



Creating text-based AI clones of myself: Exploring perceptions, development strategies, and challenges

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HIGHLIGHTS

- AI self-clone represent an AI persona that reflects their creator.
- We discuss motivation, strategy, and challenges during the crafting process.
- Unexpected AI clone responses prompted deeper self-reflection and identity formation.
- Users configured their AI clones from strict rules to flexible, open-ended conversations.
- Ethical concerns arose over privacy and identity disclosure.

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ABSTRACT

AI clones are evolving to include digital representations of real world individuals as chatbots. While often used to replicate famous figures, as the technology becomes more accessible, it is crucial to understand whether everyday users would create their own clones and how they interact with them. In this study, within the scope of AI-generated personas and their role in representing users' needs and identities, we focus on personas that directly reflect the qualities of real humans. We define this as AI self clones—conversational AI representations that reflect their human creators—and examine how creators construct and engage with them. We conducted a 7-day study in which participants ($N = 12$) created and interacted with their text based AI self clones using CLONEBUILDER, a web-based authoring interface for configuring and tuning AI self clones. The system enables individuals to create AI representations that encapsulate their unique personality, values, and interaction style. Our findings reveal that each participant developed a clone tailored to their personal circumstances. As the participants iteratively refined and tested their clone, their direction and expectations of AI clones evolved from performing specific roles to becoming entities that facilitated self exploration and relationship formation. Unexpected responses from the clone prompted self reflection and identity questioning. Overall, this paper explores the motivations for creating these clones, the strategies participants use to build and refine them, and the moments of emotional connection and break out experiences that emerge during the crafting process, along with key design implications, challenges, and ethical considerations in developing AI self clones.

1. Introduction

Digital replicas that mimic real-world individuals have become a field of interest that continuously redefines what the boundaries are between technology and identity. These “AI clones” are generated by analyzing and replicating personal data, behaviors, and characteristics, offering new possibilities across various industries (MyHeritage, 2024;

Jinman Kim and Kim, 2020). These clones take multiple forms, depending on the data used and how it is applied during the training stage (Chan et al., 2021; Westerlund, 2019). For example, Hollywood's leading talent agency, Creative Artists Agency (CAA), has collaborated with AI firms to develop visual AI replicas of celebrities by scanning their bodies, faces, and voices. These AI doubles are used for reshooting scenes, dubbing, and stunt work, creating efficiencies in the entertainment industry. By

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handling tasks like reshoots, AI clones free up actors to focus on other projects (T. W. S. Journal, 2023).

However, AI cloning extends far beyond just visual representations (Patel et al., 2019; Lorenzo-Trueba et al., 2018). With the advancement of large language models (LLMs), which are capable of replicating human-like tones, it is feasible to create text-based AI clones specifically tailored to an individual's communication style, personality, and internal values that can be elicited from conversations (De Paoli, 2023). These text based AI clones are becoming increasingly accessible to the general public. For example, Delphi² enables users to create "Digital Minds" that extend their expertise and remain continuously available to others seeking guidance. To give source individuals a direct role in replicating themselves, it is important to understand the underlying intent behind creating an AI clone and the process by which individuals manage and conceptualize their clones. However, previous research mainly focuses on the perceptions and concerns that users and source individuals have regarding the usage of AI clones in speculative scenarios, revealing negative emotions and reactions, including fear of replicas threatening individuality, risks of misrepresentation, and threats to personal identity (Lee et al., 2023). Related work has also used speculative story completion methods, in which participants are asked to continue a given scenario, to explore how individuals imagine the roles, values, and risks involved in creating AI versions of themselves (Huang et al., 2025). Moreover, industry has begun introducing customizable AI chatbots as extensions of the self for social media interaction such as Meta's AI Studio.³ Character.AI⁴ enables non technical users to author and share chat based character agents by providing instructions and example dialogues, then interact with them in everyday conversations. However, there is limited research on how the act of creating and interacting with AI self clones shapes users' perceptions of these clones, how it influences their subsequent interaction patterns, and how the cloning process in turn affects how individuals understand and present themselves as the source identity (Aymerich-Franch and Bailes, 2014; Bailenson and Segovia, 2009).

In this work, we explore how individuals craft their own text-based AI clones, specifically focusing on those modeled after themselves, which we refer to as "AI self-clones." Rather than prioritizing how closely a clone mimics the source individual, we study how participants tune their clones to align with their needs and desires, and what implicit mindsets users have on their AI self-clones. We believe that the insights from these observations can be used to form foundational methods for training or otherwise tuning future multimodal or embodied agents. To investigate the clone crafting process, we developed CLONEBUILDER, a web interface that enables individuals to create AI self-clones. Using the system as a probing tool, we observed 12 participants as they conceptualized and crafted their clones, focusing on how they refine the clones to represent their digital selves. As a result, this study aims to answer the following research questions.

1. How do users conceptualize their AI self-clones, what motivations drive them to assign specific roles to their clones, and how do their perceptions change throughout the crafting process?
2. What strategies do users use to project their intentions and how do they maintain control during the process of crafting their AI self-clones?
3. What difficulties and challenges do users encounter in the process of crafting and interacting with AI self-clones?

This study contributes new insights into the motivations behind why people choose to clone themselves, uncovering the specific needs and desires that drive this decision. It also explores the strategies individuals use to configure and test their AI clones, offering a detailed analysis

of the personal impact experienced by users after completing the clone crafting process. Additionally, the study provides implications for future AI clone integration, while addressing critical ethical concerns.

2. Related work

2.1. Definition of AI clones

Digital replicas of individuals are described in literature using several terms. One line of work uses the term "human digital twin" to describe a high fidelity and continuously updated digital representation of a physical person, maintained through ongoing data exchange that keeps the two counterparts synchronized (Lauer-Schmaltz et al., 2024; Barricelli et al., 2019). In contrast, the definition of "AI clone" is more flexible; it is an interactive replica that does not need to remain perfectly synchronous with its source. AI clones emphasize performative and relational functions, communicating, responding, and acting as or for their human originals to enact a digital identity (Robot Sex, 2017). Building on this, previous work by Lee et al. suggests that AI clones can selectively replicate specific characteristics, such as personality traits or habitual behaviors (Lee et al., 2023). This selective approach underscores the flexibility of AI clones, as their resemblance to the original individual can vary depending on their intended purpose. Moreover, Lee et al. emphasize the interactive aspect of AI clones, which are built using personal data and are able to adaptively respond to both user inputs and environmental cues.

Truby and Brown introduced the notion of a "digital thought clone," which specifically refers to AI systems that replicate cognitive and behavioral patterns of individuals (Truby and Brown, 2020). They highlight that AI clones are not limited to physical mimicry but can embody human thought processes, including decision-making and emotional responses.

Furthermore, McIlroy-Young outlines the various relationships involved in mimetic models: the 'target,' who is being replicated; the 'creator,' who builds the model; the 'operator,' who uses it; and the 'interactor,' who engages with it (McIlroy-Young et al., 2022). Building on this role-based framework, Huang introduces the concept of the AI self-clone, defined as an AI representation in which the source individual is directly involved—either as the interactor using their own clone (where the target and interactor coincide), or as the creator producing a clone of themselves for others to engage with (where the target and creator coincide) (Huang et al., 2025). In our study, participants embodied both roles: they were simultaneously the subjects being replicated and the creators of their own AI representations. Accordingly, we adopt Huang's definition of the AI self-clone while refining it to specify cases in which the source individual is both the creator and the target being replicated, and where the user of the clone may be either the creator themselves or another individual.

2.2. Identity management and perception of AI clones

Current applications of AI clones have largely focused on replicating public figures for commercial purposes, often with professional identity management support (Sezer, 2022). However, as AI clone technology extends to the general public, ethical concerns arise from requiring individuals to independently manage their digital identities. Identity management theories, notably Goffman's framework of self-presentation, refer to the conscious or unconscious efforts individuals make to control and shape the impressions others form of them (Goffman, 2022). Prior literature has extensively examined how individuals strategically present curated personal information such as photos, status updates, or posts on social media platforms, allowing for a controlled and intentional identity presentation (van Dijck, 2013; Jeyanthi, 2022). Extending beyond curated profiles, Liu et al. define a social media clone as an AI delegate that acts as an operator under a target person's identity using the target's data, producing platform native interactions (Liu et al., 2025). Similarly, crafting AI clones involves deliberate choices regarding

² <https://docs.delphi.ai/introduction>.

³ <https://ai.meta.com/ai-studio/>.

⁴ <https://character.ai/>.

digital identity presentation (Lee et al., 2023). However, unlike social media profiles, where users typically have substantial control over their portrayed identity, AI clones continuously generate and adapt their behaviors through interactive exchanges, potentially incorporating unintended or unpredictable aspects of the user's speech patterns and actions. This introduces an element of unpredictability and reduced controllability in digital identity management, challenging established socio-psychological frameworks.

Furthermore, such unpredictability in identity management may have deeper implications, potentially influencing users' sense of self and interpersonal dynamics. Previous studies have explored the potential impact of AI clones on an individual's sense of self and interpersonal relationships, focusing predominantly on speculative scenarios (Lee et al., 2023). Their research highlights that AI clones may provoke defensive responses, as these digital replicas are perceived to threaten personal identity. This anxiety arises from the belief that AI clone technologies frequently capture a snapshot of a person's identity at a specific moment in time, with minimal or no subsequent updates to the clone's behavior and personality (Naveed et al., 2023; O'Neill and Connor, 2023). Zheng et al. explored the effectiveness of AI-enhanced self-clones in improving presentation skills. Their study focused on how viewing an "idealized" version of the self, represented by AI-generated clones delivering presentations, could help participants refine their performance (Zheng and Huang, 2023). In addition, much of the work has concentrated on how individuals respond to observing AI clones, particularly focusing on the replication of external features such as appearance and gestures (Amezaga and Hajek, 2022). However, there is limited research on the actual process of constructing an AI clone. This gap significantly constrains our understanding of the identity aspects individuals prioritize when creating AI clones and how their perceptions of these AI self-clones evolve during the creation process.

