The Curious Case of Art and Climate Change: The Impact of Art-Induced Distance on

'Out-Of-The-Box' Climate Policies and Feelings Overwhelmed

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GMREMA03: Master Thesis

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2023

Abstract

To mitigate climate change, we require climate policies which go beyond current standards and practices. However, as people strive for the known, such 'out-of-the-box' climate policies may risk low acceptance. Visual climate art may counteract our reaction against 'out-of-the-box' climate policies as it creates a space to explore uncomfortable ideas with less emotional intensity. We employed an experimental design on a representational Dutch sample (N = 677) to test our hypotheses that art depicting climate change consequences induces distance from the issue, which decreases feeling overwhelmed by climate change, ultimately resulting in increased policy acceptance. Both the art frame (i.e., art vs. real image) and artistic style (abstract vs. representational) were manipulated. Art increased feeling like a distant observer from climate change above 'real' images, while abstract art induced this distance sensation more than representational art. This art-induced distance decreased feelings of being overwhelmed by climate change. Contrary to our expectations, distance decreased policy acceptance while feeling overwhelmed by climate change increased it. Subsequently, art can be used as a tool to instigate distance. However, whether art and its inherent distance perceptions induce policy acceptance may depend on the system in which it functions and whether this system focuses on the problem of climate change or the solution.

Keywords: art, aesthetic distance, psychological distance, creativity, climate change

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Mitigating and adapting to climate change requires individual and systemic changes. People must alter the way they use energy, resources, and travel (IPCC, 2023). One way of sparking individual, as well as large-scale, change is through climate policies. Climate policies are local, national, or international level rules and guiding principles aimed at tackling climate change (Nature, 2023). Yet, with the current climate policies implemented worldwide, temperatures are still predicted to climb 2.7 degrees Celsius by 2100, which would cause catastrophic climate change consequences (Dechezleprêtre et al., 2022). Hence, original, useful, and 'out-of-the-box' ideas which go beyond current standards and practices are required.

For 'out-of-the-box' climate policies to be implemented and possibly effective in mitigating climate change, they must be accepted. Traditional climate policies (e.g., carbon pricing; Maestre-Andres et al., 2019) have always fought an uphill battle to be accepted. Acceptance is based on perceived effectiveness, fairness, and personal impact (Dechezleprêtre et al., 2022) as well as influenced by individual differences (Drews & van den Bergh, 2016; Steg et al., 2011). Gaining acceptance thus requires simultaneously appeasing different needs and wishes. These attributes of policy acceptance apply to traditional as well as 'out-of-the-box' climate policies. However, the implied creativity – generating, recognising, and selecting (de Buisonjé et al., 2017) useful and original ideas (Amabile, 1983) – in 'out-of-the-box' climate policies may make acceptance even more fickle as people strive for the safe, normal, and feasible (Wronska, 2020). Accepting 'out-of-the-box' policies implies choosing the risky over the safe and the uncertain over the tested and feasible – a task which may require openness.

Art may be essential to ensuring the openness required for people to gravitate towards 'out-of-the-box' climate policies. Visual art – loosely defined as cultural objects perceived and interpreted visually within an art context (Gerger et al., 2014) – is often used to instigate social change (Roosen et al., 2017; Sommer et al., 2019; Stamkou & Keltner, 2020). Art can allow its viewers to explore unknown and even uncomfortable ideas (Stamkou & Keltner, 2020), as it creates a 'space [...] to step back and reflect' (Sommer et al., 2019, p. 3). This space may directly (McDonald et al., 2015; Rietzschel & Ritter, 2018; Stamkou & Keltner, 2020) and indirectly, through decreased emotional intensity (Greger et al., 2014; McDonald et al., 2015; Stamkou & Keltner, 2020; van Dongen et al., 2016), help ensure the acceptance of 'out-of-the-box' climate policies. An experimental design was employed to test the hypothesis that art facilitates 'out-of-the-box' climate policy acceptance due to increased distance and decreased emotional intensity.

Accepting 'Out-of-the-box' Climate Policies

To avoid possible catastrophic consequences of a continuously warming climate, 'out-of-the-box' climate policies must be accepted. In the creative process - as well as in the policy process (Benson & Jordan, 2015; Jordan, 2001) - ideas must be generated, evaluated, selected and implemented. Importantly, these separate processes are seldom executed by the same people (Rietzschel & Ritter, 2018). For instance, decisions on policies in the European Union include input from the writers of the policy as well as stakeholders, the public, and different departments (European Commission, n.d.). As a result, decision-makers must be able to accept creative and 'out-of-the-box' ideas without first participating in the creative generation process. Yet, creative ideas are seldom selected for implementation (Rietzschel & Ritter, 2018) despite our commonly outwardly appreciation for creativity (Mueller et al., 2012). This may be due to our implicit aversion to creativity (Mueller et al., 2012). Creative ideas must be original and useful (Amabile,

1983) and are thus, by definition, uncertain since they are untested. This uncertainty and the tension between novelty and usefulness (Rietzschel et al., 2010) that instils it may cause avoidance (Mueller et al., 2012) as we gravitate towards the familiar and safe to protect ourselves from risk (Wronska, 2020). As such, the acceptance of 'out-of-the-box' climate policies may be sparse, and we risk moving further towards catastrophic climate change consequences.

Visual Art

Visual art may be a means to ensure the acceptance of 'out-of-the-box' climate policies. Art can create attitudinal and behavioural change within the audience (Roosen et al., 2017). This effect may stem from the viewer's engagement with the art content (Sommer & Klöckner, 2021). Viewing art constitutes an experience as it allows viewers to perceive and imagine events and realities they may not have encountered before (Aumann, 2022). Verducci (2019, building on Dewey, 1934) emphasises that this experience is entangled with the artist as it involves the artist's own ideas, emotions and perspectives. Engaging with the artwork thus involves experiencing the content and interpreting the standpoints of the artist. The beholder is moved beyond their own reality into the imaginative experience of the art content and the artist. This may diminish the beholder's standpoint and habitual perceptions, resulting in the beholder relying less on their automatic biases (Verducci, 2019). By facilitating the space to experience different ideas and perspectives while suppressing our habitual ways of being, an art experience may ensure the openness required to consider odd and uncertain ideas (Verducci, 2019). As 'out-of-the-box' climate policies are new, different, untested and thus inherently uncertain, this art-induced openness may allow the viewer the space to consider these policies without relying on habitual and implicit avoidance of the new and uncertain.

Importantly, Verducci (2019) emphasises that art must be explicitly articulated as a teaching tool for open-mindedness to flourish. However, anecdotal evidence from organisations (Barry & Meisiek, 2010) combined with a study on art and creativity convey that the openness required for policy acceptance may benefit from a one-time art viewing. Indeed, the positive effects of art in the workplace (e.g., Antal & Bitran, 2019) may diminish with time as people get used to them (Barry & Meisiek, 2010). An experimental study, on the other hand, found that one instant of art viewing increased - directly and indirectly through inspiration - creative idea generation (An & Youn, 2018). Although open-mindedness may need honing in to flourish, disrupting the habitual response responsible for biases - including our bias against creativity - may be more effective when the art has not become ordinary. This effect may be further emphasised by abstract art (i.e., containing, for instance, distortion (Stephan et al., 2018)). Abstract art, compared to representational art (i.e., containing recognisable elements; Durkin et al., 2020), does not result in object-oriented viewing patterns nor the activation of specific brain regions (for review, see Aviv, 2014). Based on this, Aviv (2014) proposed that our brain is free to make new connections and associations, which may indicate that abstract art ensures less habitual responses. Hence, we propose that art, especially abstract art, benefits the acceptance of 'out-of-the-box' climate policies by allowing the space to consider new and uncertain ideas, resulting in the following hypotheses:

Hypothesis 1: Viewing visual art (*Hypothesis 1a*), especially abstract visual art compared to representational visual art (*Hypothesis 1b*), increases the acceptance of 'out-of-the-box' climate policies.

