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From *What Is* to *What If* to *Let's Try*: a Treasure-Box for the Playful Academic

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ABSTRACT

Academia is the global institution for higher learning. Its job is to gather wisdom, develop skills and educate new generations of researchers. Over the last decades, ever more scientific research points to playfulness as a key ingredient of sustainable learning environments. Nonetheless, academic culture largely ignores or even suppresses playful engagement. In this paper, we address this paradox: as three researchers from different disciplines, we compose a set of concrete activities to support playfulness in academia. Here, we present the process and preliminary outcome of this collabroative endeavour: we introduce the concept of playfulness (a motivational loop) and philosophy (4EA cognition) that informed our approach, motivate our particular choice of method ('scores' and a selection of movement and awareness practices), and document our playful exploration in the form of a protocol, empirical evaluation and supporting documents that make our results available to other researchers. As such, we promote playfulness as a sustainable learning practice, and invite you to join us in bringing it to life in the lab.

Introduction

What if you woke up being a researcher and teacher at university? What if this meant looking back to an academic education that helped you identify the research questions most meaningful to you, in your environment. An education that motivated and prepared you to give yourself to these questions, daily anew. What if each day you woke up to the tickle of: Where will this day lead me? How will I manage today to doubt myself, to challenge what I thought yesterday, to go further, beyond myself, to have fun, to surprise myself, to make a difference AND genuinely involve others in that process?

Academia is the global institution for higher knowing and learning: the public administration responsible for fundamental and applied research, certified scientific and technical education, and thinking of alternative solutions and liveable futures more

generally. As such, a high-quality learning environment is a key responsibility for academia[i]. Nevertheless, a rising number of academics warn about unsustainable working conditions affecting both the health of the academic workforce, as well as the quality of the knowledge it produces[ii]. These critical voices portray a system that prefers "fast science": a blind hunger for unambiguous results published and recognised in as many high-ranking journals as possible, over what might be called "slow science": the careful design of spaces and coordinated activity that can sustain paradox, support critical reflection of difficult questions and generate context sensitive learning and documentation, by transparent leadership that genuinely engages the diversity of perspectives involved, including from the public sector[iii]. Expected to immediately deliver unquestionable results, scientists often forget to think about the questions that really matter to them, alone or together, and refrain from voicing doubts or staying with the troubling complexity that inevitably tends to emerge along the way of a research project. Avoiding to muse uncertainty and not-knowing, we are less likely to notice the limits of our understanding, and thus to go beyond what we already know[iv]. Statements that involve personal experience in general tend to be judged worth less than statements presented as the outcome of an established methodological procedure. However, personal experience remains our most immediate access to the world - our colleagues, abstract ideas, our surrounding or other material. A disqualification of lived experience therefore not only affects our health by promoting stress and depression, it also cuts us off from insight, motivation and creativity. As a consequence, we respond less to - take less responsibility for - the world and others.

In 2019, the British environmental activist Rob Hopkins published *From What Is to What If - Unleashing the Power of Imagination to Create the Future We Want*. The book asks us to stop doomsaying our present and future given the severe sustainability crisis we live in. Sole criticism can easily culminate in resignation and depression rather than activism. Instead, the author suggests, we should get together and draw from our imagination, think of liveable alternatives and realise, test and develop them in our immediate environments. One of the major ingredients Hopkins brings to his imagination workshops is playfulness. Likewise, over the last decades, ever more scientific research in kindergarten and schools, but also companies and organizations has pointed to playfulness as a key ingredient for life-long learning and sustainable transformation of individuals, groups and society as a whole[v]. However, despite these results and the central role of learning, change and collaboration in all aspects of the academy, playfulness is still a rarely discussed and even less often promoted topic in academia - possibly due to the above described self-image of academia (that is to provide objective, rigorous and flawless work), which conflicts with what we intuitively understand as "play".

This article presents our attempt at following Hopkins' spirit of pragmatic and imaginative solutions to support sustainability and break with the lack of play in academia. In three steps, we browsed our research methods, repurposed our academic tools to build an extendable toolbox for playful academic collaboration, and test our result with ten co-researchers:

Based on a study published by the third author (Heimann & Roepstorff, 2018), we first present our description of what it means to become playful. In reference to 4EA cognition, we furthermore outline what we believe to be essential preconditions for entering a playful state of mind. Inspired by art-science collaboration, in particular their dual nature of being both an intervention and a research project[vi], we then entered an iterative design process to create tools that allow us to slowly gain the knowledge and technique for the desired change. Here, we present our outcome: a protocol of activities designed to support the conditions for playful academic work - a structured set of activities for each of you to try them out in your own research groups and environments. Thirdly, to better assist and welcome others into this process, we provide data on participants' experience with the protocol, as well as reflections from our own experiences with its design and facilitation. Let us begin.

What do we mean when we say playfulness?

