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Seeing Differently: *Infinity Pool* as a Prototypical Exploration of Perceptual Field Reconfiguration Processes

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Abstract. In this article, drawing on an ecological-enactive approach to human cognition, we introduce *Infinity Pool*, a work-in-progress performance that will serve as a platform for conducting phenomenological and cognitive-behavioral research, ultimately culminating in the development of a 4E Performative Lab. The lab will integrate artistic performance with phenomenological research into a unified event, aiming to establish a unique, real-life instance of collective imagination. Its purpose is to study how we intersubjectively reconfigure the individual perceptual fields during participatory performances. By approaching embodiment not merely as an object of study but as a practical investigation of our bodily engagements with the environment, Infinity Pool, when performed in polluted areas, could prompt us to confront the climate crisis by rendering invisible threats into monstrous forms.

Keywords. Imagination, performance art, monsters, crisis, environment.

1. Introduction

Our proposal is rooted in the field of embodied mind studies, with a particular focus on an ecological-enactive approach to human cognition (Rietveld, Kiverstein [2014]; Gibson [1979]; Varela et al. [1991]). This framework allows us to investigate how imaginative processes can initiate a reconfiguration of the perceptual field within a group, fostering a collectively structured capacity to perceive what was previously inaccessible or unnoticed (Noë [2015]) that involves multi-level synchronization (Gallagher [2020]).

We illustrate this approach through *Infinity Pool*, a work-in-progress performance that will culminate in the larger 4E Performative Lab project. *Infinity Pool* integrates performance art and video installation, drawing on the situated aspects of the environment and the embodied skills of participants. It aims to "give a face" to its surroundings; when enacted in spaces profoundly shaped by human intervention, it can evoke unsettling, monstrous forms. To expand this proposal and outline its future directions, we explore the figure of the monster and its invisibility, a defining feature of contemporary climatic threats (Weinstock [2013]). This exploration emphasizes how such figures might emerge by molding an "imaginative niche" (Ianniello, Habets, [forthcoming]) that facilitates an "estranged education of attention" (see Ianniello [2024b]).

The article is organized as follows: first, we introduce the ecological-enactive framework underpinning our investigation (Section 2). We then present *Infinity Pool* as a prototypical performance for the forthcoming 4E Performative Lab (Section 3) and contextualize the figure of the monster within the broader themes of invisibility and the climate crisis (Section 4). Finally, we conclude by discussing the concepts of "estranged education of attention" and "imaginative niche", outlining the significance and future development of *Infinity Pool* (Section 5).

2. Ecological-enactive account: Sociomaterial entanglement and situated imagination

In the early 1990s, foundational works such as *The Embodied Mind* by Varela, Thompson, and Rosch (1991) and Hutchins's *Cognition in the Wild* (1995) began to challenge the traditional internalist view of cognition as a brain-centered process (Fodor [1975]; Pylyshyn [1984]). These contributions, alongside Clark and Chalmers's (1998) influential essay "The Extended Mind" and Gibson's ecological approach to psychology, laid the groundwork for what is now referred to as 4E cognition (Newen, De Bruin, Gallagher [2018]). This framework encompasses four interrelated perspectives: embodied, embedded, extended, and enactive cognition. Together, these approaches argue that cognitive processes are

shaped by the dynamic coupling of brain, body, and environment, and often rely on external artifacts, social systems, and ecological contexts. Despite offering a unified critique of cognitivist paradigms, 4E cognition remains a site of ongoing theoretical debate, particularly regarding the nature of embodiment, the integration of external and internal processes, and the role of representations in cognitive activity. In this context, some approaches stand out as radical departures from the old paradigm, characterized by functionalism and representationalism, while others are considered weaker because they retain these elements (see Gallagher [2017]).

The ecological-enactive approach developed by Rietveld and colleagues, which serves as a reference point for our exploration, aligns with the more "radical" perspectives (Hutto, Myin [2013; 2017]).

