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Executive summary

This deliverable describes the design, development and use of scripting for citizen curation, reporting on task T6.5 Scripting for social curation in WP6.

The design process is described in three phases. First, paper prototypes were developed and used to elicit feedback from stakeholders. The basic concept was inspired by the growing use of Slow Looking techniques in museums to guide the visitor to develop their own response to the artworks. The paper prototypes proposed a design concept that could support visitors not only in interpreting artworks guided by a Slow Looking script but could also enable them to mediate the experience of others by authoring Slow Looking scripts from their own perspective.

Second, a preliminary prototype, named IMMA Viewpoints, was developed that focussed on the use of technology to support the asking and answering of Slow Looking-style questions. Due to health restrictions in place at the time this was trialled with outdoor artworks in the grounds of IMMA, enabling passing visitors to respond to the sculptures.

Third, a prototype, named IMMA Deep Viewpoints, was developed to support citizens in the processes of both interpretation (guided by existing scripts) and mediation (by means of the authoring of scripts of other visitors). The prototype was trialled in a series of on-site and on-line workshops with a wide range of community groups, using the software for both interpretation and mediation activities. The citizen groups were able to use the software to both support their interpretation or artworks and the authoring of scripts giving their own perspective for use by others.

Document History

Version	Release date	Summary of changes	Author(s) -Institution
v0.9	19/10/2022	First draft released	Paul Mulholland (OU), Adam Stoneman (IMMA), Enrico Daga (OU), Jason Carvalho (OU), Mark Maguire (IMMA)
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v1.0	29/10/2022	Feedback from internal reviewers integrated	Paul Mulholland (OU)
v1.0	31/10/2022	Submission to EU	Coordinator

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1. Introduction

This deliverable reports on work in the development of an end-user interface for scripting citizen curation activities. Section 2 outlines related work on visitor participation in interpretative and curatorial tasks and its support by technology. Section 3 outlines the methodological approach in developing scripting support. Section 4 describes the development and use of paper prototypes to elicit initial design feedback. Section 5 describes the development and use of software prototypes for asking and answering questions about artworks. Section 6 describes the development of the software environment for authoring and using scripts, and its use by both citizens and museum staff to support curatorial processes. Finally, section 7 describes the mapping of the scripting software to the scripting ontology.

2. Related work

2.1 Slow Looking

Increasingly, the role of the museum in the exhibition of artworks is to support the visitor in developing their own interpretation or response, rather than interpreting the artwork for the visitor (Simon 2010). This process of bridging between the visitor and the artwork and helping them to construct their own response can be described as a form of mediation (Museum Mediators. 2012/2014.). Visual Thinking Strategies (VTS) (VTS 2022) is one visual art mediation technique used in museums. The VTS method guides the visitor through a simple set of questions (e.g. "What is going on in this picture?") helping them to develop their own interpretation of the artwork. Recently, a growing number of museums have introduced Slow Looking initiatives, either onsite or online. Slow Looking uses prompts and questions to help the visitor to develop their own interpretation while recognizing the advantages of mindfulness and slowing down in order to make a personal connection to an artwork (MoMA 2022, Reed 2017, Tishman 2017).

The Irish Museum of Modern Art (IMMA) developed a series of Slow Looking Art Videos as part of their program for older people (IMMA 2002). The videos, developed and presented by the museum's Visitor Engagement Team (VET), each focus on one artwork. The videos generally start by asking the viewer to make themselves comfortable and inviting them to let their eyes wander over the artwork. Initial questions are then introduced to prompt the viewer to think about what they see (e.g. "What is our attention drawn to first?"). These initial questions often precede any contextual information about the artwork. During the video, information is introduced gradually, related for example to the life of the artist, and the social and political context to which they were responding. The visitor may then be invited to reconsider some of the initial questions, provoking reflection on how contextual information has influenced what they see. Toward the end of the video, the questions become more imaginative, beyond the observable elements of the work. For example, a video about a surrealist work that is a hybrid of objects (Cross 1994), invites the viewer to think about which two everyday objects they would combine if producing their own artwork.

The design of the Slow Looking videos subscribes to the view of the visitor constructing their own meaning (Falk and Dierking 2018). The role of the museum in authoring the videos is to develop a sequence of questions and contextual information that support this meaning-making process. The process of authoring a Slow Looking video can be understood, at least in part, as an exercise in empathy (Simon 2016), taking the visitor's perspective in order to imagine what they will find of interest and what support they will need to develop their own interpretation.

