

Sustainable development through aesthetic expertise?

Results and reflection on an experimental case study on arts-science policy intervention

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Received: 20 January 2023 | Accepted: 24 February 2023 | Published: 7 March 2023

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Keywords: artistic inquiry and intervention, aesthetic expertise, sustainable development, sensory and arts-based sustainability science

Abstract. *This article presents an innovative prospect for arts-social science collaboration in the context of sustainable development. Based on the conceptual and methodological perspectives of sensory, arts-based*



sustainability science on the one hand and on artistic inquiry and intervention on the other hand, a new approach for collaboration between arts, social science and policymaking is explored. Beyond traditional scientific expertise in social science-policy interfaces, the suggested model of arts-social science-policy intervention aims at providing aesthetic expertise by co-creating scientific and artistic insights and developing creative options for sustainable development at the local level. First the novel approach is introduced, then an experimental case study in a German rural municipality, its course of action and the results are presented and discussed. The article ends with an outlook on the potential and challenges for aesthetic expertise through policy-oriented arts-social science collaboration.

1. Introduction

In 2015, when 193 nation states agreed upon the Transformation Agenda 2030 including the global sustainability goals, there was hope that the expressed common interest and inter- and transnational cooperation would lead to multilateral and multi-level policy-making and joint engagement by state and non-state actors for collectively shaping sustainable development. By now, more than one third of the 15-year agenda has passed, and the balance sheet is meagre (Biermann, 2022, Sachs et al., 2020; UN, 2019). Reasons for the slow or even non-existent progress are manifold. As well as deeply rooted structural conditions such as unsustainable forms of resource-exploiting economic growth in global capitalism, a wave of right- and left-wing populism and nationalism across the world and – closely related – renewed geopolitical and social tensions and conflicts have made joint efforts on global sustainable development much more difficult (Marschall & Klingebiel, 2019; Rosa & Henning, 2018). More recent call for inclusive growth and fair and just transitions show that lessons have been learned but are yet to be implemented (Stavis & Felli 2020). In this regard, it can be concluded that transformative policymaking should strive for well-being-oriented sustainable development in order to ensure social acceptance (Rogers, 2012).

This could be considered especially relevant at the local level, where people live their daily lives. The perspective of arts-based and sensory sustainability science

in general and, more specifically, sensory-informed policymaking both aim at contributing to confronting this challenge (Heinrichs, 2019 & 2020; Heinrichs & Kagan, 2019; Kagan, 2011). Based on approaches to sensory studies and arts-based research the multisensorial reality of human beings must be explicitly addressed, and creative options stimulated in collaborative processes between social science, arts and public policy. In the context of sustainability science, this perspective has much in common with the discourse and practice of artistic inquiry and intervention (Kagan, 2015; Balkema & Slager, 2004). While arts-based and sensory sustainability science aims at employing arts-based methods and strategies in research and teaching on sustainable development, research-oriented arts strive to develop epistemologies, methodologies, and institutional approaches in order to enhance the ability of arts to conduct artistic inquiry and produce creative insights in and through its aesthetic practices. Thus, arts-based sustainability science and artistic inquiry and intervention on issues of sustainable development represent a reciprocal border crossing, both aiming at seizing the best out of the scientific-rational and artistic-aesthetic ways of accessing the world in order to open up new insights and grasp creative ideas.

Within this perspective this article brings together the work of an artist and a social scientist, who jointly developed and conducted the study presented, to discuss the potential and challenges for arts-science policy intervention. The guiding research question is: how can science-arts collaboration contribute to local sustainable development by co-creative research and intervention? First, the conceptual and methodological foundations are introduced. It is argued that systematic collaboration between arts and social science can co-produce *aesthetic expertise* for transformative policymaking, which goes beyond traditional scientific policy advice on the one hand and forms of artistic interventions on the other hand. Then the conceptual approach is explored within a case study in the rural municipality “Samtgemeinde Wathlingen” in Lower-Saxony, Germany. Finally, the results of the case study are presented, followed by a conceptual discussion and consideration of practical implications and identification of the need for further research.

2. Aesthetic expertise for sustainable development – conceptual and methodological foundations

Given that people in private, professional, or civic contexts are embedded in multilayered and intertwined socio-material practices, science-based information or moral prompts seem to be insufficient to transform individual and collective behavior (Reckwitz, 2012). Humans are not only cognitive information

processing machines, but also constituted and driven by implicit embodied imagination and world sensing. Therefore, cognitively based approaches, as in the international sustainable development goals, national sustainability strategies, sustainability reporting or solution-oriented deliberative contexts fall short (Heinrichs, 2020). To ensure civic support and stimulate engagement and commitment for change and unlock creativity for co-creating sustainable development, more attention should be paid to the multisensoriality of human existence and well-being-oriented transitions.