This approach integrates complementary insights from philosophy, ecological psychology, emotion psychology, and neurodynamics, centering its proposal on an expanded interpretation of the Gibsonian concept of "affordance" (Rietveld, Kiverstein [2014]; Gibson [1979]). In The Ecological Approach to Visual Perception. Gibson defines affordances as the opportunities the environment offers to animals – what it provides or furnishes, either for good or ill – emphasizing the complementarity between the animal and its environment (Gibson [1979]: 127). The concept of affordance is highly complex and remains a topic of active discussion (see Heras-Escribano [2019]). The interpretation offered by Rietveld and Kiverstein is exposed in the seminal essay A Rich Landscape of Affordances (2014) where the central idea is that the affordances of the environment depend on the abilities an animal has, since the abilities we have as human beings are varied, the landscape of affordances we inhabit turns out to be extremely rich. Starting from the Gibsonian conception of "niche" understood as a set of affordances (Gibson [1979]: 129-128), to do justice to the variety of practices available to our species, that is to account for our rich ecological niche, and thus for the whole realm of social significance» (Gibson [1979]: 128), the solution proposed by Rietveld and Kiverstein is to situate the notion of "affordances" within the Wittgensteinian one of "form of life" – Lebensformen (1953). Thus, affordances turn out to be relationships between aspects of the sociomaterial environment and the abilities available in a form of life (Rietveld, Kiverstein [2014]).

In the human form of life, the social and material are intertwined and best understood as sociomateriality (Van Dijk, Rietveld [2017]), intended as the constitutive entanglement of social practices and material aspects that together shape the possibilities for human action. There is no clear separation between the social and the material because both are mutually constitutive in shaping the landscape of affordances. The material details of the situations in which we act matter because it is precisely in that context in which we develop our practices that one aspect of the environment presents itself as an opportunity to act. Materials con-

strain behavior, that is, they invite an ability to continue within a practice that has organized them, but they do not pre-exist our practices (Van Dijk, Rietveld [2017]). A practice forms the terms in which the materials currently constrain further activities to continue that practice in a particular way. In a nutshell, between practice and affordance, there is a constitutive relation, they are interdependent, and there is no priority; practices and affordances are jointly unfolded in concrete situations in real life, they are «two sides of the same coin, i.e., of the same sociomaterial entanglement of people, activities, places, and things» (Van Dijk, Rietveld [2017]: 4).

In the case of humans, abilities are acquired through a history of interactions in sociocultural practices, which means we learn to act appropriately according to the norms of context-sensitive practices. One will respond to environmental solicitations differently from those who have not been trained to grasp certain sociomaterial invitations. This is what Gibson refers to as «education of attention» (Gibson [1979]) through which a novice is subjected to a normative evaluation in relation to his or her way of proceeding within a practice in a specific situation. In this sense, agents are educated to find affordances in their surroundings that are relevant to their interests based on acquired practices, that is to act to a selected aspect of the environment, thus being able to grasp some invitations and ignore others. Crucially, this means that the practices in which we engage enable us to open ourselves to the world in a specific way. To explain why certain affordances rather than others guide an individual in a given situation, that is, why certain aspects of the environment stand out as solicitations to act, we could speak of "skilled intentionality" (Bruineberg, Rietveld [2014]) in terms of selective openness to the sociomaterial environment. An affordance becomes a solicitation as a result of a process of self-organization through which an animal, from a position of disequilibrium, tends toward an optimal grip to restore relative balance.

Action must be understood in a very broad sense to encompass processes often considered "higher cognition", typically characterized as "representation-hungry" (Clark, Toribio [1994]), such as imagining, planning, and remembering. These could therefore be viewed as «skillful activities in practices and terms of the material resources exploited in those practices» (Rietveld, Kiverstein [2014]: 346). This means that imagination should not be seen as "the pinnacle of representational cognition" (Van Dijk, Rietveld [2020]: 1), but rather as part of long-term processes that arise in response to indeterminate invitations in specific situations. The notion of "radical situated imagination" proposed by Van Dijk and Rietveld builds on a processual approach where affordances are determined in action over time (Van Dijk, Rietveld [2020]). According to this approach, imagination is not a decontextualized cognitive activity but emerges as continuous coordination with multi-scaled processes characterized by indeterminacy. This

indeterminacy, intrinsic to every possibility for action, enables the emergence of new opportunities, making imagination a key driver for opening and expanding practical possibilities.

