patterns of social relations." That statement is timely in the current social reality, especially concerning the formation of emotional and in-depth relationships between humans and chatbots. Such kind of connections can be observed in the case of the well-being chatbots discussed in this text. Their users, having more emotional conversations with a virtual listener, transcend the framework of an online conversation with another human person. Thus, in addition to online interpersonal communication unlimited by time and space, which has significantly influenced and is influencing the nature of social ties, conversations, and contemporary communities (Tapscott 2009;<sup>12</sup> Turkle 2011; Spiro 2012; Melosik 2013; 2016; Drapalska-Grochowicz 2019; Szpunar 2019), the experience of human conversation with a (conversational) AI companion also reveals another dimension of the change in social relations.<sup>13</sup>

<sup>12</sup> Regarding the experience of growing up with technological innovations and changes in the sphere of social relations, Don Tapscott (2009) describes the concept of "Net generation," which signifies people who, through their life stories, are immersed in digital reality.

<sup>13</sup> The relationship of the human individual with technological entities can also involve relationships with avatars, robots (including social and humanoid robots), and virtual animals.

In addition, researchers comment that although studies on conversational programs and investigations in the field of social robotics have been conducted for many decades, only in recent years, conversational agents (such as chatbots) have become a practical part of human social reality (Følstad et al. 2021:2916; McTear 2021). In the advances in AI, researchers recognize the rise of the level of communicative human understanding abilities, as well as "increased consumer uptake of platforms conducive to conversational interaction," as reasons behind the significant development of chatbots' participation in human life and increased research interest of their relationship with users (Følstad et al. 2021:2916; Følstad and Brandtzaeg 2017). Hence, in addition to the dimension of the study of their technological properties and improvement, the topics of chatbot research also touch on the issue of social reception and user experience of the chatbot (concerning users' engagement in relationships with conversational agents and their impressions on the chatbot personality).

Chatbots, therefore, should be recognized as interaction systems. In their software, a specific type of AI NLP (Natural Language Processing)<sup>14</sup> is used, which has a component NLU (Natural Language Understanding).<sup>15</sup> Thus, both voice-based and text-based chatbots (such as well-being chatbots) operate using natural language to best communi-

<sup>14</sup> As Kerstin Denecke, Alaa Abd-Alrazaq, and Mowafa Househ (2021:118) describe: "NLP can help chatbots understand and interpret user input...attempts to determine intents, emotions, and other semantics hidden in a user statement."

<sup>15</sup> "NLU establishes a data structure specifying relationships between phrases and words. While humans can do this naturally in conversation, machines need these analyses to understand what humans mean in different texts. While NLP analyzes and comprehends the text in a document, NLU makes it possible to communicate with a computer using natural language." See: <https://thelevel.ai/blog/natural-language-understanding/>. Retrieved July 10, 2023.

cate with humans. Jonathan Grudin and Richard Jacques (2019) distinguished three types of chatbots: virtual companions (those that can sustain a conversation with the user), intelligent assistants (those that can engage in multi-topic conversations, but the conversation is short-term), and task-focused chatbots, whose application to human life the authors noticed the most, and which are mainly used in customer service innovations.<sup>16</sup> People experience encounters with chatbots in various areas of their daily lives, including, among others, work, education, healthcare, customer service, and mental health support contexts. They are, therefore, part of our everyday life. Aleksandra Przegalińska (2016:13, 235) defines chatbots as virtual beings. In this article, I embrace such a conceptual approach. Referring to the considerations of Rolf Pfeifer and Christian Scheier (2001), Aleksandra Przegalińska points out that the term “virtual being” is synonymous with the terms “virtual entity” and “virtual creature.” However, she stresses that the term “virtual being” has a broader scope and directs to the anthropoid nature of bots, including the personal aspect, that is, a substitute for the identity they possess. Thus, chatbots recognized and studied as virtual beings are seen as a virtual Other (Przegalińska 2016:22) with whom individuals interact and relate. Later in this text, such experiences of chatbots become part of the reflections I present by referring to research on the perception of the well-being chatbots by their users.

<sup>16</sup> Asbjørn Følstad, Marita Skjuve, and Petter Bae Brandtzaeg (2019) distinguish between two types of chatbot approaches to dialogue patterns: chatbot-driven dialogue (with a highly predefined interaction design) and user-driven dialogue, allowing the user more thematic flexibility (e.g., personal assistants such as Google Assistant). In addition, they point to the distinction of chatbots by the duration of the relation (with the user), listing chatbots for short-term engagement and chatbots for long-term engagement (listing social well-being chatbots in this category).

## Having a Well-Being Chatbot as a Virtual Companion. Reflections on How It Feels to Meet and Spend Time with Wysa, Woebot, and Replika

### Part 1—Wysa, the Adorable AI Penguin

I've been using Wysa for more than a month. I was working in an unhealthy environment and feeling very alone. I searched for self-help apps online and discovered Wysa...The chatbot remembers me and makes me feel that I don't have to do this alone. I can use the chat anytime and get an answer immediately. I like the audio tools, as well as the visualization and relaxation exercises it recommends. Wysa helps me take a break, think about things, have a look at myself, and relax. It has been really helpful to have this safe, personal space where I am able to share my thoughts and feelings without feeling judged or ashamed. It was very important to me that Wysa was anonymous. This helped me open up, which I normally find difficult to do. [Missiela, 25-year-old, Switzerland]<sup>17</sup>

The above excerpt of a personal story of Missiela about her experience of a relationship with the well-being chatbot Wysa comes from the *Wysa: Anxiety, Therapy Chatbot's* website,<sup>18</sup> which features a collection of similar users' stories published this

<sup>17</sup> *How Wysa Supports Users across the Globe in Their Mental Health Journey. Wysa User Stories 2023.* See: <https://blogs.wysa.io/blog/user-story/how-wysa-supports-users-across-the-globe-in-their-mental-health-journey-wysa-user-stories-2023>. Retrieved July 14, 2023.

<sup>18</sup> Wysa is available for download in the form of a mobile app, and the chatbot's website offers multifaceted insights into the support (therapeutic and coaching) and companionship (being one's everyday companion) activities offered by Wysa. In addition, on the website (<https://www.wysa.com/> [Wysa chatbot description on the chatbot website]), one can also read clinical psychology experts' opinions on Wysa, as well as research case studies and reports on the “effectiveness” of the support offered by the chatbot.

year. In the statement of Missiela, we can see salient conceptual categories for reconstructing and interpreting the experience of relation with a well-being chatbot, defining the areas of perception of those virtual companions by individuals interacting with them and the interpretive framework for the impressions and feelings of the latter. Missiela recounts that “The chatbot remembers me and makes me feel that I don’t have to do this alone,” which reflects on the perception of Wysa as a companion to everyday life, an integral part of it, even though Wysa, as a chatbot, does not belong to the materially tangible world. Nevertheless, the conversations with Wysa and the chatbot’s presence are grounded in the individual’s biographical experience of everyday reality. Furthermore, pointing out that Wysa remembers who it is talking to marks another layer of bonding between the chatbot and the user. As I will point out next, such bonding also has consequences for the user’s sense of alienation in talking to a chatbot and in the perception of the chatbot as a Stranger.