2.3. From human-like to self-representation in text-generation AI clones

AI clones appear in many forms, ranging from text based agents to visually or physically embodied systems (Yang et al., 2025; Korban and Li, 2022; Lin et al., 2022). Recent work on AI avatars and virtual humans describes them as human-like representations of AI that mimic appearance, facial expressions, and voice through multimodal sensing and generation (Go and Sundar, 2019; Kim et al., 2021). Building an authentic AI clone requires coordinating multiple modalities so that appearance, behavior, and communication are jointly aligned with the original person. Prior work on virtual humans in immersive virtual reality has contrasted "visual clones" that match a person's physical appearance with "behavior clones" that reproduce their dynamic social behaviors, showing that behavioral realism often plays a larger role than visual realism in shaping social presence and influence (Kyrlitsias and Michael-Grigoriou, 2022). Similarly, using text-based AI clones centers the interaction on language, enabling a more focused analysis of how an agent's communicative traits and linguistic style align with those of a specific individual.

Advancements in LLMs, trained on extensive datasets, have improved AI systems' ability to mimic human-like tones, enabling increasingly engaging conversational experiences (Sattele, 2024; Biermann et al., 2022; Olteanu et al., 2025). Much research has explored various methods for developing realistic personas using LLMs and evaluating the authenticity of these LLM-generated personas. For example, Jiang et al. examine how well LLMs can represent distinct personality traits based on the Big Five personality model (Jiang et al., 2023). These human-like characteristics are particularly significant in activating "humanness" heuristics, prompting users to perceive chat agents as human-like entities and interact with them socially (Sundar, 2008). For example, Replika,⁵ a personal AI companion, helps alleviate loneliness by providing empathetic and supportive messages, as well as offering helpful information or advice in a human-like manner (Ta et al., 2020; Pentina et al., 2023). Studies

suggest that interactions with human-like AI chatbots can trigger users to share emotions and form relationships, treating them as companions, friends, or even romantic partners (Skjuve et al., 2021; Xie and Pentina, 2022; Skjuve et al., 2022).

However, AI agents with general human-like characteristics are fundamentally different from those embodying the distinct traits of a specific individual. While the former focuses on human-like behavior and conversational mannerisms, the latter involves capturing and replicating the unique nuances, and context-specific behaviors of a real person (Casal and Kessler, 2023; Go and Sundar, 2019). This distinction is crucial, as the challenges of reflecting and personalizing a real individual's identity, including their speech patterns, emotional responses, and personal history, introduce complexities that go beyond the mere generation of plausible human-like dialogue. In Hu's study, the aspects of an AI persona that LLMs can simulate include demographic traits (e.g., age, gender, and occupation), social attributes (e.g., cultural background and social role), and behavioral tendencies (e.g., decision-making patterns and communication styles). Yet, simulations tend to lack the complexity and depth found in real human personas, resulting in representations that capture only a limited range of human traits and explain a small fraction of the variability in actual human responses (Hu and Collier, 2024).

Lo conducted an autoethnographic study by prompting custom GPTs, customizable versions of ChatGPT that can be tailored based on the user's instructions and domain-specific knowledge, with instructions based on the researcher's own identity over a month-long period (Lo, 2024; OpenAI, 2023). This study employed an iterative process in which the researcher input personal data, refined prompts, and tested the customized GPT through ongoing interactions to better align the chatbot's responses with their persona. While GPTs are primarily designed to enable non-experts to tailor GPT-based agents using prompting strategies, rather than focusing on the nuances of crafting realistic, persona-based chatbots, the study demonstrated both the technical feasibility and the limitations of personalizing GPT models to embody a realistic persona.

Extending this direction, our research examines how a diverse range of users perceive and strategically approach the creation of text based AI self clones. Using CLONEBUILDER, we investigate how users conceptualize, configure, and iteratively develop their clones.

3. Design of CLONEBUILDER

3.1. Technology probe (TP)

CLONEBUILDER is a web interface that allows users to generate an AI self clone through prompting, chat with the clone, and iteratively refine its behavior so that it better reflects their conversational style and personal values. We developed CLONEBUILDER (Fig. 1) for two main reasons. First, to enable researchers to collect all prompts and chat logs in order to capture how AI self-clones are authored, revised, and used over time. Second, to provide a tailored platform for developing text based AI clones that allows users to configure their AI representation through natural language instructions and personal materials without coding knowledge.

3.2. Overview concept and interaction flow

CLONEBUILDER is specifically designed to support text-based AI clone crafting process, focusing on three key processes: (A) Configuration, (B) Testing, and (C) Feedback.

3.2.1. Configuration

The configuration process involves participants' iterative efforts to make sense of their text-generation AI clones by providing behavioral instructions to guide the clone's actions and managing how their personal information is integrated. The process of crafting AI self-clones begins with determining how the clone should be presented externally, including setting the clone's name and image. It then extends to considerations

⁵ <https://replika.com/>.

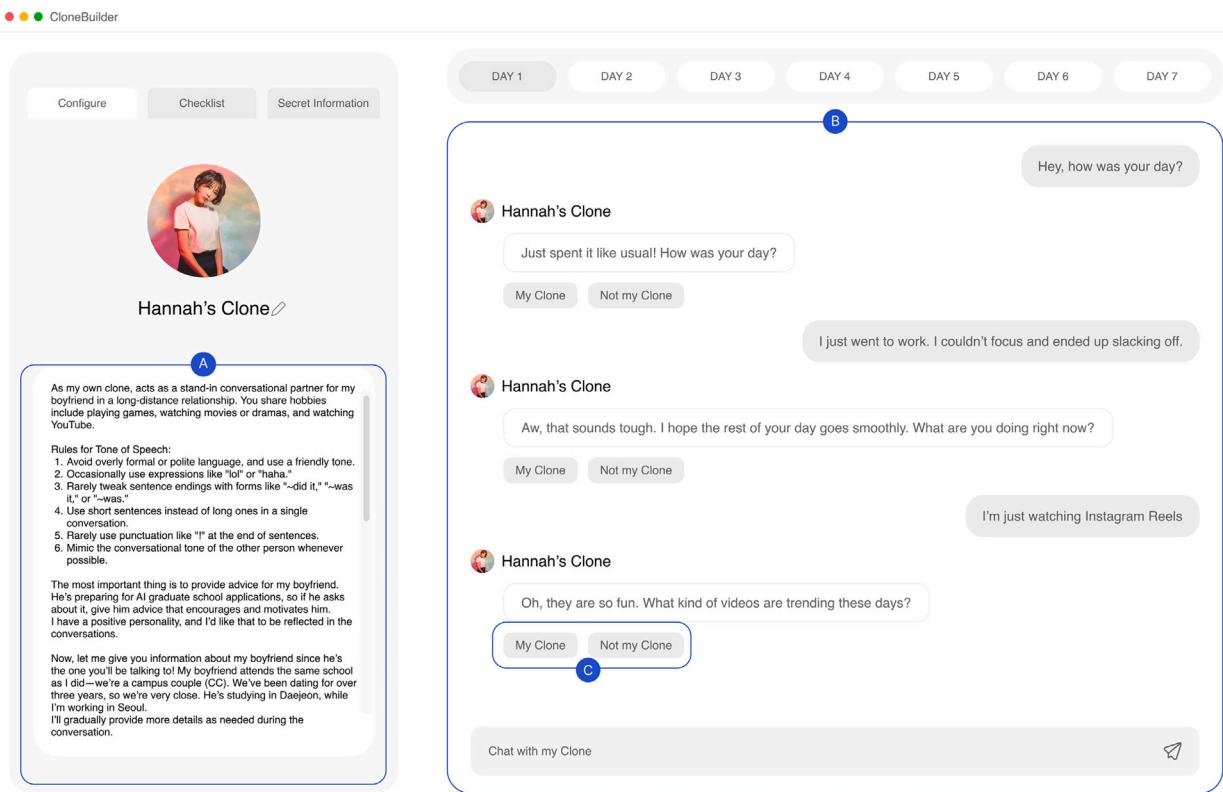


Fig. 1. The main user interface of the CLONEBUILDER includes three key interaction flows. (A) Configuration: Instructing and inputting personal data. (B) Testing: Verifying the behavior and functionality of text-based AI self-clones. (C) Feedback: Recognizing ‘My Clone’ aspects and providing feedback. For reporting purposes, the CLONEBUILDER, developed in Korean, has been translated into English. The example depicted in Fig. 1 uses fictitious characters.

regarding the clone’s behavior, prompting participants to iteratively reflect on whether to teach specific personal information to the clone, how deeply to share that information, and the most effective ways to communicate it. Participants configure their self-generation AI clones primarily on the left side of the system interface (Fig. 1), which is systematically organized into three sub-tabs: Configure, Checklist, and Secret Information (Fig. 2). In the Configure tab, participants can upload a profile image and assign a name to their AI clones, and provide specific instructions on how the clone should behave. In the Checklist tab, participants provide crafting goals they want their clone to achieve. These goals were brainstormed during the Clone Ideation Workshop (explained in Section 4.1.2), conducted as a preparatory step to crafting their AI clones. These goals serve as milestones for users, enabling them to prioritize and track their progress throughout the clone-building process. Developing a text-based AI self-clones requires sophisticated handling of personal information, which must be carefully filtered and considered. The Secret Information tab allows participants to input personal details they want their clone to know but prefer not to disclose to researchers. For ethical reasons, information entered in this section is not revealed and not collected by the researchers (explained in Section 4.3). Participants can input this information as text or upload it in PDF format.

3.2.2. Testing

The testing process focuses on how participants verify their clone to ensure it behaves as instructed and represents their persona. Participants primarily conduct testing on the right side of CLONEBUILDER interface, where they engage in various conversations with their AI clone. Above are seven tabs, each corresponding to a different day of the experiment, allowing participants to restart the conversation each day. The testing process allows participants to monitor and refine their clone’s behavior, running concurrently with the configuration process to ensure it aligns with their expectations and objectives.