Play is a term often associated with children, toys and games specifically designed or repurposed to allow entry into exploratory processes for the fun of it[vii]. *Playfulness*, in turn, is mostly studied as a personal disposition: a combination of personality traits that allow a person - child or adult - to lead their lives with more ease and fun. Playful people, so the assumption, are naturally more inclined to use their intellect and creativity to recontextualize any situation as "play-like"[viii].

Recent research suggests yet another perspective on play: while context and personal dispositions do matter, the capacity to *be playful* is universal - it is in principle accessible to anyone, anywhere[ix]. For example, Heimann and Roepstorff (2018) asked participants to perform a brick-building task in two conditions: once so that it feels as playful as possible and once so that it does not feel playful at all. Afterwards, participants were interviewed about their subjective experience of performing the task under the two different instructions. The reports reveal a series of micro-gestures to transition into playful states of mind that is very similar across participants. Because it is central to the work we propose here, we introduce this in detail:

The first of the gestures that participants perform to enter playfulness is to free themselves from any given or anticipated set of rules: they start the process with a feeling of autonomy and agency - "If I want to be playful, I need to do whatever I want". This self-advice seems to help participants expand their repertoire of actions beyond the explicit instructions provided (such as on precisely what to build). It also affords them a different kind of engagement with themselves, their environment and especially the building material they were using for the task: participants who reportedly reach a playful state describe a sensual, in some cases even aesthetic relationship to the bricks, an enjoyable and surprising experience of "becoming aware" of tactile and other perceptual qualities. Their reports furthermore indicate that such heightened sensitivity leads to a process of "fiddling" with the material - an open-ended process in which participants let themselves be guided by the sensations, affects, ideas or movements that emerge in their intimate interactions with the bricks. It was, in the words of one participant, "as if the bricks took over" - as if participants' cognition got extended by them. From there, boosts of creative building acts emerge:

outcomes that generate strong surprise and fascination ("I could not have planned what my hands and the bricks came up with"). The associated positive emotions ("Wow. I did not think I was able to build something like this"), in turn, seem to heighten participants' feelings of competence and autonomy, and leave them eager to continue the exploration and start a new building project. As such, the micro-gestures that Heimann and Roepstorff (2018) identify as inherent to a playful state of mind form a loop: playfulness tends to feed and facilitate its starting conditions.

Creating the Conditions for Playful Learning

Notably, the study also reveals the difficulties involved in becoming playful. Specifically, a number of participants report that they do not manage the crucial step of freeing themselves from the situational demands they experience. They feel observed, and their minds are busy predicting the researchers' expectations to fulfill the experimental task in all its dimensions. Instead of opening a space for intimate exploration, the task puts them under pressure to perform 'according to plan'. As a consequence, they describe their experience as boring and uncreative, leading to insignificant outcomes that leave them with a feeling of frustration rather than the motivation to try again[x].

Experts in the field of learning therefore point to the fundamental importance of setting the right frame: to create an environment that makes do without hierarchies and performance pressure by focusing on the well-being, interest, abilities and co-creativeness of the learner[xi]. When this discussion reaches university classrooms, it promotes teachers as facilitators rather than instructors, and equips them with tools to - for instance - provide (peer) feedback and other means to check the acquired knowledge in non-intimidating ways[xii]. A similar trend can be observed in experimental design: as researchers become increasingly aware of the detrimental effect of demand characteristics (such as described above) on the ecological validity of their results, they are looking for ways to create testing environments and use tasks that speak to participants' interest and intrinsic motivation[xiii].

Viewed in light of Heimann and Roepstorff's (2018) playful loop, these approaches work towards creating safe spaces, making room for autonomy and agency, and supporting fun and well-being. However, they only look at students or research participants - forgetting teachers, researchers, professors and anybody else involved in academia. Furthermore, what is lacking is the element of sensitivity or surprisingly intimacy: the simple but powerful act of paying attention to the diversity of one's ongoing experience. In our view, such sensitivity is essential: it allows us to effectively "fiddle" - to develop a deeply intimate, in the sense of border blurring, interaction - with the entire spectrum of our own and others' experience, and thus to learn, transform and change in mutual response to our environment[xiv]. On this basis, we are ready to overcome our own habits and biases, and engage in the kind of intelligent and resilient collaboration that unforeseeably but almost definitely leads to breakthrough discovery.

Before we introduce our particular approach to facilitating sensing, deep listening and tentative manipulation in everyday academic life, we take a moment to elaborate the theoretical background that informs our work: so-called 4EA cognition.

Cognition is Embodied, Embedded, Extended, Enactive and Affective – say what?

