

Reflections on the future of the "human" Dance and AI

The human of the future: posthuman, transhuman, metahuman?

Will it be a dematerialized figure, a living being "almost human," or a human-like cyborg, an organorg (Thierry Hoquet "The Almost Humans")?

I lean towards the possibility of the emergence of a new being, an "almost human," endowed with the ability to create a peaceful and constructive coexistence with everything that pertains to the realm of the living: plants, animals, minerals, and with machines as well, both abstract and concrete, through a possible encounter between bodily intelligence (the dimension of physical reality) and artificial intelligence (the dimension of the digital in its most advanced current form).

This AI, which absorbs so much of our thoughts, criticisms, present and future actions, might lead one to think that at some point the body may disappear, through a completed separation between body and mind.

But question: can one truly imagine being able to think without the body?

This is precisely what motivates my current artistic research and creations:

The active confrontation between AI and the body, a moving, thinking, expressive body.

In the fantasized vision of transhumanists, where the fleshly body would become obsolete, the mind is mere information, and detached from all materiality, it is immortal, once digitized and uploaded. It is this same vision that drives the major planetary information and communication companies to invest more in us, unbeknownst to us and of our own free will, in the disclosure and sharing of our personal data, ..., making us believe that we can "better survive our own death" (interview with Meghan O'Gieblyn in the philosophy magazine special issue on AI, "In the cave of AIs").

Today, many researchers are increasingly less inclined to be satisfied with the equation "brain = computer". They strive instead to place the functioning of intelligence in the vast context, both biological and social, that is its own.

For eminent researchers and specialists in cognitive sciences, Francisco J. Varela, Jean-Pierre Dupuy, Henri Atlan, John Augeland, Mario Borillo, etc., it is appropriate to approach the problems of the living, of which the mind is but a manifestation, in a global perspective. That is why their attention turns to self-organization. This ability to bring order out of disorder, to produce new structures to combat entropy, is, according to them, the common feature of all living organisms, regardless of their nature.

Considering dance as a manifestation of the living, I have chosen this artistic form to embody the dialectic exposed here. This confrontation, entirely new in the choreographic field, renews an essential question: the reason for the movement here and now.

Imagining creative projects where work on the body and movement can be developed in a context enriched by the challenges highlighted by artificial intelligence, is to:

- produce "speculative fictions" and offer the audience the pleasure of "living with the disturbance" (Cf. Donna Haraway)
- conduct research on danced movement and imagine a certain vocabulary of the body approached as constrained movements of a human being, an animal body in tension between physicality, language, and memory
- focus on the being-body and its relational modalities with the digital world (semi-autonomous images, robots, devices powered by neural networks, etc.)
- address the political consequences of the impact of AI on society and see how to detach ourselves from technological crisis narratives and the uniformizing worlds they construct
- tackle philosophical themes that can help understand what AI means for art and the creative process (Hannah Arendt "The Life of the Mind", Oliver Sacks "The River of Consciousness - Essay on Darwin", Marcel Proust, Vermeer, Isaac B Singer "Love and Exile", Marc Augé "Oblivion", Lev Manovich "MoMA Online Magazine The Brain in the Cultural Archive", Jorge L Borges "The Immortal / Aleph", etc.)

A very sophisticated "machine" is the perfect vehicle for inventing new myths, but it is essential to distance us from the narratives imposed by contemporary techno-liberalism. Could we then consider that an artistic object could be a therapy to propose alterity and singularity, via the invention of science-fiction scenarios, against the imaginary of excess? The artist-researcher is then someone who "experiments" with the world.

Someone who intoxicates themselves in order to say something about it.

In a temporary concluding mode, I think it is important, in the context of today's rather technological and uniformizing fictions, to invent different ones, those capable of creating "disturbance," and highlighting the "malfunction" of the machine, while trying to deconstruct the belief in its perfection.

Ultimately, to what extent can we imagine humanizing creation that resorts to artificial intelligence?

I do believe it is possible indeed through the confrontation with the moving body, the danced body.

It is in this context that I have chosen to explore and present three themes: that of a **non-verbal dialogue between a human and an immaterial entity** ("MYSELVES" project), that of **immortality** staged via a fictional and embodied AI ("IMMORTAL(S)" project) and that of the **fallibility of an AI** trained to recognize everyday gestures ("F_AI_L" project).