Beyond cognitive-rational insights regarding the need for long-term oriented sustainability transformations, the well-being discourse sensitizes to the need to pay more attention in policymaking to concrete multidimensional human needs beyond materialistic economic values, such as meaningful social relations or healthy and stimulating physical environments (Kubiszewski et al., 2013; Sachs, Layard, Helliwell, 2018; Rauschmayer et al., 2012). If this perspective is taken seriously, a different approach regarding sustainable development seems advisable. Based on theoretical and empirical insights from interdisciplinary sensory studies (Howes, 2013) and arts-based research (Leavy, 2015; Baron & Eisner, 2011), it can be argued that actions for sustainable development should become more sensory and aesthetic in order to better reflect the multisensorial experienced reality of people and grasp the (embodied) imagination and creativity for shaping sustainable development not technocratically but humanely. Looking at (un)sustainable developments and transformative policy-making through this lens, a wide range of topics arise, including: corporeal-sensorial manifestations in varying mobility options; atmospheres in nature-, land- and city-scapes; resonance in human/non-human interactions; multisensorial dimensions in varying sustainability-relevant occupational and consumption practices; sensory-scapes of places (smell, taste, touch, sight, hearing and kinesthetics); the relationship between virtual (mediated) and real (immediate) multisensorial phenomena; socio-cultural diversity of corporeal-sensorial experience, embodied cognition and imagination; multisensoriality in social and environmental inequality and the quest for just and sustainable sensory well-being. Arts-based and sensory sustainability science and artistic research appear to be well-equipped to analyze and reflect on sensed realities, stimulate associations and feelings and open up new perspectives. The sensory-aesthetic competence of artists and artistic strategies can enrich in a complementary way established scientific data- and text-based approaches.

Despite a long and multifaceted history of collaboration between social science and arts on the one hand, and social science or arts and policymaking on the

other hand, there is hardly any routinized interface connecting systematically social science, arts, and policymaking. From the viewpoint of sociological systems theory (Luhmann, 1995), a transsystemic social science-arts-policy collaboration can be seen as fruitful, but also presuppositional. All three spheres have their own logics and rationalities, which appear as strengths and weaknesses of functional differentiation. Policymaking is focused on collectively binding decision-making and is dependent on legitimation, while social science strives for proven knowledge based on review procedures of the scientific community, and arts, claiming autonomy and creative freedom, is oriented towards aesthetic insight and originality. Despite the very different institutional conditions and role expectations of the involved actors, we believe that a carefully designed approach, which does justice to the legitimate rationalities and equally takes advantage of the respective strengths is conceptually feasible. Thereby mutual blind spots can be overcome and release the potential for new perspectives and pathways. The ideal-typical model for artistic-social scientific policy intervention, which is based on theoretical and methodological considerations of sensory sustainability science and artistic inquiry and intervention, sketches how the interface could be organized to deliver aesthetic expertise, combining social scientific inquiry with artistic practice and policymaking.

This ideal-typical procedure combines the specific rationalities and competencies of arts and social science with organized settings for collaboration, information exchange and joint reflection between actors in these fields and that of policymaking. The procedure builds on different phases, from problem definition through social scientific inquiry and artistic intervention up to reflection on findings and creation of (integrative) products of aesthetic expertise. In order to allow for a collaborative process at face level between all the actors the process may start within the logic of transdisciplinary practice with a joint gathering in order to define the scope and goal of the project and clarify tasks and role expectations (Nicolescu, 2002). In the next phase social science and arts start working with their respective epistemologies and methodologies, for example, quantitative and qualitative social research and artistic inquiry and preparation of participatory interventions. Of key importance are regular exchanges between science and arts for cross-fertilization as well as deliberation of interim insights and results with involved policy actors for safeguarding practice relevance and social learning. Through this procedure, policy-oriented aesthetic expertise can be produced, which is qualitatively different from merely scientific expertise or artistic artifacts. It can provide new insights and impulses for sustainable development by drawing together the rational-analytical strength of social science with the creative-aesthetic strength of arts.



Figure 1. Artistic-Social Scientific Policy Intervention

3. The “Samtgemeinde Wathlingen” case study

The approach to aesthetic expertise through arts-social science inquiry and intervention was explored within an experimental case study. The project was realized in cooperation with the leadership of the local administration of the municipality “Samtgemeinde Wathlingen” in the state of Lower Saxony, Germany. This municipality is located in a pre-urban, rural area, approximately 30km from the city of Hannover, the capital of Lower Saxony. Based on previous contacts with the mayor and the municipal council in the context of a project in cooperation with the Environmental Ministry of Lower Saxony in 2018, the municipality expressed their willingness to participate in the experimental undertaking. Samtgemeinde Wathlingen consists of three relatively dispersed parts, - Wathlingen, Nienhagen and Adelheidsdorf - on an area of 68,47 km², with slightly more than 15.000 habitants. The surrounding area is marked by agriculture and forests. The population includes slightly more woman (56%) than men (44%), it has an average adult age of 50.74, and an overall stable population dynamic. The political landscape is characterized by two dominant parties, the Christian Democrats (CDU) and Social Democrats (SPD) followed by Greens, Liberal Democrats and by the Independent Voters Association. As a model community within the Ministry project, Samtgemeinde Wathlingen started in 2018 a process of information gathering and systematization of sustainability-related activities and measures. Amongst others, a sustainability officer was appointed in the year 2019. Against the background of this administration-centered activities the experimental project on artistic-scientific policy intervention was agreed upon. The municipal leadership was interested in opening its sustainability perspective beyond the administration to include society and to get new insights and impulses, which go beyond general sustainability management approaches, for shaping and stimulating local sustainable development process and measures. These shared interests of the participating municipal representatives, the artist and the scientist provided a fertile common ground for the undertaking.