According to embodied, embedded, extended, enactive and affective cognition - in short, 4EA[xv] - how we perceive the world, think of it and act in it is one fundamentally entangled process. Metaphors of automats or computers that passively register and discriminate between different inputs, process and react to them according to preprogrammed algorithms fall far short of reality. Instead, as the 4EA framework suggests, we enter a situation as motivated and alive individuals who hold particular questions, which fundamentally shape the type of answers and stories we (can) come across, and integrate them into our thoughts and actions. Put simply: the net that we use determines which fishes we can catch.

At the foundation of cognition, proponents of 4EA research imagine a large network of mutual influence that connects a diversity of elements. Importantly, they portray our central nervous system as but one member of a family of biological, personal, socio-cultural and ecological substrates of thinking. More concretely, and applied to the working life of an academic, we distinguish the following five levels:

At the first level, we focus on the important role of our **cognitive-affective states** for our work-life. The personal motivation we bring to our work, the value we see (or do not see) in our research questions, methods, broader approaches and outcomes, is decisive for whether or not we are able to sustain our research interest over decades of our life. Furthermore, our affective states and resonances suggest action possibilities beyond culturally impregnated norms and procedures - recognising them can be extremely helpful in picking up on subtleties of dialogues and argumentations in reading, writing, listening or talking. It is crucial for navigating work related social situations in a non-violent manner.

On the second level, our **body** plays a crucial part in how we perceive and act in the world: Our body size determines our natural perspective, our posture how long we can sit without pain, our sex and weight determines the optimal room temperature for working. How we breathe and what we eat is not only fundamentally important to how we feel and thus in what color we perceive the world, but also to how long of a lecture we can give without losing our voice and at what time we need a break.

On the third level, it is our **physical environment** that shapes our thoughts and actions: we can have little or plenty of space available, which will afford us to work at particular scales. We might be situated in light or in darkness, sharpening different senses. We may be surrounded by wild infuriating nature or calming beton, sit on soft moss or lean against sturdy metal, smell Proust's madeleine or an unknown chemical, work with paper and pen or at the computer - all with different effects on our body, affect, lived experience and thus again our work.

As a fourth level, we consider the **social interaction dynamics** through which we take part in the world and in a work space. It forms the playground on which we develop and test our roles and identity, and it presents us with others' expectations, which we may or may not feel ready to meet. Our relation to others might well be the greatest source of both motivation and despair, inspiration or boredom, activity or passivity, depending on the circumstances.

Lastly, we consider the influence of **concepts, tools and culture** on our work. This comprises the language(s) in which we communicate, the ideas and platforms through which

we manifest and reflect our experience, and the particular methods and materials we use in our work. We also consider the rules and habits modelled by influential individuals, the research groups we form part of and our academic discipline as a whole to form part of this level. The processes and products that we agree to cultivate, as well as the traditional ways of our profession shape the way we investigate the world, what of it we discover and how this affects us.

According to 4EA, our cognitive abilities depend on all levels, equally. We therefore think that we must take each of them into account when we attempt to support a more playful academia. As a consequence, we propose an academic "routine against routines": an activity that makes us sensitive to our existence across the levels we describe above, that opens opportunities to enter playful exploration at each of them, and that supports us in integrating the diverse experiences we make. This, we argue, should not only lead to a more enjoyable, challenging and enriching work process, but also generate innovative outcomes. Our approach resonates strongly with research programs such as somaesthetics, enactivism / neurophenomenology, critical co-constructed auto-ethnography, as well as the emerging field of art-science collaboration, all of which acknowledge and strive to integrate more 'objective' as well as more 'subjective' perspectives[xvi].

Scores for the Playful Academic

As we planned this article, we first considered to outline these thoughts in writing, including reflections on our own work habits. We quickly realized, however, that this left us - and would likely leave the reader - with the unsatisfying feeling of a big but empty promise. We then asked: how could one concretely go about facilitating 4EA awareness and playful interaction within academic contexts? And would such facilitation really lead to the anticipated effect of more sustainable and creative collaboration and learning?

Finally we thus took Rob Hopkins advice: instead of analysing the status quo or theorizing in search for the perfect alternative praxis, we would draw from our expertise and imaginative capacity to design and test a small scale, manageable intervention to bring about the change we envisioned in our immediate environment.

More concretely, based on Pedro's background in performance arts and his experience as an improvisation teacher, Kat's track record in art-science collaboration and Annika's work at the intersection of somatic education and cognitive science, we decided to create a series of **scores** to lead us into academic work of a different kind.

