

## Synergies of Arts and Science for Sustainability Transformations

Concept Note for an IASS Scoping Workshop

Potsdam, November 17<sup>th</sup>, 2015

In early 2015, inspired by strategic considerations of involving the arts and related audiences in Sustainable Development (SD) communication, the IASS launched two rather different pilot projects with artistic components: The exhibition “One Hectare,” held in a public park, used science communication and art forms such as sculpture, installation, performance and film to inform and inspire personal reflection about the significance of land and soil in contexts ranging from very personal to international. The dialogue project “Paradise reloaded?” which intertwined the rehearsals and performances of Joseph Haydn’s oratorio “The Creation” with a dialogue on nature and culture in the Anthropocene. Both of these projects resonated well with many participants. Yet, were they really “pilots”? Do we envision a way forward – both here at the IASS, and also for transformative research in general – where arts and science can truly complement one other?

For our scoping workshop on developing synergies between science and art, we envisage both a conceptual as well as practical approach to the topic. We would like to discuss with you what scientists really think of artists (and vice versa), where they would and could expect the arts to contribute and enhance their own endeavours – and where this is *not* the case. We wish to go beyond the easy affirmations, which praise the mutual benefits of arts and science *in abstracto*, while not really creating appropriate spaces for their meaningful interactions. Both in theory and in practice, we have far more experience with the alienation or even mutual exclusivity of the two spheres, than with their successful combination. Theoretical terminological traditions<sup>1</sup> often juxtapose the intuitiveness of the artist against the analytical approach of the scientist, or assign emotional impact aligned with diffuseness to the artistic products, while reserving sobriety and intelligibility to scientific outcomes. In practice, the myth of art as something ultimately beyond objective judgement in terms of quality withstands the routine attempts of critics, the public, and the humanities to form exactly such judgments. Equally elusive however lofty are the ideals of peer reviewed “scientific objectivity” devoid of value judgement, and of data transparency untainted by personal perception and everyday value assignments by scientists.

This concept note serves to substantiate an agenda for the workshop, which will mostly refrain from presentations in order to facilitate *dialogues*. For this aim, we wish neither to exhaust the aspect of inner-scientific and inner-artistic tensions and contradictions, nor the dichotomies that were and are often constructed between both fields. What we want to state, though, is (a) the fact *that such tensions*

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<sup>1</sup> This concept note is meant to substantiate what we want to discuss in the workshop. It is not a scientific paper and therefore refrains from literature quotes and from the pretension of conceptual comprehensiveness.

*pervade our practical experiences both as scientists and as artists,<sup>2</sup> (b) the observation that they can often be formulated as dichotomies or dilemmas, and (c) the conviction that a workshop which paves the way for more “artistic research”<sup>3</sup> (at the IASS) should start with articulating these kind of tensions and obstructions, in order to arrive at possible meaningful ideas of synergies somewhat later.*

To structure the first half of our discussions on November 17<sup>th</sup>, we would like to use three frequently experienced tensions or dichotomies as a point of departure. Our suggestions below are open to modification by the participants themselves, i.e., *while we would like to remain firm on the organization of discussion around three pairs of terms, we do not insist that the specific pairs we suggest here must be followed. Any participant might come up with a better proposition*; in fact, we will spend part of the morning collecting this sort of suggestions.

### **Routines vs Events**

The first suggested dichotomy deals with the process character of routines versus events. Scientists, except for those rock-star varieties conducting exciting experiments, are often perceived as following mundane routines of tedious analysis. Outcomes are the result of a tested methodology, while nothing is left to whim or moments of inspiration, but disciplined process. Artists, on the other hand, are seen as performers able to capture singular moments of inspiration. While a spiritual dimension is often associated with this inspirationality, craft and routine are somehow marginalized and separated, in public perception, from the “content”. The process is separated from the product and the latter exclusively understood as her or his “art”. These prejudices seem to reflect a deeper conviction about the singularity or spectacularity of the arts. This conviction, while apparently appreciating the “extraordinary” of the arts, at the same time devaluates them as something that is not a part of everyday life, the processes of societal cognition, or the formation of opinion. The artist is following her passion, which makes her happy – thus the artistic activity is relaxing and pleasurable, a life of leisure which mirrors the public’s need for elation and relaxation. That art is something which *evolves* as well, which establishes rules, and which depends on a set of technical and communicative routines, is not often recognized. As for scientific research, we often fail to systematically recognize the importance interruptions of working routines might have the role of sudden shifts of attention, or the importance of singular, event-like structured occasions of thought and communication that are provided by extra-scientific actors. This is particularly important for transformative and transdisciplinary research.

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<sup>2</sup> As authors of this note and hosts of the workshop, we have had the opportunity to gain professional experiences in *both* fields. We are aware that this will not be the case for most participants, and that ‘exclusive’ narratives from both sides of the fence will form the major body of evidence we might assemble.