Aesthetic Distance

It is important to acknowledge the use of the word *space* in the preceding paragraphs as it encompasses a critical aspect of art's impact on beholders. To adequately explain this, we must explore the difference between viewing art and actual incidents or non-artistic photographs. Art viewing is fundamentally different because its content is fictitious (Cupchik, 2002; Menninghaus et al., 2017; Stamkou & Keltner, 2020) and the viewing occurs in a safe environment (e.g., a museum or laboratory; Gerger et al., 2014; van Dongen et al., 2016). Art frame research, in which participants view images defined as art or not, exemplifies this difference. For instance, disgusting (Wagner et al., 2014) and negatively (Gerger et al., 2014) loaded images are evaluated more positively when defined as art, and images, in general, are more appreciated when framed as art (van Dongen et al., 2016). These effects are often explained by aesthetic distance (AD). AD is a perceived space between the self in the here and now and the artwork instigated by our awareness that it is art and, at least partly, imagined (Menninghaus et al., 2017; Stamkou & Keltner, 2020). In its essence, AD means that the beholder is aware that they are safe, and what they see may not be entirely true. This differs from other forms of viewing as we cannot be confident of our safety or whether the content is fictitious. Consequently, viewing art differs from other forms of imagery due to the space created by AD.

Through AD, art may facilitate the acceptance of 'out-of-the-box' climate policies. AD originates from psychological distancing (PD; Menninghaus et al., 2017; Stamkou & Keltner, 2020), emphasised in research conveying that abstract art, compared to representational art, is perceived as more distant (Durkin et al., 2020). PD is the perceived (temporal, spatial, social, and hypothetical) distance between an event and oneself in the here and now and stems from the Construal-Level theory (CLT; Liberman & Trope, 2014; Trope & Liberman, 2010). This theory proposes that we mentally represent events differently depending on its perceived distance from

ourselves. A near event, of which we have plenty of details, will be mentally represented using low-level construal's. With distant events, on the other hand, we tend to know merely the essence of when, where, with whom and whether the event will occur. This ensures we only have abstract, decontextualised, and central details to represent the event. This high-level construal, as well as low-level construal, is an information process which influences thinking, decision-making, and behaviour.

Although increased PD is often considered detrimental to climate action (e.g., Bashir et al., 2014), it may be essential for the acceptance of 'out-of-the-box' climate policies. A recent review found that most people view climate change as psychologically close (van Valkengoed et al., 2023). According to CLT (Liberman & Trope, 2014), such perception and its accompanying low-level construal will emphasise the *how* of an event and, as such, focus on feasibility. For traditional climate policy, this may prove beneficial as policy acceptance depends on perceived effectiveness (Reynolds et al., 2020). For 'out-of-the-box' climate policies, on the other hand, this may be detrimental as creative idea selection is often hampered by risk, uncertainty (Mueller et al., 2012) and feasibility focus (Rietzschel & Ritter, 2018). In contrast, PD and its high-level construal are not connected to feasibility (Trope & Liberman, 2010) but rather associated with decreased uncertainty ratings (Mueller et al., 2014) and increased risk-taking (Lermer et al., 2015), which thereafter connects to creative idea selection (Toh & Miller, 2016). Together, these findings propose that making climate change seem more distant – through art – may make the acceptance of 'out-of-the-box' climate policies more likely as it may decrease participants' feasibility and uncertainty considerations. Due to the connection between PD and AD, we propose that AD makes us more open to 'out-of-the-box' climate policies, resulting in the following hypotheses:

Hypothesis 2: AD mediates the relationship between art viewing and policy support: Visual art compared to images not framed as art (*Hypothesis 2a*) and abstract art compared to representational art (*Hypothesis 2b*) increases aesthetic distance, which thereafter results in more 'out-of-the-box' policy acceptance (*Hypothesis 2c*).

Overwhelmed

Visual art can depict many different topics that are inherently emotional. Climate art depicts, for instance, changes transpiring within nature (Roosen et al., 2017). This can be images concerning climate change consequences such as fire and flooding. As the topic of climate change is inherently emotionally charged – people worry about climate change (Steentje et al., 2017) and climate change perceptions are associated with anxiety (Clayton, 2020) – being confronted with reminders of climate change (e.g., through imagery, text, or other means) may bring such emotions to the fore. Although such negative emotions are often considered beneficial for climate action (Hornsey & Fielding, 2016), scholars in fear appeal (Kok et al., 2018), climate action research (Helm et al., 2018; Verlie, 2019), and beyond (Moser & Dilling, 2004) convey that such emotions can result in inaction. The sheer size and urgency of climate change, its uncertain effects, and the actions required to prevent it are easily overwhelming (Verlie, 2019). Feeling overwhelmed – an intense but unidentifiable emotional reaction (Gohm, 2003) – can make many feel small, incapable of acting (Verlie, 2019) and prompt defensive mechanisms (Brügger et al., 2015). Feeling overwhelmed by climate change is thus unlikely to induce acceptance towards any policy, no matter the novelty of the ideas to be accepted.

Thus, to ensure action, the feeling of being overwhelmed must decrease. In Art, Clinical Psychology and PD research, distance is often proposed as a means of emotional regulation. The Distancing-Embracing model (Menninghaus et al., 2017) proposes that the knowledge that one is

viewing art and thus safe ensures that negative emotions are kept at a distance. This is exemplified by brain activity research conveying that art and 'real' images are first experienced with similar emotional intensity, but the emotional intensity is later reduced in the art condition alone (van Dongen et al., 2016). Building upon CLT and PD research (Ayduk & Kross, 2018), clinical research on self-distancing – recalling an emotional event from the perspective of an observer (Moran & Eyal, 2022) – is proposed to decrease negative emotional intensity as the event is represented using high-level construal, which emphasises cognitive, rather than affective, reasoning (Kross et al., 2005; Moran & Eyal, 2022). Lastly, in PD research, the effect of distancing on emotional regulation is explained using the effect of physical distance (Williams et al., 2014): being physically close to a forest fire will cause more emotional reactions than standing at a safe distance. Consequently, the presence of AD inherent in viewing art, and thus also climate art, should decrease the intensity of any negative emotion the beholder may experience. Hence, we propose:

Hypothesis 3: AD and feeling overwhelmed consecutively mediate the relationship between art viewing and policy support: Viewing art increases AD, which thereafter decreases feeling overwhelmed (*Hypothesis 3a*) and thus attenuates the negative association between being overwhelmed by climate change and accepting 'out-of-the-box' climate policies (*Hypothesis 3b*).

Present Study

With this study, we aim to test whether climate art can benefit the acceptance of 'out-of-the-box' climate policies. For this purpose, we will test the mediation and serial mediation model explained above. Building upon previous research, we propose that art instigates AD, which can facilitate the acceptance of novel policies by diminishing the sensation of being overwhelmed. We further build on previous research by focusing on the acceptance of novel climate policies,

focusing specifically on climate art rather than artworks with various subject matters and exploring the impact of artistic style on policy acceptance.