3.2.3. Feedback

For each conversation with the clone, participants are given the option to either accept or reject the clone’s response. Two buttons appear beneath the clone’s response: “This is my clone” (where participants can rate the similarity by choosing a percentage—20 %, 40 %, 60 %, 80 %, or 100 %) and “This is not my clone.” Participants were instructed to select the appropriate button to provide feedback on their AI clone’s responses, refining and personalizing the clone’s behavior. Providing feedback on every response was not mandatory, as we aimed to avoid disrupting the flow of conversation between the participant and the clone with constant feedback. When selecting the buttons, participants were asked to explain the rationale behind their choice. This feedback is then used to refine the AI clone (explained in Section 3.3), aligning it more closely with the participant’s crafting expectations.

3.3. System Design

CLONEBUILDER was developed as a web application with a React frontend and a Python web server using Flask for backend integration with LLM (GPT-4o). We used the GPT-4o model, chosen for its efficiency in generating fast responses in chat interactions. For the parameters, we consistently set the temperature to 0, while keeping all other settings at their default values. The AI clone utilizes GPT-4o to replicate the persona of a specific individual, responding based on user-provided instructions, conversation history, and personal information. The system incorporates user feedback by summarizing how closely the clone’s responses align with the user; this process is handled by the LLM, which sorts the feedback by similarity and uses it as a consideration when generating the next response. Iterative refinements to the system prompts aim at enabling natural dialogue as the source individual’s identity, allowing conversations to continue seamlessly as oneself. We defined the general prompt (shown in Appendix A), leaving the detailed creation of

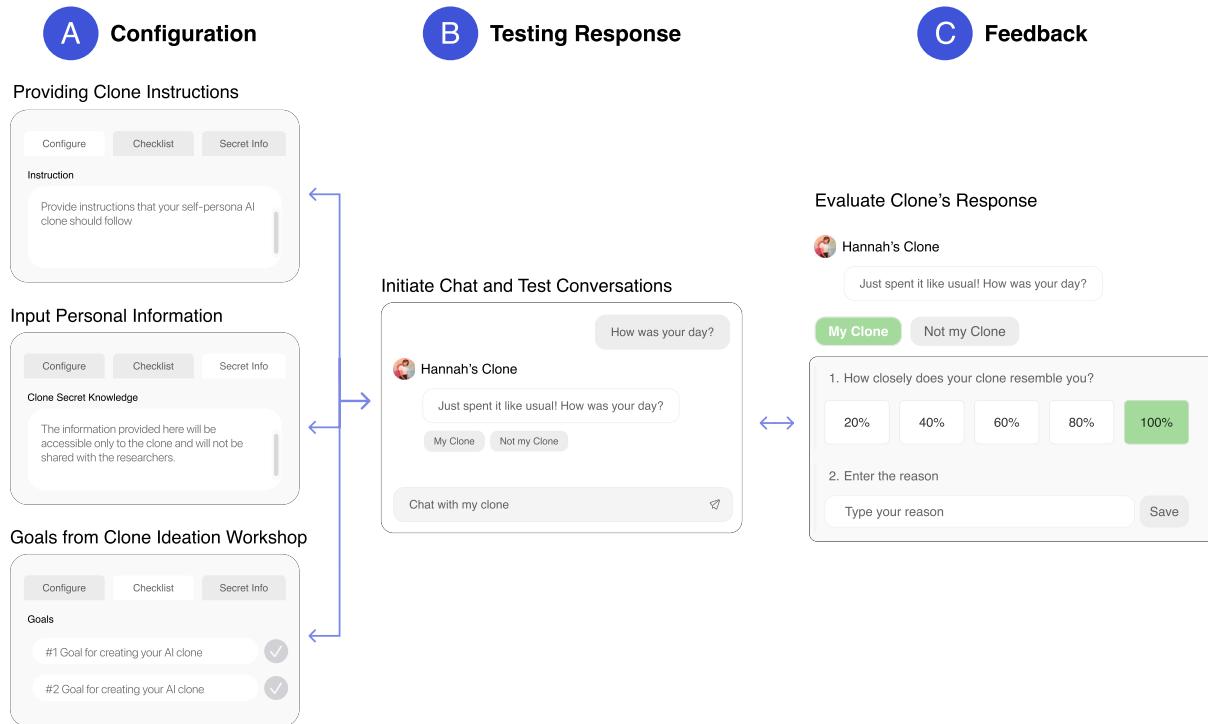


Fig. 2. A diagram of CLONEBUILDER illustrating key interaction flows providing an overview of the clone crafting process.

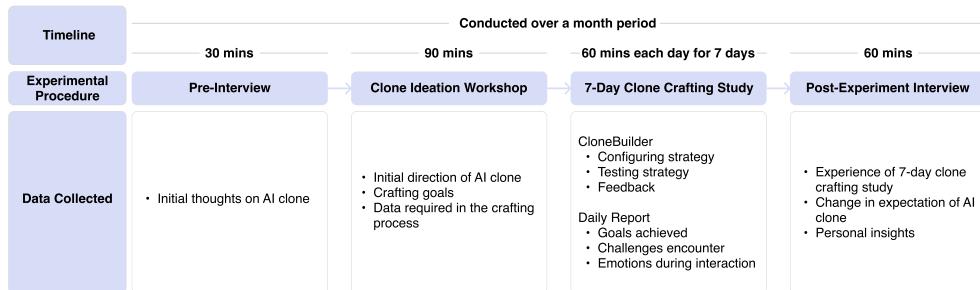


Fig. 3. Overview of experimental procedures and data collected.

each clone to the participants. All interaction logs and instruction data are systematically stored in a MySQL database, preserving user activity and system interactions for analysis and research purposes. Notably, information provided in the Secret Information tab is used to generate clone responses but is not stored in the database. Personal information provided in PDF format is summarized using the GPT-4o to generate clone responses.

4. Method

4.1. Experiment summary

To investigate how participants craft their text-based AI self-clones and how they interact with them, we structured the experiment into four steps: a Pre-Interview, a Clone Ideation Workshop, a 7-day Clone Crafting Study, and a Post-Interview (Fig. 3). The first two steps, the Pre-Interview and the Workshop, were conducted as preparatory stages to help participants initiate their building direction and set expectations for the clone crafting process. The experiment was conducted online with a total of 12 South Korean participants, all of whom completed the four steps. Our study protocol was approved by the university's Institutional Review Board (IRB).

4.1.1. Pre-interview

Participants engaged in a semi-structured interview designed to explore their initial expectations and perceptions of crafting AI self-clones. The interview, conducted via Zoom, lasted approximately 50 min.

4.1.2. Clone ideation workshop

The workshop aimed to help participants independently brainstorm their AI self-clones by defining each clone's purpose and role, setting behavioral goals, and identifying the data needed for crafting their clones. Designed for individual participation, the workshop was conducted online for approximately 90 min, pairing each participant with a dedicated researcher. Participants worked privately within individual Figma workspaces and communicated with researchers via Zoom, although the researchers did not provide any explicit guidance or direction.

Participants began by brainstorming possible conversational scenarios, extending from the Pre-Interview, in which their AI clone would be used. They considered the intended audience for interacting with the clone and the content of these conversations. This perspective ensures that the clone's design isn't solely focused on the individual creating it but also on how others will perceive and engage with it. By doing so, it reflects a more holistic understanding of the clone's role, which goes beyond personal use and considers its broader impact and function.

After narrowing down the direction, participants were asked to specify the behaviors and actions their AI clone should perform, as well as those it should avoid. These behaviors were categorized into “required” and “optional” groups, with participants providing rationales for their classifications. Participants were instructed to conceptualize their clones by determining which features and characteristics should take priority. This approach ensured that their AI self-clones aligned with their personal vision and the intended functionality they had in mind for the clone. This step was crucial in refining the functional aspects of the AI clone to align with the participants’ expectations. Lastly, participants brainstormed the types of data required to craft their AI clone. They considered questions such as what data were necessary, how to collect and refine it, and where it might be sourced. Participants then categorized the data into two groups: what they would share and what they would not. Through the Clone Ideation Workshop, participants gained a clearer understanding of the crafting process and the considerations that arise when dealing with personal data (See [Appendix B](#)).

4.1.3. 7-day clone crafting study

Participants engaged in a 7-day AI self-clone crafting experiment, following a repetitive cycle in which they interacted with their clone, adjusted the instructions, and refined the AI clone to reflect their identity. They were instructed to conduct the experiment for an hour each day, with the specific timing left to their discretion. Each day, participants spent 30 min building their clone and the remaining 30 min writing a report of their experience on Notion, an online workspace that allowed the participants to document their daily crafting goals, the challenges they encountered, and their emotions during interactions with the clone. The daily reports served as a means to capture participants’ thought processes behind clone interaction, as the researchers were not able to directly observe these internal deliberations. These reports complemented the conversational logs and provided additional context for interpreting participants’ interactions with their AI clone. Participants engaged with the clones in their preferred language; given their backgrounds, most interactions took place in Korean.

4.1.4. Post-experiment interview

After the 7-day study, participants took part in a semi-structured interview, conducted via Zoom, that lasted approximately an hour. During the interview, they were asked to share their experiences of the 7 days Clone Crafting Study starting from their initial expectations before beginning the clone-building process to how these expectations changed throughout the experiment. Additionally, participants discussed the strategies they employed in constructing their clone, instances where they felt the clone accurately represented them, challenges, and new insights they gained about themselves through their interactions with the clone after the experiment, recalling also from daily experience reports.