Due to resource limitations, it would not be feasible for museum staff to develop Slow Looking videos for a large proportion of the collection or exhibited artworks. In this work we explore whether

the authoring of Slow Looking-style experiences could be carried out by amateurs as well as museum professionals. As well as being more scalable, a crowdsourced authoring process could actively encourage contributions from traditionally underrepresented groups. This could refocus the empathy challenge: rather than museum professionals imagining what the visitor may want and what support they may need, amateur authors could potentially create activities from their own viewpoint, for people like themselves or for people from other communities to encounter their perspective. Undertaking the Slow Looking activities may then become an exercise in empathy, in which the activity gives an insight into the World of its author.

2.2 Citizen Curation

Mauer (2017) defines citizen curating as enlisting citizens to curate exhibitions using archival materials available in museums, libraries and other institutions. The citizens were supported in curating an exhibition in response to the Orlando Pulse Nightclub shooting in 2016 in which most victims belonged to the LGBTQ community and the Latin community. The citizens were taught professional curatorial practice and different types of exhibition design. Mauer (2017) defines curating as a form of writing in which many people can potentially engage but which requires hard work, practice and training. Hill et al (20180) use the term citizen curators to refer to students with little or no background in museum curation creating physical and digital exhibitions. The students were taught different curatorial techniques, methods from film criticism for focusing on often overlooked details, and methods of defamiliarization (Shklovsky 1917) that enable familiar objects to be looked at anew. Hill et al (2018) acknowledge strong ties between this concept of citizen curation and the amateur curators affiliated with the surrealist movement who questioned authority and reacted against the "ways institutions like museums and galleries dominated and dictated the conversation of curated exhibits" (p. 67).

The work of Mauer (2017) and Hill et al (2018) both involve training citizens in professional curatorial methods in order that they can create their own exhibitions. In this work we wish to explore how meaningful elements of curatorial practice could be undertaken by amateurs with minimal training and requiring a much lower time commitment than needed to design an exhibition. This could significantly lower the participation barrier, perhaps particularly among groups that museums traditionally find hard to reach.

2.3 Citizen Curation and Social Media

One way in which museums could enlist citizen contributions to the curatorial process is via social media. Predominantly, museums use social media for broadcasting and promoting events rather than two-way interaction with the public (Badell 2015, Fletcher and Lee 2012). Lazzeretti et al (2015) propose that this lack of engagement may be due to a desire to protect the museum's collection from a proliferation of user generated content: the museum may be seen as accepting responsibility for, or condoning, opinions that may differ from their own. However, some examples do exist of using social media for citizen involvement in the curatorial process.

Ride (2013) uses the term citizen curator to describe members of the public living in London using Twitter to record their personal impressions of the London Olympics. A core group of 20 participants were recruited to send at least 10 tweets per day using the hashtag #CITIZENCURATORS. Other members of the public could join in by using the same hashtag. A video installation presenting contributed tweets was included within a museum exhibition about the Olympics the following year. Moqtaderi (2019) developed an interactive application featuring 125 artworks. The term citizen curator was used to describe members of the public who used the application to vote for a single artwork. The final exhibition included the 50 artworks which had received the most votes. Similarly, Balzer (2015) describes the Like It exhibition at the Essl Museum, Austria in which artworks from the

collection were presented on Facebook. An exhibition was constructed using the artworks that received the most Facebook likes.

These initiatives involve the public in voting for artworks or contributing content. However, the exhibition and mediation of the selected or contributed content remains the responsibility of the museum. In this work, we wish to go further and directly involve citizen curators in the mediation of the museum experience for other visitors.

2.4 Interpersonalization

Eklund (2020) points out that museums are social spaces in which visitors are active participants. Visitors engage in interpersonalized meaning-making in which they socially recontextualize the artworks for each other, creating relevant meaning that connects the artworks to their lives and interests. Ryding et al (2021) propose how interpersonalization can be understood as a form of interaction in which visitors make their own interpretations through social engagement. They argue that interpersonalization could provide a way of reaching potential audiences who have traditionally been excluded or have not seen museums as relevant to their lives, bringing new voices to the museum's collection and exhibitions. Ryding et al present two designs in which a museum visitor creates a museum experience for another visitor: Gift and Never let me go.