A score is essentially a set of clear and simplified instructions to guide participants into exploration - be it in a real or virtual environment. In music and dance, a score is meant to convey a deep intuition, intimate knowledge, by transforming it into a structured task to be performed in a specific time frame according to easy to follow instructions. Successful scores thus lead to a complex output with the minimum possible pre-knowledge and effort expected from the receiver. Importantly, such output is flexible: scores should animate rather than guide, giving impulses for development in many possible directions: through the right level of definition, scores explicitly define one level of interaction and establish a game dynamic that everybody can easily enter. At the same time, they provide hidden affordances

along other dimensions not initially apparent to the participants. Therein, they leave ample space for exploration, uncertainty, discovery and surprise. By including the entire spectrum of activities from performing to exploring and experimenting, scores are wonderful candidates for transporting and at the same time generating knowledge as a diversity of evolving paths[xvii]. They provide a horizon of opportunities, and space to rethink and decide for oneself, after having gained some experience. We highlight this quality by calling them *play-frames*, not game-frames[xviii]. Scores can provide a shared agreement on how to

Contact Improvisation (CI), is a modern dance form that - therein similar to Feldenkrais - seeks to expand our bodily repertoire. CI practitioners are interested in exploring all movement possibilities of the body - a single body in relation to the floor / environment, or several bodies that share weight, roll, slide, swing or climb across one another. Originated in New York in 1972 in an avant-garde movement exploration by the American dancers and choreographers Steve Paxton, Nancy Stark Smith, Daniel Lepkoff and Nita Little, CI is today taught around the globe. A central principle of this practice is to stay aware of moving without pursuing any particular goal or intent. To exemplify: in a *small dance* - a solo practice of standing upright - CI dancers observe the micro reflexes of their body that allow them to maintain balance. Or, in a *rolling point*, two dancers focus on a single point of physical contact between them, which they keep moving at roughly the same speed and intensity. While none of the scores presented directly invites for a touch improvisation, the drawing activities 1 and 4 rely on similar principles of moving and producing in interdependence and attunement to others.

Another important part of CI knowledge is the care taken to open, facilitate and close a session. A good practice offers everybody time to arrive physically and energetically, before entering into contact with others. In CI, you practice arriving somewhere *through* a moment of bodily relaxation and 'strolling' - you walk around, lie down, take a couple of deep breaths, taste and follow the path of interesting movements. Throughout the time of practice, teachers furthermore encourage a stance towards the room as a playground and towards others as welcome participants in one's personal exploration. When anybody takes a pause or retreats to the edge of the practice space, CI culture is to still consider them an active part of the practice, a witness whose attention matters just as much as that of those more centrally involved. While hard to pin down as inspiration to single activities, we recognise these principles as key to our entire endeavour and tried to design the entire protocol allowing for their realisation.

A **Listening Circle** is an intentional space to share experience. The practice is referred to as council or sharing circle, and is based on the ancient tradition of gathering around a fire to tell stories. It usually begins with a reminder of its form - there is a beginning, an end, a center and a talking piece - and its principles: (1) to listen with one's whole self (at a conceptual/mental, emotional and physical/bodily level, as well as to the general atmosphere in the group), (2) to share stories from one's own life, (3) to wait until the essence of an experience has settled (to express the essence), (4) to share spontaneously, without too much planning or judgement, (5) to share something of service - to oneself, those present, and all other beings, and finally (6) confidentiality - the agreement that we may harvest richly from our own experience, but that the stories shared by others should stay in the circle. After a reminder of these principles, the practice proceeds with a moment of grounding (someone guides a contemplative or embodied awareness practice for everyone to arrive more fully). It then opens up for anybody to voice intentions and dedications for this time in circle, and enters into sharing and witnessing of the stories that are present in the group. Listening circles, or more simply the opportunity to hear voices and reflections, to digest and compost experience as a group, can be instants in which a whole group participates to set and shift their context and purpose. In the protocol, we integrate a (reduced form of a) listening circle in activities 5 and 7. Similar to the input in the box on contact improvisation, the ideas we outline in this box furthermore speak through the instructions in the protocol, as well as the content and approach presented in this article.

communicate and provide feedback in the group, and allow us to organically combine rather different approaches. We therefore propose scores as frameworks for genuine collaboration - to involve participants, their personal histories, and the disciplines in which they are trained in a constructive dialogue.

Resources – bringing our Context and Background to Play

In the design-process of the Protocol for the Playful Academic we relied on our personal and professional backgrounds with different movement and awareness practices[xix]. For further information, please refer to the five inspirational method boxes above and below[xx].

Feldenkrais is a somatic education developed by Moshé Feldenkrais to expand our bodily repertoire. It often involves instructions to perform minimal movements in extreme slowness and to attend to such in great depth and detail, but can span a range of movement dynamics. Simply by attending, we involve more of our body/self and discover new ways of moving. As a consequence, difficult movements gain in composure, efficiency and resilience. Frequently, this alone can resolve tension and resistance in the body, to the effect of softening or even overcoming old or life-long bodily habits. In our protocol, Feldenkrais is the main inspiration for the writing/scribbling score provided in activity two, which is designed to sharpen our awareness for our own body and affective state while we work, and could be the basis of a range of similar tasks.