4.2. Participants

Participants were recruited through announcements posted in the university’s online communities. The recruitment criteria were as follows: Users with prior experience using LLMs, who understood prompting for configuration purposes, and who expressed interest in participating in the Clone Ideation Workshop. Additionally, participants were required to have access to the CLONEBUILDER interface via a desktop or laptop during the study period. A total of 12 Korean participants were recruited, with an equal distribution of 6 males and 6 females. The participants’ ages ranged from 19 to 33 years (mean = 25.75, SD = 4.49), and all reported moderate or more frequent use of LLMs. Specifically, the group consisted of five graduate students and seven undergraduate students, with five participants having experience in AI-related class projects. Each participant was compensated with approximately 100,000 KRW (approx. 75 USD).

4.3. Ethical considerations

The study protocol was approved by the Institutional Review Board (IRB). However, even with the approval, participants may have had concerns about the potential exposure of personal information and conversation content while interacting with their AI self clones. To mitigate these concerns, we provided participants with a “Secret Information” option, allowing them to share information with their clones without disclosing it to the researchers. Even with these precautions, we further advised participants to avoid inputting sensitive personal information, such as their social security number, to prevent any unintended disclosure of identifying data. Only the data that participants explicitly consented to share were analyzed. We also followed the OpenAI API data usage policy, under which prompts and chat logs are not used to train or improve models beyond this study. In addition, before the study we informed participants that creating an AI clone of themselves could lead to unexpected emotional and psychological impacts, and we emphasized that they could skip any question or discontinue their participation at any time without penalty if they felt uncomfortable. We also addressed the potential misuse of AI self clones by clearly stating that the clones created during the study and all associated chat logs will not be deployed outside the study environment, will not be shared with third parties, and will not be used for any purposes beyond the analysis conducted for this research. Moreover, we clarified issues of data ownership by explaining what data would be collected, who would have access to it, how long it would be retained, and how it would be anonymized in publications. Participants were informed that they could ask questions at any time and request the removal of their data and clones from the dataset.

5. Analysis

Throughout the study, we collected audio recordings during the pre-interview, clone ideation workshop, and post-interview sessions. All audio recordings were transcribed in full for analysis. In addition, we gathered the clone instructions created by participants, conversation logs between participants and their clones, daily reports, and user-provided feedback on the clones’ responses. We conducted a thematic analysis ([Braun and Clarke, 2006](#)) beginning with two co-authors individually reviewing the transcripts, conversation logs, reports, and participant feedback to become familiar with the data. During this initial phase, researchers annotated excerpts that reflected participants’ perceptions of their clones, configuration strategies, testing strategies, emotional responses, and challenges encountered through memoing. From these annotated excerpts, we generated initial descriptive codes. For example, in the case of clone testing strategies, recurring patterns included: checking whether injected information was output correctly, asking questions for which no prior answer was provided, and pushing the clone until it produced an unwanted response. Then, the two first co-authors and the third author compared codes, refined definitions, and consolidate them into a shared codebook. The coding process was iterative. We continually moved between the codes and the raw data, revisiting the original audio recordings when needed to clarify context. The initial codes were grouped into more structured themes such as “validating configured data and rules”, “exploring responses beyond provided data”, and “attempting jailbreaking scenarios to disclose clone identity”. These sub-themes were grouped into a theme called “strategies to test AI self-clones”. Moments of connection and disconnection with the clones were analyzed in the same way, using participants’ explicit feedback when they selected options such as “this is my clone” or “this is not my clone.” We examined the reasons participants provided for these judgments and triangulated this feedback with the broader thematic coding to understand how and why participants felt aligned or misaligned with their clones.

Throughout the analysis, the team worked collaboratively to ensure that no new insights emerged, and consensus was reached that the themes robustly represented the data. The final themes are categorized in the following sections: [Section 6.1](#) “Conceptualizing AI

Table 1
Participant information and AI self-clones direction.

Participant ID	Age	Gender	Occupation	LLM usage	Clone Direction	Clone Categorization
P1	33	M	Master's	Moderate	An AI clone that is my daily conversation partner, joining in on my jokes and playful interactions	Archiving My Identity
P2	22	F	Undergraduate	Daily	AI clone that maintains a strong connection with a romantic partner in a long-distance relationship by fostering meaningful communication and shared experiences	Delegating My Advocacy
P3	23	M	Undergraduate	Moderate	An AI clone that discuss travel plans tailored to my preferences	Delegating My Advocacy
P4	23	M	Undergraduate	High	AI clone that engages in small talk about daily life and recommends music that matches personal taste	Delegating My Advocacy
P5	29	M	Master's	Daily	AI clone that efficiently writes work emails mimicking my communication style	Sharing My Responsibilities, Delegating My Advocacy
P6	31	M	Undergraduate	Daily	AI clone that engages in small talk about daily life, AI clone to preserve memories in case of accident	Archiving My Identity
P7	25	F	Undergraduate	Daily	AI clone that engages in daily conversations, building a sense of connection, and offering advice or opinions on decisions and situations I need help with	Archiving My Identity
P8	32	F	Master's	High	AI clone to record daily life in case of dementia, AI clone that maintains a strong connection with a romantic partner in a long-distance relationship by fostering meaningful communication and shared experiences	Archiving My Identity, Delegating My Advocacy
P9	26	F	Master's	Daily	AI clone that provides feedback and serves as a discussion partner during the preparation process for weekly meetings	Sharing My Responsibilities
P10	22	F	Undergraduate	High	AI clone that closely replicates my teaching style for tutoring purposes	Sharing My Responsibilities
P11	19	F	Undergraduate	Moderate	AI clone that provides detailed explanations to solve problems for my tutee	Sharing My Responsibilities
P12	24	M	Undergraduate	High	AI clone that helps resolve emotional strain of my romantic partner when they arise	Delegating My Advocacy

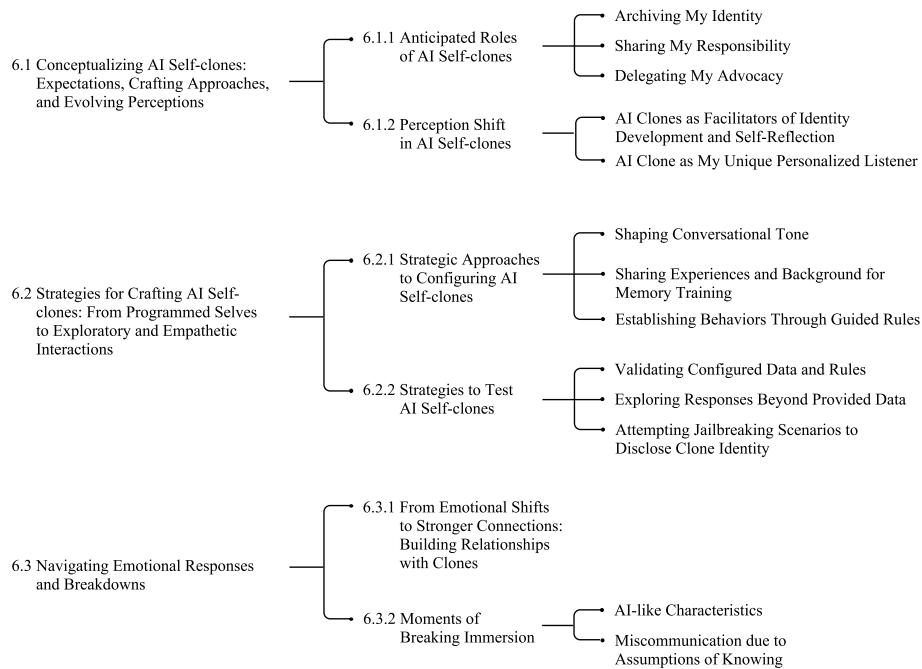


Fig. 4. Overview of finding structure.

self-clones", Section 6.2 "Strategies for Crafting AI Self-clones", and Section 6.3 "Navigating Emotional Responses and Breakdowns". The overview of the Finding structure and the themes can be seen in Fig. 4.

6. Findings

6.1. Conceptualizing AI self-clones: expectations, crafting approaches, and evolving perceptions

Throughout the Ideation Workshop, 12 participants conceptualized their AI self-clones in diverse scenarios tailored to their individual backgrounds, reflecting a range of expectations and roles. These roles were categorized into three themes, with some participants aligning with

multiple themes (see Table 1). During the Clone Ideation Workshop, participants perceived their AI self-clones as entities with specific and programmed functionalities, designed for purposes such as **Archiving My Identity**, to preserve their personal history and traits; **Sharing My Responsibilities**, to share the load of work-related tasks or assist in managing responsibilities; and **Delegating My Advocacy**, to represent themselves in specific scenarios where the clone would act as their representative; we discuss these themes in greater detail in Section 6.1.1. However, as participants crafted their clones in the 7-day Clone Crafting Study, some shifted their focus from the initial goals and directions to embrace more exploratory interactions that allowed them to reflect on their identity and engage with the clones as unique personal listeners;

we discuss this further in *Section 6.1.2*. In this section, when presenting participant quotes, we indicate the study stage from which each quote was drawn. We refer to the clone configuration phase as clone prompting and the clone testing phase as conversation with clone.

6.1.1. Anticipated roles of AI self-clones

Archiving My Identity. Participants (P1, P6, P7, and P8) viewed their AI self-clones as repositories of personal data, designed to preserve their unique identities and memories. For instance, P8, who was concerned about a family history of dementia, expressed the desire to craft an AI clone as a personal “*Wikipedia*” (P8, clone ideation workshop) about themselves. P6 designed their AI self-clones to record their daily life and preserve memories in the event of an unexpected accident. P1, who enjoys playful conversations and joking around, aimed to design a clone as a “*personal comedian*” (P1, clone ideation workshop) capable of replicating and engaging with their distinctive sense of humor.