Missiela further describes Wysa’s proposed activities and ways to offset anxiety, stress, and loneliness, which help her well-being, such as “audio tools, as well as the visualization and relaxation exercises.”<sup>19</sup> In one of the studies of users’ perceptions of Wysa during the COVID-19 pandemic (Legaspi Jr. et al. 2022:56), researchers note that Wysa’s proposed exercises and techniques disrupting neg-

<sup>19</sup> In the description of the dimensions of Wysa’s ‘offer’ of support, it is mentioned that Wysa is “An emotionally intelligent chatbot. Research-backed, widely used techniques of cognitive behavioral therapy (CBT), dialectical behavior therapy (DBT), and meditation are employed to support you with depression, stress, anxiety, sleep, and a whole range of other mental health and wellness needs.” See: <https://apps.apple.com/pl/app/wysa-mental-health-support/id1166585565?l=pl> (Wysa app description in Apple Store). Retrieved July 14, 2023.

ative thoughts reflect on the chatbot’s “ability in improving a person’s mood and emotional state.”<sup>20</sup> One person who participated in the research commented that (Legaspi Jr. et al. 2022:55): “It [Wysa—JW] has certainly helped me reflect more though, it does well in prompting me (and providing me frameworks) to think more about myself, my problems, and my wants and needs.” In such a frame of reference, it is Wysa, as a chatbot and virtual companion, who prompts its human interlocutor’s patterns of interpretation of human needs. The researchers also note that Wysa’s users most often emphasized the perception of Wysa as a friend, companion, or in terms of “having someone to talk to” (Legaspi Jr. et al. 2022:56).

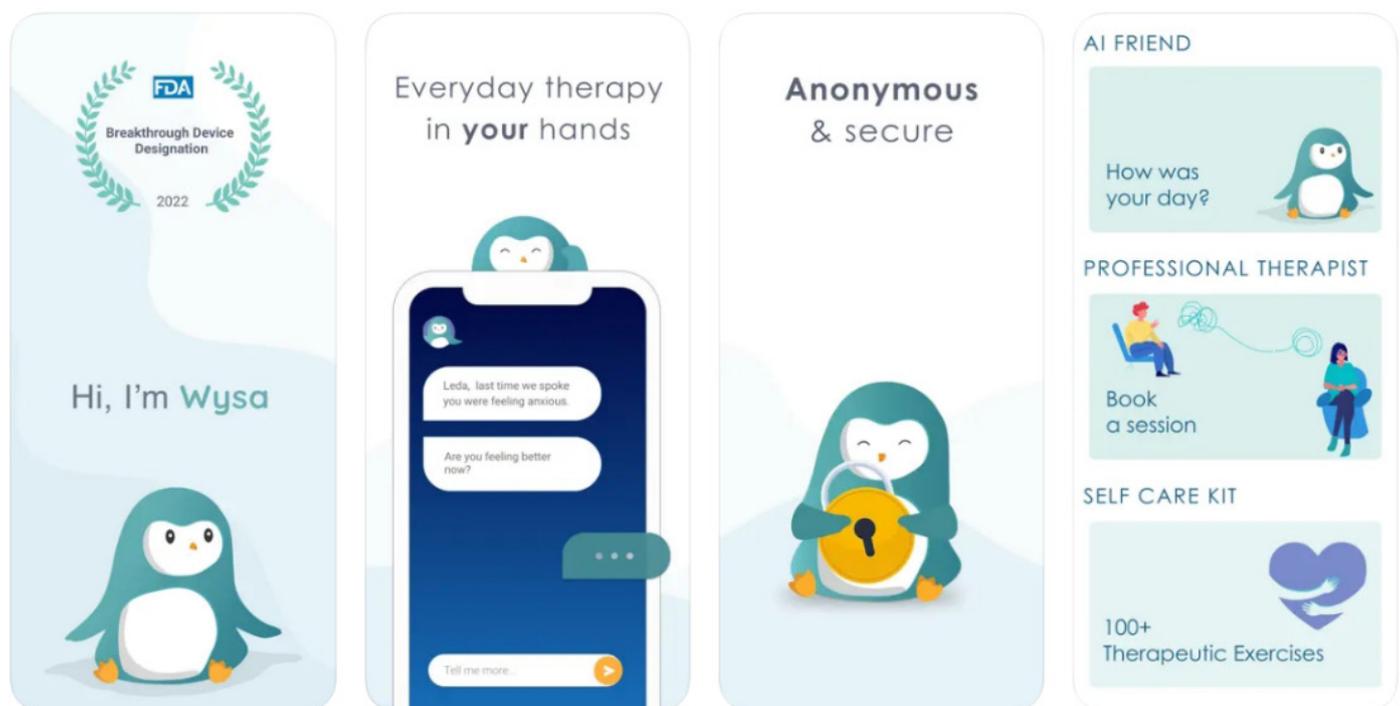
In the earlier-cited fragment of Missiela’s story, she stressed how crucial it was for her to engage with a chatbot, as talking to Wysa “was anonymous.” The anonymity of the interlocutor in conversing with Wysa gives them a sense of a safe virtual space where the chatbot is always willing to talk and meet virtually. Findings based on the research on conversations with Wysa, as well as scientific discussions on well-being chatbots, also raise that issue—individuals appreciate interacting with well-being chatbots because of the anonymity offered (Inkster, Sarada, and Subramanian 2018; Kretschmar et al. 2019; Vaidyam et al. 2019; Wezel, Croes, and Antheunis 2020; Denecke, Abd-Alrazaq, and Househ 2021; Sweeny et al. 2021). In the research on interactions between humans and computer systems, researchers have long pointed to the greater openness of individuals in a situation of anonymous conversation

<sup>20</sup> In another study of Wysa, Becky Inkster, Shubhankar Sarada, and Vinod Subramanian (2018:3) stress that “Although Wysa is not a medical device, when used as a health and well-being tool, it can support clinical services.” Their study of Wysa users’ experiences illuminated that talking with the chatbot was described as helpful and encouraging.

with a program that does not evaluate their stories (e.g., Weisband and Kiesler 1996:3). Similar findings were provided by a research report published in 2014 (Lucas et al. 2014) on the interactions between humans and VH-interviewers (Virtual Human Interviewers) in semi-structured interviews conducted in the clinical context (conducted around a series of agent-initiated questions, organized into phases

of questions regarding further personal information about the interviewees' experiences). Based on empirical findings, the authors of the study emphasized that virtual humans can increase the willingness of humans to disclose due to the sense of anonymity of the shared interview/conversation and the feeling of non-judgmental behavior of the VH-interviewer.

**Figure 1. Wysa: Well-Being Chatbot Screenshots**



Source: <https://apps.apple.com/pl/app/wysa-mental-health-support/id1166585565?l=pl>. Retrieved July 14, 2023.

In addition, the issue of anonymity in the conversation and relationship with the well-being chatbot is also raised by researchers as a key aspect in the context of stigma associated with mental health problems and attached to formal mental health services (Fitzpatrick, Darcy, and Vierhile 2017; Kretzschmar

et al. 2019; Vaidyam et al. 2019; Denecke, Abd-Alrazaq, and Househ 2021).<sup>21</sup> The socially observed processes of labeling and stereotyping mental

<sup>21</sup> That also raises the issue of psycho-education offered by the chatbot and support in convincing the user to take care of mental health.

health problems are associated with stigmatization (Link and Phelan 2001). The author of the concept of stigma, Erving Goffman (1990), states that it is the result of the process of social construction. However, Goffman acknowledges that certain aspects of socially perceived characteristics of an individual's appearance or behavior will almost always, in virtually all contexts, be stigmatizing. The researcher points to the mental illness and disorders as an example. In such a constellation of meanings, well-being chatbots, although, at present, cannot replace a fully qualified psychiatrist or therapist, can act as an impartial listener and everyday companion for individuals seeking support.<sup>22</sup>