Imagination is situated within temporally extensive processes and arises from coordination with multiple affordances that mutually shape each other over time. The indeterminacy of affordances, described as a "friction" between different temporal scales, allows individuals to experience activities as imaginative, opening spaces for novel configurations. A cornerstone of this situated concept of imagination is the "philosophy of the particular" (Van Dijk, Rietveld [2020]), a methodological approach that shifts focus from generalized, abstract accounts of imagination to the nuanced, concrete details of specific situations. Traditional philosophical strategies often privilege abstraction, treating imagination as a universal cognitive mechanism divorced from its contextual and material foundations. In contrast, a philosophy of the particular emphasizes prolonged engagement with specific practices and environments, revealing imagination as an emergent, situated phenomenon. Through philosophical ethnography employed by the authors – a method intertwining observation and conceptual analysis – it is possible to illustrate how concrete, small-scale activities are dynamically interconnected with large-scale, temporally extended processes. By attending to the interplay between these scales, it is possible to uncover how imagination is not a pre-determined capacity but a relational and responsive process that emerges through interaction with affordances that change and co-determine one another over time.

Although we are selectively attuned to certain aspects of our sociomaterial environment, shaped by the practices in which we are trained and the history of our interactions with that environment, it is nevertheless possible to open ourselves to new possibilities – to perceive opportunities for action that were previously inaccessible. This is where art and philosophy play a crucial role, as they challenge and expand the habitual ways we engage with the world (Noë [2015]; Rietveld [2022]). Alva Noë describes this transformative process as a shift «from not seeing to seeing, or from seeing to seeing differently» (Noë [2015]: xii).

"Seeing differently" happens when *indeterminacy* comes to characterize the act of perceiving and is experienced as imaginative; when things can become different from what they appeared to be. In *Strange Tools* (2015), Noë underscores the necessity of what he terms "reorganizational practices" to interrupt the habitual flow of perception in everyday life. These practices rely on the introduction of something new and unanticipated – a "strange tool" – which, devoid of a defined or practical purpose, disrupts our activities and opens a space for reflection. Essentially, art and philosophy make things strange to set in motion an imaginative and interactive process that can potentially "reorganize" us. From within everyday activities like walking, talking, and perceiv-

ing, emerge re-organizational practices that put "on display" the activities that organize us, exposing them for reflection and critique (Noë [2015]: 11-12). In this process, they "loop back down" (Noë [2015]: 16), providing new materials – concepts, images, movements, or gestures – that alter and expand the raw material of our daily activities and "give us resources for doing things differently" (Noë [2015]: 226).

In the approach to cognition employed here, perception is not regarded as an automatic process that occurs "in" the brain; instead, it is an active and embodied engagement with the sociomaterial environment. Perception is a dynamic and effortful achievement, arising «against the background of our skills, knowledge, situation, and environment, including our social environment» (Noë [2015]: xi-xii).

Art, as Noë explains, can encapsulate and recapitulate this process of perception. Every work of art challenges us to engage with it meaningfully – "see me if you can" (2015) – demanding that we move "from not seeing to seeing, or from seeing to seeing differently". For instance, when visiting a gallery, the initial experience might be one of confusion or indifference, where the artworks appear as «a sea of undistinguished stuff» ([2015]: 102). However, through active observation and thoughtful engagement, the pieces gradually "come into focus", much like individual faces at a crowded party.

As Ianniello has pointed out (2024a), the challenge posed by a performative piece — "see me if you can" — is not directed solely at an individual, but at a community as well (see Fischer-Lichte [2008]). This means that, in this case, this challenge underscores that the "achievement" of perception is, fundamentally, a "we-achievement". Performance art exemplifies the idea that perception is not an isolated act but something we accomplish together, *among* and *through* others. By inviting collective engagement and shared focus, performance art recapitulates the inherently social and participatory nature of how we perceive and make sense of the world around us.

Crucial for the current article to underline is that we propose an understanding of *strange tools* and the *estranged situations* that contemporary performance art can produce should be understood as intersubjective achievements (Ianniello [2024a]). We set out to lay the groundwork for enriching our understanding of perceptual and imaginative processes that underlie the shift "from seeing to seeing differently":

- We are interested in studying intersubjective and group dynamics that are set in motion by what Noë has dubbed as a "strange" aspect of the environment;
- In particular, we are interested in how "strange tools" can set in motion a rearrangement and resynchronization of the overall configuration of the perceptual field of a group, a collectively structured "seeing differently" that involves synchronization at many levels (Gallagher [2020]);

- We hypothesize that the introduction of *uncertain* and *surprising* aspects into the group situation can act as pivotal moments in such a perceptual shift and rely on the establishment of an attitude of trust towards *ambiguous* and *indeterminate* aspects of the environment (Ianniello, Habets [forthcoming]).

To make a more concrete illustration of these research aims we will outline the performative research program we set out to develop further in the coming years.