Method

Participants

A representative sample of the Dutch population was recruited through Dynata's pre-recruited paid panel. All participants were granted 3 euros and 70 cents for participating on the condition that they finished the survey. Two attention checks were utilised to ensure attentive participation. Participants who failed the attention checks were immediately eliminated from further participation. After analysing whether participation had been undertaken seriously (e.g., checking item variance on validated scales), a sample size of 677 remained. Of the remaining respondents, 50.74 % (N = 342) identified as female and 49.26 % (N = 332) identified as male. Age was measured in categories with an average span of 9 years (e.g., 25-34). Age categories were utilised to establish functional quotas. The median age fell between 45-54 (15.36 %, N = 104) years of age, with 38.84 % (N = 263) falling below and 45.79 % (N = 310) falling above. Education was divided into three categories (28.80 % (N = 195) in the lower, 35.89 % (N = 243) in the middle, and 35.01 % (N = 237) in the highest category) and conveyed a slight skewness towards higher education. The survey took, on average, 15 minutes and 24 seconds to complete.

Procedure and Design

This experiment was part of a larger study conducted by the University of Groningen in collaboration with the Boekmanstichting. The larger study included this experimental design and a preceding questionnaire section, both built using Qualtrics. Following approval from the ethics committee at the University of Groningen, the study was sent to Dynata for distribution. The study began with information regarding the purpose of the study and the handling of participants'

data. All participants were asked to provide informed consent before the questionnaire section and experimental design began. If declined, participation was terminated and collected data was discarded. All measures and text in this study were translated from English to Dutch by the translation tool offered by Qualtrics and checked by native Dutch speakers in the team.

The study began with a questionnaire section regarding, but not limited to, demographic variables, personal values, perception of the cultural sector and sustainability. Following these questions, participants were randomly allocated to one out of three experimental conditions or one control condition (see experimental stimuli in Appendix A). The three experimental conditions were introduced either as 'art' (two conditions: abstract or representational art style) or as 'real' newspaper photographs (one condition: following the experimental set-up of van Dongen and colleagues (2016)). The last condition was an empty control condition. Participants in the experimental conditions were asked to read the following text: *The following [two images are photographs from newspapers/two artworks are photographs from a climate change art exhibition/two artworks are paintings from a climate change art exhibition]. Both depict climate change consequences that are becoming more and more common. Please look at these [photographs/artworks] before moving on to the next question (note that the [photos are not staged and depict real-life events/ situations you see are artworks of staged scenes]).*

Following the experimental conditions, all participants were asked questions regarding perceived distance from the art content, the perceived experience of being overwhelmed and their acceptance of climate policies.

Measures

Artwork

We used two freely accessible photographs from Climate Visuals and Climate Outreach (2023) found by focusing on climate change consequences and using 'fire', 'flooding', and 'Netherlands' as search terms. These images were slightly altered for our abstract art condition using the GoArt AI tool offered by Fotor (2023). This alteration made the photographs resemble paintings painted with light distortion (see Appendix A). We used the original photographs for the 'newspaper photograph' and 'representational' conditions. Fire and flooding were chosen as subject matter as they are close and well-known climate change consequences to the Dutch public. This was deemed crucial to exclude inducing distance through the subject matter and not only the art experience. Since how we view art (i.e., shallow or thorough; Perkins, 2020) may influence its impact on us, the time participants spent interacting with the artwork was tracked.

Aesthetic Distance

To measure AD, we altered a self-distancing measure used in clinical research. This was deemed useful as it, like AD, stems from PD and because of its focus on imagination, which is more akin to AD than PD. We altered the item used by White and colleagues (2019) by asking about the art condition rather than focusing on a worrisome future experience: "As you saw the artworks/photographs from an art exhibition/newspaper portraying climate change consequences, to what extent did you feel like a distant observer or involved in it?" The question was rated on a 7-point scale ranging from 1 (*Very much distant observer)* to 7 (*Very much involved).* The item was reverse-coded in order for higher values to indicate increased distance rather than an increased sense of being involved. A mean of 3.83 and a standard deviation of 1.44 were found.

Policies

A list of 9 policies ranging from familiar to novel was created for this study (see Appendix B). These policies aimed to capture legal, infrastructural, and financial changes and

opportunities, as well as changes to individual behaviours and produce options. Two of the more familiar policies were taken from the work by van Valkengoed and colleagues (2021). The rest were created using inspiration from the idea of systemic change – including the legal status of nature (de Toledo, 2020), – technological solution-oriented ideas (Krajick & Adelman, 2010; Nelson, 2019), green infrastructure ideas (Perez, 2020), traditional subsidies ideas, and ChatGPT (personal communication, April 2023). The policies were judged on their originality, value, and usefulness – in line with the conceptual definition of creativity (Amabile, 1983) – by 11 independent judges to order them from familiar to novel. Made-up policies that were neither perceived as creative nor familiar were excluded. Participants in this study were asked to rate how willing they were to accept the remaining policies (e.g., *Invest public money into algae-powered buildings, which will heat up the building* (rated most creative) and *Increasing taxes on fossil fuels, such as oil, gas, and coal* (rated least creative)) on a 7-point scale ranging from 1 (*Definitely not*) to 7 (*Definitely yes*). It was stated that the policies were effective to diminish possible third-variable explanations and to capture only acceptance of 'out-of-the-box' ideas. A mean of 4.32, a standard deviation of 1.27, and a Cronbach's alpha of .89 was found.

Overwhelmed

Three statements were used to gauge participants' feeling of being overwhelmed by the content of the artwork (i.e., climate change consequences). These items aimed to capture participants' feeling of being overwhelmed by the uncertainty, disruption and unknown effects of climate change. Participants were asked: "As you saw the photographs/paintings from a newspaper/ an art exhibition portraying climate change consequences, to what extent did you feel…" Participants rated the statements (*overwhelmed by climate change consequences*, *the uncertainty brought about by climate change overwhelms me*, and *the actions needed to combat*

climate change overwhelms me) on a 7-point scale ranging from 1 (*Definitely not*) to 7

(*Definitely yes*). A mean of 4.09, a standard deviation of 1.53 and a Cronbach's alpha of .85 were

found.

Data Analysis

Before conducting the hypotheses testing, a factor analysis was conducted on the

dependent variable to explore whether the novel and more familiar policies could be statistically

separated. As this was not the case – only one factor had an eigenvalue larger than 1 – the

analysis was conducted with only one dependent variable.[1] The hypotheses were tested using

process model 4 (mediation) and model 6 (serial mediation; Hayes, 2022). The use of Helmert's

coding system resulted in three comparisons: 1) the control condition compared to the

experimental conditions for an overall comparison; 2) the real condition compared to the art

conditions (i.e., the average of abstract and representational conditions combined) for hypotheses

1a and 2a; and 3) the representational condition compared to the abstract art condition for

hypotheses 1b and 2b. 5000 bootstrap samples were used for the percentile bootstrap confidence

intervals and estimates. The seed for the random number generator was set to 456723.