3.1 The design and implementation of the experimental study

The generation and provision of aesthetic expertise for sustainable development requires an adequately designed collaborative process. A procedure was defined in which co-creative collaboration between science and arts as well as continuous cooperation with the political-administrative personnel involved throughout the project could be realized. The workflow was characterized by three key features: 1) periods in which arts and social science focused on their respective work; 2)

collaborative formats in which science and arts jointly reflected on their parallel activities and co-created joint insights and ideas; 3) cooperative formats in which the cooperation was organized throughout the process.

The first workshop took place in February 2019. In this meeting the procedure, including a general time schedule and content of the project was jointly elaborated by the artist, the social scientist and the mayor and deputy mayor. In March, however, the Covid-19 pandemic and the general lockdown in Germany interrupted this plan. Given the difficult situation, the plan was adapted in three ways: 1) the formal start of the project was shifted towards the summer; 2) the meetings with the representatives from the municipality to initiate collaborative work between social science and arts were changed to virtual meetings; 3) the social scientific studies – including personal interviews – were switched to digital formats; 4) the artistic interventions were realized under the required hygiene measures in an aligned form. With these changes, the project was conducted between June 2020 and July 2021.

The artistic-social scientific research and intervention is described in three steps: the social scientific contribution, the artistic contribution, and finally the provision of aesthetic expertise. It is noteworthy that the scientific and artistic activities took place in parallel with regular exchange between the artist and the scientist. It was explicitly not organized as a linear process, in which social science produces knowledge, which then forms the basis for arts production. The artist and the social scientist worked simultaneously and co-creative by employing their respective methods and strategies, such as quantitative and qualitative studies for science and artistic exploration and participatory interventions for the arts. The respective procedural steps, for example, designing the questionnaire or recruiting participants for the interventions, as well as interim findings, were discussed in an ongoing process of exchange.

3.2 The social scientific contribution

The particular contribution of social science in the co-creation of aesthetic expertise was aimed at gaining a more differentiated understanding of the perceptions, opinions and future expectations of functional elites as well as citizens regarding sustainable development in Wathlingen. Three empirical studies were conducted: 1) guided interviews (online) with representatives from political parties, municipal administration, civil society and private sector in order to get an overview of the sustainability perceptions and assessments of local elites; 2) an analysis of sustainability-related policy documents and communications of the municipal administration, in order to get an insight into

concrete policy measures and activities of the local government; 3) a citizen survey, focused on opinions and attitudes towards the local quality of life, sustainable development and willingness to change. This mixed-methods approach was employed with the aim to obtain a comprehensive understanding of the perceived sustainability and future perspectives in the municipality. The topics addressed in the empirical studies were discussed and elaborated between the participating scientist and artist, in order to incorporate the artistic perception of the local situation, and finally agreed upon by the cooperation partners from the municipality, in order to secure policy-practical relevance. In the following essential results of the analyses are briefly summarized.¹

3.2.1 Video interviews

The guided interviews took place in September and October 2020 (online). Twelve representatives from civil society and municipal policymaking were asked to participate and ten interviews were finally conducted. The interviews lasted between 30 and 60 minutes. For the data analysis the software MAXQDA was employed. The key topics addressed in the interviews were understanding of sustainable development, perception of challenges, potential and willingness for change of institutions and citizens, significance of the local sustainability initiative and future visions. The results show, apart from minor differences and priority settings, quite similar perceptions of the interviewees regarding three salient areas.

First, despite some media reports, the public has so far only been reached in a limited way with information on sustainable development and citizens have not been included broadly in the process. Thus, a more decentral approach is considered as desirable since sustainability activities necessarily need to be concretized on the ground in the three member communities. Second, a more systematic activation of citizens associations and volunteers are considered as particularly relevant for a deeper anchoring and creative shaping of local sustainable development. In particular, associations can provide opportunities to experience concrete sustainable practices. Third, a very important, but challenging field of action for sustainable development is considered to be mobility and infrastructure. Room for improvement is seen for public transport, alternative mobility models, such as car sharing, as well as bicycle traffic, even though with respect to the geographic situation – dispersed member communities – and deeply anchored car routines no easy solutions are in sight.