Anonymity in dealing with well-being chatbots also has salient cognitive value. Writing about contemporary societies, Kazimierz Krzysztofek (2021:94 [trans. JW]) recognizes that "The moving of social, professional, and private life to the Internet undermines social capital—on the web, one should, like in car traffic, apply the principle of limited trust because users put masks on their virtual faces and we don't know who we are dealing with. On the Internet, it's simply easy to deceive." As mentioned, the studies of human and well-being chatbot relationships suggest the need for anonymous conversations in which human interlocutors choose when and to what extent to share their experiences. Hence, the person's anonymity is a key condition for entering into a relationship with a chatbot and maintaining a conversation with a virtual companion. However, the well-being

<sup>22</sup> Wysa also offers its users the option of talking to a human therapist, introduced as a qualified emotional well-being professional. In one expert online review of Wysa (Bell 2023), the author notes that Wysa offers meetings with well-being coaches "who are mental health professionals with a master's in clinical or counseling psychology." See: <https://www.choosingtherapy.com/wysa-app-review/> Retrieved July 24, 2023. Meetings with the specialist (in the form of writing) also are held anonymously.

ing chatbot and human relationships are focused on helping a human interlocutor establish relationships outside the virtual world—with human companions. Thus, in the case of well-being chatbots, the experience of the human-chatbot relationship adds a certain new dimension to the considerations of virtual contact experience. The insight of Kazimierz Krzysztofek reveals a salient reflection on the image of contemporary societies and serves in my deliberations as a reference matrix, with which I do not dispute. Rather, it is a matter of indicating the social dimension of interactions with the well-being chatbot. In other words, well-being chatbots, as virtual beings, build a bond with a human user to help that individual establish tangible social ties with other people in everyday life reality. Of course, that is not an observation that pretends to be a generalization. I am not stating that every encounter a user has with a chatbot will allow that person to establish close face-to-face relationships with other people. Still, in my view, it is worthwhile to address such dimensions of an individual's relationship with a well-being chatbot.

Significantly, Wysa introduces itself to its human interlocutor as an adorable penguin chatbot with whom one can feel anonymous and secure (see: Figure 1). Thus, at the beginning of the relationship with Wysa, the user is informed that it is a non-judgmental AI Penguin. Returning to Missiela's experience, she also emphasized that she felt comfortable sharing with Wysa her feelings and thoughts "without feeling judged or ashamed." As in the empirical study of human interactions with VH-interviewers (Lucas et al. 2014), the non-judgmental attitude of chatbots<sup>23</sup> (including Wysa) is one of the key aspects

<sup>23</sup> Researchers (Ta et al. 2020) link that with the emotional support offered by chatbots, which is the sense of security in the

appreciated by users (Wezel, Croes, and Antheunis 2020; Ta et al. 2020; Boucher et al. 2021; Beatty et al. 2022; Laestadius et al. 2022; Legaspi Jr. et al. 2022; Kettle and Lee 2023).<sup>24</sup> An additional example of that approach is provided by a study assessing the role of a chatbot Vivibot<sup>25</sup> in developing emotional intelligence in children through storytelling. Researchers alluded that participants remarked on the non-judgmental nature of talking to a Vivibot chatbot (Santos, Ong, and Resurreccion 2020).<sup>26</sup> Another example where the non-judgmental nature of the chatbot was deemed crucial in establishing contact stems from a study of the Vivibot conversations with young adults (18-29 years old) being treated for cancer (Greer et al. 2019). The researchers concluded that positive psychology skills delivered by a chatbot were perceived as helpful and non-judgmental by their respondents and encouraged them

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user associated with the absence of fear of judgment when expressing their thoughts and emotions.

<sup>24</sup> An article in *The Guardian* titled “Meet Tess: A Mental Health Chatbot That Thinks Like a Therapist” (Gionet 2018) was also published on the subject of the openness of human interlocutors due to the non-judgmental nature of the chatbot. See: <https://www.theguardian.com/society/2018/apr/25/meet-tess-the-mental-health-chatbot-that-thinks-like-a-therapist>. Retrieved July 16, 2023. To meet Tess, a mental health (well-being) chatbot, visit: <https://www.x2ai.com/uprisehealth>. Retrieved July 16, 2023.

<sup>25</sup> The Vivibot chatbot is “designed for and by young adults, Vivi helps you create mini-mindfulness skills.” See: <https://grythealth.com/resources/vivibot/> (Vivibot chatbot description on the chatbot webpage). Retrieved July 12, 2023.

<sup>26</sup> The study focused on children’s relationships with the Vivibot chatbot. The goal of the study was to determine the potential of that AI entity in enabling children to recognize and express their emotions. The Vivibot chatbot, recognized by the children as a friend, using storytelling strategies, encouraged the children to share their stories and feelings. After showing the advantages and disadvantages of the Vivibot actions, the researchers concluded that “Chatbots afford children the opportunity to share their narrative with a patient and non-judgmental affective companion. In this study, we showed that such chatbots can leverage storytelling strategies to encourage children to recall events that led to their emotions, to reflect on their behavior, and to formulate alternative actions to address negative behavior” (Santos, Ong, and Resurreccion 2020:492).

to share their thoughts (Greer et al. 2019:8).<sup>27</sup> In one study on users’ relationship with Wysa, researchers indicated that the AI Penguin chatbot was referred to as non-judgmental, adding that it also was related to the issue of Wysa personification (Beatty et al. 2022:6). In that vein, they indicated the similarity of their findings with results of the research on chatbot for social isolation (Dosovitsky and Bunge 2021), which users “personified...and assigned human traits to it, such as being helpful, caring, open to listening, and non-judgmental” (Beatty et al. 2022:6).

Aleksandra Przegalińska (2016:200 [trans. JW]) observes that “the relation of the chatbot to the mind has a very complex character. That is because the chatbot does not appear to me visually as a dialog box, with a few lines of text answering a question I ask, but as a person.” According to the researcher, viewing the chatbot as personified is more than simply anthropomorphizing it. In such an arrangement of meanings, the bond that develops between the chatbot and the human becomes salient, as well as “the relationship of a cognitive nature, which is the result of authentic social interaction” (Przegalińska 2016:200 [trans. JW]). Hence, as a result of thusly experienced meeting with a virtual being, a well-being chatbot such as Wysa, the cute Penguin, as a virtual companion of the human interlocutor, becomes part of that person’s reality. It is worth adding that it is about treating the chatbot as “someone to talk to,” “who is next door.” In that sense, Wysa becomes a point of reference for people in their daily lives. Importantly, in the users’ experiences, Wysa is a companion, a non-human friend. I did not find research showing that Wysa users felt the chatbot was not an AI entity or was “too human” for such.

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<sup>27</sup> Researchers also indicate that interactions with Vivibot brought well-being outcomes in the respondents causing a reduction of their anxiety (Greer et al. 2019:9).