Micro-Phenomenology (MP) as developed by Claire Petitmengin is a method of guided introspection: experienced interviewers help interviewees become aware of their subjective experience and enable them to describe it in fine-grained detail. MP reveals the bodily and mental life of a person in any moment of their existence - including emotions, images and mental speech but also more complex experiences such as trans-modal feelings or thoughts. By offering time and skilled attention to which is happening to us, MP presents an opportunity to go beyond socially constructed concepts and interpretations of what we live through. In the protocol, in particular activity 5 is inspired by MP: it invites you to notice what exactly you experience when you read or listen to a test, an activity central to the academic profession. And while neither of our tasks comprise a structured interview setting, our experience with the method again influenced the way we formulate the scores - trying to stress the value of attending to the lived moment rather than meta-thoughts, to listen rather than to think, to wait and search for the right description rather than to simply use common metaphors that make it easy to oversee the gap etc.

Improvisational Theatre extends play to the realm of words, roles, language and culture more generally. It animates us to be "the other" - in the sense of taking on the role of a character different from our usual selves. Rather than through abstraction, this is done in deeply embodied study: in iterations of embodying emotional states and reflecting on their lived effect, performers bring themselves closer to the experience of their character. As expressed by Konstantin Stanislavski: "When I give a genuine answer to the *if*, then I do something, I am living my own personal life. At moments like that there is no character. Only me. All that remains of the character and the play are the situation, the *life circumstances*, all the rest is mine, my own concerns[. A] role in all its creative moments depends on a living person - i.e., the actor - and not the dead abstraction of a person - i.e., the role." (Benedetti, 2011). While, again, our protocol does not contain acting exercises as such (though it could), the creative writing scores of activity 6 are related to this praxis. Likewise, whenever we ask you to perform an activity with an unusual focus - such as in activity 2 - we prompt you to delve deeper into a certain way of experiencing yourself, very much akin to the idea of entering a character through your bodily experience.

Introducing the Protocol

In **Supplementary Material A**, you find the Protocol of the Playful Academic as it currently stands. What we offer you there is the synthesis of an evolving process: the candidate activities that we selected, explored and identified as potent resources for academic play.
The protocol begins with a poem - an image to mark the beginning of playful exploration and adventure. The first activity we then introduce is called 'Drawing in Circles'. This activity has a social focus. It asks us to pay close attention to our group dynamic, and offers an easy but fun start into working together. The second activity we propose involves the body - 'Drawing from Toe to Ceiling' is inspired by a Feldenkrais exploration and motivates you to stay aware of your body as you engage in a work-related activity, such as writing. In the third activity, we offer you a set of questions for reflection: 'Each of Us and All Together' is designed to make you aware of the personal perspective that you bring to this work. Here, we also introduce the form of a listening circle as an intentional space to share reflections in the group. Activity four, 'Triangulating space', is another social improvisation game, this time focused on complementing rather than mirroring our activities. It is a score that allows you to configure and organise a space, together. Next, in 'Reading between the Concepts', you get the opportunity to learn about the landscapes of experience that emerge for yourself and the others, as you listen to a text (or other material that you work with). This activity is inspired by micro-phenomenology. It asks you to pay detailed attention, take notes, and later gather and structure these notes as a group. In activity six, you might pick up the material you generated in the previous activity: it is a 'Creative Nonfiction' writing task that offers a number of suggestions on how to play on expression. Finally, the last activity is another listening circle. In 'Diamonds in the Raw', we suggest you finish your collaborative play session by witnessing and harvesting what you have experienced.

We encourage you to take a look at the actual protocol, as well as the Guide for Facilitators that we provide in **Supplementary Materials A** and **B**.

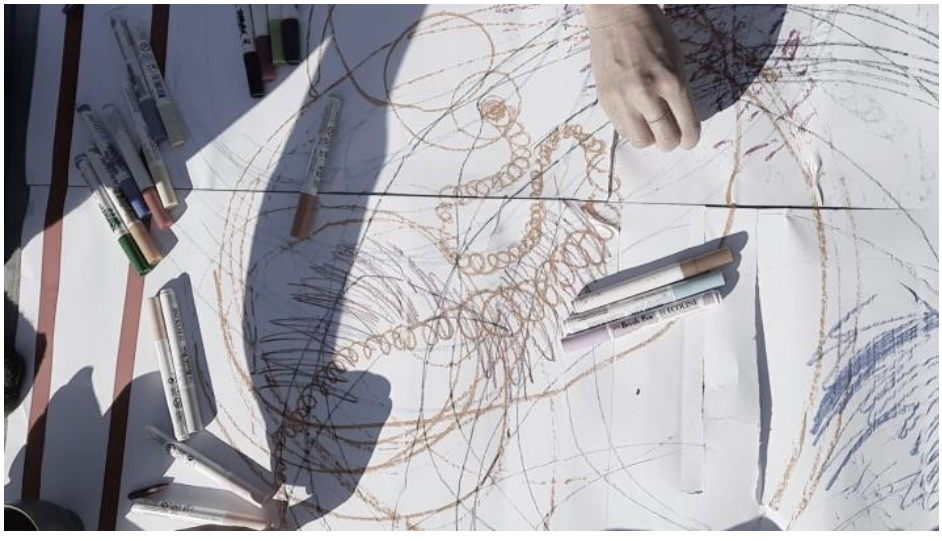

Figure 1: Traces from Activity 1 of the Protocol for the Playful Academic. AL exploring with two colleagues in Hamburg.