¹ Further information is provided at the project's website: <https://hoernemann-walbrodt.de/aexpertirience/>

Beyond these major topics, shared widely by the interviewees, other points were mentioned, for example, the crucial relevance of national and regional policies as a prerequisite for municipal sustainability activities, the adequate financing of sustainability initiatives and programs or the role of education and local knowledge networks. It can be concluded that the interviewees showed a clear interest in engaging further with sustainable development and that the already existing social relationships between people and institutions in the municipality provide a good basis for further steps towards a more sustainable future.

3.2.2 Document review

To get a better understanding of the extent to which the perspectives of the interviewed representatives reflect actual sustainability activities of the municipal administration, key documents considered by the municipal leadership as sustainability-related were looked at. Even though the municipality started with specific sustainability activities only in 2018 within the model project “Municipal sustainability in small and medium-sized municipalities in Lower-Saxony”, altogether 61 thematically relevant documents could be identified for the period 2018-2020. This includes resolutions of the municipal council, (internal) municipal briefings and information as well as press releases by the municipal administration. These materials were evaluated according to two dimensions: 1) regarding the type of document (resolution, briefing, press release); 2) content wise concerning the areas of activity on sustainable development. For this the categories employed in the content analysis of the online interviews were applied. The distribution of the types of documents shows that press releases constitute one third of all documents. This would seem to contradict the findings of the interviews with representatives that the citizenry has not been sufficiently reached with sustainability information. However, from a closer study it emerges that relatively few individual topics are dominant, e.g., international partnerships or reports on the municipal leadership, but a strategic sustainability communication, addressing systematically sustainability challenges and diverse target groups is not present.

The second largest group of documents are council resolutions. Resolutions, such as related to “climate crisis” can be viewed as particularly relevant, because they show an essential political majority will for approaching sustainable development. Internal municipal briefings and information are a third important group of documents. Here efforts to start introducing sustainability in the municipal administration through targeted information for administrative staff on measures and options to contribute at the workplace become evident. As

regards the content of the material, the category of “sustainability in politics and administration” is dominant, reflecting a strong focus on addressing particularly the political-administrative system and not the wider community. A second focal point is the topical area of energy transition and electric mobility. Finally, a relevant number of documents deal with the topics “public communication and sustainable development”, “sustainable infrastructure” and “availability and sustainability of water”, with a specific focus on wastewater and wastewater treatment. The overview of the sustainability-related press releases, council resolutions and municipal briefings and information suggests that the municipal administration supported through the municipal council in the past two years is on its way towards sustainable development with mostly small-scale steps and some that larger.

3.2.3 Citizen Survey

A citizen survey was conducted in November 2020 (questionnaire in annex). The survey aimed at gathering opinions and attitudes regarding (local) sustainable development and transformation. Due to limited resources a sample-based survey with personal or telephone interviews conducted by a professional survey institute was not feasible. Instead, a postal questionnaire was distributed via the local weekly journal “Wathlinger Bote”, which is distributed to all households by the municipal administration. A total of 204 questionnaires were returned to publicly accessible collections points such as the town hall. In relation to the structure of the population the participants of the survey turned out to be a little older (55,7 to 50,74 years) and slightly more men (51% to 44% in basic population) than woman (49% to 56% in basic population). Regarding education, the distribution shows 66% with higher education, 27% with secondary education and 7% with low/no educational attainment. Concerning social status, two groups are dominant: 53% are in employment and 42% are retired persons, self-employed or temporarily without employment. Students, apprentices, or unemployed people have low representation. The key results of the study are:

1. A ranking of relevance of current topic shows, that sustainability issues, such as climate change, environmental protection or social cohesion are considered, after the Covid-19 pandemic as most important.
2. The quality of life in the municipality is perceived as quite positive, with most respondents choosing the category “good” or “gratifying”.
3. A core question of the questionnaire was focused on the assessment of areas of sustainable development already addressed by the municipal administration.

The findings show that no field is considered very bad nor very good. However, there is a clear picture of which fields are perceived as more problematic. While peaceful cohabitation, health promotion, and sports are indicated as positive, the challenges of sustainable consumption, (un)employment projects, sustainable infrastructure and agriculture are seen as more critical (grade 3 and lower).

4. Regarding the future relevance of these municipal sustainability fields, it emerges that sustainable water management, sustainable agriculture, sustainable energy, education, and climate change are perceived as particularly important. International town twinning, gender equality or nature – given the rural context – are noticeably less often mentioned as important topics.

5. The basic orientation towards sustainable development was also surveyed. The interviewees were asked to decide between several opposing options. The data shows a substantial general sustainability orientation, especially regarding responsibility towards future generations or solidarity and nature protection, but not at any cost. A significant number of respondents believes that economic growth and sustainable progress are possible and that more income is desirable.