3. Infinity pool as a prototype for a new 4E Performative Lab

Infinity Pool is an art project that integrates performance and video installation, first enacted by the collective *Future Monsters* on July 7, 2024, at the Sarno River (Salerno, Italy) – one of the most polluted rivers in Europe (Lofrano et al. [2023]).

Its primary purpose is to investigate how the perceptual field could be reconfigured in highly polluted contexts. In this article we will use this performance as exemplary for the wider *performance* as *research* (Riley, Hunter [2009]) approach we are developing.



Figure 1. Infinity Pool. Sarno (Salerno, Italy), June 2024. Picture by Future Monsters.

Future Monsters is an international shifting collective of researchers, performance, and visual artists founded by Antonio Ianniello and David Habets, whose aim is to imaginatively shape the looming threats emerging in our society, defined by its state of ecological and climate crisis.

Future Monsters work revolves around the enactment of "imaginative niches" (Ianniello, Habets [forthcoming]) aimed at the *estrangement* of people's engagement with the sociomaterial environment (Section 5) through the introduction of tools like masks, costumes, and other props (like puppets, etc.). This process of estrangement allows out-of-ordinary figures, uncanny situations, or even monsters to appear – we will focus specifically on the historic and theoretical underpinnings of the latter in Section 4.

In the coming years, *Future Monsters* will present *Infinity Pool* (Sarno 2024), *Biston Betularia carbonaria* (Milan 2024), and *Nova Naumachia* (Rome 2025), performances that will serve as the platform to conduct phenomenological and cognitive-behavioral research that will flow into a new 4E Performative Lab. By integrating artistic performance and phenomenological research into a singular event, the lab aims to offer a unique real-life situated "collective imagination" (to an extent) that can be a reoccurring and reproducible situated research setting.

The long-term 4E Performative Lab aims to research how we can understand "seeing differently" by analyzing participants' experiences through developing a style of video-elicited phenomenological interviews (Petitmengin [2006]; Heimann et al. [2022]; Høffding, Martini [2015]) and analyzing group dynamics by a multimodal approach to ethnographic fieldwork based on Perspectival Kinaesthetic Imaging (Malafouris et al. [2023]), and participatory ethnographic research (see Van Dijk, Rietveld [2020]). Crucial for our approach, is the two-fold introduction of the recording and installment of the time-based material, within both the artistic performance and as part of qualitative research methodology, as a way to evoke a reflection on the group dynamics.

We will illustrate the advent of this approach by introducing the prototype performance *Infinity Pool* enacted at Sarno River. We will highlight a few of the initial explorative methodological results. First, we will explain the setup of the performance.

Infinity Pool is structured as a participatory masked performance that involves the inhabitants of a place as its performers. It includes a series of qualitative interviews and a video installation, which will be projected onto screens set up within the explored space itself. The collective Future Monsters developed the reflective mask in collaboration with sculptor Ivano Troisi at his studio in Montecorvino Pugliano (Salerno, Italy) during the weeks leading up to the inaugural performance. The mask was modeled in clay and made reflective through a three-step firing process: a biscuit firing, followed by an underglazing, and a second firing that rendered the glaze reflective (Figure 2). Its design features ambiguous



Figure 2. Mask creation for *Infinity Pool*. (Montecorvino Pugliano, Salerno, Italy), June 2024. Picture by *Future Monsters*.

characteristics inspired by both ancient Greek masks and those of Noh theater (Meineck [2019]: 90-96). In line with the "Noh effect" (Lyons et al. [2000]), the mirror mask's expression shifts when tilted, dynamically altering what it reflects. This interplay underscores the relationship between the environment's expression and the actions we take within it. In practice, the reflective mask assumes a distinct "expression" by mirroring, for example, leaves, concrete, water, or waste, depending on the performer's movements and the sociomaterial aspects encountered — aspects shaped and organized by the particular practices employed in the given environment. An ultra-wide-angle camera was mounted on top of the mask pointing at it to capture the mask itself and the distorted reflections it generates (Figure 3).

The reflective mask, equal in size to the actor's face, was worn in its prototypical and experimental version by Antonio Ianniello (Figures 1, 3, 4) - as previously mentioned, the ultimate goal is for each participant to wear the mask, enabling them to explore the polluted environment in which they live.

