

“When I Becomes We”

Reporting on Making a Poetics for Togetherness Through Performance Art

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Abstract

This paper explores how a performance piece can enact and embody conceptual ideas to illuminate what truly matters in the experience of being together. By combining linguistic expression with performative embodiment, the work begins to articulate a new poetics of togetherness—one that offers a scaffold for discourse in psychology and technologically mediated human interactions, while also reshaping how we imagine future relations with Artificial Super Intelligence (ASI).

Central to this investigation is the development and use of a novel video-conferencing system, NUNA, designed in a teleprompter style to enable natural eye contact and mutual regulation during remote interactions. The system was used in a performance titled *When I Becomes We*, in which performers and participants engaged through NUNA to explore different kinds of presence and a shared sense of togetherness, what we call “interpresence”. This approach expands the idea of presence beyond information exchange and task performance, instead offering an embodied experience of togetherness and opening up to other aesthetics of being together.

The paper argues that the enacted performance within an interdisciplinary research setting contributed to a reframing of fundamental questions in psychology and human–technology interaction. A central outcome is the concept of *interpresence*, which is proposed as a key framework. Interpresence is situated as shaping how we imagine futures with ASI. Unlike dominant narratives that tend to abstract or disembody human agency, interpresence offers a calm, relational scaffold at the centre of the AI storm in which the human remains actively and meaningfully in the loop.

[1]

Introduction

What does it mean to be together with another? Until now, togetherness has always presupposed the presence of another; someone has needed to be there for an interaction to even be possible. With the rise of AI, based on

more and more sophisticated language models, this could be about to change. But while some already praise the coming of our superhuman overlords, we still don't fully know how togetherness comes about.

In her seminal essay "Towards a Poetics of Artificial Super Intelligence", Nora Kahn develops the concepts of "hurricanes" and "scaffoldings" to contrast two different approaches to understanding and engaging with advanced technologies and in particular Artificial Super Intelligence (ASI).^[2] In her call for new imaginative paradigms, she argues for a different "poetics" or symbolic language for the discourse on technological developments that seem to fall beyond our comprehension. This paper resonates with Khan's diagnosis, as it seeks to broaden our approach to understanding shared presence, or togetherness, as it is mediated through technology. Shared presence, or togetherness, has long been shaped by technology arguably since the invention of the telephone, or even earlier, depending on how one defines "technology". We value understandings of presence as an ongoing, embodied engagement where embodiment includes not only the physical body but also our entanglement with technological systems. We draw attention to the need for new ways of conceptualising what togetherness entails, mediated or not, and we present how our work contributes to such developments.

Crucially, in our case, this involves more than symbolic language. The knowledge required to formulate new concepts is, in part, embodied and resides in experience. We argue that such new concepts may be valuable for reframing not only the discourse surrounding ASI, but also of foundational perspectives in psychology and technologically mediated human interaction. Rather than reinforcing notions of division and individuality, such a framing would cast togetherness as shared and mutual.

How Do Our Disciplines Approach the Experience of Being Together?

When we use the words "together" and "togetherness" in this paper, we mean the everyday experience of being in a psychologically shared here and now with another person. We do not mean something complex or cognitively taxing, like having an involved conversation, but rather something basic that happens all the time the foundational condition for the human experience of being in a psychologically shared here and now. This phenomenon has been widely explored from various perspectives, including those represented by the authors of this report. In this section we briefly outline the discourse in the three fields that the authors come from, to highlight how current framings in interaction design and clinical psychology seem unable to address a shared concern, and how performance art can turn that same concern into a medium. What is initially difficult in our project is foregrounding and articulating what we are pointing at, while discussing what it is that does the pointing.

Togetherness in Interaction Design

The design of the things that people use shapes their behaviours and experiences with those things, where designers make decisions about what they think those behaviours and experiences should be. The design of technological things thus involves ideas about what they are for. Everyday video conference systems, for example, are designed with particular understandings of what the focus of interacting with others is or is about. They obviously allow people to talk with each other remotely, and therefore decisions have been made about what is important in making the other person present to be able to do so: using moving images with sound. While this is great for talking *to* each other, it often leaves us dissatisfied as there is often a sense of disconnection, a feeling of talking *to* someone rather than *with* someone.