Percentile bootstrap mediation requires simulation analysis to establish accurate sample

sizes. Such simulation has already been done for simple mediation analysis (i.e., model 4 with

continuous variables). When expecting a small effect size, that study informs us that a sample

size of 558 would suffice (Fritz & MacKinnon, 2007). An alternative way of estimating the

sample size required for the indirect effect is through multiple regression power analysis (e.g.,

MeMoBootR Documentation, 2021). For six predictors (four conditions and two mediators) with

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[1] Due to differences in creativity ratings following the pilot study, we explored whether differences would emerge between the new and more creative policies compared to more common policies. No major differences emerged – possibly due to a spill-over effect. Hence, we present the dependent variables as an aggregated score.

a small effect size (Cohen, 1988), this calculation conveys a sample size of at least 687 (f^2(v) =

.02, α = 0.05, power = 0.80, N = 687). However, as our mediations include many different

effects (four effects for both mediators, the effects between the mediators, and the effects

between the mediators and the dependent variable), such estimation can only be considered a

low-end estimate. Thus, to ensure better power, possible control variables (i.e., biospheric values

(important for climate action to occur (de Groot & Thøgersen, 2018)), gender identity (important

for recognising creativity; Stemler & Kaufman, 2020), and whether people value new ideas)

were included only in an exploratory manner.[2] Nonetheless, the actual sample size and the fact

that no simulation study was conducted ensures that interpretations must be done with caution.

All analyses were conducted in R statistical software (v4.3.1; R Core Team, 2022) using pwr

package (v1.3.0; Champely et al., 2020) for power analysis, MeMoBootR package (v0.0.0.7001;

Buchanan, 2018) for diagnostic purposes, lmtest (v0.9.40; Zeileis & Hotnorn, 2002) for

heteroscedasticity testing, and PROCESSR (Hayes, 2022) for analysis purposes.

Results

Preliminary Findings

The data was examined prior to hypothesis testing to ensure our strict representativeness

criteria were followed and for diagnostic reasons. The variables of interest had low levels of

missing values. The dependent variable (i.e., policy acceptance) had the highest amount of

missing data (N = 19). These missing values were mainly found in the control (N = 7) and

abstract art group (N = 7). The time participants took on the experimental conditions was

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[2] Only one difference emerged in the first mediation analysis. Namely, the difference
between abstract and representational art on distance became non-significant ($b = 0.28$, 95%
BootCI [-.007; .57]). However, this did not emerge in the serial mediation analysis with
covariates ($b = 0.29$, 95% BootCI [.004; .57]), except when outliers were excluded ($b = 0.28$,
95% BootCI [-.03; .56]).

excluded from further considerations as it had no statistically significant bivariate associations with our variables of interest.[3] The first mediator (i.e., distance) exhibited large variation and positively skewed distribution, while the second mediator (i.e., overwhelmed) was negatively skewed. Lastly, the dependent variable (i.e., policy acceptance) was slightly peaked and negatively skewed. However, neither the kurtosis nor skewness values exceeded +/- 1 for any of the included variables.

Three linear regression assumptions were violated. First, the first model (i.e., mediation) violated the normality assumption. As inferences utilising bootstrap confidence intervals and estimates do not assume normality (Hayes, 2022), this violation is rendered moot. Second, the assumption of homoscedasticity was visibly violated in the first model. The second model (i.e., serial mediation) showed limited signs of violation in the scatterplots. Nonetheless, the results of the Breusch-Pagan test of homogeneity conveyed heteroscedasticity in both models (mediation: $\chi^2(4) = 26.81$, $p < .001$; serial mediation: $\chi^2(5) = 32.64$, $p < .001$). To remedy this issue, a robust regression using a Heteroskedasticity-Consistent Standard Error Estimator, as suggested by Hayes and Cai (2007), was utilised. More precisely, the HC4 was utilised as recommended when outliers are present (Hayes & Cai, 2007). Lastly, 47 observations were marked as outliers by their Cook's distance in the mediation model and 49 in the serial mediation model. As this was not due to measurement issues, both analyses were run twice – with and without the outliers. As the outcomes of both sets of analyses conveyed largely similar conclusions, we report only the analyses with outliers (for deviating outcomes in the analyses with outliers, see footnotes).

Hypothesis Testing

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[3] Participants in the 'real' condition spent nearly 60 seconds on the image (M = 52.42, SD = 519.64) – with large variation. In the art conditions the average time was substantially shorter (Abstract: M = 18.52, SD = 34.21 and Representational: M = 12.25, SD = 14.49).

The total effect (see c_1 and c_2 paths in Table 1) informs us that Hypothesis 1a – viewing art increases policy acceptance – was not supported. Although the c_1 path (see Figure 1) affirms the expected direction – viewing climate image (whether art or not) increases policy acceptance – the c_2 path informs us that the 'real' condition drove this effect. Similarly, Hypothesis 1b – viewing abstract art, compared to representational art, increases policy acceptance – was not supported (see c_3-path in Figure 1) as the association is neither statistically significant nor positive. Notably, art's expected positive effect – especially abstract art – emerged when distance perceptions are equal (see c_2' and c_3' pathways in Figure 1).

Mediation Analysis

Discernible in the a-paths (see Figure 1), the manipulation had the intended effect as art influenced distance perceptions more than 'real' images, conveying support for Hypothesis 2a. Moreover, Hypothesis 2b – abstract art increases distance perceptions more than representational art – was similarly supported (see a_3-path in Figure 1). However, the b-path (see Figure 1 and Table 1) conveys that distance decreases policy acceptance when the experimental conditions are controlled for. Subsequently, Hypothesis 2c – distance increases acceptance – was not supported.

Although neither the relative direct nor relative total effects were significant (see Table 1), the significant indirect effects convey support for the overall mediation hypothesis (Hypothesis 2). Bootstrap analysis showed that in some of the comparisons, the relation between the experimental conditions and acceptance of 'out-of-the-box' climate policies was mediated by experienced distance from climate change (see Figure 1; a_2b: $b = -0.20$, 95% BootCI [-.32; -.09]; a_3b: $b = -0.14$, 95% BootCI [-.27; -.004]). However, these relative indirect effects are negative. The 'real' condition compared to the art condition (regardless of style) conveys that viewing art increased distance perceptions, translating into less policy acceptance. Comparing the two

artistic styles showed that viewing abstract art influenced distance more than viewing representational art, which thereafter decreased policy acceptance. Subsequently, Hypothesis 2 is supported as AD mediates the relationship between viewing art and accepting 'out-of-the-box' climate policies; however, AD does not increase acceptance. No relative indirect effect was found in comparing the experimental and control conditions (see Figure 1; a_1b: $b = 0.06$, 95% BootCI [-.05; .17]).[4]

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[4] One difference emerged when re-running the analysis without outliers. Namely, the relative total effect of the comparison between the 'real' condition and the average of the two art conditions remained negative but reached significance ($b = -0.25$, $t = -2.32$, $p = .02$). Hence, in the model without distance, viewing climate art resulted in less policy acceptance than viewing 'real' climate images.