6. A similar picture appears regarding attitudes to change. Here the data reveals that a basic openness and willingness to change can be assumed, but for many respondents it is important to safeguard achievements and preserve what is considered as good.

7. Asked which actors are particularly willing to change, the interviewed citizens rank the business sector first, closely followed by associations and the municipal administration. The participants are more skeptical about their fellow citizens.

8. Regarding the citizens' opinion of the potential of artistic interventions for contributing to sustainable development, one third believes the arts could play an important role, but a majority does not know about such approaches and a minority think it is of less importance.

Based on the empirical results of the citizen survey – considering that the sample is slightly older and more male than the overall municipality – it can be concluded that the residents of Samtgemeinde Wathlingen evaluate the current quality of life relatively positively, but they have a differentiated view of current and future sustainability challenges. Considering a mostly distinct sustainability orientation and an observable willingness to change, especially of important actors such as businesses and associations, it appears that many citizens are ready for further steps toward sustainable development.

3.3 The artistic inquiry and intervention contribution

As an artist I'm interested in the aesthetic nature of what I focus on. And I do it in an objective-subjective way, which means that I'm personally responsible for what I sense and do, but not just as a private experience. For years I have been reflecting on the way I do my work as an artist in a non-artistic environment. If you have a blocked sink, a plumber is the right person, but if a municipality is looking for sustainability strategies, an artist doesn't seem to be the right person. However, if you consider that nothing at this time is needed more than creativity to find ways of facing and solutions for wicked problems, then it makes sense to call an artist. Artists are skilled at holding the space of not-knowing, at being consciously playful and at taking responsibility for the impossible. The inquiry of an artist is an improvisation in doing and reflecting, alternating both in a short distance of time. Improvisation in the arts doesn't mean to "just do something". It rather draws on practice to use all available skills and experiences and decide at the moment, sensing what can be expressed here and now.

3.3.1 Meta-tools: triangles

For some time, I have been using a certain type of meta-tools: triangles. The first triangle is well known: I perceive, I think, and I do. With the second triangle, art has a chance to emerge. The way I do it is unique, irrational, and responsible. The quality of the atmosphere which I create is presence, warmth, and inspiration. And the last triangle describes what I work with as an artist: space, material and interaction.

Over a period of one year, I spent fifteen days on site in Samtgemeinde Wathlingen. When I went there for the first time, the mayor showed me the municipality and the steps already achieved towards sustainability. After that, I wandered around by myself to get a feeling for the environment. And I got lost. My impressions can be described as

1. The streets are straight.
2. The potassium dump is visible.
3. Everyone has enough space for themselves.
4. The administration initiates and implements.
5. Need is not noticeable, continuous overload is very much so.
6. Three villages were forced to come together.

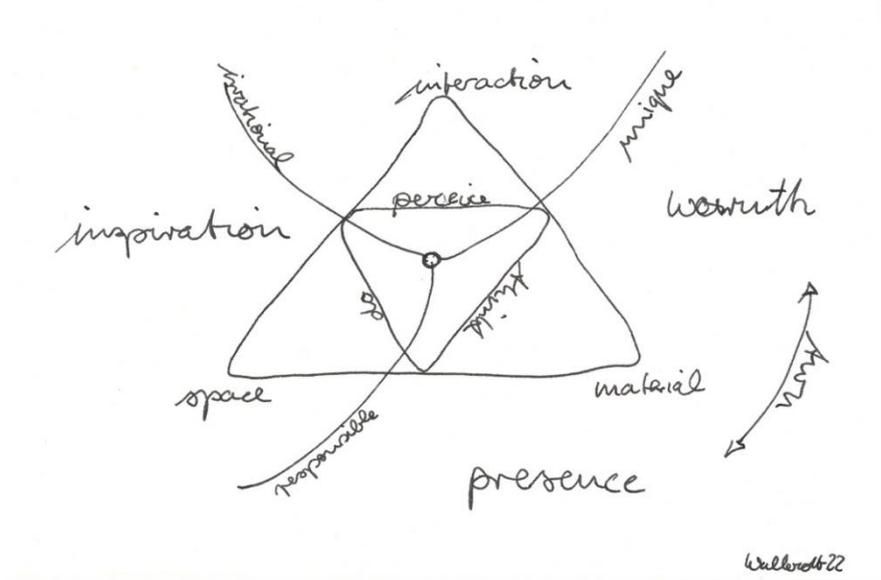


Figure 2. Triangle – unique, irrational, responsible



Figure 3. Potassium Dump



Figure 4. Arranged Map

Starting out from the perspective that art does not reflect what is seen, but rather makes the hidden visible, the intention of my artistic interventions is to build atmospheres in which creativity becomes visible.

3.3.2 Social Sculptures

To do so I created four social sculptures.