<sup>3</sup> “Artistic research” is not the only possible way in which science and arts can interact; in fact, as it means that research is truly altered through artistic components and open for new results from this research process alteration, it is the most ambitious and most unlikely form of cooperation. In this concept note, though, it might serve as a preliminary metaphor for what we ought to achieve, someday.

### **Analysis vs Intuition**

The second dichotomy would be the opposition of *analysis and intuition*, based on the ideas of ratio vs emotion, mind vs heart (or guts). – Coming back to typical stereotypes, scientists are often portrayed as nerds with lots of brain and little body awareness; passionate only about their methods and their beautiful data. They invest rigorous activity into *not* leaving any trace of subjectivity in their output. Writing in the passive voice, they remain ‘invisible’ and are not imagined as persons at all. In stark contrast, artists can be seen hyperbolically as “personalities,” be it of the eccentric and exotic, or of the accessible and familiar type. By relating to their art, you somehow relate to those personality features as well. This often leads to rather vulgar ideas about certain strokes of fate, biographic data, or just situations and moods that ‘explain’ the work of art or are ‘expressed’ by it; to understand the art means understanding the artist. Intuition, here, is equalled to radical subjectivity, whereas analytical tasks seem to relate to impersonal objectivity expressed by the scientist. The sometimes extensive research artists might undertake when preparing their work, and the analytical discourse which might surround it, are then either neglected or understood as rather incidental components of the artistic complex. Scientists’ “personal,” implicit knowledge, on the other hand, is seldom perceived to be essential for the scientific experience, nor are the individual value preferences they might load onto the framing and presentation – the narrative – of their work.

### **Instrumentality vs purposelessness**

The opposition between *instrumentality and purposelessness* derives from deep philosophical roots. It has frequently been discussed *within* both science and the arts. An example for which is the relation to politically committed art at several points of the 20<sup>th</sup> century, or with regard to funding for applied vs basic research in the European Union. In science for SD transformations, the core concern of the IASS, a specific type of “instrumentality” is central to the mission statement, namely the normative ambition to ‘push’ for certain transformative policies or to empower “change agents.” Regardless of how ‘transformation’ is defined, the aspiration of sustainability science is always to achieve societal impact, be it through the influence on decision makers or through societal diffusion of scientific insights and recommendations. This instrumentality is not undisputed by some parts of the scientific community, e.g. with the argument that this kind of “solutionism” might jeopardize science’s autonomy in defining its own objects of knowledge. These discussions within the scientific system have a counterpart in age-old debates on whether the arts have to legitimize themselves through extra-artistic purposes (e.g., politics, or education). When scientists reach out to the arts, they often think of them as a potential amplifier for their messages to society. But when exploiting the arts in this manner, paradoxically, scientists rely on purposelessness they ascribe to the arts themselves: on a merely ludic quality which people just ‘like’ and which might somehow ‘lure’ them into science or help to ‘persuade’ them to change their political behaviour, etc. – Artists, on the other hand, are often attracted by the scientific thoughts or schemes and seek inspiration in them, but neglect and transgress the contexts of justification these schemes are imbedded in (e.g., anal cuts or terminological definitions). They tend to be oblivious to matters of validity

or scientific methods, and they (justly?) fear the political commitment imposed to them by normative, e.g. sustainability science.

All three dichotomies or tensions operate both within and between scientific and artistic practice, self-conception, and in perceiving the other. And, like all 'prejudices,' they contain elements of both truth and error.

In the afternoon session, the workshop will aim to identify which of these elements are necessary to maintain a meaningful scientific and artistic practice, and which of them could be corrected or altered in order to achieve synergies between both fields. It might be the case, for example, that at certain stages of transdisciplinary science (i.e. when identifying the research question), the "intuitions" of all those involved in the research process are of paramount importance, while at other stages they should be rigorously controlled. Or that artistic production, at some points, might profit from the interruption of typically artistic "routines" by scientific intervention, in order to become permeable for new impulses, while certain artistic "events" should maybe not be merged with the routines of scientific discourse.

After a discussion of "tensions" (followed by a relaxing lunch) we would like to use a reflection on our own experiences from the two IASS projects mentioned at the beginning, as a starting point for the discussion. The fields of synergy ought to be discussed based on participants' own previous experiences and ideas. Where/how has the respective "other" been experienced (for scientists: an art work or artist, for artists: a scientific idea, method, or dialogue partner)? Where has this experience expanded their perspective? Where has it enriched their own 'core businesses'? Which project phases could have profited from (closer) collaboration? According to these ideas, we will spontaneously structure the afternoon breakout sessions, similar to an "Open Space." To conclude the workshop, we will then seek to identify possibilities for projects that respect the necessities both of "good science" and "good art," paving the way for effective interaction which might result in something new – and transformative. We, as the hosts, are interested in enabling discussions about these issues; our own perspectives and suggestions will inform (but not determine) the workshop's dialogue.