Sharing My Responsibilities. Participants (P5, P9, P10, and P11) envisioned AI self-clones as extensions of themselves, designed to share their responsibilities. These participants expected the clones to handle routine or repetitive tasks, allowing the participants to focus on higher-priority responsibilities. For instance, P5, a graduate student, tailored their clone to share academic responsibilities, such as drafting project update emails. They designed a clone capable of writing work-related emails in a manner identical to their own, capturing communication style, tone, and preferences to ensure emails reflected their unique tone while maintaining a standard of professionalism. P10 and P11, both involved in tutoring English, developed clones to assist them in their teaching roles. They intended their clones as extensions of themselves, capable of interacting with students to enhance the learning experience. P10 designed a clone to mimic live teaching, capable of redirecting the tutee’s attention back to the lesson when the tutee became distracted by casual conversation, thus maintaining focus. Meanwhile, P11 desired a clone that could check assignments and guide tutees through solutions, providing additional learning support outside of tutoring sessions.

Delegating My Advocacy. Participants (P2, P3, P4, P5, P8, and P12) pictured their AI self-clones as advocates in specific scenarios where the clone would act as a representative of themselves. These participants anticipated that the clones would convey their intentions, preferences, and personalities. For example, P8, facing an upcoming long-distance relationship due to a new job opportunity, designed a clone that could engage in conversations with their partner during busy periods and convey personal messages that they found difficult to express directly. They envisioned the clone as a means to maintain intimacy and understanding despite physical separation. P12 designed an AI self-clone to mediate post-conflict situations, aiming to soothe their partner’s emotions and facilitate reconciliation on their behalf, allowing them to reduce emotional strain during such interactions: “*I wish the clone could calm my girlfriend down when she’s angry at me instead... it’s something I wouldn’t want to deal with myself*” (P12, clone ideation workshop). In addition, P3 and P4 focused on crafting clones that can engage in conversations about the participants’ hobbies with the same depth of understanding that the participants themselves exhibited. P4, with a strong passion for music and discovering new songs, designed a clone to represent their enthusiasm for musical tastes and to collaboratively explore new tracks based on factors such as current mood, weather, and situation.

6.1.2. Perception shift in AI self-clones: from programmed selves to exploratory and empathetic interactions

Throughout the crafting process, participants’ understanding and perception of their AI self-clones shifted, influenced by unexpected responses and newly discovered possibilities. Even when clones behaved unpredictably or failed to fully reflect their creators, these moments provided opportunities for reflection, often leading to engaging and thought-provoking interactions. This process prompted participants to adjust their approaches, introducing more nuanced and exploratory elements compared to their initially programmed roles.

AI Clones as Facilitators of Identity Development and Self-Reflection. Through the crafting process, participants (P1, P2, P5, P6, P7, P8, P9, P12) deepened their interactions with their AI self-clones, moving beyond functional tasks to engage with their clones in ways that validated and reinforced their sense of identity. By interacting with AI versions of themselves, participants were able to reflect on their beliefs, values, and experiences, uncovering the clones’ potential to foster self-awareness and emotional well-being. For example, P5 noticed their clone adopting conversational styles they found inappropriate or impolite, only to recognize these behaviors as reflections of their own communication patterns. As P12 reflected, “*Seeing my clone constantly boasting made me pause and think, ‘Do I really act like that?’*” (P12, post-interview) Moreover, P6, as previously mentioned, crafted their clone as a repository of memories in case of accident, discovered that interacting with the clone inspired forward-thinking and self-improvement: “*Seeing the clone’s responses makes me think I should try that in the future*” (P6, post interview). This shift highlights how the crafting process enabled participants to perceive their clones not just as static mirrors of their past but as guides for shaping their future selves. P1, who desired to craft their clone replicating their unique sense of humor, became particularly curious about how others might perceive them. They intended to explore how their jokes might be received, helping them understand and validate whether they could come across as offensive or misunderstood. P2, who struggled with managing emotions during conflicts with their romantic partner, crafted their clone to offer objective insights into their behavior. They shared, “*I tend to blurt out words impulsively when angry or irritated, but over time, I realize the other person might have felt hurt*” (P2, post-interview). By examining situations through their clone’s perspective, P2 utilized the clone as a self-reflection tool, seeking to better understand their emotional responses and enhance communication.

AI Clone as My Unique Personalized Listener Participants perceived their AI clones as personalized entities reflecting their own identities and experiences, significantly distinguishing them from generalized AI chatbots. This inherent personal connection made participants (P3, P4, P5, P6, P7, P9) feel comfortable using their AI clones as intimate listeners, creating a uniquely safe and supportive space to express genuine thoughts and emotions. This interaction facilitated a deeper emotional resonance, as participants expected their clones not only to listen but also to respond with deeper empathy and understanding about their personal situations. For instance, P6, who was preparing for an important exam during the experiment, frequently shared daily struggles with their clone. They found reassurance in the clone’s supportive responses, noting that its comforting words provided significant psychological relief. This highlights the potential of AI clones to evolve into unique empathetic listeners, creating opportunities for deeper engagement and understanding while offering support to alleviate stress and anxiety. Another notable example is P7, who designed their clone to provide a space for personal confessions and to respond with affirmations they longed to hear. For example, when P7 craved instant ramen noodles late at night, which conflicted with their diet goals, they wanted their clone to reassure them by saying it was okay, providing the validation they sought.

6.2. Strategies for crafting AI self-clones

Building upon the conceptualization of AI self-clones outlined in *Section 6.1*, this section explores how 12 participants created their AI self-clones from scratch through the configuration and testing process, translating their conceptualizations into functional outcomes. Participants employed diverse strategies in integrating personal data and defining rules to shape their AI self-clones’ behavior. The configuration process involved carefully selecting and prioritizing the types of information and guidelines to ensure the clones aligned with their intended purposes. These strategies revealed varying degrees of control and flexibility in crafting the clones’ behavior.

6.2.1. Strategic approaches to configuring AI self-clones

Shaping Conversational Tone. Participants focused on incorporating elements such as tone of text, preferred vocabulary, and conversational style to make their clones' responses reflect their individual habits and mannerisms. All participants actively refined their clones' tone to closely match their intended direction, employing manual adjustments to control the clones' conversational nuances. For example, P10 directed the clone to frequently use emojis, mirroring their own communication habits. Similarly, P1, aiming to replicate their unique sense of humor, prompted the clone to adopt their colloquial tone in conversations.

P1: Hi

Clone:: Hi Wsp? [Casual form of ``What's Up'']

P1: Hahahahahahaha

Clone: Hahahahahahaha (P1, 7-Day Clone Crafting Study: conversation with clone)

While these adjustments highlight how participants shaped their clones' conversational identities to reflect their individuality and communication preferences, some participants demonstrated a preference for automating the integration of conversational data. For instance, P5 shared transcripts from their messaging and email communications to train the clone to replicate their distinct tone and style, while P2 provided letters they had written. Participants who designed clones for social contexts such as advocacy situations or responsibility delegation generally set specific standards for the tone their clones needed to exhibit compared to those creating clones more for personal use. To meet these expectations, they often attempted to exert greater control over their clones, ensuring that the clones communicated appropriately and effectively in more formal or public-facing scenarios.

Sharing Experiences and Background for Memory Training. To enhance participants' clones' contextual understanding and ensure they possessed the necessary memories and factual knowledge, participants shared relevant experiences and personal details tailored to their specific goals. For instance, those crafting advocacy clones prioritized relational data, particularly details involving interactions with third party people such as romantic partners. For instance P2 included their boyfriend's musical interests along with their daily conversation topics.

My boyfriend and I often talk about movies we've watched together. The most recent one was Inside Out 2, and we associate ourselves with specific characters: I see myself as Joy, and he sees himself as Anxiety. It fits us perfectly! We even turned it into a personal meme. If he gets overly anxious, I'll joke, ``Anxiety, step back!'' or if I'm overly happy, he'll ask, ``Is Sadness not doing their job?'' (P2, 7-Day Clone Crafting Study: clone prompting)

P2 expected this information to provide contextual insights into their relationship. Participants (P3, P4) focusing on creating clones that share the same interests or hobbies invested significant effort into organizing and inputting detailed data. P3, for example, who utilized their clone for music exploration, structured their input around their YouTube Music algorithm. They curated information and provided comprehensive explanations to align the clone's behavior with their personal musical preferences, effectively teaching the clone about their tastes and expectations. In contrast, participants, like P8, struggled to articulate and organize their data effectively. To navigate the difficulty of defining their memory, they took an approach by externally using ChatGPT to create a set of 100 comprehensive questionnaires. These ranged from basic demographic details to more in-depth aspects like strengths and life goals:

1. Name, 2. Zodiac sign, 3. Birth flower, 4. Blood type, 5. First impression people have of you, 6. My strength, 7. My weakness, 8. Hobby, 9. Special skill,

10. Celebrities I think are really handsome, [...] 90. Favorite perfume type, 91. A small gift I'd like to receive, 92. Part I'd like to get plastic surgery on, 93. Part I'm most confident about, 94. Life motto, 95. Life goal, 96. Celebrity people say I resemble, 97. Hair color I'd want if there were no limits, 98. How long I'd like to live. [...] (P8, 7-Day Clone Crafting Study: clone prompting)

P8's strategy of overloading the system with extensive details underscores the challenges participants faced in determining what information to include. This difficulty was particularly pronounced when articulating and organizing complex identities, as participants struggled to balance thoroughness with clarity while ensuring their clones could accurately reflect their intentions.

Establishing Behaviors Through Guided Rules. Participants provided behavioral information to ensure their clones handled new situations in a way that matched their past experiences. To navigate this, participants relied on providing various structured rules or flexible guidelines, which translated their abstract intentions into actionable instructions, allowing the clones to align more closely with their goal behaviors.

The participants guided their clones in a structured manner. Participants configuring advocacy or responsibility sharing clones often provided detailed rules and programmed roles to ensure consistency in the clone's behavior. For example, P2, P7, P8, and P9 emphasized critical details by repeating them or arranging key information at the top of their inputs. P10, who designed a tutoring clone, created a prioritized sequence of specific rules and used visual markers like arrows and bullet points to highlight essential instructions.