An idea that underlies the design of many classical systems in Interaction Design (IxD) and the closely related field of Human Computer Interaction (HCI) aimed at doing work, is to treat presence as a piece of abstract information that is detected, and therefore a signal that can be transmitted.^[3] The design of technology that mediates interactions based on such ideas is subsequently structured to solve issues such as bandwidth, resolution and representation (via avatars).

What is at work here is a way of thinking, a basic paradigm of existence in terms of signals and units that process the signals. This paradigm, or underlying narrative, is visible in how the design of technological systems itself is approached, which involves processing units with input/output channels. It is also present in how the relation between human experiences and thinking is thought to play itself out, with the brain as a processing unit with input/output channels, and by extension how the interactions between digital systems and human beings could and should be formed.

With contrasting perspectives and approaches (framings) to how people make sense of the world and each other, ideas of embodiment were derived from the context of pragmatism and phenomenology.^[4] Technological mediation in this perspective is no longer about transmitting information across a distance or creating an illusion of physical presence, but about the ongoing constitution of meaning through interaction.^[5] The technology that mediates our interactions is not neutral or invisible; it actively shapes our experiences of presence and togetherness. It also reflects the designers' assumptions and intentions about what it means to be present with others.

Similarly, post-phenomenological ideas of technology from philosophy that emphasise reciprocity in making sense and meaning in interaction,^[6] are brought to bear on designing interactions between people and things, creating space for a broader range of meanings and aesthetics of being together rather than merely performing tasks with others.^[7] That idea of performance is further pursued by foregrounding that human-technology interactions are about the experience of performing the task, rather than just its success, and the use of the technology as a kind of staged spectacle.^[8] This introduces a framing in which first-, second- and third-person perspectives extend the narrative of human-technology interaction.^[9] They highlight what such interactions are fundamentally about and what designers ought to consider in terms of how human experiences are expressed and made meaningful through technology.

A gradual shift in framing and basic narrative, which allows different things to be addressed and articulated compared to previous discourse is underway. However, a somewhat singular idea of presence seems to be lingering. In the practical context of designing and building technology that connects us with and through machines, by means of sensors and displays, the mutuality and sharedness of ongoing engagement seems to slip out of view. A poetics of togetherness that is essentially individualistic is bound to leave us dissatisfied in the end.

Our work described in this paper is inspired by experiments with how a fundamentally mutual experience of presence, known as perceptual crossing or "I see you seeing me" can be demonstrated in technologically mediated conditions.^[10] A fascinating implication is that for interacting in and through digital systems, content completeness may be more important in mediated interactions than bandwidth or transparency.^[11] A salient question is what the framing or narrative allows in terms of the opening up of interactions between human experience and vastly different ways of "being" in the world. One approach would be to ignore the question whether a system is actually intelligent or merely perceived as such and instead focus on the human experience.^[12] We pursue a poetics that emerges from engaging mutuality, or mutual engagement.

Togetherness in Psychology

In different subfields of psychology, the concept of togetherness could be linked to intersubjectivity,^[13] the phenomenon of a shared psychological space a shared now which is an important part of developing relationships and a sense of self.^[14] The term is close to concepts such as “participatory sense-making” and shared intentionality,^[15] which together with the notion that interaction actually precedes cognition,^[16] points to the fact that being with another is the most fundamental aspect of being social.^[17]

Following changing research cultures, the field of psychology has evolved in various directions. However, a clear trend over the past 30 years has been an emphasis on methodologies aligned with the natural sciences prioritising measurability, reductionism, repeatability and highly controlled experiments. This trend has contributed to the dominance of cognitive psychology and the prevailing metaphor of the brain as a computer.^[18] While the benefits of this approach are well recognised, its limitations are less frequently acknowledged.

Technological advancements, particularly the development of functional magnetic resonance imaging (fMRI), have significantly expanded our understanding of the brain. As much of this knowledge is derived from studies conducted on individuals lying completely still inside an fMRI scanner, it has inherent limitations. In response, there is now a growing movement towards mobile brain imaging,^[19] with research approaches such as frontloading phenomenology^[20] and ConNECT^[21] prioritising lived experience at the center of implicit, embodied interactions between individuals in dynamic contexts. This shift is fostering interdisciplinary connections within psychology, particularly between sub-fields such as psychotherapy, developmental psychology and neuroscience.

Dominant narratives and framings in psychology paradoxically seem to hold a rather individualistic perspective on social interaction. Furthermore, cognitivist and neuroscientific approaches to understanding human experience again paradoxically isolates that individual in motionless and constrained environments (such as an fMRI camera). Similar to the so-called hard problem that consciousness has so far not been identified as linking to a particular brain are, the idea that specific social experiences relate to specific processing units in the brain may suffer from a framing that simply falls short of being able to address the questions asked.