1. In the first one I initiated the PRINCIPAL OFFICE FOR THE IM-POSSIBLE (Grundsatzamt für Un-Mögliches) and became the honorary head of department. The focus was set on the administration internally. As part of a performative approach a desk with office equipment was installed at a well-visible corner in the entrance area of the town hall. Apart from sitting like any administrative staff at my desk, I took a mechanical typewriter and visited the administrative staff to ask them what they considered to be im-possible.



Figure 5. Principal Office for the Im-Possible



Figure 6. Mechanical Typewriter



Figure 7. Stamp “Principal Office for the Im-Possible”

The PRINCIPAL OFFICE FOR THE IM-POSSIBLE collects and moves everything impossible in the Samtgemeinde. The collection is done by mail and the email address: un-moegliches(at)wathlingen.de. On every first Tuesday of the month, all those who feel involved meet. The meeting lasts exactly 60 minutes (a clock is provided) and takes place in the office. The following general conditions are set and read out at the beginning of each meeting:

1. No one leads the meeting, everyone leads together.
2. The meeting begins with each person individually confirming that it is impossible.
3. All impossible topics are noted and ordered on the analog typewriter of the office.
4. the following rules are to be observed when dealing with the topics:
 - a. there is an obligation to listen carefully;
 - b. no solutions may be sought;
 - c. the essence of the topic must be understood;
 - d. everyone gets a turn.

From the 50th minute (the clock gives a signal) of the meeting, each person present confirms that the PRINCIPAL OFFICE FOR THE IM-POSSIBLE has done a good job in allowing failure. This is the end of the monthly meeting. The resulting document is stamped with the office stamp and displayed in a picture frame.

2. Secondly, I installed the ATELIER FOR ALL. An atelier can be seen as a space where one works on a base of not-knowing, open-mindedness, and curiosity. Citizens were invited through the local gazette “Der Wathlinger Bote” to work co-creatively in the field of sustainability.



Figure 8: Public “Atelier for All”

Figure 9: Impression from “Atelier for All”

The ATELIER FOR ALL is a space in which work is done with an attitude of not knowing, openness to results and the joy of trying things out. In it, the impossible is taken apart, enriched, and put together anew. Connections are created that have not yet been thought of and responsibility is taken for the qualities of the irrational in Wathlingen. The studio takes place simultaneously in different places in the joint municipality:

1. At home in the basement, in the kitchen and in the living room.
2. In temporary open spaces of the joint municipality.
3. Under the open sky.

4. Mobile e.g., as a cargo bike, construction trailer or public bus.

Every citizen can open a studio and invite others to work together. Every citizen is an artist. As such, they bring three qualities to the balance created:

- uniqueness;
- irrationality;
- responsibility.

The ATELIER FOR ALL takes place at any time in any place. It lasts as long as it takes and is not repeated twice in the same way.

3. Thirdly, I created a format called SUSTAIN-ABILITY TALKS (Nachhaltigkeitsgespräche). I invited citizens from different backgrounds, who normally don't meet, to talk about sustainability under the premise of being creative.



Figure 10. Impression from “Sustainability Talks”



Figure 11. Impression from “Sustainability Talks”

Four times a year, the municipality opens the registry office to everyone and invites them to talk about sustainability. They always take place from 7 to 8:30 p.m. and are led by a citizen who is authorized or empowered to make connections. Two leaders are also possible. The conversations take place in the following framework, which is read out at the beginning of the conversation:

1. Everyone sits in a large circle or in small circles.
2. No solutions are sought.
3. Everyone strives to make connections.
4. Everyone is given a period of time in which to speak.
5. The issues are made visible/tangible.
6. The dimensions of sustainability (social, ecological, economic) are given equal attention.

From 7:50 p.m. the leaders begin to make connections. Topics, competencies, resources, ideas, and possibilities are related to each other in the large circle or in small circles. Around 8:20 p.m., the connections made are documented. The conversation ends in the large circle with a silent minute. Reverberation.

4. As the fourth social sculpture I initiated a taskforce to plan and prepare the COMMUNITY WORLD CELEBRATIONS (Samtgemeindefest für die Welt). For the first time all three parts of the municipality create a joint day in the context of sustainability.