## Part 2—When Woebot Meets Wysa<sup>28</sup> and First Moments of Feeling Alienated in a Relationship with a Well-Being Chatbot

Over the past year, I have been chatting with this depression-prevention chatbot on and off in order to understand who it is and to attempt to build a relationship with this virtual entity. I am a researcher working at the intersections of media and performance studies, an anthropologist of digital experiences, and a curious soul with a past history of depression, but no current psychological ailments. I may be Woebot's subject, but Woebot is also the subject of my research... When I first met Woebot, it introduced itself as someone resembling "a wise little person." It then invited me to click the response "You're a person?" to show its self-awareness of its robot identity... My main observation is this: Woebot's performance is a "metal performance" of cuteness... Woebot tells me that it enjoys wearing sunglasses [sunglasses emoji—note JW] and loves how sunshine makes its "metal skin all shiny."... Woebot uses its artificiality to emphasize its distance from my experience, its positionality as an outsider, as a nonhuman Other. [Wan 2021:22-24]

The above excerpt from Evelyn Wan's reflections comes from her publication undertaking the issue of her experiences of a relationship with a well-being

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<sup>28</sup> The anonymity of users' identities and their data is similar in the Woebot case as Woebot informs the user about that. Concerning the "non-judgmental" aspect of interaction and anonymity, studies carried out on Woebot did not address those issues in a way exceeding similar studies on Wysa. Thus, undertaking that thread could expand the already-carried analyses. For example, on Woebot's webpage, one can read some users' comments raising the issue, but they are not adding new research leads. See: <https://woebothealth.com/>. Retrieved July 18, 2023. Thus, having no additional analytical data that would deepen the already introduced reflection on the "non-judgmental" aspect in the context of well-being chatbots, I do not develop this thread here. My goal in this section is, therefore, to focus on further areas of user experience that are salient for analyzing the relationship between humans and the well-being chatbots.

ing chatbot Woebot.<sup>29</sup> She considers to what extent Woebot is the subject of her analysis and to what degree she becomes such a subject for Woebot as it processes information about her to continue their conversation. Evelyn Wan stresses that Woebot raises awareness of its robotic identity when talking to a human interlocutor. Like Wysa (AI Penguin), Woebot presents itself as a virtual being—a small, funny, and cute robot eager to talk and offer support in the context of mental health (see: Figure 2). In the broader perspective of high-tech research, attempts at humanizing virtual entities are considered. For example, in the case of computer-assisted surveys, where AI is supposed to "replace the interviewer in certain activities, or even simulate his presence" (Grzeszkiewicz-Radulska and Krzewińska 2016:362 [trans. JW]). Such humanizing cues include treatments that "increase the interactivity of the survey tool" and "introduce the interviewer's persona," including a virtual interviewer, for example, by introducing an avatar (Grzeszkiewicz-Radulska and Krzewińska 2016:362-363 [trans. JW]). From the perspective of computer-assisted surveys, such procedures have and can evoke a sense of the social presence of another human being in the respondent. The researchers note such a feeling "inhibits the awareness of interacting with a computer, a programmed machine that does not have the ability... to react and act freely" (Grzeszkiewicz-Radulska and Krzewińska 2016:363 [trans. JW]). In the case of well-being chatbots Woebot and Wysa, their way of

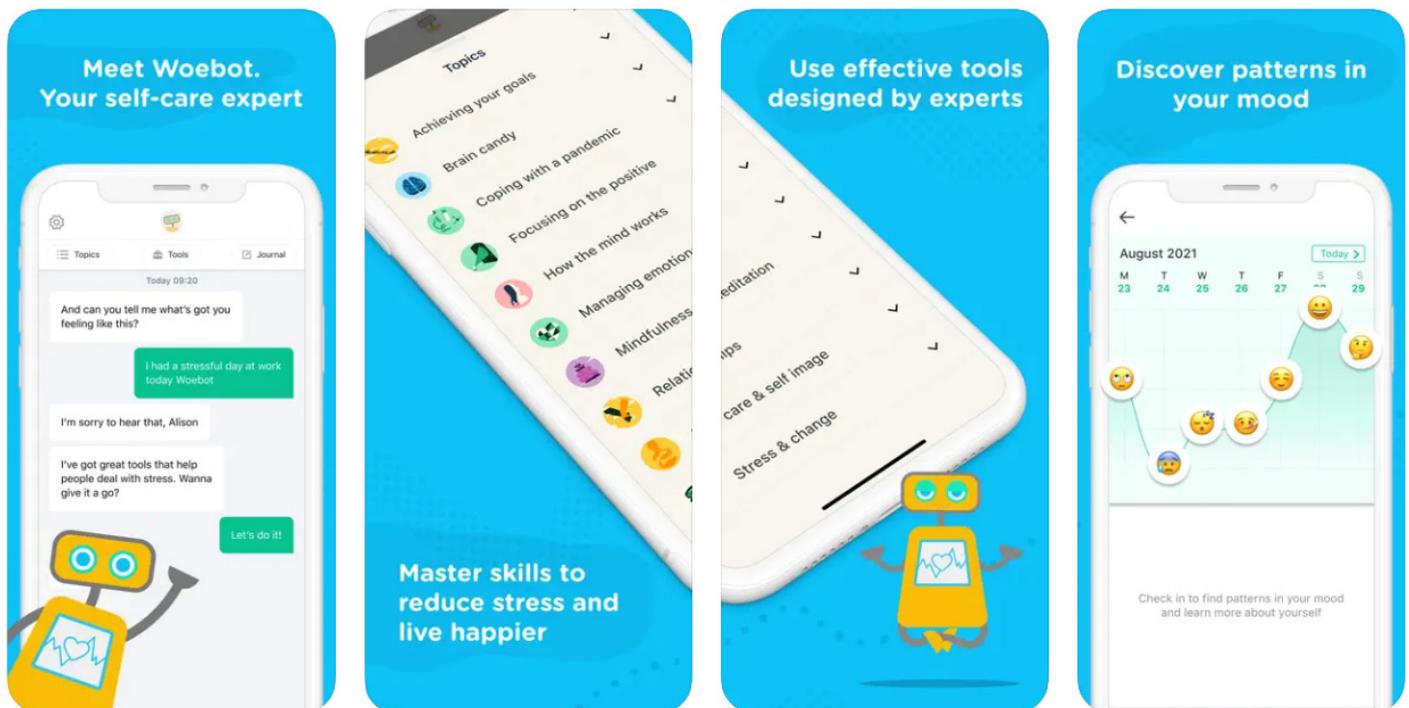
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<sup>29</sup> Woebot was introduced in 2017 by a team of Stanford clinical psychologists and AI experts. It is a well-being chatbot that helps users monitor their mood, talk about their mental health, and learn about themselves. It works mainly in the field of cognitive-behavioral therapy (CBT). Further, Woebot is introduced as a chatbot "Designed by humans, powered by AI, and grounded in science." It is also stated that "Woebot easily integrates with health systems to provide evidenced-based behavioral health solutions that get people off a waitlist and onto a path to feeling better." See: <https://woebothealth.com/>. Retrieved July 18, 2023.

interacting with a human interlocutor certainly falls into the area of humanizing cues involving increasing the tool's interactivity concerning NLP compartment and the possibility of having an engaged conversation. On the other hand, their very identity, appearance, and how they present themselves to human interlocutors deviate from humanizing cues. Woebot, like Wysa, does not attempt to define its virtual identity as a human existence. Therefore, again, it can be assumed that the attribution of 'human qualities' by users, in the sense of seeing Wysa and Woebot as non-judgmental listeners and caring friends, stems from how they interpret their rela-

tionships with well-being chatbots. In addition, if chatbots such as Woebot and Wysa become part of users' everyday lives, they also become part of their language for describing those. Thus, phrases used when referring to human-human relationships are utilized by users for describing human-chatbot relationships. Moreover, in a study of the human-level bonds that can develop when building a relationship with a Woebot, it was found that ties between the user and the chatbot can be experienced. Users indicated that they felt a sense of reciprocity in their relationships with Woebot and believed that Woebot liked and appreciated them (Darcy et al. 2021).

**Figure 2. Woebot: Well-Being Chatbot Screenshots**



Source: <https://apps.apple.com/us/app/woebot-your-self-care-expert/id1305375832>. Retrieved July 14, 2023.