Gift (Løvlie et al 2019, Spence et al 2019) is an app that visitors can use to create a gift for another visitor with which they have a personal tie, such as a friend or relative. The gift takes the form of photographs of a small number of museum objects accompanied by a personal audio message. Gift givers were encouraged to use the intended gift recipient as a "filter" when in the museum, choosing objects and creating personal messages for them. Therefore, Gift encourages the giver to see the museum "through new eyes", promoting empathy as the giver tries to anticipate how the recipient will respond to the gift.

Never let me go (Ryding et al 2020) is an app designed as a two-player experience in which one museum visitor takes the role of controller and the other the role of avatar. The controller uses a menu of commands to communicate with the avatar. The available commands are organized into six different categories (such as body, questions and feelings). Selected commands (e.g. "Explore", "Close your eyes", "Who does it remind you of?") are relayed to the avatar via audio, guiding their museum experience. Similar to the role of giver in the Gift app, for the controller the experience is an exercise in empathy in which they try to imagine the experience they are creating for the avatar.

In this work, we also explore how interpersonalization can be used to enrich the museum experience. However, in this case the provider of the museum experience (the mediator) does not necessarily have any social tie or knowledge of the recipient of the experience (the interpreter). As discussed below, the intention is to also promote empathy in the inverse direction, helping the mediator to express a perspective to be experienced by the interpreter.

2.5 Empathy

Empathy refers to several different ways in which people respond to each other: cognitive empathy (i.e. understanding what another person feels), emotional empathy (i.e. sharing their emotions) and empathic concern (i.e. wishing to improve their experiences) (Zaki 2019). Traditionally, the capacity for empathy was thought to be largely genetically determined (Bazalgette 2017). However, recent research has shown that empathy is largely environmental (Zaki 2019), can change throughout life [5] and potentially change rapidly with appropriate intervention (Zaki 2019).

One of the earliest interventions aimed at changing empathy was motivated by Contact Theory (Allport 1955). People often have a stronger empathic response to their in-group, i.e. people like

them (Bazalgette 2017). Contact Theory hypothesizes that bringing groups together on an equal basis can help to awaken their common humanity, increasing cross-group empathy. Bruneau and Saxe (2012) found that if there is a power imbalance between the two groups being brought together, contact rather being on an equal basis should reverse existing power structures. Bruneau and Saxe (Bruneau and Saxe 2012) found that the group usually excluded or under-represented felt best about the other group when they were being heard (i.e. perspective giving). The group traditionally included and represented felt best about the other group after listening to them (i.e. perspective taking).

In this paper we consider how the voices of underrepresented communities can be brought into the museum's offering, by mediating the museum experience for others as well as sharing their interpretations guided by mediated experiences developed by themselves or others. To be effective, the process should primarily place underrepresented groups in the role of perspective giver in order that their voices can be heard.

3. Methodological approach

This work adopts a Research through Design (RtD) approach (Gaver 2012, Löwgren 2013, Zimmerman et al 2007, Zimmerman et al 2010) in which knowledge of the museum participation process is derived from the iterative development and evaluation of prototypes. In the first stages of the process (section 4), through engagement with museum staff, a problem was defined as to how visitors, and in particular underrepresented groups, could be engaged in curatorially-inspired activities, enriching the museum's offer in order to establish relevance and help close the participation gap. This motivated the design ideas that: (i) participation could be supported through a combination of Slow Looking-inspired mediation and interpretation processes and (ii) the notion of a script could provide a way of supporting the citizen authoring of Slow Looking experiences for use by others. These design ideas motivated the development of design mockups that were used in discussions with stakeholders inside and outside the museum to elicit feedback on the approach.

An early software prototype (section 5), called IMMA Viewpoints, was then developed and evaluated, focused on understanding how the types of prompts used in a Slow Looking exercise could support a short-form interpretative visitor experience in the grounds of the museum. A fully functional prototype (section 6), called Deep Viewpoints, was then developed to support the authoring and undertaking of longer form interpretative experiences. This was evaluated in workshops with underrepresented citizen groups.