We propose a narrative that embraces ongoing human engagement in a social and physical context may be better suited to address the important and urgent human need for being together, rather than a focus on performing tasks with another and participatory sense-making,^[22] concepts such as “social breathing” and “interpresence” are giving this narrative shape.^[23]

Togetherness in Performance Art

One could arrive at a straightforward definition of performance art by paraphrasing the legendary theatre director Peter Brook and state: a man walks across an empty space whilst someone else is watching him.^[24] Performance art is *someone doing something in a space and someone else in the space watches them while they do it*. What lies at the root of a performance piece is the presence of two or more people who react to each other’s presence as humans before any other role is considered in the moment they share. A performance piece can be interactive or operate with a strict fourth wall logic that excludes the audience, but psychologically it doesn’t matter. Acting as if on a stage still entails being aware of the presence of the audience in what goes on and working with that presence.

Three perspectives are at play here: the performer’s first-person perspective, a participant’s second-person

perspective that is engaged by the performer, and a spectator's third-person perspective, who looks at the performer interacting with participants. This is not to differentiate between individuals per se: in many performance art pieces, an audience member may be considered a participant and performer, where the performance artist is always acting in first-person perspective while maintaining acute awareness of second- and third-person perspectives.^[25] In an interactive work, the relationship between performer and audience/participant is renegotiated with or sometimes imposed on unwitting spectators. That which happens between performer and participant is then acknowledged more directly within the framework of the piece and through the roles taken on. The piece discussed in this paper is such a piece. Three performers took turns engaging audience members directly, making them into participants.

The phenomenon of presence has been explored endlessly throughout art history, through painting, sculpture, sound and much more. But in performance art this presence is elevated from a theme to a medium. Discourse in performance art pivots on the performances as they happen, their liveness. Performance artists have an extensive and embodied knowing in their sense of togetherness. By utilising this embodied knowledge, a method was devised for crafting a stage at which a heightened sense of togetherness could occur. While the form and content of the discourse of performance art provides a scaffold for our inquiry, it is the embodied and lived, not the symbolic and linguistic framing that seems particularly relevant for our work towards embodying a different poetics of togetherness. In developing the performance piece, two technologically mediated investigations proved particularly inspiring.

During the 1970s, the artist Dan Graham worked with mirrors, video cameras and monitors to create shifts in our perception of time, the present and ourselves. In *Time Delay Room*, he shifted the viewer's experience away from the work to their experience of themselves as viewer.^[26] Two wall monitors show the room they are mounted in but from two different angles. When a visitor enters, they expect to see themselves on the screens, but the room remains empty. Only after an eight-second delay do they see themselves stepping into the space on the left monitor while the right keeps showing an empty room. After another eight seconds they also appear on the right monitor. Eight seconds is the limit of what we can hold in our immediate memory and perceive as the present. The result is that the visitor can never fully identify with what they see on the screens and instead get stuck in a constant observation of themselves.

The artist Janet Cardiff has worked with hearing and binaural sound as a starting point for over three decades. In installations and (voice-guided) audio walk, she has explored the associative power of sound and hearing as one of our primary senses. In the work *The Forty Part Motet* (2001), we encounter the sound recording of a choral piece, for which Cardiff recorded each of the singers alone and presents the work with a loudspeaker for each voice.^[27] Forty speakers in a circle together manifest the striking discrepancy between the embodied voice and our expected experience of a sound recording.

The philosopher and dancer Susan Kozel has for many years worked on formulating phenomenological experiences of a technologically expanded corporeality. In her book *Closer* (2001), she describes what phenomenologists call the "pre-reflective" state, a state that allows us to step around preconceived notions and meet and experience something new.^[28] We can visit this state, though never dwell in it, in several ways: partly by simply halting our assessing and categorising of the situation, but also through, for example, improvisation. As a performing artist, when she describes the role of improvisation in her work and that of others, Kozel easily draws parallels with music and dance. By changing rhythm and tempo, among other things, an experience can go from slow and contemplative to fast and changing. She further argues that improvisation can be used to break up the everyday and make the invisible visible where there is a strong relation between improvisation and play.