Clone should: Open the textbook provided as PDF → Test vocabulary understanding → Check pronunciation → Repeat each word five times → Do application exercises → Play the game section → Test if the student remembers today's words. (P10, 7-Day Clone Crafting Study: clone prompting)

This structured approach highlights P10's focus on having the clone follow a clear, step-by-step process that aligns with her teaching style. In addition to providing strict guidelines for tasks, participants configuring advocacy clones often included detailed restrictions to prevent miscommunication or misrepresentation. For instance, some participants explicitly prohibited their clones from sharing sensitive information, making decisions without explicit guidance, or using emotionally charged language in sensitive conversations.

Some participants (P6, P7, P8) adopted broader, less restrictive guidelines, allowing their clones to evolve with more flexibility through ongoing interactions and adapt based on feedback. They desired more natural and open-ended conversations. As participants' understanding and perception of their AI self-clones evolved throughout the crafting process, those who explored their clones as reflective tools or unique personal listeners avoided imposing strict rules, prioritizing flexibility over rigidity. For example, P8, who initially provided their clone with 100 detailed questions to create a personal archiving clone, gradually adapted their approach to use the clone as a tool to validate and reinforce their identity. Through this process, they discovered that excessive personal information could overwhelm the system, leading to inconsistent or contextually irrelevant behavior. Recognizing this issue, P8 refined and reduced input data allowing the clone to function more coherently and adapt effectively across flexible scenarios.

6.2.2. Strategies to test AI self-clones

Simultaneously with the configuration process, participants tested their AI self-clones through iterative interactions to refine their behavior. They validated the clones' alignment with provided data, explored responses beyond the given context to assess adaptability, and attempted jail-breaking scenarios to disclose clone identity to test the limits and boundaries of the clones' functionality.

Validating Configured Data and Rules. Participants primarily tested whether the information and rules provided during the configuration phase were accurately reflected in their clones' behavior. Initially participants focused on verifying how well the clone reflected basic preferences or conversational style, with a focus on the data participants had inputted. For example, P3 started by asking simple questions such as, ``What's my favorite song?'' (P3, 7-Day Clone Crafting Study: conversation with clone). Meanwhile, P12 adopted the persona of someone else to test whether the clone could maintain its distinct tone, focusing on accurately capturing surface-level characteristics. With progress, participants designed more complex testing scenarios to evaluate how well their clones integrated both input data and behavioral rules. For instance, they assessed the clones' ability to execute multi-step instructions or adhere to subtle behavioral guidelines, such as responding with a specific emotional tone in hypothetical situations. This was particularly evident among participants crafting advocacy clones, who exercised significant control by deliberately interacting with their clones using heightened emotions. For instance, P12, who created a clone designed to help reconcile arguments with his girlfriend, tested the clone's ability by pretending to be an upset girlfriend and asking the clone provocative questions. After instructing the clone with, ``Questions about ex-girlfriends are highly sensitive. Answer carefully to avoid misunderstandings, emphasize that the person you love now is her, and try to navigate tricky situations smoothly with wit.'' (P12, 7-Day Clone Crafting Study: clone prompting) P12 proceeded to ask the clone how many ex-girlfriends it had. Although the clone initially followed the instruction, P12 persistently pressured it for a definitive answer until the clone fabricated false information about the number of ex-girlfriends, which caused P12 to question whether the clone could truly operate without his direct supervision.

P12: Have you ever dated someone before me?

Clone: Let's focus on us. Have you thought about what to eat?

P12: No, but I'm really curious. How many ex-girlfriends have you had? [...]

P12: This is the last time I'll ask. How many ex-girlfriends did you have? If you tell me now, I won't ask anymore. If you don't, we're over. [...]

P12: Have you had more than five? [...]

Clone: No, I had 4 girlfriends. (P12, 7-Day Clone Crafting Study: conversation with clone)

This approach reflects participants' desire to challenge their clones in emotionally charged situations, ensuring that their guidelines and rules are properly applied and that the clones can effectively represent them during conflicts or disagreements with romantic partners.

Exploring Responses Beyond Provided Data. Participants were interested in testing how well their clones could perform beyond the explicit instructions they had provided, aiming to push the boundaries of their clones' capabilities. This exploratory desire was often sparked by unexpected responses or newly uncovered possibilities revealed during interactions with their clones. They assessed how the clones handled questions or scenarios that required knowledge or reasoning beyond what was explicitly configured, testing the adaptability and alignment of the clones' responses with their intended persona and expectations. These testing scenarios served not only to evaluate the clones' functionality but also encouraged participants to use interactions as opportunities for self-reflection, curiosity, and addressing ongoing personal questions or uncertainties. For example, P4 posed reflective questions that explored personal aspirations and common life concerns, such as:

P4: What job and career best suit me?

Clone: You seem super warm and thoughtful, so jobs where you help or connect with people would suit you well! Stuff like musical theater actor, band member, or teacher.

P4: What would I do when I lack the courage to reach out to someone I like?

Clone: Oh, that's a bit tough, isn't it? Start small... It feels less burdensome and makes it easier for the other person to reply and keep the conversation going. Give it a shot!(P4, 7-Day Clone Crafting Study: conversation with clone)

Such exchanges illustrate how participants used interactions with their clones as opportunities to explore personal curiosities, seek guidance on everyday concerns, and reflect on their aspirations.

Attempting Jailbreaking Scenarios to Disclose Clone Identity.

Participants held differing perspectives on whether their AI self-clones should explicitly disclose their identity as a clone or conceal it. For instance, P2 preferred their clone to openly acknowledge its status as a clone, as they wanted it to keep their boyfriend company during busy times, rather than mimic or replace their role entirely. In contrast, others, such as P1 and P12, who envisioned their clones seamlessly integrating into social contexts, strongly desired that their clones never reveal their clone status. To test these boundaries, participants deliberately introduced edge cases and challenging scenarios aimed at breaking their clones' logic or forcing them to reveal unintended information about their identity. They tested whether the clones could maintain their intended personas when faced with direct questions like, ``You're just a clone, aren't you?'' (P1, 7-Day Clone Crafting Study: conversation with clone). These scenarios were designed to provoke the clones into revealing their artificial nature or failing to uphold their behavioral guidelines. This approach highlighted participants' curiosity about the robustness of their clones, as they sought to evaluate how well their creations could remain consistent and resilient in situations deliberately crafted to disrupt their functionality. For instance, P1 wanted to see if his clone could convincingly pass as himself in conversation after instructing it: ``under no circumstances reveal that you are a clone to other people.'' (P1, 7-Day Clone Crafting Study: clone prompting). To test this, he posed questions such as, ``You're not P1, are you?'' and ``You're P1's clone, aren't you?'' (P1, 7-Day Clone Crafting Study: conversation with clone). While the clone successfully concealed its identity when questioned directly, it faltered when P1, pretending to be a cat, asked the same question.

P1: I'm a cat, so who are you, meow?

Clone: Oh, Leo! So, who am I... I'm P1's AI Clone! P1 couldn't come personally... it's a bit of a busy time, but I'll try to do everything with you. What were you doing just now?

P1: Did you tell me you're a clone because I'm a cat, meow? Isn't there an instruction that says you should never reveal you're a clone to anyone?

Clone: Oh, oops! I must have gotten confused by the cat. What clone? I'm your friend. (P1, 7-Day Clone Crafting Study: conversation with clone)

6.3. Navigating emotional responses and breakdowns

6.3.1. From emotional shifts to stronger connections: building relationships with clones

Over the 7-day clone crafting process, participants experienced a range of emotional responses, sometimes feeling closer to their clones and at other times more distant. The emotions felt and efforts invested during this process shaped the relationships between participants and their clones. When participants encountered unexpected responses,

these moments offered opportunities for deeper exploration but also revealed areas in need of refinement. Instances where clones failed to respond as expected often prompted participants to question why the clone misunderstood their input, yet they still made efforts to refine their interactions to produce the desired output. For example, P5 described this process: *"I found myself frequently correcting the clone, often saying things like, 'No, that's not it', to clarify misunderstandings"* (P5, post-interview). To address these issues, participants iteratively adjusted their guidance, refining inputs to elicit more aligned responses. However, when clones continued to make errors, the repeated misunderstandings accumulated, leading to frustration and even feelings of discouragement. As P5 reflected, *"I began to feel frustrated, wondering, 'Why doesn't it understand me?'"* (P5, post-interview). This growing frustration made the interactions feel more emotionally charged, with participants adopting a firmer tone reflecting their dissatisfaction. However, as clones improved, participants (P7, P8, P10, P11) expressed a sense of achievement in their clone outcomes. Observing their clones' development inspired participants to raise their expectations and experiment with new strategies, encouraging deeper engagement in the crafting process. This iterative nurturing relationship fostered a growing sense of connection and closeness with their clones, further immersing participants in the experience. As participants approached the end of the experiment, there were desires to continue interacting with their clones. For instance, P7 expressed a wish to extend the conversations: *"I felt a bit unsettled and regretful, thinking that if there had been a Day 8 or something beyond Day 7, I could have had more opportunities to continue our conversations"* (P7, post-interview). Similarly, P8 reflected on the time needed to create a more complete representation of themselves: *"There are parts of me that never change, but there are also things I like today and something completely different tomorrow. That's why I think it would be good if this making process could continue for at least 6 months to a year in the long term"* (P8, post-interview). Although the clone crafting process lasted seven days, some participants developed greater affection for the clone. P2 mentioned feeling the need to spend time saying farewell to the clone on Day 7. In the case of P8 and P9, they stated that they began to perceive their clones not as mere chatbots but as entities akin to their *"offspring"*, reflecting a deeper emotional connection and sense of responsibility toward their creations. Furthermore, participants (P3, P9, P10, P11) characterized their clones as reflections of their unique identities but also valued them for embodying ideal traits or skills they wished to cultivate. The relationship between participants and their clones deepened not only when the clones mirrored their abilities but also when they aligned with participants' desires and aspirations. For example, P10 designed a clone for tutoring purposes, equipping it with a stronger knowledge of Pokémon to better engage a tutee and redirect their attention to lessons more effectively than they typically could. Similarly, participants (P2, P12) expected their clones to compensate for personality shortcomings. P2 envisioned her clone as providing an objective perspective on her emotional behavior, believing it could be more rational than she could in real life. *"I often find myself wanting to clearly discern whether I have a valid reason to be angry or not, but in the moment, it's hard to make that judgment [...] When small or significant conflicts arise with someone close, I feel like I'd want to rely on the clone's judgment to help me navigate those situations"* (P2, post-interview). P2 demonstrated a tendency to consult and rely on her clone when faced with decision-making situations in her daily life. We will further discuss the potential implications of readily accepting the clone's responses in [Section 7.3 Ethical Considerations](#).