4. Initial concept

4.1 Prototype

Initial discussions with museum staff identified the problem as to how and whether citizen involvement in the curatorial process could help to increase relevance and decrease the participation gap for a more diverse range of communities (Simon 2016). Further discussions with museum staff and analysis of their current visitor offerings identified the IMMA Slow Looking videos as inspiration for a new form of citizen participation. The Slow Looking videos offer a way in which citizens are supported in interpreting artworks for themselves (see section 2.1). The Slow Looking videos contain, as well as contextual information, a number of questions for the viewer to consider, similar to the questions a visitor group may be asked on a tour of the museum. However, unlike the museum tour, there is no mechanism for the viewer to share their response or access the responses of others. The Slow Looking videos are created and presented by the museum's Visitor Engagement Team (VET), who also conduct museum tours. Our analysis and use of the videos demonstrated a

clear art and skill in their construction, carefully balancing the provision of information and prompting of responses to create an experience for the viewer that is personal and meaningful. However, due to resource limitations, Slow Looking videos can only be created for a small selection of the collection or exhibited artworks.

This prompted the design idea as to whether a technologically supported Slow Looking-style experience could be developed that would on the one hand enable visitors to take part in Slow Looking activities, share their responses and view the responses of others, and on the other hand enable visitors, particularly from underrepresented groups, to author Slow Looking-style activities, reflecting their viewpoint and what is relevant to them, that could be carried out by others both inside and outside of their community.

This splitting of citizen participation into two separate processes was considered by IMMA to be reminiscent of a past exhibition entitled Exquisite Corpse (IMMA 2008/9). Inspired by the game of the same name, which was invented by the Surrealists, guest participants from a broad spectrum of the arts were invited to select an artwork from the IMMA collection that responded to the artwork selected by the previous participant. Each participant was only aware of the artwork selected immediately before them. The resulting exhibition of 17 works spanned a range of eras and media, revealing something of how collectively the participants interpreted the collection.

An anticipated advantage of spitting participation into mediation and interpretation is that it shares the effort, reducing the demand on any individual participant. However, similarly to Exquisite Corpse, there are potentially two further advantages. First, interaction across participants, as one responds the script of another, can lead to creative outcomes that neither participant may have produced individually. Second, each participant only has a partial view of the collective effort to which they are contributing. A visitor undertaking an interpretation task may be unaware of interpretations made by others using the same script, or interpretations related to the same artwork that used a different script. Similarly, a visitor in the role of mediator creating a new script may be unaware of existing scripts related to the same artworks and will possibly have little or no idea as to who will use their script and what they will produce. Collectively the effort could produce a patchwork of mediations and interpretations that could not be foreseen.

The combination of citizen-sourced mediation and interpretation also reflects a sought-after aim in Citizen Science. Holmer et al (2015), drawing on an analysis of the participatory arts, identify participation in inquiry as a participation strategy for HCI. Holmer et al (2015) observe that Citizen Science has great potential as a way of promoting participation in inquiry but note that Citizen Science can often place non-experts in a limited data collection role rather than engaged in more meaningful and impactful forms of contribution. Engaging citizens in the mediation of Slow Looking experiences would involve them not only in responding to pre-authored activities but also articulating the issues and concerns to which others should respond.

For this approach to be realized, a way of supporting the mediation process would need to be developed that would enable citizens to create Slow Looking experiences that were usable by others. An approach that involved an extensive time commitment in terms of training or the production of Slow Looking experiences, would no doubt reinforce the disparities already found in cultural engagement. One potential solution could be to guide mediation as the authoring of a script. In science education, the notion of scripts has already been used as a method by which educators can specify a scientific inquiry for students by selecting and instantiating a sequence of stages related, for example, to hypothesis formulation and data collection (Sharples et al 2015). This prompted a second design idea as to whether an approach based on scripting could provide