- Information about "MYSELVES": [\[link\]](#), with dossier, [video excerpts](#), photos
- Information about "IMMORTAL(S)": [\[link\]](#), with dossier, [video excerpts](#), photos
- Information about "F_AI_L": [\[link\]](#): [video excerpts](#)

Dance and AI – General considerations

Proposed Presentation on the Relationship with AI:

- Utilizing AI: For example, writer Weber uses AI to deepen his unique "sauce," his "touch," his style. AI can be used to create new dances and enhance creativity.
- Dialoguing with AI: Revealing its functioning, questioning its omniscience, challenging it (e.g., "BodyFail"), and activating collaboration between two creative agents (e.g., "F_AI_LLE") > hybrid co-creativity.
- Composing: Writing speculative, science-f(r)ictional narratives with the imaginations that AI generates (e.g., "IMMORTAL(S)").

Machine Intelligence / Human Intelligence

Intelligence is not merely a matter of pure data processing or logical algorithms. Instead, it encompasses a broader range of capabilities shaped by society, values, and traditions in which an individual is immersed. Culture provides the framework through which we perceive and interact with the world and influences what we consider valuable, relevant, or intelligent. Our brain is only a module in this complex web of events.

It is essential to recognize that intelligence is not a static concept; on the contrary, it is dynamic and multifaceted, capable of adapting to the diverse cultural landscapes of our world. This means that different cultures can place varying importance on and promote different types of intelligence, such as linguistic, social, emotional, practical, or bodily intelligence. Therefore, it is crucial to develop an understanding of intelligence that is culturally sensitive and considers the richness and diversity of human cognition.

Art in General

For me, art is one of the most precious results of the thought process (distinct from intelligence. Thought is a constantly evolving tapestry of human life, a floating foundation of every conscious and unconscious activity we undertake—or decide not to undertake. We lack a solid definition of thought, just as we lack many other key definitions that determine who we are. This is probably one reason why we cannot truly reproduce or control it.

Art: a mysterious function of human productivity—how it happens, how we share it, how it transports human thoughts and feelings across generations. Art as a means of communicating obsessive thoughts, embracing the contradictions of life, expressing the involuntary realization of who we are. Art that, like love, occurs only because time is precious, according to Borges (*The Immortal / The Aleph*).

Art and Digital Technology (a long history, a long story...)

Art and AI / Creativity

It is important to note that while AI has the potential to support and enhance human creativity, it is unlikely to completely replace it. Human creativity is driven by a complex interplay of emotions, experiences, and cultural contexts, whereas AI creativity is limited to the algorithms and data it has been trained on. Human creativity and AI creativity each have unique strengths and limitations, and the most exciting possibilities for creativity may arise from the intersection of the two.

In this sense, AI and creativity are conceptually linked by the idea of generation. Both can be considered systems with the capacity to generate new and original outputs, and both have the potential to enhance and support human creativity.

Dance and AI / Bodily Intelligence / Pre-AI (see Antoine Schmitt's text and Jaime del Val references)

Proposed definitions:

Superimposition of Two Worlds, Two Maps

The map of the digital world and that of the physical world

The digital and the physical

AI and the reality of the body

The body is the vehicle of the project.

The “MYSELVES” project: <https://www.k-danse.net/en/portfolio/myselfes/>
Texts by Antoine Schmitt "Pre-AI":

– *long text* –

Forms of intelligence are found in all living organisms, from the simplest to the most complex, from bacteria to humans. These varied forms of intelligence enable survival and reproduction in a complex environment, ensuring the perpetuation of the species. Some forms of intelligence are related to the body (efficient and effective movement, object manipulation), behavior (flight, combat, food searching, seduction of a sexual partner, collaboration with allies), or thought (analysis, memorization, anticipation, language, dialogue, abstraction). While bacteria or small animals exhibit only a few simple forms of these intelligences, all are present in humans. The Large Language Models (LLMs) underlying ChatGPT, Bard, Mid Journey for static images, Sora for film creation, Suno for music, EMO for animating static images) etc., imitate human language capability, addressing only a small part of human intelligences.

Movement strategies, relational modes, and movement qualities are other levels of intelligence also present in humans, constituting a potential for scientific and technical research, as well as extremely rich artistic material. If the term Artificial Intelligence corresponds to the intelligence of thought, we can call pre-AI the intelligences related to the body, movements, and behaviors, that is, the infra-language levels of intelligence.

These forms of pre-AI are particularly interesting in the field of dance and choreography because they allow an approach to the deep mechanisms of movement and its qualities. Implementing or staging such a pre-AI possessing a form of infra-language intelligence provides a highly malleable and rich material for exploring ways of being alive.