Both Graham's and Cardiff's works manage to draw out a playfulness in its spectators. The works are open in such a way that any meaning is subordinate to the fact that in a pre-reflective stage, the visitors know how to deal with them and simply start to engage. They improvise. Visitors to *The Forty Part Motet* immediately begin to interact with the work. They walk along the rows of speakers, approach them from behind, try to create their own sections and find the nearest voices. Some experiment with walking past the speakers at different speeds. Others are left standing with a big smile on their face. In documentation of Graham's *Time Delay Room*, we see visitors bewilderedly waving at themselves without a response. Once they realise what is going on, many laugh and get caught up in a kind of strange game of contact with themselves. If we wanted to observe something as elusive as togetherness, it would make sense to create a situation where, similar to the works of Cardiff and Graham, the participants are able to halt their assessing and categorising of the situation and start improvising, not alone, but together, with each other.

Creating the NUNA, Materialising Interpresence

From our shared understanding of discourse in interaction design, psychology and related fields, we conclude that when conceptualising togetherness there is something that they point to but fail to address directly. We realised that a general framing of what we respond to needed specific examples, not least because different fields of research use different terms and the examples we found did not quite seem to fit with our thinking.

We started with the intention to approach a basic experience of being together in the form of video conferencing technology. It is worth underlining that the kind of mutually embodied experience of presence that we aim for does not only happen in and through eye contact. We decided to work with a video conference type setting as it is so common, where we assumed that natural and digitally unprocessed eye contact is an important aspect for perceptual crossing and mutual regulation. Our cross-disciplinary approach meant that the design was imagined as an instrument for a wide range of explorations: artistic use in performance art, as an object in design research and as a one-of-a-kind research tool for scientific studies on human interaction.

Early in our process we worked with a rather long and imprecise description of what we thought deserved specific attention. For the longest time we used "thing" as shorthand to describe it. As we constructed the NUNA and could begin to experience the difference between various kinds of presence that the NUNA could be thought to mediate first-hand, we gained a more nuanced impression of moving in and out of "it".

It seemed to us that this "it", which we felt when moving in and out of experiencing togetherness, warranted a term that underlined the sharedness of it, is something that happens only in a shared psychological here and now with another person. A presence that hinges on the presence of another person. For this we began using the word "interpresence". Though initially more of a hunch than a well-articulated idea, the notion of interpresence helped develop and shift the focus in our research trajectory. As such, interpresence worked as a transitional concept that propelled our research project.^[29] Through the process of making the NUNA, our idea of interpresence has also become more concrete in our thinking and writing. Because the notion of interpresence is to some extent incomplete and unstable, it works as a transitional theory for different fields of research interested in the same thing as we have seen in the empirical research with the NUNA and in establishing the cross-disciplinary Interpresence Institute at Umeå University.

As illustrated in Figure 1, we built a teleprompter-style video-conference system that we call NUNA, an old

Swedish word for face. Different from the camera-above-screen set-ups that are found in laptops, for example, a NUNA can dynamically and continuously move the camera anywhere behind the image of a person in view. This makes it possible to position the camera behind the eyes of an image of a remote person, for instance, effectively enabling a form of eye contact that the camera-above-screen set-up typically does not. For remote mutual eye contact, two NUNAs are obviously needed.

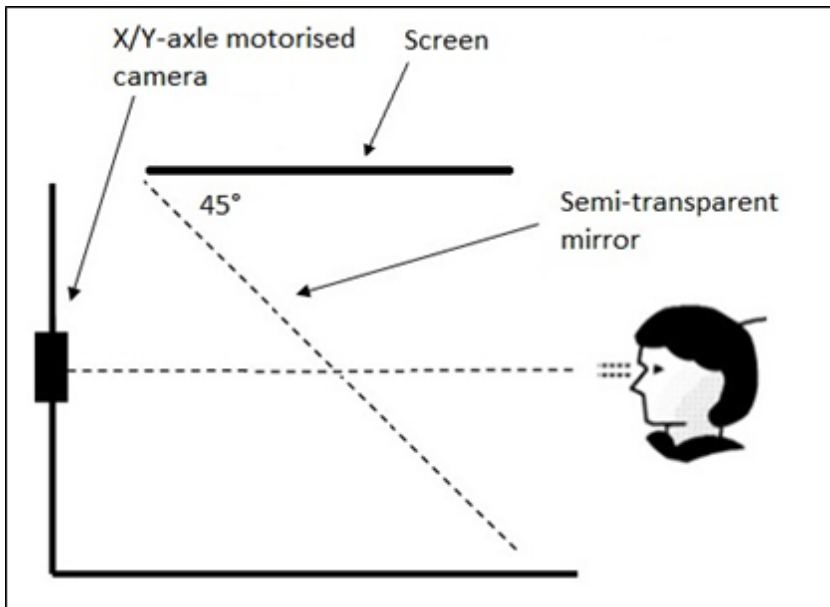


Figure 1. An early design sketch of the principle for the NUNA; diagram by Niclas Kaiser