Evaluation

a) Feedback from Participants

As mentioned in the introduction, we think of this project as an ongoing intervention - a research project that loops over design, use and evaluation stages to continue to arrive at best possible, up to date solutions. We therefore tried the tasks while we designed them. The final version of the protocol further inspired four sessions during which we invited fellow researchers to explore the protocol with us - once in September 2020 and three times in February 2021. Subsequent to the experience, we asked for written feedback and performed a formal evaluation of the responses. You can find a complete description of our qualitative analysis approach, as well as a table summarising the results, in **Supplementary Material C**. In the following, we offer a summary of what we learned from participants' reports.

Firstly, we used participants' comments and constructive feedback to improve the protocol and add to the theoretical background and resources that we provide. In particular, we were inspired to create a 'Guide for Facilitators' (**Supplementary Material B**). Our main analysis then focused on statements about lived or anticipated effects of the protocol. Participants describe their overall experience as "good", "fun", "interesting", "helpful", "relevant", "enjoyable" or "surprising". More concretely, all eight participants describe immediate *positive effects of the protocol on general mood and feelings*, such as feeling less lonely/more connected to the others (four participants), feeling a stronger purpose of their work (three participants) and feeling more competent or confident (two participants) or motivated towards it (one participant). They also report joy about the discoveries made during the exercises and curiosity about further explorations (four participants) and voiced experiencing gratefulness for this experience and/or the work with their group in general (four participants). One participant furthermore remarked that the experience had a de-stressing effect on him. See for example:

"It created a different kind of atmosphere and reminded me why I'm here and what I cherish about the group and the work we do, I felt it made a better day for me, I feel happy and less stressed and more of a sense of purpose just now as I write." (Participant 5)

Quotes also indicated *effects of the protocol on participants' awareness or feeling of presence regarding their own body, their direct environment, the other participants and the work project they all related to*. More precisely, four participants specifically commented on the shift of attention afforded by the different tasks and described the surprising effects of this new focus:

"The moment I first recall when thinking back is when exploring the space around me and "talking" with a chosen object. It sparked my imagination and made me feel very present in the moment in which personal, aesthetic and spatial thoughts popped up." (Participant 1)

Five Participants furthermore report that they found the intervention *freeing with regard to usual habits of an academic interaction*. Specifically they appreciated to "think imagine and

create without the need to produce a product with clear function" (Participant 1), to interact with others in a "non-cerebral way" (participant 2) and due to their experience anticipated that "It [the protocol] might enable me to work with less rigid academic rituals and routines and it might give me the opportunity to more freely share and think together with my collaborators." (Participant 1)

Such freedom was also mirrored in the actual experience of an *extension of bodily and cognitive capacities* elicited by the tasks, reported by four participants. See for example:

"The writing/body movement exercise was interesting because at first I didn't get it at all and then it was a nice surprise how it changed how I write and how I experience writing." (Participant 2).

Further immediate as well as anticipated effects touched upon participants' *creativity and imagination* (enhancement reported by three participants) and their *expressive capacities* (enhancement reported by one participant):

"I think it [engaging further with the protocol] will boost my creativity and help me express things, especially with a sense of playfulness! I suspect this will make my writings and expressions more "lively" and creative." (Participant 4)

Lastly, five participants testified how the exercises elicited reflections (about self, environment, work and workgroup), and three stressed its positive effect on their current and future collaboration:

"I engaged in the protocol just today and as for now I feel even more connected than before with my collaborators. Part of this is related to the fact that I appreciated to realise that I'm so at ease with them that I can do, without problems, unusual or possibly intimate things like the exercises we did, so I kind of felt that my group is special. I'm pretty sure in the future this will make me even more motivated to keep working with them and most of all do my best in this work." (Participant 8)

Also, remarkably, while most descriptions referred to effects on professional behavior, four out of eight participants remarked on influence far beyond the work context.

"I feel that these kinds of exercise affect my understanding of life in general." (Participant 3)

And finally, despite not having been explicitly asked about this, three participants spontaneously uttered that they wish to engage again with the protocol in future.