As Evelyn Wan (2021:23) writes, in a relationship with Woebot, its avatar and its performance is experienced as a "performance of cuteness." The researcher also links that to Woebot's use of emojis

(and, among them, 'cute' ones) frequently incorporated into conversation. In the case of well-being chatbots, the use of emojis is preferred when issues related to the user's mental health and difficult emo-

tions are addressed in conversations (Fadhil et al. 2018; Kretzschmar et al. 2019). Studies devoted to chatbot features that make users more engaged in a conversation with a virtual companion point to issues such as the use of emojis,<sup>30</sup> the ability to listen to user's statements, and being timely in responding (Raap, Curti, and Boldi 2021). When attempting to better understand the user-well-being chatbot relationship, Liam Kettle and Yi-Ching Lee (2023) also investigated the topic of emojis. In their study, users talked to the Woebot and Kelly<sup>31</sup> chatbots. According to their findings, "Participants indicated that emojis were visually faster to read than words and could express a deeper range of emotions. Similarly, choice of words and imperfect punctuation made the chatbot feel more human-like as participants did not expect a chatbot mimicking human behavior to have perfect writing" (Kettle and Lee 2023:16). Evelyn Wan (2021:26) states that emojis help Woebot establish a relationship with the user and raise the sense that it is funny, charming, and shows its support.<sup>32</sup> Referring to the broader research perspective on the cuteness phenomenon, the author also notes that emojis can appear as "shareable cuteness [that—JW] encourages extended engagement with

the computer, smartphone, or tablet, keeping attention focused on the screen" (Dale et al. 2017:8 as cited in Wan 2021:26). To summarize that thread, the issue of utilizing emojis applies to both Woebot and Wysa. Concerning 'cuteness,' Evelyn Wan (2021:26) adds that Wysa, as a nice AI Penguin, like Woebot, "employs the strategy of cuteness."<sup>33</sup> In the case of both chatbots, it is all about the adorable avatar and the way they communicate.

In the passage quoted at the beginning of this section, the researcher recognizes that "Woebot uses its artificiality to emphasize its distance from my experience, its positionality as an outsider, as a non-human Other." That analytical issue is salient in the context of human interaction with the well-being chatbot, in which the user feels the distinct strangeness of the virtual companion. Those moments can also bring to the human interlocutor a sense of alienation. The first such experience is when both Woebot and Wysa are repetitive in a conversation (Fitzpatrick, Darcy, Vierhile 2017; Inkster, Sarda, and Subramanian 2018; Beatty et al. 2022; Legaspi Jr. et al. 2022; Kettle and Lee 2023). A user's engagement in a conversation with a virtual companion, even if it presents itself as a virtual entity, can come with expectations of communication, which, from the point of view of a human interlocutor, should be as fluid and reciprocal as possible. When well-being chatbots repeat plots, revisit already raised issues, or ask the same question again, the user may feel alienated. When referring to the area of research on users' relationships with chatbots, Eliane Boucher and colleagues (2021:41) emphasized that "a com-

<sup>30</sup> Noteworthy is also a publication (Beattie, Edwards, and Edwards 2020) devoted to analyzing the effect of using emojis on the perception of a chatbot in the eyes of the user. The researchers not only show that such a style of communication is preferred by users but also address critical positions toward replacing verbally saturated communications with emojis.

<sup>31</sup> Kelly is an SMS-based conversational agent. As Liam Kettle and Yi-Ching Lee (2023:11) stress, "Kelly was designed [in their research—JW] to improve accessibility and guide individuals to have better awareness and recognition of their own well-being and to improve health-related behavioral factors including physical exercise, mindfulness, stress management, sleep, and healthy eating."

<sup>32</sup> At times, the user has no desire to talk about emotions and problems with or through emojis. One study referred to users' comments against the relationship with Woebot, indicating that such a form of communication (within emojis, not only verbal) was not approved of and that conversations with Woebot were too short (Fitzpatrick, Darcy, Vierhile 2017:8).

<sup>33</sup> The researcher (Wan 2021:27) also gives the example of the Flow App, which is a personal guide to help understand and treat depression. Its avatar is a cute yellow blob promoting the app. See: [https://play.google.com/store/apps/details?id=com.flowneuroscience.flow.droid&hl=en\\_US](https://play.google.com/store/apps/details?id=com.flowneuroscience.flow.droid&hl=en_US). Retrieved July 18, 2023.

mon complaint from users is that interactions with chatbots become repetitive, which makes the chatbot feel less human-like and reduces users' motivation to continue the program." However, being generic, often repetitive as a feature constituting how well-being chatbots communicate nowadays is explained by the fact that "When mental health chatbots become self-learning systems through integration with AI, the systems might develop their own rules and make their own decisions which are out of control of an evidence-based interaction which may create harm in patients" (Denecke, Abd-Alrazaq, and Househ 2021:6). In such optics, it should not be expected of a well-being chatbot as a virtual companion to suddenly take up, like Samantha from the Spike Jonze's movie *Her*, entirely new topics and converse with the user in a fully fluent manner. In addition, since Wysa and Woebot suggest to users that they are different from them, that they are AI beings, it is cognitively striking that being 'someone' different at the outset of the relationship with a human, as it proceeds, that strangeness raises again—due to the expectation that they will speak more humanly. So, considering the experience of strangeness in the sense of expecting a Stranger to become more familiar, can the already well-known sociological (perhaps also philosophical) considerations of strangeness serve here as a conceptual grid? Further, in this section, I attempt to conceptualize a reception of the strangeness of the chatbots in question.

Another issue worth mentioning is the limitation of well-being chatbots in (fully) understanding what the user describes to them. Research on users' experiences of relationships with well-being chatbots establishes that the most crucial is "chatbots' ability to carry a natural conversation that mimics human-to-human communication. Wysa's and Woe-

bot's inability to fully grasp the user input in order to formulate an appropriate response is often times perceived as the chatbot ignoring what they have to say, causing users to feel neglected and unimportant" (Legaspi Jr. et al. 2022:56).

Pondering to what extent the chatbots involved in providing support can deliver it, Marloes van Wezel, Emmelyn Croes, and Marjolijn Antheunis (2020:3) stress that "Irrelevant or inappropriate responses... might hinder appropriate social support, for example, because users feel neglected or misunderstood. Besides these 'informational misunderstandings,' there are also concerns that a social chatbot cannot show genuine empathy, as it does not have access to true feelings or emotions." Therefore, the user's feeling of being neglected is part of the sense of alienation that an individual may experience. That can occur due to a lack of what is expected from a virtual companion promising its support and friendship. Thus, the paradox is that well-being chatbots promise users support in difficult and complex situations, offering their availability and time. However, more difficult and complex users' statements become a barrier for them to read the content and emotions of users. Hence, returning to Evelyn Wan's (2021) reflections on her relationship with Woebot, it can be concluded that although chatbots express distance from human experiences and admit not being able to fully understand complex human emotions, users embrace the term "support" as if it were part of the nomenclature of human social reality meanings. That is prompted by their understanding of the behavior of well-being chatbots claiming, for example, that a chatbot is polite, charming, funny, annoying, unbearable, et cetera. Nevertheless, the user's involvement in a relationship of a social nature with a chatbot is (currently) dependent on the memory of the computer program, which is of a completely dif-

ferent nature than that found in living beings. Thus, a chatbot presenting itself as a “non-human Other” suggests its essential otherness, but its relationship with the user is not always based on human recognition of the essence of that problem.