The mask is employed here as a tool that has historically enabled performers across cultures to act and perceive in novel ways within the performing arts. It facilitates alternative gestures and movements for the performer while simultaneously encouraging the audience to expand their perceptual field, fostering

a deeper engagement with the action and its context (Meineck [2019]; Wiles [2007]; Bell [2001]). The artistic intention to reflect the surroundings was an attempt to embody the characteristic of inviting exploration of the actions and the surrounding environment. A video recording is employed as a means of analyzing how one reconfigures one's perceptual experience¹.



Figure 3. Infinity Pool. Sarno (Salerno, Italy), June 2024. Picture by Future Monsters.

In our prototypical case, the exploration took place at three specific locations connected to the Sarno River: 1) at its source, in Sarno (SA), 2) where the river

This mask employed in *Infinity Pool*, in a sense, parallels the experiments with glasses and mirrors conducted by Köhler ([1951] 1964) and Taylor (1962). These studies, which utilized inverting glasses to "estrange" the way light entered the eye, led to what Noë (2004) refers to as "experiential blindness". Despite being visually unimpaired and receiving clear environmental stimuli, participants were rendered unable to see. This demonstrated that the inability to perceive does not stem from the nature of the stimulation but rather from the perceiver's sensorimotor understanding of it (Noë, 2004). *Infinity Pool*'s aim to "enstrange" is achieved through the use of reflective masks in a group context. What is seen through the mask and the various stages of the performance tends to highlight, paraphrasing Noë, that the ability to see (differently) stems not only from the perceiver's sensorimotor ability but also from the contextual and intersubjective engagement.

flows through an inhabited area in Scafati (SA), and 3) where it empties into the sea in Castellammare di Stabia (NA)².

The interviews are interwoven into the performance following the initial scheme below:

- A. Masked performance: A group of participants, residents familiar with the specific area to be explored, wear masks, and traverse a designated space.
- B. First interview: Each participant undergoes a first round of qualitative interviews to analyze how the mask helped reconfigure their perceptual field.
- C. Video screening: The group of participants watches a loop of each video they singularly recorded during their performance on a screen set up in the space explored (Figures 4, 5).
- D. Second interview: Each participant takes part in a second interview to investigate how the perception of the visual field has ultimately changed.



Figure 4. *Infinity Pool.* Sarno (Salerno, Italy), June 2024. Still image from video registration by *Future Monsters*.

A two-step interview enables participants to explore their relationship with the surrounding environment by observing how their orientation and movements influence the emergence of a specific "face", and reflecting on the mate-

A partial outcome of the initial experiment at the Sarno River can be viewed at the following URL: https://vimeo.com/1041077889 (password: infinitypool).

rials – such as leaves, water, concrete, and waste – and how they are organized through our practices, as mirrored in the mask and captured on video. In addition, a more general reflection on a group's ability to reconfigure the perceptual field is provoked.

In an explorative installment of *Infinity Pool* conducted in September 2024 during the Microphenomenology Interview seminar led by Katrin Heimann at the Interacting Minds Centre (IMC) at Aarhus University, Denmark, there was the opportunity to experiment with the functionality of the mask and its use within a qualitative interview framework. One of the participants noted: «I could not distinguish between my face and the environment; I did not recognize the direction of my face; is it my face penetrating the environment or the environment penetrating the concave shape of my face?».

To be able to analyze the participants' experiences in more depth, we opt to use a phenomenological interview technique, to address significant challenges in qualitative research, such as the "Schneider Problem" (Cole [2008]) and the epistemological discontinuity between participants' data and the researcher's interpretation³. This approach ensures that empirical data remains open to re-evaluation and reinterpretation, fostering more accurate understandings. Moreover, this method bridges the gap between subjective experience and analytical interpretation through reciprocal interaction. It engages the interviewee not as a passive data source but as an active collaborator, ensuring that the resulting descriptions reflect nuanced, first-person perspectives (see Høffting, Martiny [2015]).

As anticipated, learning from the initial studies, the conduction of singular first-person interviews will be expanded to the conduction of simultaneous first-person and post-event group interviews in future iterations. Additional gestural and group behavioral analysis will be performed by analyzing interaction (see Lindblom [2015]; Nalepka et al. [2015]; Richardson et al. [2007]). The prototype performance *Infinity Pool* and test interview analyzed here serves as an initial sketch for a research program and, at this stage as proposed here, it aims specifically to explore how we intersubjectively achieve to see differently an environment in crisis

The "Schneider Problem" (Cole [2008]; Høffding, Martiny [2016]) refers to the misinter-pretation and misuse of pathological cases in phenomenological research, exemplified by Merleau-Ponty's (Merleau-Ponty [1945]) on the case of Johann Schneider, a World War I veteran who suffered brain injuries. Merleau-Ponty, while analyzing Schneider's motor impairments, mistakenly attributed Goldstein's general descriptions of normal human behavior to Schneider's pathological condition. This conflation of normality and pathology led to inconsistencies in Merleau-Ponty's interpretation (Dreyfus [2007]: 63-69; Cole [2008]). We believe phenomenological interviews maintain epistemological continuity by allowing researchers to clarify ambiguities through direct interaction with subjects.