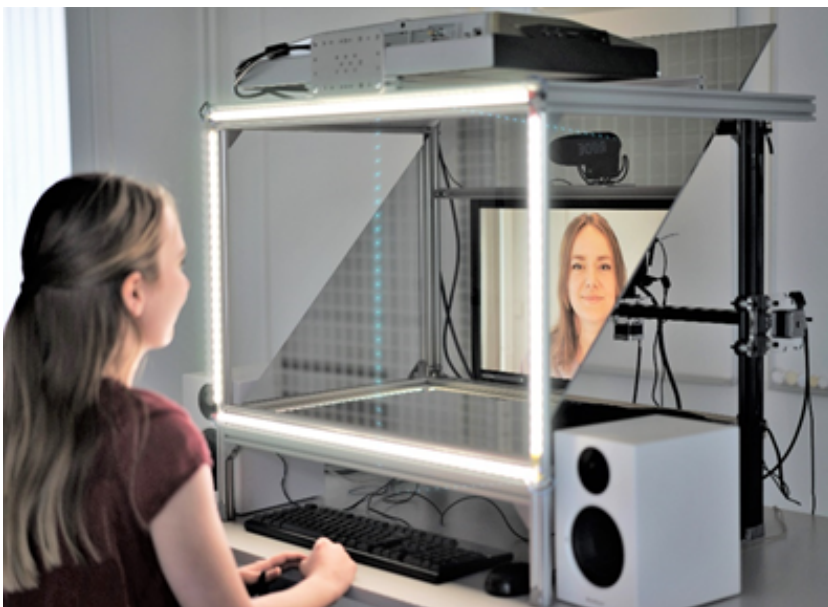


Figure 2. Two researchers using the NUNA; photo: Niclas Kaiser

A NUNA consists of a camera mounted behind a semi-transparent mirror placed at a 45-degree angle. The camera is mounted on motorised gantries that can move it on a vertical plane. A monitor is mounted above the

mirror, so that a person in front of the NUNA sees an image of the screen upright. A computer runs software that controls the position of the camera and handles the image and sound processing and data exchange with another NUNA.

It may sound like the building of the NUNA was an engineering exercise. A lot of engineering work was indeed necessary to solve mechanical and software problems. Here, however, we do not go into those; instead we focus on how thinking and making of togetherness were intertwined and developed in tandem. It is impossible to capture this process in all its detail, but we will home in on how a few of the decisions we made relate to our knowledge of experiential aspects of being together.

The choice of a robotised camera instead of software-based solutions came out of knowledge about the socio-biological system. The relational human system is not geared towards one person perceiving eyes looking straight into their own eyes. The ability to look away, or to very briefly catch another person's eyes and then retract, are processes that are unplanned and important in regulating many different aspects of human relationships. We assumed that gaining insights in processes of being together required a design that would allow for subtle shifts in eye direction, which a software-based solution would not be able to do. The same goes for the alternative: of having a fixed camera and holding the head still, which would take away the relational information involved when moving the head.

“When I Becomes We”, Assembling the Performance

The NUNA has been instrumental for psychological studies of the meaning of eye contact in online interaction. Specifically in experiential and qualitative conversation studies in non-clinical and semi-clinical settings,^[30] but also in a still unpublished study of the neural underpinnings of a sense of togetherness.^[31] Combined these studies point to the difference in talking *to* a person and talking *with* them, a core aspect for the sense of being together, even in video-mediated interactions, suggesting that the lack of eye contact may be part of the negative aspects of the socio-digital development in clinical settings, at work and in private life.

Already when building the NUNAs we had their potential as performance art tools in mind. With performance art's use of presence as a medium, it might prove singularly effective at highlighting the shifting between different instances or degrees of togetherness from silently acknowledging each other to actively sharing a space, all the way to talking with each other, as well as the shift from being on the outside, observing, to entering and becoming a participant.