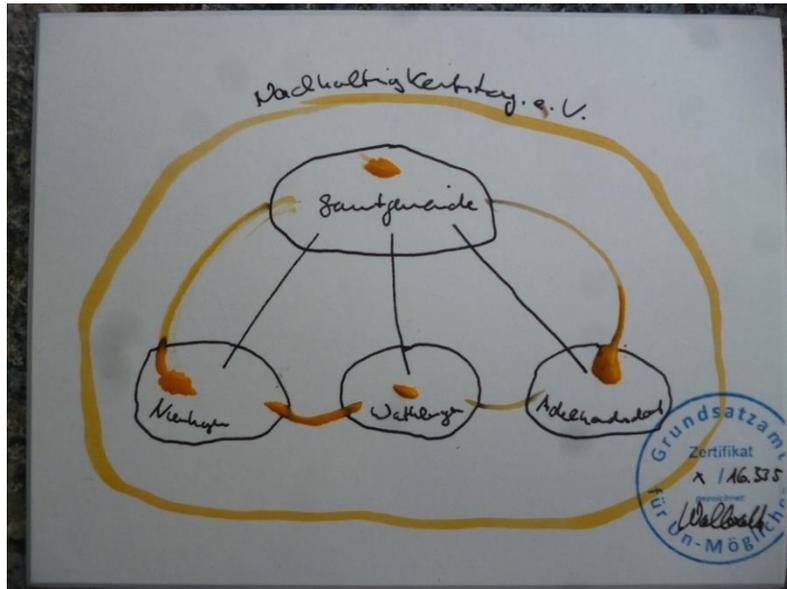


Figure 12. Artifact “Community World Celebration”

Every year the municipality organizes a festival with all citizens. The venue changes. The framework for the festival is provided by the UN Sustainable Development Goals (SDGs). At this festival all the citizens of the joint municipality come together to show the following in actions, at booths, on stages and in games:

1. Individual skills, resources, or offerings.
2. Collectively created skills, resources, or offerings.
3. Missing skills, resources, or offerings.
4. Future skills, resources, or offerings.
5. Everything shown can be tried out and experienced with all senses.

As a highlight of the festival, "the sustainability jester" is elected. All citizens of the joint municipality can apply for this award. For one year, jesters have the task of pointing out, as irrationally as possible, the issues that are important to everyone. They are noticed for this and are listened to in any case. In addition, they are invited to dinner once a week or can invite themselves to citizens' homes. The jester is chosen by the artist of this sculpture.

Finally, I asked the citizens to give me their old picture frames. I took all the pieces of work I created during my stay in the Samtgemeinde Wathlingen and all the social scientific results and put them into the frames. All the pictures became a Salon Hanging – a so-called "Petersburg Hanging" – in the town hall of Wathlingen, as illustrated in Figure 13.



Figure 13: Aesthetic Expertise – Salon Hanging

3.4 Provision of aesthetic expertise

The artistic-social scientific explorations, findings and interventions were finally merged into three forms: 1) artifacts & permanent installation; 2) text; 3) power-point presentation.

1. Several artifacts, employed throughout the artistic activities, were handed over to the municipality. These are on the one hand artifacts used during the interventions, such as a mechanical typewriter, a slip box, stamps, banner. On

the other hand, the artistic and scientific results were merged into a permanent installation of pictures and collage. Employing the approach of “Petersburg Hanging” the social scientific and artistic insights of the experimental project are now aesthetically processed and permanently exhibited in the town hall.

2. A text of 10 pages was compiled describing the collaborative artistic-social scientific process and integrating their findings as well as key information for further reading. The report was text-based information and did not include graphics or photos. The writing style and layout was sober, mimicking usual policy documents.

3. Finally, a power point presentation was provided as a pdf document with 34 slides containing an overview of the project and the findings, including the final recommendations for further action. Key information on procedure and results of the artistic-social scientific project is presented with crisp text, diagrams for the citizen survey and photos documenting the artistic interventions. The power point presentation aims at providing an overview for decision-makers as well as for interested (lay) audiences.

These products represent the co-creative outcome of the experimental project on artistic-social scientific policy intervention. Given the combination of terminological information combined with artifacts in the final products as well as the artistic-aesthetic practice of the social sculptures during the project, we can say that *aesthetic expertise* has been generated and provided to the political-administrative decision-makers as well as to the interested public in Samtgemeinde Wathlingen. Finally, the project and the project results are documented at a website, in order to make it accessible to interested audiences².

4. Discussion and Conclusions

Reflecting on the experimental implementation of the conceptual model for co-creating aesthetic expertise through collaboration between arts and social science for policymaking on sustainable development, several insights can be inferred. Content wise it can be stated that the approach managed to deliver scientific empirical information, released a perturbing and productive impulse in the municipal administration and across the spheres of administration and civil society by the artistic interventions, keeping the co-produced knowledge and insights permanently alive through the aesthetic manifestation in the permanent installation in the town hall. Regarding the collaborative process, it can be said

² <https://hoernemann-walbrodt.de/aexpertirience/>

that, despite the challenges of the Covid-19 pandemic, which led to greater online-exchange, the fundamentally open-minded attitude, especially on the side of the project partners from the municipality, allowed for a productive and cooperative atmosphere.

The procedural structure of the conceptual model proved to be well-functioning. The mix of parallel work streams for the social scientific and artistic activities, together with the close exchange between the social scientist and the artist and the regular exchange between them and representatives of the municipality, can be seen as key for cross-fertilization between the different perspectives and perceptions. For instance, the foci in the survey and the guided interviews on attitudes to transformation, perceptions and responsibilities of actors were informed and guided by the insights of the artistic observation and sensing on site, and the data were co-interpreted by the social scientist and the artist and finally jointly reflected with their partner in the overall venture. Moreover, the scientific insights, for example, through the interviews with representatives or the municipal documents, were instructive for shaping the participatory artistic intervention.