"Would very much like to do more of the protocols. I can remember coming away from the last one thinking, More of this! More of this!" (Participant 7)

Next to the overall highly positive response, and participants' expressed willingness to continue to work with the protocol, it was particularly remarkable to us that participants' responses directly speak to our original intentions with the protocol, on all levels: participants express a sense of ease, presence, connection and trust - with themselves, the process as such as well as in relation to the group. They seem to have found a safe zone in which encountering an 'other', or something new, does not elicit defense. They also describe feeling enhanced in their freedom to work and interact as they please, and report intense unpreceded interactions with moments of surprising expression, discovery and creativity. This, finally, seems to make them feel competent and strong, reinforcing their motivation to continue the work. As such, they complete and report on each of the elements of the motivational loop identified by Heimann & Roepstorff (2018).

b) **Reflecting the Process from our Perspectives**

In a valuable comment, one of our reviewers asked us to add further reflections on our experience with this project: what did we experience - how did our work with playful interventions affect our working process? Did we notice any far reaching or long lasting effects on our academic practice?

To all of us, it was freeing and motivating to work together on a project that we found highly meaningful, if not necessary, to our work as academic researchers. We developed a strong shared mindset of turning idealistic aspirations into concrete actions: to develop tools and habits that allow us to forge our very personal paths into a more playful academia. This sense of common purpose might have been the driving force behind a meeting that we decided to organise as part of this project. For a period of several days, we gathered at the home of KH. Here, we offered each other lived experiences of our methods, prompted us to formalise our intuitions, and engaged in a tedious process of iterative discussion and self-experiment. We each remember real progress from this intense time, during which we put together the final version of the protocol. The playful atmosphere was mirrored in the constant changes the project went through - in genuine appreciation for the input each of us offered, we did not cling to our thoughts. Akin to an improvisation practice, it compelled a certain presence, was marked by aha-moments, softness and a will to change - we were often surprised by where it took us.

However, there were also conflicts and situations that did not feel playful. Looking back at these moments, we relate them to time and performance pressure: when we approached the end of our shared time, or the hand in date of this article, it was hard to slow down, listen and stay open to exploration and 'the other' - instead, a potent mixture of time-constraints, personal needs and expectations created friction, pushing us into 'long-time familiar' power dynamics and hierarchies.

Five months after creating the protocol, all of us have the impression that this work had a tremendous positive effect on us as individuals and researchers. Not only did we use our scores in existing research projects and experienced immediate positive effects such as those reported by our participants. Moreover and maybe more importantly, we felt inspired: our collaborative effort provided us with the trust and courage to take more creative

approaches to academic research, and aim to for solutions we truly believe in, even if trying to do so at times confronts us with the habits that pervade our usual work environments.

Nonetheless, we feel this work has just started, and expect it to remain a (likely life-long) invitation to further exploration and discussion. To close the frame of this article, we now offer a summary and point to important open questions.

Known and Unknown Territories: Summary and Discussion

In this article, we introduced playfulness as an important vehicle for sustainable learning and collaboration and faced up the challenge of introducing playfulness in our everyday work in academia, the central place of knowledge-making and education within our society. First, we set the theoretical background by presenting a concept of playfulness that lends itself to the task at hand: a motivational loop that involves safety, autonomy, intimate interaction, and unexpected competence - creating the intrinsic motivation to continue exploring. In particular, we highlighted sensitivity to the whole range of experience as an often overlooked but core component of playfulness. We then identified a suitable form (scores) and useful resources from our personal and professional experience (movement and awareness practices), and entered an iterative design process that culminated in 'The Protocol for the Playful Academic' - a set of concrete suggestions to inspire more sensitive and playful academic work.

Our and others' experience testifies to the potential of our approach: our explorative sessions with the Protocol for the Playful Academic generated unconventional interactions across personal and interpersonal dimensions that were marked by an intimate and candid quality of encounter. They further brought about significant moments of discovery and surprise, as well as the motivation to continue and revisit activities from the protocol in the future. Besides immediate positive effects on mood and atmosphere in the group, our experience suggests that continuous practice can create a lasting shift in work-related feelings and habits: we experience greater satisfaction with our profession and work, enhanced flexibility and stronger intrinsic motivation - the courage to continue to challenge and surprise ourselves.

We also experienced challenges when developing this project. In our analysis, most of such difficulty was related to a lack of time, patience or ability to integrate the unexpectedly arising needs and opportunities with the hard constraints we were facing. While the Guide for Facilitators picks up on several of these issues, we believe that further research is needed to clarify and respond to these challenges.

We have formally tested the Protocol of the Playful Academic with researchers from sociology, anthropology, media science, art, philosophy, cognitive science, physics, music and dance - thus, members of a highly interdisciplinary audience, who did or did not form part of an existing working group. Nonetheless, our experience and evaluation is of course limited and needs to be taken with care: the relatively small number of participants in the formal evaluation process were all colleagues and friends of ours - they might have therefore been more open to the suggestions and approaches we provide. On top of this, our scores were developed and tested in times of the Covid 19 pandemic, which might create special

conditions such as a heightened sensitivity to yourself, your colleagues and work, and a strong need for sensing and connecting. The effect of such interventions may furthermore be hard to measure (immediately), and require more and longer term tests and experiments. An important part of this continuous exploration is therefore to widen its application.