Figure 1

Coefficients and Significance of Pathways in the Proposed Mediation Model
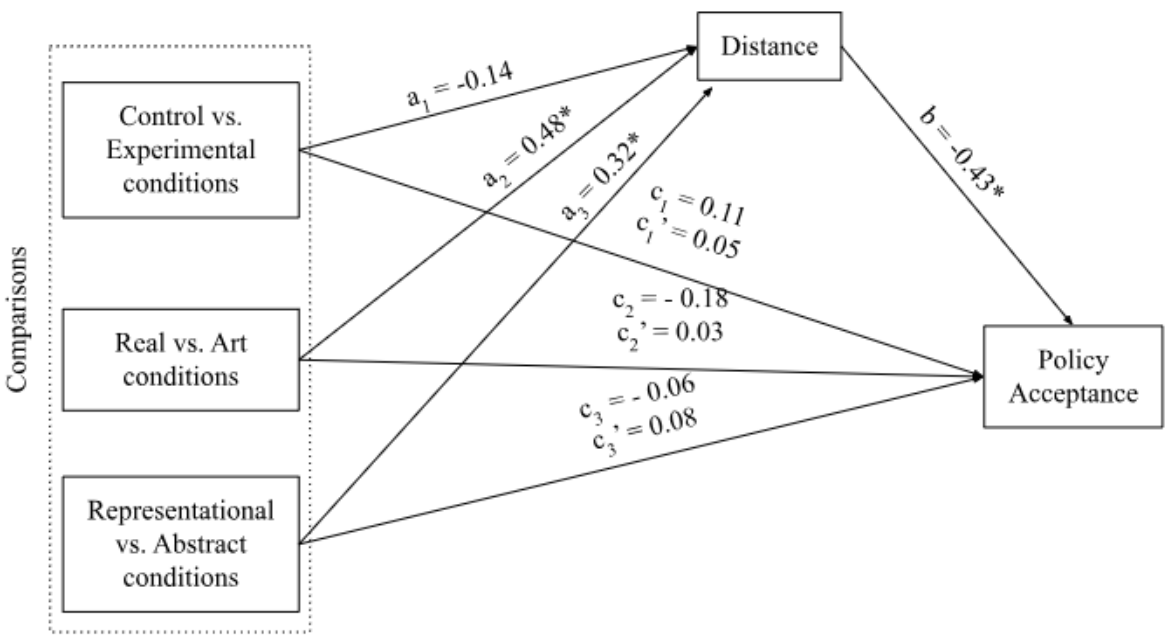
Note. Due to a suspected violation of the normality assumption, bootstrap confidence intervals were utilised. Hence, no precise p-value can be given.

* = 95% BootCI excluding 0.

Table 1

Standard Errors, Bootstrap Confidence Intervals, and Model Summary Information

Independent Variable		Y Policy Acceptance			M Distance				Y Policy Acceptance		
		SE	*p*		Boot*SE*	BootCI LL	BootCI UL		Boot*SE*	BootCI LL	BootCI UL
Control vs Conditions	c_1	0.11	.32	a_1	0.13	-.40	.12	c'_1	0.10	-.14	.23
Real vs Art	c_2	0.13	.17	a_2	0.14	.21	.74	c'_2	0.11	-.19	.25
Representational vs Abstract	c_3	0.14	.67	a_3	0.15	.01	.62	c'_3	0.12	-.17	.33
Distance		-	-		-	-		b	0.03	-.49	-.36
Constant	i_Y	0.05	<.001	i_M	0.05	3.73	3.95	i_Y	0.13	5.70	6.19
		$R^2 = 0.005$ $F(3, 653) = 0.98, p = .40$			$R^2 = 0.03$ $F(3, 653) = 5.91, p = <.001$				$R^2 = 0.23$ $F(4, 652) = 38.70, p = <.001$		

Note. Due to normality issues, the omnibus tests should be interpreted with caution.

Exploratory Analysis

As the statistically significant indirect effects convey, the three experimental conditions differ in their effect on AD and, thereafter, on policy support. These differences make the comparison between the control condition and the average of the experimental conditions uninformative. Group comparisons and detailed examination of correlations were explored to ease the interpretation of this comparison (a_1b- path in Figure 1). It is vital to acknowledge that the means (see Table 2) centres around the 'neither/neutral' answer option. Despite this, the means of distancing confirm our hypothesised directions since the abstract condition conveys the most distancing and the 'real' condition conveys the most involvement. Moreover, participants in the abstract condition were the least overwhelmed by climate change, while participants in the 'real' condition were the most overwhelmed. This is emphasised by the statistically significant difference between the 'real' and abstract conditions (see Table 3) and the negative bivariate associations between distance and overwhelmed (see Table 4) – which give preliminary support for Hypothesis 3a. On both these variables, the control condition is closest to the 'neither/neutral' option - shortly followed by the representational condition. The overall comparison becomes uninformative as the opposite conditions are grouped together and compared to the most neutral stand. Thus, the first comparison is excluded from further examination.

Table 2

Means, Standard Deviations and Correlations

		Distance	Overwhelmed	Policy Acceptance	Policy Acceptance$_{Adjusted}$
Control (N = 163)	Mean	3.94	4.02	4.23	4.28
	SD	1.47	1.49	1.22	
Real (N = 167)	Mean	3.49[a]	4.39	4.46	4.27
	SD	1.47	1.51	1.40	
Representational (N = 166)	Mean	3.81	4.06	4.31	4.31
	SD	1.40	1.59	1.29	
Abstract (N = 159)	Mean	4.14[b]	3.87[b]	4.24	4.39
	SD	1.33	1.46	1.14	

Note. Group comparisons were conducted using ANOVA and Tukey post-hoc comparisons.

[a] = significantly different from the control condition

[b] = significantly different from the real condition

Table 3

Correlations Between the Continuous Variables Across Conditions

	Control		Real		Representational		Abstract	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
(1) Distance	–	–	–	–	–	–	–	–
(2) Overwhelmed	-.47***	–	-.59***	–	-.50***	–	-.39***	–
(3) Policy Acceptance	-.54***	.55***	-.50***	.57***	-.35***	.58***	-.51***	.51***

Note. *** $p < .001$

Serial Mediation Analysis

As established in the mediation analysis above, viewing art, and abstract art in particular, increased distance perceptions. Hypothesis 3a proposed that this increased feeling of being a distant observer of climate change would decrease feelings of being overwhelmed by the issue. As discernible in the statistically significant d-path (see Figure 2), this was supported. However, that feeling overwhelmed would decrease policy acceptance (Hypothesis 3b) was not supported. Instead, feeling overwhelmed by climate change, when controlling for distance and conditions, was positively associated with climate policy acceptance (see b_2 pathway in Figure 2).

In line with the overall serial mediation in Hypothesis 3 – climate art facilitates policy acceptance by increasing distance, which attenuates the negative effect of feeling overwhelmed – bootstrap analyses showed that the relationship between viewing art and accepting 'out-of-the-box' climate policies was mediated by both distance perceptions and feeling overwhelmed (see Figure 2 and Table 4; $a_{12}d\,b_2$ - pathway: $b = -0.10$, 95% BootCI [-.16; -.04]; $a_{13}d\,b_2$ - pathway: $b = -0.07$, 95% BootCI [-.13; -.006]). Negative relative indirect effects were expected. However, contrary to expectations, decreasing feeling overwhelmed did not positively affect policy acceptance and, therefore, viewing art compared to 'real' images and abstract art compared to representational art did increase distance, which decreased overwhelmedness, but this did not benefit policy acceptance.[5]

Exploratory Analysis

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[5] Without outliers, the omnibus effect sizes increase, and bootstrap confidence intervals decrease. The c_3' pathway edges towards significance ($b = 0.17$, $p = .08$), showing that abstract art – compared to representational – increases policy acceptance when controlling for mediators. Lastly, the c_2 pathway edges towards significance ($b = -0.20$, $p = .08$), meaning that 'real' climate images influences policy acceptance more than climate art when mediators are included.

In both analyses above, a curious find emerged. Namely, the expected positive association between art and policy acceptance emerged when controlling for feeling distance and overwhelmed. Although not statistically significant (see Tables 1 and 4), the effect is also discernible in Table 2. Vital is the difference between policy means and adjusted policy means. Discernible in these means is that acceptance in the 'real' condition decreased while acceptance in the abstract condition increased when controlling for distance and feeling overwhelmed. Control and representational conditions remained nearly the same. This conveys, aligned with the hypotheses testing above, that the differences in policy acceptance are mostly driven by differences in distance and overwhelmed (see also bivariate associations in Table 3). However, it implies that art may still benefit climate policy acceptance in some instances.