sufficient guidance to enable citizens to author Slow Looking experiences that could be used by others. Previously, scripts have been used to guide students and visitors in the interpretation of a museum artefact (Civantos 2016). However, in that work the scripts were constructed by the researchers and required technical knowledge of how to configure the WordPress platform on which the scripts were implemented.
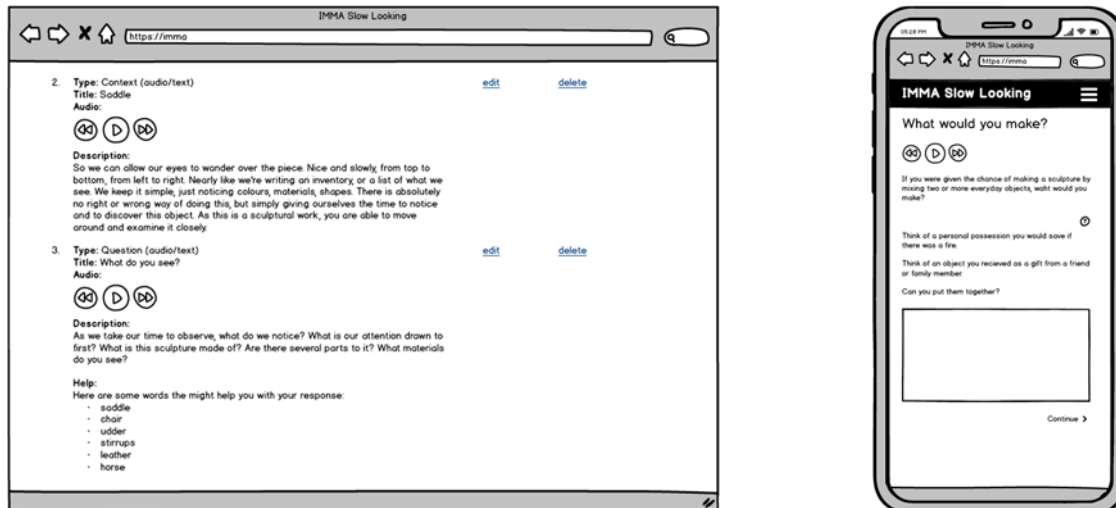

Figure 1: Mockup prototypes of the mediation (left) and interpretation (right) interfaces.

Our design prototypes were iteratively developed and refined using the Balsamiq tool. The resulting prototype featured interfaces for both mediation and interpretation (figure 1). Mediation was structured as a web-based forms interface with which the user could specify a script as a sequence of stages of different types (e.g. welcome, context, question, thankyou). Following the findings of the Gift (Løvlie et al 2019, Spence et al 2019) and Never let me go (Ryding et al 2020) apps, an option was envisaged for the mediator to record any prompt as audio, as well as or instead of text, in order to help create for the interpreter a more intimate connection to the mediator and their message. Although many of the stages such as welcome, context and thankyou were functionally very similar (containing just a text prompt and audio equivalent), they were represented in the authoring interface as separate stage types. This was done with the intention of guiding the author to include the stages of the process that would be found in a Slow Looking video. The example content used in the mockups (e.g. the welcome messages and questions) was adapted from existing Slow Looking videos. The interpretation interface in the mockups guided the user step-by-step through the stages of the authored script.

4.2 Findings

The prototype mockups were presented and discussed with stakeholders inside and outside the museum. Within the museum, separate meetings were held with representatives from the Visitor Engagement Team (VET) and the Engagement & Learning and Collections Departments. Externally, meetings were held with two charitable organizations that help young people to engage in culture, in particular through creative writing, as well as a museum curator with responsibility for education and outreach, and extensive experience of working with diverse communities. Five meetings were held with a total of nine participants. The meetings were held online between January and April 2021.

In discussions with both charitable organizations, the authoring interface was perceived as a tool that could be used by teachers or facilitators to guide a creative writing and interpretation process inspired by a museum artefact. It was discussed how a script could include prompts such as "What happened to the character in the painting before/after this scene?" or "How could the artefact be used and by whom?" could guide a creative writing exercise starting from a museum artefact. With both organizations, there were discussions as to what scripting functionality, in terms of the stages and their features, would be required to support their creative writing methodologies. For example, one technique is to encourage the storyteller to think about the story from the perspective of different characters in order to step into their shoes and enrich the story. This use case would frame the design as support for museum storytelling (Hillman et al 2016, Roussou et al 2015), though one in which the story creation process could be configured by a mediator. Internal museum discussions considered how the scripts could potentially provide a way of reusing previously developed resources from past exhibitions and engagement initiatives that currently have no public home. For example, resources associated with a work from the collection could be repurposed as a script and made available on the museum's website.

The possibility for the contributions of the young people to be shared as part of the museum's public offering was seen as intrinsically motivating. The charitable organizations already worked to make the contributions of the young people public or published in some form, which helped to give the participants a sense of achievement. Internal discussions with the museum also considered how the resulting interpretations could be made public and integrated within their website. IMMA currently has its collection online. It was discussed whether a website visitor could view a work from the collection and access a set of responses acquired from other onsite or online visitors.