Finally, we want to highlight the very different phases that our collaborative experience went through: from open-ended immersive exploration and spontaneous bursts of creativity (mostly when everybody could relax into the group and moment), to strong conflicts marked by a hardened and defensive attitude (as in the intense periods of work before a deadline). While it seems obvious that stressors such as a (real or perceived) lack of time hinder playfulness and cooperation, we think it is important to take a closer look and ask what a comprehensive approach to avoiding such tensions in the first place would look like.

Ultimately, this brings us back to our original points: constraints, differences and the unexpected cannot be avoided, so we better be well-prepared and 'ready' to work together as a group. In our view, this requires (1) clear purpose and intrinsic motivation to engage, (2) trust, empathy and familiarity with the particular characters, abilities and interests each person brings to the collaborative project, and (3) useful tools and procedures that support the process of the particular group, setting and day. We consider this the crux or bottleneck for sustainable collaboration, which we describe as the ability to deliver concrete products *and* engage deeply in what we like to do, within the particular constraints that we are facing (be that limited time, or the specific demands of a discipline, employer or client).

The activities in the protocol are designed to do exactly this. Importantly, a core feature of this approach is that it invites voices from many different backgrounds to explore the diversity of their experience, together. In this sense, we hope that our article can inspire and support you in joining us on the journey ahead - we would be happy to learn about applications and extensions of our Treasure-Box for the Playful Academic in the wild wild west, east, north and south of pandemic and non-pandemic futures.

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i Such as outlined in the Lindau Nobel Laureate Guidelines (2020).

ii See for example this selection of (online) articles: Nature Editorial. (2020), 'Look beyond publications in assessment of PhDs', 2019, Trakakis, 2020, or 'A kinder research culture is possible', 2019.

iii Frith, 2020, or the plenty of resources and approaches summarised in Caron, 2020.

iv Myers & Dumit, 2011.

v Resnick & Robinson, 2018; Hirsh-Pasek, Golinkoff, Berk & Singer, 2008; Farber, 2019; Lin, Lin, Chen & Teng, 2010.

vi Chilton & Leavy, 2014, Frayling, 1993; Sleigh & Craske, 2017.

vii Garvey, 1990.

viii Proyer, 2019.

ix Bateson & Martin, 2013.

x 'Der Mensch spielt nur, wo er in voller Bedeutung des Wortes Mensch ist, und er ist nur da ganz Mensch, wo er spielt', Schiller, 1993 (translation: 'a person only plays where she can be human, in the full meaning of the term, and is only entirely human, where she can play'). See also a report by The Royal Society, 2019, on academic research culture.

xi Andersen & Roepstorff, 2021.

xii Tompkins, 2018; Almagor E, Aharonov D & Lerner, 2018.

xiii Latour, 2013.

xiv Sleigh & Craske, 2017; Myers & Dumit, 2011.

xv For an introduction to '4E cognition', see Newen, De Bruin & Gallagher (2018). Further key references / wonderful entry-points into this field are: Varela, Thompson & Rosch, 1991; Varela & Depraz, 2013; O'Regan & Noë, 2001; De Jaegher & Di Paolo, 2007; Thompson & Stapleton, 2009; Kirchhoff & Froese, 2017; Nummenmaa, Glerean, Hari & Hietanen, 2014; Fairhurst & Dumas, 2019.

xvi Shustermann, 2012, provides an overview of somaesthetic perspectives. Varela 1996, as well as Varela & Depraz, 2003, describe the enactive / neurophenomenological approach. Cann & DeMeulenaere, 2012, present a critical co-constructed auto-ethnographic approach. Recent examples of art-science collaboration include EER (https://www.eer.info/) and ARTIS (https://artis.univie.ac.at/). See also Wenger, 2000, for an account of learning based on communities of practice.

xvii Scores have been used in other contexts to facilitate playful engagement, see in particular Løppenthin, Bjerre Jensen, Vesper, Roepstorff & Dumit, forthcoming, and find more information at https://www.eer.info/activities/sharing-perspectives-3.

xviii See for example Hanus & Fox, 2015, who highlight the limitations of games to enhance motivation.

xix Clark, Schumann & Mostovsky, 2015, offer an overview of mindful movement practices honing attention.

xx Find more information on *Feldenkrais* for instance in Manning, 2020, on *contact improvisation* in Lepkoff, 2008, or Koteen & Smith, 2021, on *Improvisational Theatre* in Benedetti, 2011, on *Listening Circles* in Linnea & Baldwin, 2010, or at Contemplative Scientific Collaboration, 2021, and on *Micro-Phenomenology* in Petitmengin, 2006.