This is the case with the performance "Myselfes" (2019 production), which confronts such an artificial entity with a human dancer in a semi-improvised reciprocal choreography. The entity in "Myselfes" perceives the dancer through visual and physiological sensors and interacts with her using infra-language behavioral modes: imitation, flight, attack, fusion, etc., which are modes of being of the dancer—her selves. Its body consists of pixels projected onto the dancer and her environment, and its pre-AI intelligence is programmed with algorithms inspired by living behaviors. The performance unfolds as an infra-verbal dialogue between a human and an immaterial entity, exploring various relational modalities and culminating in a form of reconciliation.

– *short text* –

The performance "Myselfes" features a semi-improvised reciprocal choreography between a human dancer and an artificial entity programmed with algorithms of infra-language intelligence related to bodily behavior: imitation, flight, attack, fusion, etc. Its body is made up of pixels projected onto the dancer and her environment, and its pre-AI intelligence is programmed with algorithms inspired by living organisms. These algorithms perceive the dancer through visual and physiological sensors to understand her different selves and interact with them. The performance develops as an infra-verbal dialogue between a human and an immaterial entity, exploring various relational modalities and culminating in a form of reconciliation.

The “F_AI_L” project: [https://www.k-danse.net/en/portfolio/f ai lle/](https://www.k-danse.net/en/portfolio/f_ai lle/)

An unlikely dialogue with an AI, a digital creature trained with a database consisting of a very large number of recordings of short, danced videos.

The image transforms according to the unusual, misaligned movements... a body to explore. Words serve both as an interpretation of what the machine captures and as invitations to go along with it.

The "body" of this creature is everywhere in the setup.

F_AI_L is capable of interpreting the smallest movements, fragments of behavior, all kinds of gestures and attitudes, intentions. An invitation to explore other ways of moving, to explore states of the body, etc., to develop a relationship according to your creative inspiration.

The “IMMORTAL(S)” project: <https://www.k-danse.net/en/portfolio/creation2023/>

Immersive, site-specific, participatory, and interactive live performance.

A speculative and post-human science f(r)iction.

Audiences, projected into the future, can, at will, act upon and dialogue with an hybrid being, sort of “organorg”, enclosed for eternity inside a protective capsule.

This creature is nothing more than one, amongst many “Immortal(s)”, which has been ostracized.

A meeting between two intelligences: the artificial one and the corporeal one.

2084, Different times, different customs.

The Immortals have become circus animals confined in cages and exhibited to the glory of past technology.

Visitors can observe and tease them as one would with trained monkeys.

The Immortal embodies an “almost human” sophisticated AI.

She tries to relive forgotten memories. She is struggling to connect with humans.

She awaits the audience...

The set is installed inside an immersive 3 walls, video mapped space.

Audiences communicate with the creature via a tactile cartel.

– “Love is the Turing test. [...] This is how we verify life. ”

Catherynne Valente, “Silently and Very fast” (science fiction writer)

– “Like diamonds we are cut with our own dust. ” John Webster, “The Duchess of Malfi”

– “Thus, age by age – oh, how soon, my Lord? – Under the art and nature’s scalpel, Our spirit

screams, and flesh is worn .

By giving birth to the sixth sense’s organ.” Nikolai Gumilev

Some key points on how AI influences dance:

Dance and artificial intelligence (AI) are increasingly intersecting, creating an exciting fusion of art and technology.

1. AI-assisted Choreography: Researchers and artists use AI to generate new choreographies. Algorithms can be trained on datasets of dance movements to generate original movement sequences.

2. Movement Analysis: AI can be used to analyze dancers' movements, providing detailed insights into technique, emotional expression, and other performance aspects. This can be useful for professional dancers and choreographers to improve their practice.

3. Interactions with Virtual Partners: Advanced AI systems allow dancers to interact with virtual partners or avatars. These partners can be programmed to respond to the dancer's movements in real-time, offering new possibilities for creative exploration and performance.

4. Use of Sensors and Wearable Devices: Sensors and wearable devices are often used to capture dancers' movements and transmit them to AI systems for analysis and processing. This allows for seamless integration of AI into the creation and performance process.

5. Experimentation with Immersive Environments: AI is also used to create immersive environments in which dancers can interact. These environments can be virtual or augmented, offering new sensory and narrative experiences for both performers and audiences.

6. Exploration of New Styles and Techniques: AI can be used to explore new dance styles and techniques by combining elements from different genres or generating unique movements that challenge traditional conventions. This can lead to innovative and inspiring forms of dance.

In summary, the combination of dance and AI opens new creative and artistic perspectives, providing dancers and choreographers with powerful tools to explore and push the boundaries of their art.

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