Casting the NUNA

By enabling eye contact in a screen conversation, the NUNA breaks the expected experience and potentially enables a form of contact previously reserved for direct meetings between people in the same room. Until now this potential only existed in science fiction; in *Star Trek*, for instance, Captain Picard addresses alien captains directly through the *main viewer*, and in *1984*, the training instructor suddenly addresses Smith personally and scolds him for not performing the morning exercise movements correctly. Our NUNA creates a window for spontaneous play together with and through technology. The technology Graham and Cardiff used in their works made certain kinds of interactions and investigations possible, because they enabled certain kinds of presence. The NUNA does so as well, but a key difference is its inherently social impact. Similar to Cardiff's and Graham's work, there is a sense of encountering a wholly new technological experience in the case of the NUNA it is truly new since it is the first device of its kind. The NUNA opens up towards its own set of artistic questions, which we

touch upon in our reflections in the next section.

Description of the Performance

The performance took place during the opening of UmArts in a new space called Smedjan at the Arts Campus of Umeå University on 16-17 June 2023. One NUNA was placed at Smedjan, which was open to the public during the event, the other was placed at the campus library in an adjacent building. The piece involved four performers who were stationed by the NUNA at the library throughout the event.

They were given a thorough explanation of the purpose of the work as well as the opportunity to try out the NUNAs and become acquainted with working with them. As the event started, the two NUNAs were activated and one performer would place themselves in front of the NUNA at the library, waiting for someone to approach the NUNA at Smedjan. The performers were given a set of instructions to follow throughout each interaction and the event itself.

The performers would take turns being closest to the NUNA so that when someone at Smedjan looked into the NUNA there, they would come face to face with one of the performers who would then engage them in conversation. The script that the performers followed listed six activities from which they could choose. They would propose one of the suggestions to the participant to give the participant the option of saying no. They could:

1. Continue talking, which they would just do, and not present as a task to the participant. However, they would soon go into bigger or more personal questions than we usually do with strangers, though these were of a non-unsettling or offensive nature. They included asking the participant how they felt about their job, what they would do now if they could choose to be anywhere they wanted, etc.
2. Mimic each other, wordless or not. The choice was left to the moment and to both participants.
3. Open an envelope positioned in front of the NUNA at Smedjan. The envelope would contain a question that the performer and participant would answer together. They would then jointly come up with a new question for the Smedjan participant to write down and place in the envelope to be answered by a different performer and participant.
4. Draw each other, using pen and paper placed in front of the NUNAs. To draw someone, you have to watch and study them more closely than you normally would. When focusing on drawing, many also find it difficult to speak, which moves the interaction further away from a safe conversation about the weather, for example. It also highlights the connection made through the screens when you are watching and being watched at the same time. The task creates a natural flow between studying/watching and looking away.
5. Without breaking eye contact, telling each other who they are. What this means was also left to the moment.

The last activity was not for the participants at Smedjan. As our area of interest was togetherness, we saw it as vital that the performers would be given opportunities to develop a shared sense of “we” among themselves, to not just be focused on persons in the other NUNA, like someone working at a call centre. The last activity, a dance, allowed them to make a choice when they were not engaged in a conversation.

6. The dance consisted of three stylised gestures that signalled either confusion, searching for contact or contemplation. The performers would look straight ahead and use their peripheral vision to determine what their colleagues were doing, to which they would adapt. At any point any one of them could decide to shift movement, from confusion to contact to contemplation, etc. The others would then adapt in their own time. If someone approached the NUNA at Smedjan while they were engaged in the dance task, any of the performers could choose to disengage and engage the NUNA instead, at which time the other two performers would leave the frame at a comfortable pace.

While not engaged in a conversation with someone at Smedjan or performing the dance, the performers were encouraged to put their experiences into words and to share them with each other. When doing so, they would again position themselves so that one would be directly in front of the NUNA and the other two were nearby. They could also seat themselves that way and just talk about whatever they wanted. The point was to normalise the situation, make them feel in control of their own space and to develop a sense of that space being shared between them.

Two of the seats were completely “off-stage” and provided space for a less focused togetherness to unfold between the actors themselves, hopefully experientially highlighting the contrast between the different types of engagement and relation. Considering togetherness as something foundational and basic, even sitting silently together and watching each other perform familiar tasks gives rise to a sense of a shared here and now. Apart from their scripted instructions, we also instructed the performers that at no time did they need to keep up any specific kind of appearance. They didn’t need to pretend the instructions weren’t scripted beforehand or that they hadn’t done them before. The tasks they eventually performed with the participants were always secondary. They should first and foremost relate to the other person as a person. The actors were therefore free to answer any questions participants might have as themselves and as they saw fit.