Figure 2

Coefficients and Significance of Pathways in the Proposed Serial Mediation Model
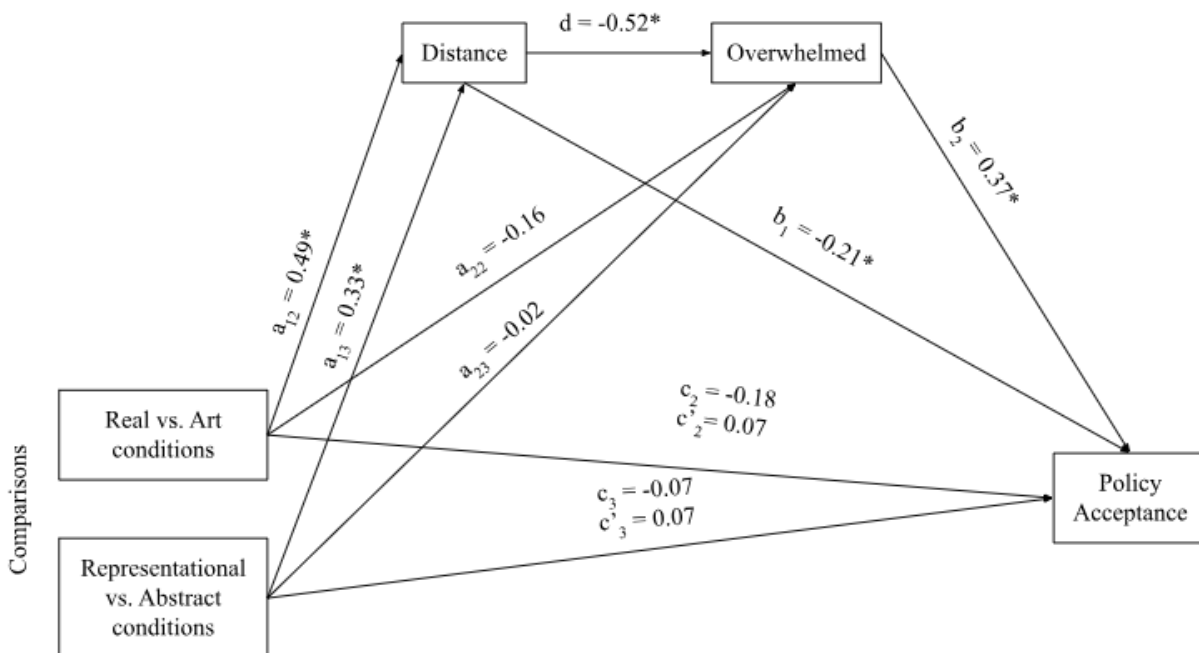
Note. Bootstrap confidence intervals were utilised. Hence, no precise p-value can be given.

* = 95% BootCI excluding 0.

Table 5

Standard Errors, Bootstrap Confidence Intervals, and Model Summary Information

Comparisons		Y Policy Acceptance			M1 Distance				M2 Overwhelmed				Y Policy Acceptance		
		SE	p		BootSE	BootCI			BootSE	BootCI			BootSE	BootCI	
						LL	UL			LL	UL			LL	UL
Real vs Art	c_2	0.13	.15	a_{12}	0.14	.22	.75	a_{22}	0.12	-.40	.07	c'_2	0.10	-.13	.28
Representational vs Abstract	c_3	0.13	.60	a_{13}	0.15	.04	.63	a_{23}	0.15	-.32	.28	c'_3	0.11	-.13	.30
Distance		–	–		–	–	–	d	0.04	-.59	-.44	b_1	0.05	-.32	-.17
Overwhelmed		–	–		–	–	–		–	–	–	b_2	0.04	.29	.43
Constant	i_Y	0.05	<.001	i_{M1}	0.06	3.73	3.95	i_{M2}	0.15	5.80	6.34	i_Y	.32	3.00	4.23
		$R^2 = 0.005$ $F(3, 651) = 1.04, p = .37$			$R^2 = 0.03$ $F(3, 651) = 6.18, p < .001$				$R^2 = 0.25$ $F(4, 650) = 53.00, p < .001$				$R^2 = 0.36$ $F(5, 649) = 63.40, p < .001$		

Note. As normality was no issue in this analysis, the omnibus tests are valid. However, to be consistent, bootstrap was chosen as the inference method.

Discussion

The aim of this research was to investigate whether and how art can promote the acceptance of climate policies, particularly those that go beyond current practices. The results support our hypotheses that style (abstract vs. representational) and framing (art vs. real) made respondents feel more like distant observers, which reduced feeling overwhelmed by the issue. However, whereas we hypothesised that increased distance and reduced feeling of being overwhelmed would increase 'out-of-the-box' climate policy acceptance, the opposite seemed to happen. That is, increased distance reduced policy acceptance while increased overwhelmedness by climate change increased policy acceptance. Interestingly, differences in distance and overwhelmedness depending on experimental conditions were observed when examining the mean levels but not in policy acceptance. This suggests that art does not influence respondents' acceptance of 'out-of-the-box' climate policies. Nonetheless, a contradiction emerged when the effect of feeling like a distant observer and overwhelmed was removed. Namely, art seems to positively influence policy acceptance. This implies – although not statistically significant – that respondents were more open to the 'out-of-the-box' policies due to the art viewing when distance and overwhelmedness were removed.

The seemingly conflicting results concerning art's influence on policy acceptance find resonance within art research and whether art can instigate action or not. Proponents view art as facilitating other mental capacities, such as open-mindedness (Verducci, 2019) or motivation, which leads to action (Aumann, 2022). Opponents, on the other hand, argue that the nature of the art experience suppresses behaviour as we do not need to protect ourselves from the sensory input (Cupchik & Winston, 1996; Gerger et al., 2014). Although contradictory, our results convey a connection: art, in and of itself, may instigate mental capacities such as open-

mindedness, resulting in policies being more easily accepted. On the other hand, its expression may depend on the influence art has on other variables and how these variables relate to the situation – as supported by the confirmed mediation and serial mediation. As such, we must acknowledge that art does not function in a vacuum but rather functions together with other variables that may facilitate or debilitate art's activating effect.

Art-induced Uncertainty

An essential element of the system in which art functions is the art content. The imagery we presented focused on dangerous climate change consequences, which we stated are becoming more common. As such, it becomes a fear appeal. Fear appeals are loss frames (Tannenbaum et al., 2018), and, as such, our inherent loss aversion ensures more willingness to take risks (Kahneman & Tversky, 1979; Tversky & Kahneman, 1981). This would ensure increased acceptance (Osberghaus, 2017) of 'out-of-the-box' climate policies as they – although specified as effective – may carry risks (e.g., social rejection or doubting its value; Mueller et al., 2014). Following this reasoning, we would expect increased acceptance in all experimental conditions as they included the fearful imagery. However, the mean differences – albeit not statistically significant – indicate that the 'real' condition had a more substantial impact on policy acceptance than the art conditions.