Finally, the concluding Petersburg Hanging installation integrated aesthetically the multilayered insights co-created between social science, arts, and the municipality. Against the background of the conceptual and methodological considerations on arts-based and sensory sustainability science and artistic inquiry and intervention, it can be concluded that it is principally viable to combine the strengths of social science and arts for practical policy contexts. The production and communication of empirical knowledge, with the ability the of arts to stimulate (new) thinking, sensing and creativity for practical purposes and the final aesthetic preparation, together lead to a different kind of experienced insight compared to expertise produced at conventionally social science-policy interfaces or political artistic intervention alone. Alongside scientific facts and figures the participatory artistic interventions enabled sensory-aesthetic dimensions to become part of the overall generated insight. Finally, given that the overall enterprise is not dominated by the perspective of social science, the arts or the municipality, it purposefully represents an in-between phenomenon for which we have created a neologism to grasp its specificity: AExpertierience, merging Aesthetics (Arts), Expertise (Science) and Experience (Practice).

We believe that our experimental case study has shown that the production and provision of aesthetic expertise is both possible and promising in its significance. Based on this outcome and the project experience, some considerations for further research and practice can be inferred. First, more experiments and

research will be needed to analyse more systematically under which conditions and for which topics the proposed approach can be most effective. This is particularly relevant with regard to the finding that a majority of the surveyed citizens said that they are not familiar with the role of the arts in this context.

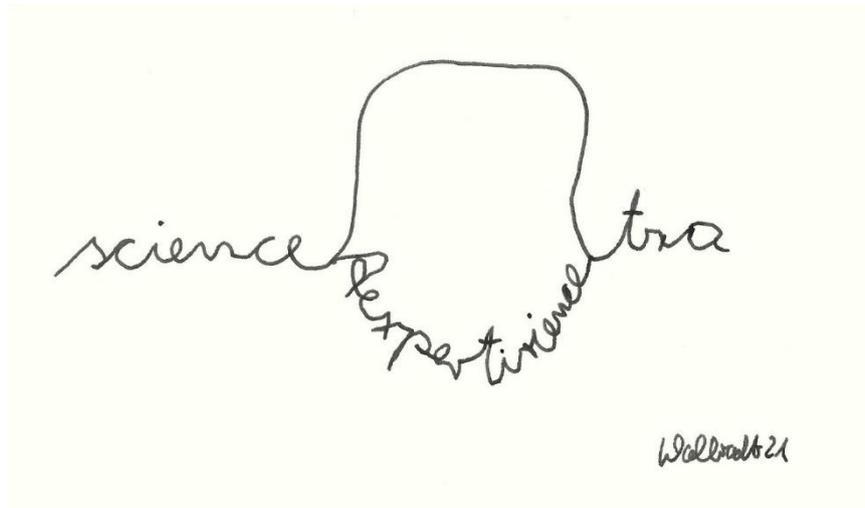


Figure 14. Art and Science by Walbrodt

Second, the material impact of aesthetic expertise could be evaluated through the contribution given by lens of sustainability assessment. Third, concerning the social science-arts collaboration and the social science-arts-policy interface, reflective studies could generate a more nuanced understanding of requirements and success factors for such transsystemic interaction. Despite the need for more experiments and research to develop the approach of aesthetic expertise further, the project delivered results, which were considered by the participating practitioners as valuable. The co-created aesthetic expertise was evaluated as an informative, lively and effective approach to drive forward local sustainable development. Based on the positive evaluation, the mayor invited the artist and social scientist for a follow-up project. In this respect, some general recommendations for further practice can already be formulated. The joint problem and goal definition as well as the transparency of the procedure of the co-creative process are as important as nurturing the willingness of the

participating partners to engage with each other and the heterogenous perspectives and the openness for potentially surprising results. Given that there is no routine in political-administrative systems for this kind of project, as opposed to social scientific consultancy on the one hand or commissioned artistic work on the other, institutional creativity is clearly a prerequisite before the project may start in order to provide the space for enabling an experience which can produce aesthetic expertise for sustainable development.

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Funds

This research received no specific grant from any funding agency in the public, commercial, or no-profit sectors.

Competing Interests

The authors hereby state that there are no financial or non-financial competing interests that are directly or indirectly related to the work submitted for publication and that may compromise or be seen to compromise the objectivity or integrity of the contents of our paper.

Citation

Heinrichs, H., and Hoernemann, D. (2023) Sustainable development through aesthetic expertise? Results and reflection on an experimental case study on arts-science policy intervention. *Visions for Sustainability*, 19, 7311, 125-151.
<http://dx.doi.org/10.13135/2384-8677/7311>



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