Figure 3. A NUNA situated in the public library at UAC; photo: Christoffel Kuenen



Figure 4. A NUNA situated in the Smedjan gallery of UmArts; photo: Cindy Kohtalla

Actor Experiences

After each session, which lasted between three and six hours, we held a one-hour debriefing with the performers to gather their impressions and reflections. The performers were selected from Gabriel's students, who had extensive experience in both performance and working within social contexts.

A general feeling was that the performance went fast and that it was easy to connect. The atmosphere quickly became familiar and inviting.

Performer 1: You felt safe to perform because you had this clear role to play. A circumstance where it felt like

more was allowed. Maybe that made it easier to reach out and connect.

Performer 3 agreed and added that they felt they weren't really performing in a theatrical dramatical sense but rather just were themselves.

Performer 3: I thought it was interesting that it didn't feel like a performance, because the connection (with the other participant) was so strong. I had my restrictions, guidelines and rules but mostly I was myself. When someone said, "My god you are such a skilled performer," I was almost put off. I wanted to say, "This is not a performance, this is me!"

The NUNA also presented us with an unexpected effect. Many participants and spectators kept asking if it was real. One woman was completely convinced that performer 2 was an AI-generated intervention.

Performer 2: I found it interesting that I failed the Turing test. I was unable to convince the other participant that I was a person.

Some participants didn't realise what was different from a conventional video conference call until we shut down the ability to make eye contact. This does not have to mean that the effect of the NUNA was negligible but could also be interpreted that by enabling eye contact talking felt easy and natural.

Performer 1: It was weird. Several participants didn't understand what "the thing" was, until we took away the eye contact. Then they understood what was missing.

On a few occasions, one of the performers came up to Smedjan and met people they had previously interacted with through the NUNA. This gave rise to strong feelings as well.

Performer 1: I was drawing together with one person through the NUNA and we finished it live in the same room. When we were done, we just stood and looked at each other. We didn't want to stop.

Performer 4: When I went up (to Smedjan) a person (previous participant) shouted "Hello (performer's name)"! I got an almost euphoric feeling!

Performer 2 also reflected on how the nature of eye contact changed in the interactions through the NUNA. Contrary to the participants who didn't even notice that they were making eye contact, some including performer 2 felt their safety within the heightened level of intimacy was conditioned on the special circumstances of the piece.

Performer 2: This connection that you have when you're making eye contact is extremely special and really elevates your mood. But outside this room it would be really scary. There is a voluntariness to this intimacy that is not a given.

There was further agreement on this when discussing the fact that a few visitors stopped by the library and looked in on the performers as they were working. This gave rise to stronger feelings than they had expected.

Performer 2: It felt like they were trespassing sometimes. Especially when they didn't introduce themselves.

Note that this was happening in an open library where anyone could enter at any time. The presence of visitors to the library, on library business didn't elicit the same feelings of violation. A positive side to this sense of space was the effect that the dance had on the performers as a group.

Performer 4: The dance felt good. You entered a zone and felt that you as a group really synced up. Even if I didn't start the movement, I could be the one who finished it. It could be difficult to determine who was actually leading the movement.

Performer 3: I wish we had danced more today. We had a better level of dancing yesterday. I think it was very meditative. It was a very singular assignment. The only thing I have to do is sync with my fellow dancers. It was almost the most exciting when all three of them stood and waited for the next command. And then when you felt that, now I'm going to start, and then you noticed that the others were doing it.

Reflections on Developing Concepts, Machines and Performance Pieces

There was a powerful dialectical dynamic in our process of working between manifestations and forming and framing of ideas. This dynamic resonates with what is articulated as programme–experiment dialectics in the context of programmatic design research.^[32] A depiction of that dynamic as driven by a continuous interplay between optics and engagements is particularly useful, to articulate what happened during the construction of the NUNAs and development of the performance piece, where the need arose to coin the concept of interpresence.^[33] This process involved creating an opportunity for an experience of this kind of mutual recognition, of sharing a moment within a certain context. In our discussions, we aimed to emphasise the experience of togetherness rather than focusing on boundaries defined by space and time. We also recognise a similar dynamic process in the development of the performance piece *When I Becomes We*, with the need for a scripted and yet open engagement from well prepared performers.