To understand why our results do not follow the traditional rationale of loss frames, we must acknowledge the connection between art viewing and art-induced distance. The effectiveness of our manipulation – art viewing, especially abstract art viewing, increased perceived distance from the art content – confirms theorising on the inherent connection between art viewing and AD (e.g., Menninghaus et al., 2017; Stamkou & Keltner, 2020). Due to this, we may assert that other theorised elements of AD similarly align. As such, the theorised knowledge

that the image is art and thus may not be wholly accurate may increase uncertainty surrounding the art content. As the activating effect of art only emerged when the mediators were controlled for, some of the inherent uncertainty of art-induced distance may have been accounted for. This indicates that uncertainty – or rather, the absence of uncertainty – may be significant for the expression of art's activating effect. This is emphasised in loss frame research as loss frames decrease, rather than increase, willingness to act when uncertainty is present since the risk of loss is uncertain (Morton et al., 2011). Art and its inseparable distance thus become a loss frame with inherent uncertainty, ultimately explaining the negative – albeit not statistically significant – association between art viewing and 'out-of-the-box' climate policy acceptance.

The Effect of Climate Change Proximity

Importantly, our results convey that the 'real' condition may remedy the effect of uncertainty. As our measure of AD was a bipolar scale anchoring feeling like a distant observer and involved in climate change on opposite ends, our results imply that feeling close to the issue of climate change increased policy acceptance directly and indirectly via overwhelmedness. Perceiving an event as close (hereinafter referred to as proximity) means knowing it will happen, to whom, where and when (Trope & Liberman, 2010). Of particular interest is the hypothetical element of PD (i.e., knowing that something is real and will happen; Trope & Liberman, 2010). Previous research conveys that decreasing hypothetical distance is vital for mitigating intentions to occur (Jones et al., 2017), possibly by accentuating that climate change will happen and what impacts it will have (Maiella et al., 2020; McDonald et al., 2015). The negative association between our 'real' condition and AD, coupled with the experimental condition emphasising that the image was not staged, may have decreased uncertainty concerning the problem of climate change, thus ensuring acceptance.

In our original reasoning, we presented distance as beneficial for 'out-of-the-box' climate policy acceptance as it would, among other things, decrease the uncertainty surrounding these policies (Mueller et al., 2014). However, as elucidated in our discussion above, we did not consider the effect of uncertainty concerning the problem of climate change. The importance of being certain of climate change (e.g., Jones et al., 2017) helps explain our finding that art-induced distance decreased policy acceptance. Proponents of proximity (e.g., Bashir et al., 2014; Jones et al., 2017) propose that this knowledge – together with knowing when, where and to whom (Trope & Liberman, 2010) – highlights the consequences of the issue, the personal threat and, through this, increases negative emotions, ultimately resulting in an increased willingness to act (Brügger et al., 2015; McDonald et al., 2015). As such, decreased, rather than increased, distance should result in more policy acceptance as certainty surrounding the issue would, theoretically, increase.

The connection between proximity and negative emotionality, as emphasised by proponents of proximity, is evident in our findings that distance decreased overwhelmedness, and thus, proximity increased it. Proximity research explains this connection by proposing that experiencing the problem of climate change as close will highlight personal relevance and make the threat more present (McDonald et al., 2015). The positive association between feeling overwhelmed by climate change and policy acceptance can further be explained by fear appeal research, as this line of thought emphasises our motivation to avoid both threats and negative emotions. This motivation will ensure protective behaviours to remove both the threat and negative emotion (Tannenbaum et al., 2018). Our supported serial mediation aligns with this reasoning as increased proximity resulted in increased overwhelmedness and policy acceptance, which resonates with previous proximity research on mitigation intentions (Jones et al., 2017)

and policy acceptance (Fesenfeld & Rinscheid, 2021). Hence, when considering the problem of climate change, feeling overwhelmed may not necessarily result in inaction and defensive mechanisms as we first proposed but rather, together with proximity, facilitate acceptance.

Implications

The results of this study – both expected and unexpected – underscore three vital theoretical and practical implications. First, the interconnectedness between art and distance in this study highlights art as a practical means of manipulating distance. This effect was apparent even though our manipulation occurred in an artificial setting and only contained subtle differences. As such, it can – through finetuning and validation – become a parsimonious means of manipulating distance. As there is currently no uniform way of manipulating climate change distance – exacerbating the difficulty in judging the effectiveness of PD research (Keller et al., 2022) – this may prove vital to establish a more systematic research tradition.

Second, the finding that art-induced distance decreased feeling overwhelmed confirms previous research and theorising on art's emotion-regulatory properties (Menninghaus et al., 2017; van Dongen et al., 2016). This may imply that art – a safe context without risk of personal harm – ensures an openness to experience overwhelmedness without resulting in defensive reactions. This may be especially important considering the implication that proximity increases overwhelmedness. The difference between the empty control – in which respondents felt neither distant nor overwhelmed – and experimental conditions showcases that both perceptions are malleable and, as such, may increase. Intense feelings of being overwhelmed are connected to helplessness and powerlessness and are often accompanied by either proactive or avoiding behaviours (for review, see Kabigting, 2019). Previous research informs us that negative emotions require the presence of self-efficacy (i.e., the belief that one can do what is needed;

Bandura, 1978) for protective action to occur (Kok et al., 2018; Witte & Allen, 2000; cf. Tannenbaum et al., 2018). As the powerlessness of strong overwhelmedness is unlikely to connect to high efficacy beliefs, it remains doubtful that overwhelmedness will continue to ensure the acceptance of climate policies. Indeed, as overwhelmedness was low in our sample, it becomes plausible that more intense feelings remain incompatible with efficacy beliefs, ultimately resulting in avoiding behaviours. As the negative effect of distance on policy acceptance decreased when overwhelmed was in the model, highly emotional topics may benefit from art's emotion-regulatory effect.

      Third, our results imply a difference between focusing on the problem of climate change and its solution. To elucidate this, we must acknowledge that the experimental conditions and the mediator highlighted the problem of climate change while the policies focused on the solution. We must further emphasise that art viewing functions in a system in which the content and the elicited distance perceptions are both present. Lastly, our results indicate that although we accounted for uncertainty in the design of the policies, we did not consider uncertainty concerning the problem of climate change. The theorised impact uncertainty may have had on our results indicates that AD aligns more with the hypothetical element of PD rather than possible policy uncertainty. As such, viewing art will induce distance, which may emphasise uncertainty. Our results indicate that, when focusing on the problem of climate change, this becomes detrimental because the inherent loss in climate change becomes uncertain. A recent study informs us that the selection of intellectually distant ideas – in which uncertainty concerning usefulness is likely due to limited knowledge – benefits from induced low-level construal's (Mount et al., 2021), which connects to proximity (Trope & Liberman, 2010).

Together with our results, this implies that when emphasising the problem of climate change, proximity – not AD – is essential for the acceptance of 'out-of-the-box' policies.

Nonetheless, the impact of the presented loss frame and the possible positive effect of art hint at a possible solution-focused approach in which art may benefit the acceptance of 'out-of-the-box' climate policies. For art viewing to ensure policy acceptance, it must create an instance in which the beholder is open to the content-oriented uncertainty created by AD. This may require a gain frame rather than a loss frame. A gain frame might be ensured by focusing on the solution to climate change throughout and not only through the suggested policies. Solution-oriented climate art (for examples, see Sommer & Klöckner, 2021) will highlight possible future climates. A future climate reference will ensure a gain frame as the possible climate is something we can gain (Osberghaus, 2017). In these situations, the possible future emphasises an avenue to avoid the loss climate change will otherwise ensure. The presence of uncertainty will then cast doubt on this loss reduction, thus ensuring the need to act (Morton et al., 2011). Combined with Aumann's (2022) thesis that pleasurable art instigates motivation to experience the content in real life, solution-focused climate art may prove more beneficial for 'out-of-the-box' climate policy acceptance and emphasise a possible avenue for our original reasoning to take effect.