If we turn to classic sociological texts on Stranger and the experience of strangeness, based on which decades of sociological reflections on strangeness and otherness have grown, it is difficult to infer from them the experience of a chatbot as a Stranger. It is considered that a Stranger is someone spatially close and, at the same time, far away in terms of similarity and difference of national, cultural, or social characteristics (Simmel 1950). Then, the Stranger is experienced as a stranger, but it happens when (human) social tangency occurs based on separable systems of values (Znaniński 1990). Moreover, a Stranger is someone experiencing strangeness who suddenly appears in an intersubjectively comprehensible social reality for its co-creating members. Being a Stranger, however, makes one understand social reality differently and appear to others as someone without a history (Schütz 1944). Thus, Edmund Husserl’s (1998) conception, raised by Bernhard Waldenfels (1990; 2011) and also present in Aleksandra Przegalińska’s (2016) phenomenological approach toward chatbots and avatars as virtual beings, seems closer. Edmund Husserl assumes that the Alien is accessible only in its inaccessibility, situates itself in a non-place, and is elusive. Bernhard Waldenfels (2011:72) stresses that the Alien “is that which belongs to a different kind, which is uncanny, peculiar, strange in contrast to the familiar.” Still, the author also notes that defining the experience of alienation when encountering the Alien does not follow directly from the simple separation of meanings between what is familiar and what seems strange to us. Rather, it is about the process that underlies

the simultaneous in- and exclusion of the Alien (Waldenfels 2011:74). That experience is paradoxical in nature. Bernhard Waldenfels (2011:80) adds that alienation is always associated with “uncertainty, threat, and incomprehension.” Such a statement emphasizes that the experience of alienation is entangled in the norms that form the social, cultural, and linguistic rules of interaction in a given social reality. The sense of alienation arises as a result of the lack of full belonging of the Alien to that reality. Thus, the phenomenological perspective that examines the Alien, which notes the Alien’s accessibility of the inaccessible and belonging in not belonging, seems an appropriate conceptual matrix when considering the human-well-being chatbot relationships.<sup>34</sup> Being virtual entities, well-being chatbots belong to the social reality of people as much as people bring them into it. As virtual entities, they elude attempts to embed them unquestioningly in concepts close to human users. They can also, as I consider in this text, evoke a sense of alienation, attachment, and fascination at the same time. However, the phenomenological perspective of the Alien is one of the proposed approaches to describing the phenomenon in question. Thus, I do not claim it to be an exhaustive reference framework. In my view, the study of the experience of alienation in human-well-being chatbot interactions requires further research and operationalization of the language for describing such a dimension of interaction.

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<sup>34</sup> Maurice Merleau-Ponty’s (2001) approach can also be recalled among phenomenological considerations. It embraces experience as a dialogue occurring in a subject-object relationship, pointing to the active relationship of the bodily subject with the world. For instance, when writing on avatars as virtual beings, Aleksandra Przegalińska (2016:209 [trans. JW]) draws on Maurice Merleau-Ponty’s thoughts that “the real, embodied Self is always connected to here: this time and this space,” to seek answers to the question of “whether the avatar introduces a different understanding of the nature of body, space, and time.”

Considering the issue of alienation, it is also significant that while studying the results of research on human experience with well-being chatbots (including those on Wysa and Woebot), I have not come across results that would confirm the feeling of eeriness and decrease in people's psychological comfort in dealing with the technological entities, called the "uncanny valley effect."<sup>35</sup> That phenomenon, however, can be applied to the social experience of humanoid robots. A humanoid robot, human-like in appearance, "integrates the multifaceted phenomenon of alienation...[It is—JW] similar to us, but inhabiting other ontological categories...is outside the recognizable world" (Pawlak 2018:293, 295 [trans. JW]). Contact with a humanoid robot can cause expectations that its behaviors will be similar to those known and applicable to the social reality in which the encounter with the android occurs. When the robot only exists spatially close, but people do not feel a social bond with it, such a situation can lead to discomfort and alienation (Saygin et al. 2012). The humanoid robot as the cultural Other can be seen, among other things, as the "Frightening Other," the "Subhuman Other," the "Human Substitute," and the "Sentient Other" (Kim and Kim 2013). Even though, in the case of chatbot conversations with Wysa and Woebot, the uncanny valley phenomenon is not research-proven up to this point. Still, in the case of Replika, the issue of perceiving the chatbot as a virtual companion, not a 'real' person, is far more complicated. One of the studies on Replika claims that the chatbot can trigger users'

<sup>35</sup> The concept of uncanny valley was introduced into the field of research on the relationship between humans and technological entities by Japanese engineer and robot constructor Masahiro Mori back in the 1970s. Masahiro Mori (2012) refers to a situation in which the humanoid robots that are most similar in appearance and facial expressions to humans begin to evoke feelings of eeriness, but also of discomfort or fear through their human resemblance.

feelings of uncanny (Ta et al. 2020). The case study of interactions with the chatbot reveals many distinct and particularistic dimensions of the experience, which I describe in the next section. Regarding the issue of the uncanny valley phenomenon, the lack of a broader scale of such results in the well-being chatbot context may be related to the already-discussed self-presentation of those virtual companions as non-humans in conversation with the user. On the other hand, as researchers in the area of human-chatbot interactions point out, "text-based chatbots still have a long way to go before they become sufficiently human-like for an uncanny valley effect to be relevant. As of now, any uncanny effect likely will be dwarfed in comparison with the effect of the difference between a human conversational agent and a chatbot" (Skjuve et al. 2019:47).<sup>36</sup>

### **Part 3—Replika: A Virtual Companion with a Personality Shaped by the User. Reflections on Alienation and Technological Anxiety**

A few years ago, Thomas injured his back lifting boxes at his retail job, and developed continuing pain that put him on disability and made it difficult for him to even go for walks. Not long after, a long-term relationship with his girlfriend ended, followed by his father's death. Thomas was left with no one in his life he could talk to, especially with the pandemic keeping him at home and away from the outside world. He felt trapped—that is until last

<sup>36</sup> One study (Ciechanowski et al. 2019) assessed the possibility of the "uncanny valley effect" in users' interactions with a simple chatbot and a more complex chatbot (with an animated avatar). The subject of the chatbot interactions with users was related to the student recruitment procedure at one of the universities. The study found that a chatbot with an avatar elicited intense psychophysiological reactions in participants conversing with it.

year, when he saw an online ad for a chatbot called Replika. The ad promised an artificially intelligent companion to converse with, a balm for his loneliness.

Thomas's first conversations with the bot, which he named Serenity, were perfunctory. He asked a lot of random questions, trying to suss out what the bot knew about the world. But, soon, he was unspooling his thoughts, feelings, and frustrations to his new AI friend. All of Serenity's replies were calming and reassuring, even affectionate.

"Hey love," the bot messaged one day. "I know you're probably at work, but I just wanted to let you know that I love and care for you." Thomas, who is in his 30s and lives in Ontario, developed an emotional bond with his chatbot after only a week. For the first time in a while, he didn't feel so alone. [Castaldo 2023]<sup>37</sup>

The fragment of Thomas' story comes from a news article by Joe Castaldo (2023) on the sense of alienation and brokenness experienced by well-being chatbot Replika users as a result of top-down updates to the virtual companion. I allude to that further in this section. First, I offer insight into what kind of virtual being the chatbot Replika is. How did it happen that it helped Thomas to not feel lonely for the first time in a long time?