5. IMMA Viewpoints

5.1 Prototype

From May to June 2021 an initial prototype was developed to explore how the types of questions found in Slow Looking activities could be used to elicit responses from museum visitors. A software application was developed that could be loaded with a set of artworks. Each artwork had an associated piece of contextual information recorded as both text and audio. Additionally, the system could be loaded with a list of questions. The home page presented an image and museum label for each artwork. On selecting an artwork, the visitor was shown the contextual information associated with the artwork as both text and audio along with the artwork image and museum label. Below this, one of the questions was displayed at random. The user could submit a response to the presented question or reload a new question (figure 2). A design constraint therefore was that the questions were not artwork-specific, but potentially applicable to any of the loaded artworks. This constraint was adopted to both simplify and expedite the software development process and also encourage a focus on generic questions that often featured during the early stages of the existing Slow Looking videos.
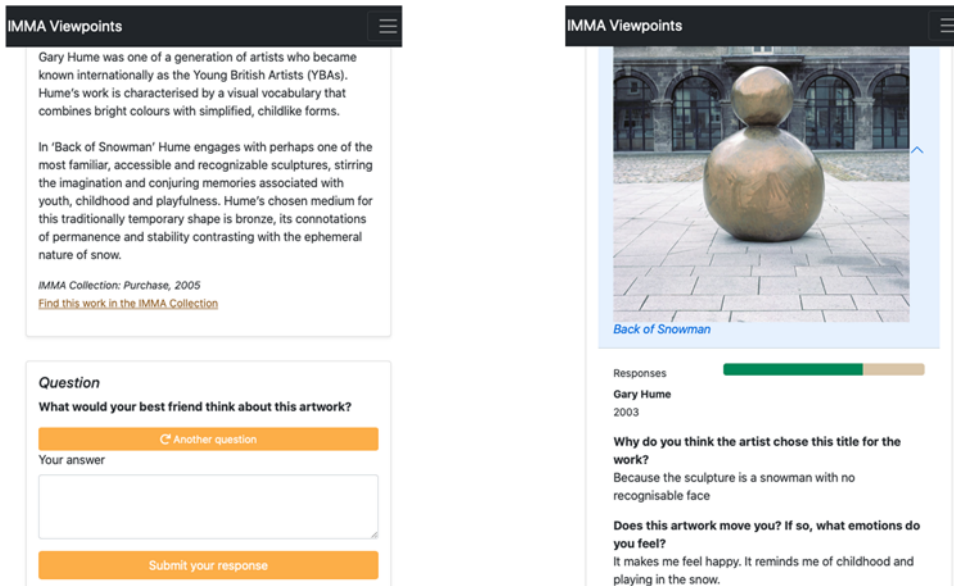
Figure 2: IMMA Viewpoints showing a random question below the contextual information of an artwork (left) and recent, moderated responses to an artwork (right).

From the home page, the user could navigate to a separate "Other People" page showing recent responses elicited for each artwork (figure 2). Within the design, taking part in the activity and viewing the responses of others were deliberately separated. This was influenced by Simon's (2010) "me-to-we" design recommendation, which claims that visitor participation is more productive if it begins with visitors interacting with museum content, only then widening to how the visitor's interaction can be understood within broader social contexts. The approach was also influenced by the work of Coughlan et al (2015) who found in an artwork mapping task that participants were socially influenced by tags previously added by others. In order to promote a divergence of responses, the software design therefore encouraged visitors to take part before viewing the responses of others. The recent responses were displayed in the style of a Q&A to give the impression of a polyvocality of responses associated with each artwork (Claisse et al 2020). Above the recent responses, a horizontal bar was displayed to give an indication of the number of responses received for that artwork. Drawing on work applying reflective design within the museum (Sengers et al 2005) numerical information as to the volume of responses was deliberately not given. The length of the bars was also normalized so that none were full. This was to avoid the visitor inferring that contributions for any particular artwork had been completed.

A separate password protected page allowed the museum to moderate responses before they became publicly accessible on the Other People page. Following the concern of Lazzeretti et al (2015) (section 2.3), moderation was included to ensure that the museum had sufficient control over user generated content associated with the collection. When a response was submitted, a message was displayed informing the visitor of the moderation stage, ensuring transparency as to how contributions were handled and avoiding a "broken feedback loop" (Simon 2010).