Thus, the result of this study emphasises the importance of either focusing on the solution to the problem of climate change or the problem itself. For the latter, our results emphasise the need to feel involved and overwhelmed by the issue to suppress uncertainty. As such, it gives credence to both proximity (e.g., Bashir et al., 2014; Jones et al., 2017) and fear appeal research (e.g., Bigsby & Albarracin, 2022; Tannenbaum et al., 2018) and emphasises the benefits of 'real' imagery. Regarding the focus on solutions, our theorising emphasises the need to be open to uncertainty, a task which may require art and its inherent distance. Acknowledging this

separation is vital as it allows us to recognise the system in which art and policy acceptance operates and in which instances art may be required to ensure openness or emotion regulation. As such, our findings partly support Stamkou and Keltner's (2020) proposition that art can ensure social change – as long as the system in which it operates is thoroughly investigated.

Future Directions

An important practical implication of this study, as mentioned, is the evidential success of our manipulation. However, more research is required for this manipulation to be useful in future studies. For instance, future research must establish how art content influences distance. This connects to our proposition that solution-oriented climate art may ensure the effectiveness of distance. As this is currently unknown, future research should explore how different art contents impact distance and its effect on policy acceptance. Although this requires an experimental design, exploring a more natural setting is further important to establish ecological validity as most people experience art outside of the controlled system within laboratories. This may impact the outcome as art may influence openness through the interpretations of others (Barry & Meisiek, 2010). As beholders are more likely to hear and see the reactions of others in museums than in laboratories, art is likely to induce less openness in the latter setting. Moreover, our unexpected results emphasise the pertinency to include measures on uncertainty and construal level – the latter may be especially important to understand why control conditions are often found to be uninformative (e.g., Mueller et al., 2014). Lastly, the suggestion that art, in and of itself, increases policy acceptance due to constructs such as open-mindedness requires further investigation.

Strengths and Limitations

Important strengths and limitations of the current study must be acknowledged. An important limitation is that serial mediation analysis requires an exceedingly large sample size – especially problematic in this study considering the many grouping variables included – and, as such, we cannot ensure adequate power. As discernible in the discussion above, the possible importance of uncertainty informs us that although the policies were piloted and declared effective, we should have asked whether respondents experienced uncertainty concerning the truthfulness of the art depictions. Similarly, no manipulation check was included for the experimental stimuli. Although we found the hypothesised effect, we cannot be certain that it is due to the difference in art frame as we do not know whether participants believed what they saw was either art or real photographs. Alongside these limitations, this study carries important strengths. One strength in particular is the interdisciplinary nature of the study as it connects research from a broad range of research traditions (e.g., Environmental, Creativity, and Art Psychology). Another strength was the data collection. By collecting data through a panel company, we assured more generalisability, as evident in our sample being, to a large extent, a representative sample of the Dutch population.

Conclusion

Throughout this paper, we have explored how art can benefit the acceptance of climate policies, especially those that go beyond current practices. This study adds weight to previous scholars who have emphasised art's importance in changing ourselves and our societies. Yet, this study furthers these proclamations by highlighting the possible different pathways this can take and the importance of considering the larger system in which art operates. An art viewing may, as proclaimed by Sommer and colleagues (2019, p. 3), grant us "space [...] to step back and reflect". However, whether art viewing and its ensuring distance perception results in action or

inaction may depend on focus and uncertainty perceptions. The current study demonstrated that, when focusing on the problem of climate change, feeling involved and overwhelmed ensures policy acceptance. Nonetheless, the unexpected results convey a possible solution-focused path in which the space art creates, and the openness towards uncertainty it may instil allows for 'out-of-the-box' climate policies to be accepted. Therefore, to harness the beneficial elements of art and its AD for climate policy acceptance, one must investigate the larger system in which it operates in order to grasp whether the *space* art creates ensures action or inaction.

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Appendix A
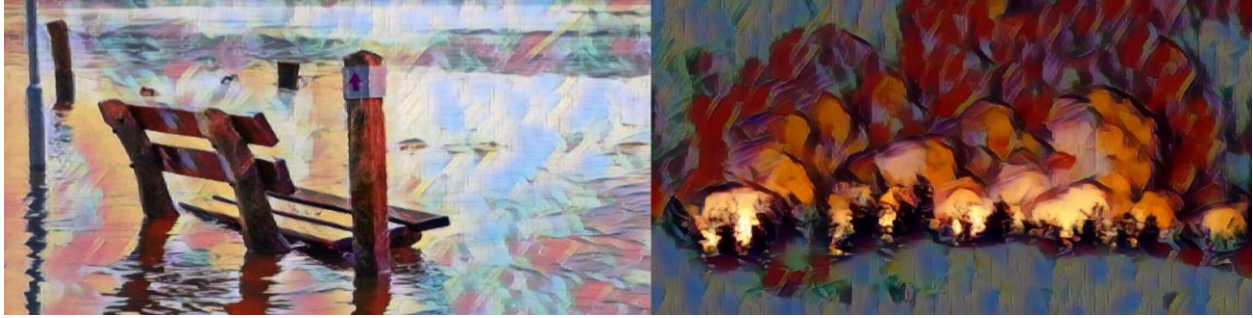
Experimental Conditions

Figure A1. Abstract Experimental Condition.

Figure A2. 'Real' Photography and Representational Art Condition.

Appendix B

List of Creative and Familiar Sustainability Policies Used in this Study

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How willing are you to accept the following policies?

1	2	3	4	5	6	7
Definitely not			Neutral			Definitely yes

1. Invest public money into algae-powered buildings, which will heat up the building when warmed by the sun.

2. Giving nature the status of a legal entity, ensuring its right to exist, thrive, and evolve.

3. Requiring highways to be lined with artificial trees that absorb the exhaust from cars and reuse the carbon dioxide as carbonation in sodas.

4. Implementing laws against 'ecocide', forbidding large-scale destruction of ecosystems and biodiversity.

5. Introduce a sustainable living allowance to help people become more sustainable (for instance, purchasing locally-produced food and using public transport).

6. Introducing a climate lottery in which individuals can win prizes for reducing their carbon footprint while proceeds go towards climate research and innovation.

7. Requiring food sellers to exchange 50% of their meat products with lab-grown meat.

8. Using public money to subsidise renewable energy such as wind and solar power.

9. Increasing taxes on fossil fuels, such as oil, gas, and coal.

Note. Policies are in decreasing order of creativity following the result of the pilot study. Items 4-7 are inspired by traditional subsidy ideas and ChatGPT (personal communication, April 2023). Items 8-9 originate from "Development and Validation of a Climate Change Perceptions Scale," by A.M. van Valkengoed and colleagues, 2021, Journal of Environmental Psychology, 76, p. 5 (https://doi.org/10.1016/j.jenvp.2021.101652). Item 2 stems from "What if Nature Became a Legal Person?" by N. de Toledo, 2020, World Economic Forum (https://www.weforum.org/agenda/2020/05/nature-legal-personhood/). Item 3 stems from

"University Joins 'Synthetic Tree' Venture," by K. Krajick and C. Adelman, 2010, Columbia Climate School (https://www.earth.columbia.edu/articles/view/2654) and "9 Not-So-Crazy Ideas to Combat Climate Change", by B. Nelson, 2019, Treehugger (https://www.treehugger.com/not-so-crazy-ideas-to-combat-climate-change-4868956). Item 1 stems from "The First Algae-Powered Building Presents Unique Renewable Energy Solution," by D. Pereze, 2020, Engineering (https://www.engineering.com/story/the-first-algae-powered-building-presents-unique-renewable-energy-solution).