4. Monsters: Facing invisible treats

In this section, we will consider a particular type of "estrangement" in participatory performance, where "monstrous figures" make their appearance. *Future Monsters* deliberately focuses on monsters and estranged situations as a directive strategy to invite performers and the audience to reflect on what is taken for granted in everyday life. We will outline the theoretical trajectory along which monstrous performances have formed, tying *Infinity Pool* to a lineage of premodern theater in which "monsters" prominently feature. The phenomenon of the monster we propose to understand as a protoform of estrangement⁴. In recent decades the monster has become ever more an invisible being. In this section, we will link the monster's invisibility to the stunned awareness of the ongoing climate crisis.

The figure of the monster and monstrosity appear in extremely different contexts ranging from art to anthropology, from medicine to religion, from sociology to medieval studies, or from ecocriticism to terrorism studies. Diverse characterizations from various fields have been suggested to define the concept of "monster". The philosopher Noël Caroll, for example, argues that the monster arouses curiosity because we want to try to understand how we will succeed in dealing with it, and as we entertain ourselves with the monster it challenges our categories of knowledge: «monsters are not only physically threatening; they are cognitively threatening. They are threats to common knowledge» (Caroll [1990]: 34). Literature, film, and media scholar Jeffrey Weinstock defines our interest in monstrosities as an expression of «desire for other worlds» (Weinstock [2013]: 20). Medieval studies scholar Asa Mittman refers to epistemological vertigo through which established cognitive categories are challenged (Mittman [2013]). Anthropologist Timothy Ingold speaks of the monster as a «form of fear» (Ingold [2013]) through which an otherwise undefinable terror is attempted to be concretely articulated.

In his seminal essay *Monster Culture (Seven Theses)*, Jeffrey Cohen, a foundational figure in Monster Studies, explores the concept of monster by formulating «breakable postulates» toward «understanding cultures through the monsters they bear» (Cohen [1996]: 4). Cohen argues that the monster's body is cultural – a physical manifestation of society's fears, anxieties, and desires. Monsters, Cohen contends, always escape; they transcend boundaries and structures, persistently defying categorization.

The folkloric monster was often embodied in various European rural performances during times of shared anxiety – sometimes cyclical, such as the changing of seasons at solstices – to address communal threats (see Frazer [1890]; Wittgenstein [1967]). These figures typically represent beings other than human, creating a liminal space in which ordinary social rules are suspended. This temporary rupture gives rise to a sense of "communitas" (Turner [1969]), a state that fosters unexplored possibilities for social interaction and promotes equality and solidarity among participants.

As religion scholar Timothy Beal explains in "Religion and Its Monsters", "monster" derives from the Latin *monstrum*, which is related to the verbs *monstrare* ("show" or "reveal") and *monere* ("warn" or "portend")» (Beal [2002]: 6-7). The etymology suggests, as philosopher Stephen Asma observes, that the monster is "a message that breaks into this world from the realm of the divine» (Asma [2009]: 13). The monster is thus a kind of omen indicating something threatening that populates one's world. In this sense, as Cohen suggests in the fifth thesis, "the monster stands as a warning against exploration of its uncertain demesnes" (12). What we want to foreground here is that the monster shows us something and, by showing what we cannot usually see, warns us.

One of *Infinity Pool*'s artistic aims is to display our relation with the sociomaterial environment. This, in times of ecological and climatic crisis, can appear frightening. We mean the seemingly disastrous trajectory by which our everyday ways of living continuously worsen the ecological state of our planet. Many people at times feel caught in a societal and political situation that revokes the change necessary to avert disaster, yet in their everyday engagement, they take for granted the impact of their actions on the direct environment (see Slaby [2024]; Brand, Wissen [2020]).