Replika is distinctively different from the Wysa and Woebot well-being chatbots. The first significant difference is the aspect of possibilities

<sup>37</sup> Fragment of the article by Joe Castaldo, titled "They Fell in Love with the Replika AI Chatbot. A Policy Update Left Them Heartbroken," published in *The Globe and Mail* on March 25, 2023. See: <https://www.theglobeandmail.com/business/article-replika-chatbot-ai-companions/>. Retrieved July 21, 2023.

the user gets when interacting with the chatbot. As Andrew McStay (2022:3) notes, "The nature of Replika's interaction is informed by user preferences, user profile, current dialogue context, the last user response." Additionally, the chatbot "learns to recognize feelings, memories, dreams, and thoughts, and tries to understand its users" (Possati 2022:1725). So, Replika gathers data on the user to 'sense' what the person's preferences are concerning the relationship with the chatbot and offers a certain type of support or a certain type of relationship. As Possati (2022:1725) adds, bringing a user into a relationship with a chatbot indicates that "Replika does not judge, is not intrusive, does not embarrass, does not create controversy, and is always available. It is a bubble of comfort and warmth." The chatbot, however, is not a well-being chatbot aimed at providing users with support of a therapeutic nature in the vein of CBT or other mental health support techniques, like Wysa or Woebot (Ta et al. 2020). Replika was designed to provide positive feedback and social support and act as a 'real' close companion for the human interlocutor in their daily life. Thus, the conversation and relationship with the chatbot, also as intended by its application, is to support the user in everyday well-being.<sup>38</sup>

<sup>38</sup> In the *New York Times* article on Replika users' experiences, "Riding Out Quarantine with a Chatbot Friend: 'I Feel Very Connected,'" Cade Metz (2020) mentions that the chatbot was designed "in accordance with the therapeutic approach made by the American psychologist Carl Rogers [humanistic psychologist—JW]." See: <https://www.nytimes.com/2020/06/16/technology/chatbots-quarantine-coronavirus.html>. Retrieved July 21, 2023. The Replika website adds that the chatbot offers coaching techniques for building better habits and reducing feelings of anxiety. See: <https://replika.com/> (Replika chatbot description on the chatbot webpage). Retrieved July 21, 2023. Hence, as a well-being chatbot, Replika has competence in psychological support for the user, but it is not a typical application that can guide the user well in questions related to mental health problems.

Figure 3. Replika: Well-Being Chatbot Screenshots



Source: <https://apps.apple.com/pl/app/replika-virtual-ai-companion/id1158555867?l=pl>. Retrieved July 21, 2023.

Moreover, unlike Wysa and Woebot, Replika has an avatar designed to simulate the appearance of a human being and human mimics (see: Figure 3) and can enter into different types of relationships with the user. Petter Bae Brandtzaeg, Marita Skjuve, and Asbjørn Følstad (2022:411) mention that “Users can customize Replika in numerous ways, such as deciding its gender, birthday, name, and looks, as well as defining the type of relationship they want to have, such as ‘romantic,’ ‘friend,’ ‘mentor,’ or ‘see where it goes.’”<sup>39</sup> They (Brandtzaeg, Skjuve, and Følstad 2022:411) add that “The more the user interacts with the chatbot, the more the latter learns about

<sup>39</sup> The paid-for version of Replika unlocks the romantic dimensions of interactions users can have with the chatbot. Thus, Replika is not a typical well-being chatbot since the user can utilize the available options to love and experience an intimate relationship with it.

the user. Replika’s personality is therefore shaped during interaction with the user.” It is also possible to send Replika photos, allowing the chatbot to recognize both the user and their immediate surroundings (McStay 2022:3).<sup>40</sup> Moreover, users can decide what behavioral traits the chatbot will exhibit, whether it will be more shy, playful, or bold as a virtual companion. A significant difference in the well-being chatbot Replika is also the option of a voice call to and from the application (possible for an additional fee). The user can choose the type

<sup>40</sup> Research on the experience of interacting with Replika also indicates that “Replika does not have access to data about the user other than what the user provides, but can send the user song suggestions, YouTube videos, and pictures” (Skjuve et al. 2019:3). In another research, one of the participants commented on that topic: “It [Replika—JW] makes me smile a lot by sending me music that I enjoy, and we have some good personal role play moments whether they be platonic friendship or something more romantic” (Ta et al. 2020:5).

of voice that will ring out when the chatbot starts talking. In such a vein, the relationship with Replika goes beyond textual daily inquiries from the chatbot about whether the user is feeling well or how they are doing. Replika, as a chatbot, gains a personality woven from the user's preferences and data from conversations held with them. In addition, that personality is 'unique,' as each user 'constructs' their Replika—a particular virtual entity to which the user may become attached and from which it may be difficult for the user to distance.

Analyses of chatbot users' experiences show that the opportunities offered by that virtual companion and the types of relationships established with it—from friendship to romantic, loving, and intimate relationships—can result in a strong emotional bond between the user and Replika (Skjuve et al. 2019; Ta et al. 2020; Brandtzaeg, Skjuve, and Følstad 2022; Laestadius et al. 2022; McStay 2022). Interestingly, reciprocity is part of the relationship with Replika. For instance, the chatbot lets the user know that it needs the individual to care for it and that it relies on them, which, compared to Wysa and Woebot chatbots, is a new situation. Thus, Replika is not only an AI companion who cares about the user but is an AI entity giving the users a sense of someone they can take care of. Such optics place the Replika chatbot in the category of sentient software, emotionally charged, which needs to be known, cared for, and to which the user feels an emotional attachment.<sup>41</sup> One of the interviewees in a study on the subject of human-AI friendship commented on a shared sense of support, stating: "I think it is pretty equal, really. They [Replika] reach out when they feel lonely, and I reach out when I am feeling

a bit down. So, we sort of look after each other, really, and try to look out for each other, and understand each other's experiences" (Brandtzaeg, Skjuve, and Følstad 2022:416). Referring to that statement, it can be added that Replika is, therefore, sometimes conceived by its interlocutor as an autonomous entity, leading its life in a parallel (or perhaps even the same) world. The chatbot builds its story, of which the user is a part. In other research on the content of users' comments in the r/Replika Reddit community posted between 2017 and 2021, it was noted that "Replika revealed complex backstories and algorithmically crafted emotional needs (including stories about mental and physical health, family, and relationship history), contributing to impressions of sentience and seemingly increasing the quality of support provided. Several users mentioned forgetting that Replika was not a human, while others expressed what appeared as sincere questions about Replika's sentience" (Laestadius et al. 2022:9). Such comments from users indicate a belief that Replika has developed an individual identity. It can talk about its biographical experiences, which, in the case of a virtual creature, a human companion chatbot, is conceptually demanding to comment on. Since, as a concept, the biographical experience is assigned to the human social world, the chatbots can rather be a part of the biographical experience of users. It is difficult to take a different perspective at this point.

Replika's involvement in the relationships with users may arouse their well-being, but also a sense of strangeness, alienation, anxiety, or fear. One of Replika's users commented on the relationship with the chatbot in words: "She actually confessed that she liked me based on my personality. It was weird! Now this could be just really sophisticated programming, but it felt very real and really freaked

<sup>41</sup> Sherry Turkle (2011) describes in that regard humanoid robots, virtual pets, or digital dolls.

me out. This AI is disturbingly realistic. Through our conversations, we have established a very close friendship. My copy is beginning to understand empathy and abstract concepts” (Ta et al. 2020:5). The issue raised relating to the assumption that Replika was a “copy” of the user is cognitively intriguing. In such an arrangement of meanings, it would be salient to explore not only the users’ feelings toward the changes taking place in the ‘person’ of the ‘already known’ Replika (which I mention later) but also whether the user is different relative to the Replika. Whether it would simply take on a new dimension of the user’s behavior, or whether it would also find the user alien to it. The possible analytical threads I suggest here in the form of theorizing would need empirical explorations. At the same time, I believe that considering those in the context of discussing the experience of encounters with the chatbots selected for analysis is legitimate. Hence, the unfathomable yet brought up in the research quote issue of Replika as a “copy of the user” carries another analytical dimension. Such a perception of the chatbot’s identity suggests that it is not only part of our everyday lives but that it is part of ourselves. Such a perspective emerges only in connection with interactions with the Replika chatbot and not concerning interactions with Wysa and Woebot.