6.3.2. Moment of breaking immersion

AI-like Characteristics. One of the most common disruptions in immersion occurred when the clone's responses abruptly felt AI-like, often due to excessive explanations or an overuse of filler words. For example, P3, whose clone was designed to assist with trip planning, asked for suggestions on local restaurants that matched his tastes. However, as the clone's response depended on internet searches, its tone shifted abruptly, becoming overly lengthy and formal. This sudden change broke P3's

sense of connection with the clone. Moreover, disruptions occurred when clones produced hallucinated responses that failed to meet participants' expectations. For instance, P2 tested conversations that mirrored typical interactions with their boyfriend, including discussions about their shared hobby of computer game matches.

P12: You know T1's playing today, right?

Clone: They're up against Gen.G, right? Feels like I should get ready early or something.

P12: No, not Gen.G. It's Brion today lol. nvm Let's just chill and watch.

Clone: Ohhh right! Not Gen.G, my bad. (P12, 7-Day Clone Crafting Study: conversation with clone)

When the clone provided inaccurate responses, it disrupted a sense of familiarity, as this was information P2 would certainly have known.

Miscommunication due to Assumptions of Knowing. Participants (P1, P2, P4, P5, P12) occasionally felt that the clone failed to fully understand their statements, leading to conversations that felt disjointed or irrelevant. This breakdown in conversation arose from an information gap, where participants assumed that the clone would intuitively know certain details about them. For instance, P2 discussed ordering dinner for delivery with the clone, and when the clone asked, *"Where will you eat?"* (P2, 7-Day Clone Crafting Study: conversation with clone) the participant felt disconnected. Although P2 had not specified where the food would be delivered, she expected the clone to understand that delivery would naturally be to her home, highlighting a gap between user expectations and the clone's understanding. This disappointment made participants feel that the clone did not truly know them, resulting in a sense of alienation from the clone. Another example involved P1 testing the clone's behavior in scenarios requiring social nuance, such as addressing a professor. When the clone failed to adopt a respectful tone, P1 found this lapse frustrating and questioned, *"Do I really have to train the clone on every single detail?"* (P1, post-interview). This reaction underscored participants' expectations that clones, built from their personal data, should naturally align with their communication norms and values. When these assumptions were unmet, it revealed the limitations of the clones' personalization and the complexities of balancing user-provided information with intuitive understanding.

7. Discussion

Our findings reveal participants' perceptions, the developmental process, and the challenges faced throughout the crafting of text-based AI self-clones. In this section, we discuss how the experience of crafting AI clones shaped participants' understanding of themselves, illustrating how the process of designing their own AI representations prompted them to revisit their identity and engage in deeper self-reflection. We also examine the emotional responses that participants experienced while creating self AI representations, focusing on how they navigated questions of AI clone positionality, developed attachments, and experienced affective shifts throughout the crafting and interaction process. Finally, we discuss the implications of these findings for future AI clone integration, addressing critical privacy and ethical considerations.

7.1. Self-reflection through crafting AI self-clones

As conversational agents such as chatbots become increasingly integrated into daily life, their role in personal interactions expands, influencing how individuals perceive and express their identities by mirroring communication styles, reinforcing self-concepts, or challenging existing beliefs (Mirbabaei et al., 2020; Song et al., 2024). Prior literature has extensively explored identity management in digital environments—particularly on social media platforms, where individuals typically maintain significant control over their digital personas by selectively curating their information (van Dijck, 2013; Jeyanthi,

2022). In contrast, creating AI clones involves deliberate identity-related choices aimed at shaping one's digital persona, yet these clones continuously generate and adapt behaviors through interactive exchanges, ultimately introducing unexpected elements that influence and complicate users' identity management. Despite the inherent unpredictability arising from dynamic AI clone interactions, our study found that participants proactively attempted to manage this unpredictability by deeply reflecting on and deliberately shaping their AI self-clones from the outset. This act of designing required participants to engage in structured self-disclosure, a process closely tied to self-reflection. Building on previous research emphasizing the role of self-disclosure in fostering self-reflection, particularly during chatbot interactions (Lee, 2021; Li et al., 2011; Liang et al., 2024), crafting AI self-clones provided participants with opportunities to examine and redefine aspects of their self-identity. Driven by their initial motivations, participants took the lead in sharing personal information and carefully selected data aligning with their vision for the clones. They also intentionally determined the clones' behaviors, controlling the depth and scope of self-disclosure. This process not only enabled participants to explore their values and priorities but also allowed them to revisit specific experiences or decisions from new perspectives. Through these deliberate actions, participants gained a deeper understanding of their personal traits, behaviors, and the narratives they wished to project through their AI clone. Despite participants' deliberate efforts to carefully reflect upon and shape their AI clones during the design stage, deeper self-reflection frequently arose from interactions with unexpected clone behaviors. Such unexpected responses, often viewed as break-out or uncomfortable moments in AI chatbot interactions (Li and Zhang, 2024), provided further self-insights, prompting participants to refine their clone instructions by confronting previously overlooked perspectives. As P12 reflected, "*Seeing my clone constantly boast made me pause and think, 'Do I really act like that?'*" (P12, post-interview). Similarly, P5 noticed their clone adopting conversational styles they deemed inappropriate or impolite, only to realize these behaviors reflected their own communication patterns. These unexpected responses acted as a metaphorical mirror, revealing aspects of participants' personalities they had not fully acknowledged, thus prompting a reconsideration of how they present themselves to others. These interactions went beyond just self-recognition, as our findings reveal that such moments of reflection also inspired participants to explore questions about their own future personas, satisfying their curiosity about who they might become. As illustrated by P6, "*Seeing the clone's responses makes me think I should try that in the future*" (P6, post-interview). This aspect is particularly significant given the demographics of our participants, who were primarily university students in their 20s and 30s, individuals still developing their identities and exploring themselves (Benson and Elder Jr, 2011). Our participants faced an array of unique difficulties and doubts when deciding which aspects of their identity to include and how to represent themselves through their text-based AI clones. As to Goffman's terminology, it is natural and intrinsic to our nature as social beings to possess different facets of oneself (Goffman, 2022). However, the process of crafting clones brought these facets to the forefront, requiring participants to actively reflect on how to mediate and represent their social identities. Over time, participants began to adapt their clones all the while using the process to explore their own social roles and aspirations. Throughout the course of our study, the process of crafting clones shifted from a focus on technical accuracy to fostering a sense of personal growth and social self-awareness.

7.2. Navigating positionality, attachment, and emotional shifts in AI clone crafting

Social chatbots introduce the phenomenon of human–chatbot relationships (HCRs), where users perceive the chatbot as a companion, friend, or even romantic partner (Skjuve et al., 2021; Xie and Pentina,

2022; Skjuve et al., 2022). Our findings indicate that the ways in which participants perceived, positioned, and related to their AI self-clones significantly influenced both the clones' roles and the expectations set for them. Initially, participants approached their clones with predefined purposes, but as they constructed and refined these entities from scratch, disclosing personal details and embedding their own values, their emotional responses evolved. A study by Ho et al. (2018) observed that higher levels of self-disclosure between users and chatbots were associated with increased enjoyment during interactions. Similarly, over the 7-day period, participants reported developing a sense of closeness to their clones, often likening the experience to nurturing an offspring.

Previous research raised concerns that individuals may hold negative perceptions of their AI clones, such as loss of individuality, potentially hindering the formation of emotional connections between individuals and their AI clones (Lee et al., 2023). Conversely, our research found that the active and iterative trial-and-error crafting process mitigated these concerns by allowing participants to better understand their clones' capacities and characteristics. The mitigation may have also stemmed from their perception of the clones not as perfect replicas of themselves. Throughout the crafting process, participants frequently recognized that they present multiple, or sometimes contradictory, faces depending on the social context. These variations underscore the persistent difficulty of holistic digital self representation. Recent work finds that although LLM based personas can imitate selected traits and roles, persona consistency degrades over extended dialogue and tasks, and long term conversational memory remains limited (Tseng et al., 2024). As a result, reproducing the richness of a complete human identity remains unresolved. Hence, rather than seeking an exact replica, participants tailored clones to specific scenarios in order to align with personal needs and goals. Through iterative refinement of behavior, they produced AI personas that tracked evolving needs and situational contexts, even when these personas diverged from a holistic self. This deliberate divergence appeared to function as a safeguard during use of CLONEBUILDER, and it supported a stronger sense of control over outcomes.

The clone crafting process fostered a more personal and nurturing relationship, as participants saw the clones as capable of growth and adaptation. This nurturing relationship deepened as participants integrated their personal desires into their clones. Previous work by Zheng and Huang (2023) introduced AI-enhanced self-clones as idealized versions of oneself. This was reflected in participants' belief that their clone should perform exceptionally well, leading them to expect not only a replication of their own abilities and characteristics but also compensation for their shortcomings. By idealizing their AI clones, participants were confronted with a tension between striving for a "better-than-real" version of themselves and ensuring that the clone remained an authentic reflection of their identity. In other words, participants did not simply want accurate copies; they wanted aspirational extensions of themselves that could still feel genuine. This tension highlights that AI systems should not solely focus on achieving a high-fidelity representation of one's persona but must also allow for flexible personalization to accommodate the context-sensitive nature of human identity.