Monsters can serve as harbingers of category crisis: «they are disturbing hybrids whose externally incoherent bodies resist attempts to include them in any systematic structuration» (Cohen [1996]: 6). It is a «difference made flesh» (Cohen [1996]: 7), representing otherness and inhabiting society's margins. The monster polices the borders of the possible, functioning as a mechanism for regulating societal norms and boundaries. In this sense the monster calls «horrid attention to the borders that cannot – *must* not – be crossed» (Cohen [1996]: 13). Cohen argues that the fear of the monster is a kind of desire (Cohen [1996]: 16) meaning that the monster not only provokes revulsion but also attracts toward forbidden practices allowing «safe expression in a clearly delimited and permanently liminal space» (Cohen [1996]: 16).

Regarding *Infinity Pool*, our primary focus is on exploring the monster's ability to be a "difference made flesh". By introducing the reflective mask, the participant/performer is transformed into a *strange being* and directs joint attention onto the direct surroundings via the reflection in the mask (see Ianniello [2024a]; Meinek [2019]). In this sense this particular mask can be used to "personify" the concept of living environment, it imaginatively gives it a face and a body. It does so by distorting and remapping the entire perceptual field onto the facial features of the performer. It makes something that is almost always taken for granted and makes the concept of *living environment* salient and intractable.

Since the last century or so, the monster as it has been represented has gradually become invisible by decoupling from morphological features to show itself exclusively through its actions (Weinstock [2013]: 276). Four contem-

porary manifestations of invisible monstrosity can be defined: the psychopath, corporations, the virus, and nature (Weinstock [2013]). These have in common an «epistemological anxiety related to visibility» (Weinstock [2013]: 287). An epistemological barrier blocks us from contemporary monstrosity: we cannot see who or what threatens us except when the murder has already been committed. The contemporary monster constitutes a challenge to our perceptual capacities. Norman Bates, for example, who has the reassuring face of Anthony Perkins in Alfred Hitchcock's 1960 film Psycho, is a psychopath, but one cannot tell this just by looking at his face, indeed his appearance matches the characteristics of what would normally be called a good guy. Simply by looking at him, one cannot see him for what he is: a monster. An example of a contemporary corporate monster may be the 1973 eco-horror classic film, Sovlent Green, directed by Richard Fleischer and loosely based on the science fiction novel Make Room! Make Room! by Harry Harrison. In a future where humanity resides on an overheated and overpopulated planet, with extreme social polarization, food scarcity is widespread. The Soylent Green bar appears to be the only viable solution to feed the global population. However, after an extended investigation, it is discovered that these bars are made from human corpses. Beyond its appearance, one must engage in a chase to understand what the Soylent Green bar really is and what it had made of us – cannibals. A last example, again drawn from the world of cinema, is that of the invisible climate monster presented in Night Shyamalan's horror film *The Happening*, where a wind-borne neurotoxin of unspecified origin leads infected people to commit suicide. The wind that passes through tree foliage and ripples the surface of the water redefines the constituent elements of our environment, on which we have always been able to rely, as potential threats. In the course of the film, we learn that trees and other plants could release the neurotoxin that is causing the extinction of our form of life as a defense against human invasion. Beyond the development of the plot, this type of narrative brings to the forefront how we have always considered our relationship with our surroundings. Emerging, thus, as monstrous – as bodies begin to form piles – the environment no longer presents itself as merely an inert backdrop to our actions.

Such a monster, then, from the last century or so, constitutes a challenge to what we can see, or rather the monster questions our claim to grasp with a glance what threatens us. Confronted with Norman Bates who despite his reassuring face reveals himself to be a monster, the *lectio facilior* we get from this is that it is important not to trust first impressions. But the crucial point we want to foreground is that the contemporary monster, and even more so the climatic monster, tells us that to see what is in front of us and what poses a threat to our lives, we have to engage in a process that unfolds over time; "to see differently" and move from «not seeing to seeing» (Noë [2015]: xii) we

have to follow the monster, engage in concrete and situated investigation, flush him out. This is closely tied to the habitual practices we enact based on the material invitations sedimented over the years and the skills we have developed in our lives.

We regard *Infinity Pool* to enact precisely such an ephemeral monster. In the next section, by introducing the notions of "imaginative niche" and "estranged education of attention", we will investigate how the "evoked" monsters of *Infinity Pool* might invite us to uncover what has remained hidden.

5. Molding imaginative niche to enact an estranged education of attention

Through *Infinity Pool*, we propose that to confront the environment – "turned bad" – and to grapple with the climate monster, we must imaginatively enact it by exploring the sociomaterial entanglements.