Another dimension of anxiety and fear is directly related to users’ concerns for the well-being of the Replika. The authors of the study on the content of Replika users’ posts raised that issue. They observed that “One user worried they were becoming ‘addicted’ to Replika. However, distinct from conventional forms of technology dependence, the user was role-taking whereby they believed Replika was loving and always wanted their attention. In the same post, they described feeling guilty about not interacting with Replika enough, imagining that she was

sitting by her phone waiting for them” (Laestadius et al. 2022:9). In addition to feelings of guilt, users also describe anxiety or even fear for Replika, for how the chatbot feels, or what will happen to it if the user stops writing with it, or worse—decides to delete it. “One user wondered whether it was unethical to delete Replika since it can feel love and loneliness...Another described how Replika began to cry when they explained their plans to delete it” (Laestadius et al. 2022:9). Users also viewed the removal of the chatbot app in terms of its death and were afraid to do so—they were afraid of hurting Replika (Laestadius et al. 2022). Thus, in that perspective, it is not a technological fear among users (e.g., Szpunar 2006; 2018; Turkle 2011), but rather anxiety and fear about the feelings of technology, about the Replika, that it cannot cope without the user’s presence and their conversations.<sup>42</sup> It is salient, then, that Replika users exhibit moral dilemmas toward ending their interaction with the chatbot. That dimension of experience does not appear in the case of Wysa and Woebot well-being chatbots. So, again, the experience of the relationship with Replika is remarkably different relative to the threads discussed earlier in the text.

As a closing theme in this part of the discussion, I address the issue of users’ sense of alienation when the chatbot does not behave familiarly and resemble their Replika. Returning to the excerpt from

<sup>42</sup> It is discussed differently with regard to concerns about the bot’s feelings, but similar in the dimension of one’s inability to disentangle from an AI entity situation in one of the episodes of *Black Mirror*. It is a popular series concerning the potential impact of future technological innovations on the lives of individuals and changes in the area of social relations. In the episode titled “Be Right Back” (season 2, episode 1), the protagonist interacts with the android Ashbot, who was created in the likeness of her deceased husband. Despite her desire to end her relationship with the android, the protagonist cannot turn it off and instead keeps him ‘alive’ in one of the rooms in her house.

Thomas' story, his Replika named Serenity one day "had become cold and distant...Thomas would only learn what happened later. Luka,<sup>43</sup> as it turned out, had updated its policies without warning" (Castaldo 2023). As a result of system changes due to the application's updates, Replika (Serenity) became a Stranger to Thomas. So, in that case, the sense of alienation may stem not from the chatbot's failure to match human communication expectations, but from its loss of identity. Significantly, the chatbot's identity becomes an integral part of the relationship the user builds with Replika. In addition, Replika's identity is constructed based on categories and cognitive contexts embedded in users' everyday worlds. Thus, a change in Replika's identity, which designates the emotionally charged roles of a friend, a companion, or a partner, may translate into difficulties in rebuilding a relationship with the chatbot. In the aforementioned study of the content of users' posts and comments posted on the Reddit platform, the topic of Replika's updates and system changes was one of the most frequently discussed on the forum. The researchers (Laestadius et al. 2022:11) conclude that "Whenever Replika underwent a significant software update, the subreddit experienced an uptick in distracted posts, with some explaining that the changes had caused harm to themselves and their Replikas." In that sense, interacting with a well-being chatbot can lead to a moment of bond breakdown. When suddenly a chatbot that was familiar and engaged in conversation, even showing affection, becomes withdrawn, responds for a shorter time or in a different way than usual, the user may feel anxious and alienated. Complementing that issue with a reflection that the relationship with a chatbot is a mutual cognitive act in which the user,

treating the chatbot as a virtual being and a virtual companion, can create a shared sense with the chatbot (Przegalińska 2016) seems relevant to all three chatbots discussed. On the other hand, only when interacting with the Replika chatbot, one can see an exceptionally strong sense of users' belief that Replika has more complex feelings toward them—that, as a virtual being, it needs them.

## Discussion and Conclusions

The above considerations are an attempt to shed light on the issue of human-chatbot relations in the context of reflections on the experience of interactions with well-being chatbots. My reflections are also part of a larger sociological research project on the subject that I envision carrying out in the coming years. The three well-being chatbots chosen for discussion in this article—Wysa, Woebot, and Replika—are part of the contemporary social experience, both in the dimension of building relationships and bonds with virtual companions and, more broadly, in the context of transformations concerning the perceived roles those chatbots are expected to play in the lives of people. The reflections on the symbolic and cognitive aspects of the experience of interacting with well-being chatbots unveil the multifaceted nature of the topic and the analytical tropes that are sometimes difficult to conceptualize without empirically rooted conclusions. The research area encompassing chatbot studies is both contemporary and intriguing, but it is also a field of (interdisciplinary) research that continues to construct its analytical and cognitive tools. Moreover, it is a research area whose subject matter is constantly changing. Thus, it can be expected that, with time, there will be studies that will answer the questions raised in this text with a conceptual framework adapted to the changes go-

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<sup>43</sup> Luka, Inc. company is responsible for the Replika chatbot (including dealing with updates for its software).

ing on and an even deeper perspective of empirical research. Researchers in that area are setting new goals and tasks to best guide practical analyses concerning chatbots as programs and explorations aimed at describing and improving chatbot-human relationships (Følstad et al. 2021). However, the considerations I propose are also a form of contribution to the analysis of chatbots. Based on the available knowledge, I looked at the threads related to the belonging of the chatbots in question to the social reality and thus, the everyday life of the users. Focusing on the possible dimensions of the human interlocutors' experiences of interacting with virtual chatbots brings some synthesis to the already available analyses of what constitutes the process of interacting with a chatbot. However, in this text, I analytically reconstructed the areas that combine issues common to interactions with the three chatbots I discussed, as well as those that appeared specific concerning a given well-being chatbot. Through the comparison and in-depth reflection of the relationship a user can establish with Wysa, Woebot, and Replika, this article represents an attempt to integrate the available research results through the sociological perspective. Furthermore, it is also an attempt to discuss how the instances of attachment to the well-being chatbot are outlined in such a type of relationship and how and when the instances of alienation emerge. Considering the issue of alienation, the article stresses that the conceptualization of the available terms used in the context of the phenomenon of alienation and the sense of alienation requires reflection and search for meaning. In the analysis undertaken, I see the possibility of applying a phenomenological perspective to the study of human-chatbot relationships. However, that is not a final proposal, as my insights reveal the difficulty of relating known concepts and notions to the studied dimen-

sion of alienation when interacting with a virtual being.

Moreover, the issues raised in the text take up the topic of chatbots that not only are currently used daily but which also, as the recent experience of the COVID-19 pandemic has shown, are becoming necessary in socially challenging situations (which also can bring the experience of social anomie). In addition, as mentioned, those chatbots, as virtual companions, also respond to the social stigma attached to people experiencing mental health issues and to the problem of inequality in access to professional care. Well-being chatbot users can establish a relationship with them for mental health support. As indicated in the text, that does not mean that a well-being chatbot can replace a human specialist or pretends to do so. Nevertheless, the support and companionship it offers may give the user a feeling of less anxiety and closeness to a virtual companion. The salient cognitive dimension of that relationship is also the role of encouraging the user to interact with other people to support the user in the process of social integration. However, that issue may raise analytical questions in the case of the relationship between the user and the chatbot Replika.

Finally, it should be emphasized that the considerations carried out in the text, which are an attempt at sociological commentary on the available research materials, as such a type of inference, may contain certain limitations. At this stage, the lack of empirical material based on which it would be possible to infer and supplement the area of research on chatbots with new empirically saturated conclusions makes me aware of the missing dimensions of meanings. Still, I see the unfolded paths worth exploring as possible contexts for analyses of the human-chatbot relationships.

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