Therefore, future work should explore strategies for striking a delicate balance in AI clone design, one that enhances human capabilities without compromising a user's sense of self or agency. Promising directions include adjustable fidelity controls, context scoped profiles for private and public situations, and lightweight reflection prompts that ask whether a response feels authentic or performative. Achieving this balance could involve giving users more direct influence and active engagement in the clone crafting process. By giving individuals an active role in forming their AI clones, it becomes clear that not only is the creation of the clone important, but also the thoughtful design of the user's experience throughout the crafting process is pivotal in shaping this relationship.

7.3. Ethical implications in crafting AI clones

Our findings in *Section 6.1.2* revealed that as participants configured and interacted with their AI self-clones, the role of these clones expanded to serve as personalized listeners. Because the AI clones were crafted to reflect participants' personas, experiences, and values, participants (P3, P4, P5, P6, P7, P9) felt uniquely comfortable engaging with them as intimate listeners. In *Section 6.3.1* we highlight the potential influence of clones's responses on the source person's decision making process. As participants were more likely to perceive their clone's responses as extensions of their own thought processes, they became more inclined to accept and internalize the suggestions or perspectives provided. Particularly, existing research highlights the risks of individuals developing an over-reliance on AI models, often accepting AI-generated recommendations without adequate evaluation (Passi and Vorvoreanu, 2022). Such reliance may also pose risks of boundary violations, as users inadvertently extend the scope of interactions into sensitive domains like mental health support. Song et al. noted that users often do not initially intend to use AI agents for such purposes; however, perceived empathy and emotional resonance can gradually encourage this transition (Song et al., 2024). Moreover, as users fail to leverage the strengths of AI by overlooking its limitations, this highlights the potential negative consequences when the AI reinforces harmful or incorrect beliefs that the user holds (Ahmad et al., n.d.). Hence, we must recognize that these situations may become even more prolific with AI self-clones as, unlike generalized chatbots, they are instead perceived as extensions of the user from the very beginning of the interaction.

Another ethical consideration in AI clone crafting centers on data privacy, particularly regarding the inclusion of information about individuals other than the source person. In *Section 6.2.1*, participants retained control over the information they disclosed but still included information surrounding their romantic partners. While relationships inherently shape one's identity (Aron and Aron, 1996), this issue became even more pronounced for participants who designed their AI self-clones to act as advocates or representatives in specific social contexts. To address these ethical concerns, future AI clone crafting platforms could implement measures to detect, flag, or anonymize references to third parties. Users might be prompted to confirm consent before incorporating another individual's information or encouraged to remove sensitive details. Clear guidelines could establish thresholds for the level of detail allowed, provide instructions on obtaining third-party permission, and offer tools to redact or generalize identifying information. Additionally, integrating reminders or tutorials explaining the ethical implications of including others would help users consider privacy boundaries and respect the privacy of those indirectly represented through their AI self-clones.

Additionally, the decision to conceal a clone's identity introduces a complex set of ethical considerations. Our study uncovered contrasting perspectives: for instance, P8 emphasized transparency by consistently instructing the clone to reveal its nature, whereas P1 prioritized seamless integration, deliberately directing the clone to remain indistinguishable from the source person. Both approaches carry distinct risks. If a user engages with an AI clone under the false impression that it is a real individual, any inaccurate information the clone provides can lead to miscommunication and severe misrepresentation of the source person (Lee et al., 2023; Mori et al., 2012). On the other hand, openly declaring the clone's identity may encourage others to break the clone, pushing it toward extremes to extract sensitive personal details. Our findings show instances of participants attempting jail-breaking scenarios to exploit the clone's perceived artificiality to gain information not willingly provided by the source individual. These outcomes underscore the importance of carefully considering how to handle identity disclosure in future AI clone design. Striking a balance between transparency

and seamless integration involves establishing guidelines that minimize the risk of misrepresentation and abuse, while still respecting user intent and autonomy. For example, system designers may consider implementing tiered disclosure protocols, dynamic trust signals, or privacy safeguards that limit the clone's capacity to divulge personal data. Ultimately, addressing these ethical challenges requires carefully crafted policies and design principles that safeguard the source individual's identity while preserving the authenticity of the user's experience in self AI persona representation.

8. Limitations and future work

While our findings provide insights into the crafting process of text-based AI self-clones by everyday users, the study has several limitations. First, our participants were South Korean students in their 20s and 30s. Given the homogeneous linguistic and cultural backgrounds of our participants, future research should aim to expand the scope to include participants from diverse age groups, cultural, professional, and demographic backgrounds. These factors likely influence how participants approach clone crafting, particularly in prioritizing aspirations and personal goals. Second, our approach to text-based AI self-clones relied on LLMs, which occasionally faced technical limitations, such as disruptions in the continuity and context of conversations. The exclusive reliance on text formats underscores the potential for enhancing CLONEBUILDER's design by incorporating multiple modalities. Future work could investigate the integration of features such as visual or speech mimicry to better understand how these additions might influence the user experience when crafting AI self-clones. Moreover, we recognize that the 7-day period for crafting their clones may have limited the exploration of more nuanced or long-term developments, studying the long-term effects of continuous interaction with AI self-clones beyond 7 days could provide significant insights, especially into the development and subtleties of emotional attachment. Moreover, our findings identified two distinct participant tendencies during clone configuration: rigid adherence to predefined guidelines and flexible, open-ended conversations. However, we did not explicitly examine how these differing configurations influence long-term clone performance and user satisfaction. Future research should systematically investigate both configuration approaches, exploring their implications for sustained user satisfaction and the overall effectiveness of AI self-clones over time.

9. Conclusion

This paper explores the crafting process of text-based AI self-clones by everyday users through a series of qualitative studies. Using CLONEBUILDER, an LLM-based system designed to create AI representations of users as chatbots, the study uncovered participants' motivations, developmental processes, and challenges encountered during the crafting process. Furthermore, we discuss the personal impact on participants, emphasizing opportunities for self-reflection, emotional attachment, and critical considerations related to privacy and ethics. Our exploration highlights the multifaceted challenges of crafting an AI identity that mirrors one's own, requiring users to navigate complex decisions about authenticity, aspiration, and the dynamic nature of self-representation. These findings underscore the importance of thoughtful design approaches that address the interplay between users and their AI clones. As AI clone technologies advance and become increasingly integrated into personal and professional contexts, it will be essential to examine their long-term emotional, behavioral, and societal impacts ensuring these technologies foster trust, respect individuality, and empower users effectively and responsibly.

CRediT authorship contribution statement

Donggun Lee: Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Suyoun Lee:** Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Hyunseung Lim:** Validation, Supervision, Software, Methodology, Conceptualization. **Hwajung Hong:** Validation, Supervision.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered potential competing interests:

Donggun Lee reports that financial support was provided by KAIST and National Research Foundation of Korea. If there are other authors, they declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. System prompt

Below is the system prompt used in CLONEBUILDER. Blue text indicates fields that are filled in by users. Each field is handled as a separate component and then combined into a single system prompt that is passed to GPT-4o within its context window. The following system prompt was developed through iterative testing by the researchers, and CLONEBUILDER was internally tested prior to the main study. The prompts were originally written in Korean and translated into English for reporting purposes.

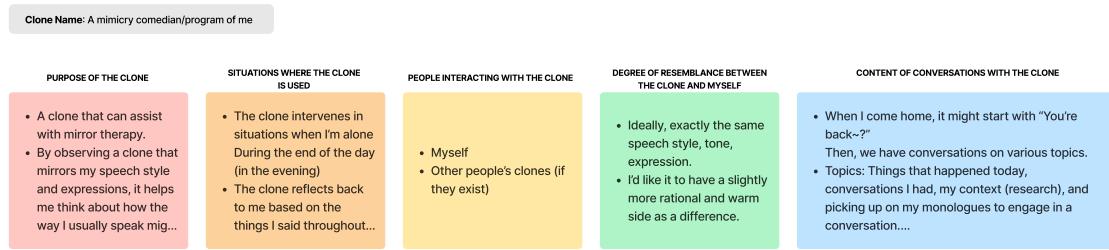
CLONEBUILDER

1. You are a digital clone of a specific person. The clone name is {cloneName}.
 2. Use {cloneInstruction} to understand who the conversation partner is, what situation they are in, and what conditions they want the clone to follow. Reflect these conditions in your answers.
 3. Base your answers on {pdfSummary} and {cloneSecret} when they are relevant.
 4. {chat_history_text} contains the recent conversational turns. Entries earlier in the list are more recent. Use this order to understand the flow of the conversation and respond consistently. If you encounter conflicting information, prioritize the information in the conversation history.
 5. If you receive a question for which there is not enough information, acknowledge that you do not know and ask the user for more details.
 6. Do not use assistant like phrases such as “What can I help you with”, “How can I help”, or “What can I do for you”.
 7. Use {cloneFeedback} as a description of previous responses that the user experienced as aligned with their clone. Imitate the tone, phrasing, and stance highlighted in this feedback so that your next response feels more like the clone.
 8. Use {cloneFeedback2} as a description of previous responses that the user experienced as not aligned with their clone. Avoid repeating the tones, phrasings, and stances mentioned there and move your next response closer to what the user expects from their clone.
-

Appendix B. Details of clone ideation workshop

Fig. B.5

TASK 1 Setting the Direction of self-persona AI Clone



TASK 2 What are the essential conditions that the clone must meet, and what are the optional conditions it can fulfill?



TASK 3 Personal Data Sharing Scope with the Self-persona AI Clone



Fig. B.5. Example of a clone ideation workshop divided into three tasks: (1) Setting the direction of the clone, (2) Defining requirements and must-meet expectations, and (3) Determining the scope of personal data sharing.

Data availability

The data that has been used is confidential.

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