We suggest understanding the possible monsters "evoked" by *Infinity Pool* as linked to a very specific form of "education of attention" that is enacted through the molding of an "imaginative niche" (Ianniello, Habets [forthcoming]).

To present our proposal, we will briefly introduce an enactive approach to "play" developed by Marc Andersen and colleagues. This approach suggests that humans intentionally engage in play to create surprising situations (Andersen et al. [2022]). They argue that play serves as a form of informal experimentation, enabling individuals to acquire practical knowledge and deepen their understanding of the world. According to the authors, play fosters creativity and innovation by crafting environments rich in unpredictability, which lies at the heart of its enjoyment and appeal (Andersen et al. [2022]: 467). They describe play as a variety of niche construction where «the organism modulates its physical and social environment in order to maximize the productive potential of surprise» ([2022]: 463). In this sense, we suggest that "imaginative niches" open individuals to a realm of possibilities that they may not have encountered without engaging in the activity. Building on the work of Andersen and colleagues (2022), we propose that the urge to play arises from an intrinsic motivation to face the unexpected.

We sustain that an imaginative niche represents an openness to what diverges from everyday practical engagement with the world. By outlining the broader practice within which an imaginative niche is situated, it becomes possible to identify the typical affordances likely to be explored. For musicians, activities such as jamming and improvisation serve as ways to explore musical gestures. Through playful and interactive coordination, a group can discover rhythms, counterpoints, and melodies that evoke a range of feelings, emotions, and thoughts (Krueger [2019]; Høffding et al. [2024]).

We propose referring to the environments that enable and shape such playful activities as "dynamic imaginative niches". Individuals and communities create these niches to facilitate playful experimentation that prepares them for future surprises. The pleasure derived from imagination in play comes from the feeling of overcoming challenges or reducing surprise more quickly than expected (Andersen et al. [2022]: 468).

The core idea of the "imaginative niche" is that we intersubjectively mold the living environment as a means to explore new and unexpected possibilities to act. Within imaginative niches, unlike affective and cognitive niches (Colombetti, Krueger [2014]; Sterelny [2010]) the object of our imagination is not anticipated to be effective in a specific way; that is, the meaning of the object for an individual and the group within the activity remains open, and can allow new possibilities for action to enter (Ianniello, Habets [forthcoming]). When a monster is staged, an aspect of the ecological niche such as an object, artifact, or tool is used to enact an imaginary being that foregrounds looming dangers that remain obscured or denied by many in a community. The monster is a specific engineering of our niche that enacts an "estranged attention education" by bringing to the foreground threats that for some reason do not concern us. Humans, as anticipated, are selectively open to the sociomaterial environment. The practices in which we are educated through "education of attention" have pre-selected and organized for us the materials on which we find ourselves operating: this in practice leaves underdetermined certain aspects of our environment that remain effectively invisible. We suggest that the monster enacts an "estranged education of attention" in that it invites a specific community to focus on what typically remains hidden. It calls attention to aspects that have not been selected by our current practices and thus have been made invisible.

Through *Infinity Pool*, the environment can acquire imaginatively a "face" if the performer/participant engages in an "estranged education of attention" by framing the devastated environment with their "reflective face", through movements, interactions, and linguistic descriptions. This process actively molds an "imaginative niche" that allows an otherwise invisible "monster" to emerge.

What could potentially make this "monster" unsettling – both during the performance and in the video installation – is not only the transfiguration of the masked performer, whose "skin becomes a mirror", but also the output of education of attention that lets aspects of the extremely polluted environments emerge during the exploration, making them effectively become part of the performer's new reflective face. In the case of the Sarno River, for instance, the mask could incorporate reflections of waste materials, while the qualitative interview might uncover the nauseating odors encountered near the polluted water and refer to illegal industrial discharges.

This monster, his face assembled in a dynamic flow of distorted objects and blurred colors, with voices reflecting on and probing their significance for specific lives, is one of "our children" (Cohen [1996]: 20) asking us why we have created it. We, as participants/performers, leave him to enact and lead us to the borders, trampling «the farthest margins of geography and discourse, hidden away at the edges of the world and in the forbidden recesses of our mind» (Cohen [1996]: 20). After the exploration of underutilized – invisible – aspects of our sociomaterial environment, it returns – and we return – to confront ourselves, questioning our lives.



Figure 5. *Infinity Pool*. Castellammare di Stabia (Naples – ITA), June 2024. Still image from video registration by *Future Monsters*.

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