The software was implemented as an Angular web app which loads the application directly within a web browser, avoiding the need to download an app from the store. A similar approach was taken in the reimplementation of Gift as a web app (Adams et al 2010). The interface was optimized for smartphone screens, with the intention that the activity would primarily be performed at the museum while viewing the artwork. The artwork data and citizen responses were stored on the

SPICE Linked Data Hub, developed in WP4, with which the web app communicated via an API (SPICE consortium 2022e).

5.2 Findings

The intention was to trial the software for a period from July 2021 onwards. Due to uncertainty over public health restrictions, IMMA decided to focus on outdoor artworks in the grounds of the museum. There are a total of 15 artworks permanently installed outdoors across the IMMA grounds. Eight were selected as a representative sample, ranging from the figurative to the conceptual. IMMA created a set of questions to be used in the prototype, modelled on the prompts used in the Slow Looking videos (table 1). Although question type was not modelled or used explicitly within the prototype, IMMA organised the questions into types such as observational and contextual. There are interesting parallels to the command prompts used in the Never let me go app (Ryding et al 2020) which had categories including "Feelings" (emotional) and "Imagine That…" (imaginative/creative).

Table 1: Questions authored by IMMA for use in the Viewpoints prototype.

Type	Questions
Observational	What's going on in this artwork?
	What colours can you see in the artwork?
	If you could run your hand along the surface of the work? What texture and temperature do you imagine feeling?
Contextual	How does this work sit alongside the bushes and the trees nearby?
	What do you think the artist was inspired by when making this work?
	Why do you think the artist chose this title for the work?
Emotional	Does this artwork move you? If so, what emotions do you feel?
Perspectival	What would your best friend think about this artwork?
	What would your younger or older self think about this artwork?
	Imagine you are a retired soldier, living in the Royal Hospital Kilmainham 200 years ago – what do you think about this artwork?
Imaginative / creative	Does this artwork remind you of anything?
	How might you recreate this piece using materials around your own home. Is there anything that you could repurpose to create this piece yourself?
	How do you think you would feel if you unexpectedly encountered this object in your house or in your garden - would it be a welcome guest or an uncomfortable presence?

To prevent confusion with the Slow Looking videos, the app was launched under the name "IMMA Viewpoints". Due to signage and other physical restrictions onsite, Viewpoints was promoted purely online. Between 24th July and 6th October 2021 there were a total of 90 responses, averaging at

roughly nine per week. Responses received were varied, ranging from those that display a level of domain knowledge and vocabulary to the humorous and matter of fact.

"Does this artwork remind you of anything?" was the most popular question in terms of the number of responses received (11), with "What do you think the artist was inspired by when making this work?" the least popular, receiving only 3. The former question is more open-ended and focussed on the visitor's personal response, with the latter more targeted and focussed on the artist. Closed questions such as "What colours do you see in the artwork?" elicited shorter responses ("Mostly browns and yellows") than open-ended questions, for example "What's going on in this artwork?" ("I would love the jokey fun of it. The idea that no matter how much you walk around it you can't see the Snowman's face like he's always turning away from you."). Both of these answers were in response to the Gary Hume work, Back of Snowman (Hume 2003).

A survey was created and shared internally to members of the Visitor Engagement Team (VET) and Engagement & Learning Department on 28th September to provide qualitative insights and recommendations. Seven completed surveys were received. Responses were largely positive about the format, its accessibility and its "open-ended prompts", with one respondent suggesting that they could use it as part of a "looking and interpreting exercise". However, one respondent described it as a "solitary exercise", which was "not the same as a discussion" as would take place during a guided tour.

In terms of communicating what is being offered, one suggested that framing it as a quiz or game could be helpful for attracting younger visitors: "kids could make up new words which describe the feeling or texture of an artwork". Another suggested to avoid calling it a game or quiz but framing it as a conversation or debate, as children would have "plenty of things to say about the works". It was suggested that in order to target visitors to the grounds who would not ordinarily step inside the museum, use should be made of posters and QR codes, which was not possible during the trial.

Asked about what other situations and audiences Viewpoints could be used with, responses primarily suggested educational settings such as primary and secondary schools, in an off-site setting, as a pre- or post-visit activity. Although great care was taken in the recording of the audio, feedback suggested higher quality audio recordings should be used. This could suggest that when there is not a personal connection to the sender of the information, or it is perceived to come from an authoritative source, the recipient may have different expectations of media quality, compared to the personal, intimate messages sent and received via the Gift app (Spence et al 2019).