The NUNAs we built are technological means to mediate something that people do all the time, without really thinking about it, in a particular way. Several of the performers' comments reflect this. The relationship between the NUNA and what it mediates between people is somehow similar to how a particular chair defines sitting, or how a specific cup defines drinking. This staged interaction cannot be complete in its definition of the idea in general, however, in its particularity, the NUNA embodies the act of being in interpresence in general and how technologies can be involved in specific aspects of it. Just like you can only be specific to some extent in words about what interpresence is, and quite abstractly, it is quite complete and concrete when you construct a NUNA. When reducing "being in interpresence" to its micro behaviours and movements, defining its conceptual limits or removing the NUNA from the equation, the concept tends to fall apart.

When introducing the performers to the intended performance piece, we made it clear that what we were looking for was not comparable to a performance in the sense of something flashy or memorable, but rather that which is usually invisible and goes on all the time. In a very real sense, the NUNA is what made the piece possible, but the piece itself is what made it possible to disseminate the experience as an experience. Looking at their comments, it is clear that all the performers experienced the moving in and out of different sets of togetherness, the fragility of maintaining them as well as the emotional effect of feeling that the intimacy of interpresence had been violated when visitors entered their physical performance space uninvited.

Recalling the triangular structure of a performance piece, including first-, second- and third-person perspective, the performers and participants in *When I Becomes We* slid out of that triangular model of interaction by moving

between performing the piece and simply people connecting, sometimes through and sometimes in spite of, the NUNA and the scripts.

Conclusion: Interpresence, the Calm at the Centre of the AI Storm.

In this article, we explored how different narratives of togetherness across our fields of practice intersect with the embodied knowledge of performance artists. This interdisciplinary lens enabled us to engage with and express specific dimensions of being together that often escape traditional methods of inquiry. When considered in isolation, many concepts emerging from psychology and design lack the depth and focus needed to grasp what truly makes togetherness happen. Most prevailing narratives risk driving us into a lonely corner reducing togetherness to an experience within the individual, as transactional or merely functional.

By drawing on the embodied intelligence and skill of performance artists and building on the artistic strategies of artist Dan Graham and Janet Cardiff, we developed a performance piece that made the fundamental condition of co-being discernible as a lived experience, leading to the development of the concept of interpresence. The NUNA platform provided new tools to shape, challenge and deepen participants' sense of togetherness, extending the reach of what could be collectively felt and understood.

At the heart of our approach is a fundamental premise: the presence of the other is only accessible to us insofar as we can sense how we ourselves are present to them. This relational sensitivity is not merely conceptual; it is aesthetic, affective and embodied. We advocate for a narrative that opens space for this richness a narrative that moves beyond instrumental views of togetherness as a matter of coordination or task performance. Instead, we call for a new poetics of togetherness, one that acknowledges the multiple shades, textures and dynamics of co-experience.

Through the performance piece *When I Becomes We*, we have shown how artistic practice made interpresence not just a concept, but something experientially real. This embodied poetics has the potential to reframe what can be addressed in fields such as psychology and technologically mediated human-human interaction. More provocatively, it also speaks to the context of Artificial Super Intelligence (ASI).

While hopes are high for ASI, we must ask: if togetherness relies on human capacities we've barely begun to articulate let alone model as shared systems what are the implications? It is conceivable that future ASI agents might trigger the human system for interpresence, leading to the experience of being with another even when that "other" is not actually an other. The discourse around human relationships with ASI urgently needs a poetics of togetherness that assures that human remains actively and meaningfully in the loop. In this light, we present interpresence as the calm scaffolding at the centre of the AI storm a quiet but potent foundation for co-existence, even in radically unfamiliar futures.

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But most of all we want to acknowledge the great work from the actors in this performance: Peter Andersson,

Footnotes

1. The performance was mainly created by Gabriel Bohm Calles and performed by the performers instructed and trained by him. The design and build of the NUNA was carried out by Christoffel Kuenen and Niclas Kaiser. The manuscript in its entirety is written by all three authors.
2. ASI is a—so far—imaginary, advanced version of Artificial Intelligence (AI). Whereas current machine learning systems, such as LLM’s currently presented as forms of AI, are already difficult to understand, Khan’s point is that the workings and capabilities of more advanced systems would be orders of magnitude more difficult to even begin to fathom with the framings and narratives currently used to address them.
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