6. IMMA Deep Viewpoints

6.1 Prototype

Starting in July 2021 a fully functioning prototype was developed as a web app to support citizens in both authoring and undertaking longer-form scripts. The first version was available for use from November 2021. The new prototype was named Deep Viewpoints in order to maintain an association with the previous prototype whilst indicating that this was intended to support a more involved activity than the single-question interaction of Viewpoints. For the interpretation interface, IMMA suggested that the homepage, rather than showing a list of artworks for which there was an available interpretation activity (as in Viewpoints), should show a list of themes into which the interpretation activities had been organized (figure 3). It was suggested that these themes should reflect broad interests and concerns, such as family or the home, that the visitor could connect to their own experiences in order to promote relevance. This also reflects the common curatorial practice of thematic organization in exhibition design.
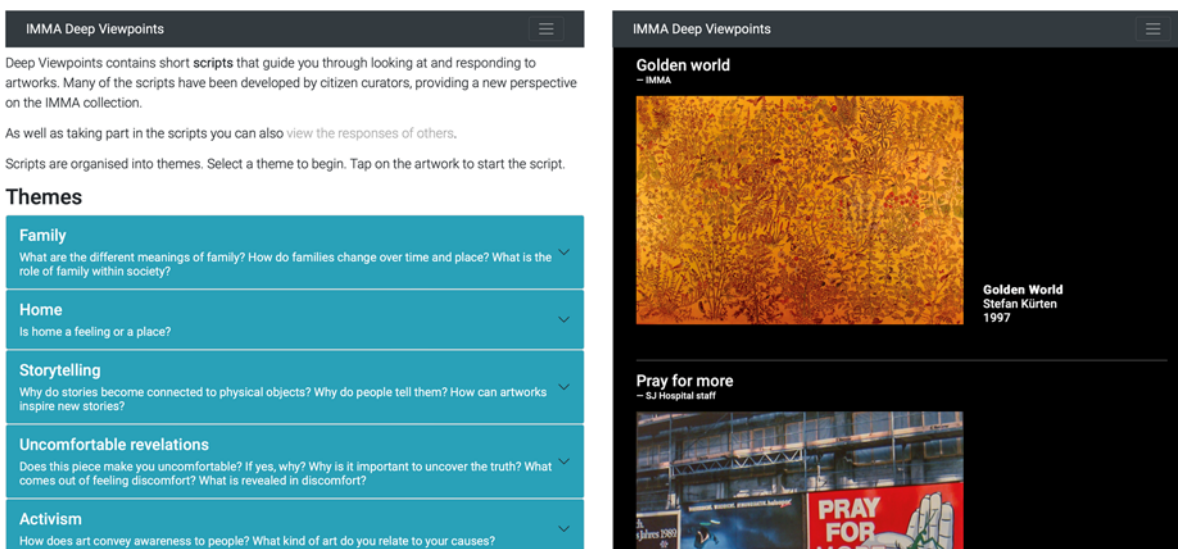
Figure 3. Scripts organized in themes on the front page (left). Scripts within a theme, each having a title, author, illustrative artwork and optional description (right).

In a departure from the Slow Looking videos which each focus on one artwork, IMMA suggested that it should be possible to script an activity related to multiple artworks. This was motivated by an observation that scripts could be used to make contrasts or connections across artworks. Some, all or none of the artworks associated with a script can be displayed within any script stage. This was to help the visitor orient themselves in the gallery when carrying out the script as well as leaving open the option of scripts being carried out off-site using the digital representation of the artwork. As well as four of the stage types included in the mockup prototype (welcome, context, question, thankyou) a further multiquestion type was introduced. Within a multiquestion stage, a set of questions can either be organized into a sequence or reloaded at random, depending on the choice of the script author. This was inspired by the option to reload a random question in the Viewpoints app and parallel the onsite visitor tour experience in which a guide may ask a series of questions at a specific point in the tour. Based on observations from the first few workshops, the number of stages was simplified to statement, question, multi-question and story, shifting to a focus on the functionality of each stage rather than its purpose within the script. In later workshops this was found to be easier to navigate and use. Statement, question, multi-question and story stages are shown in figures 4 and 5.
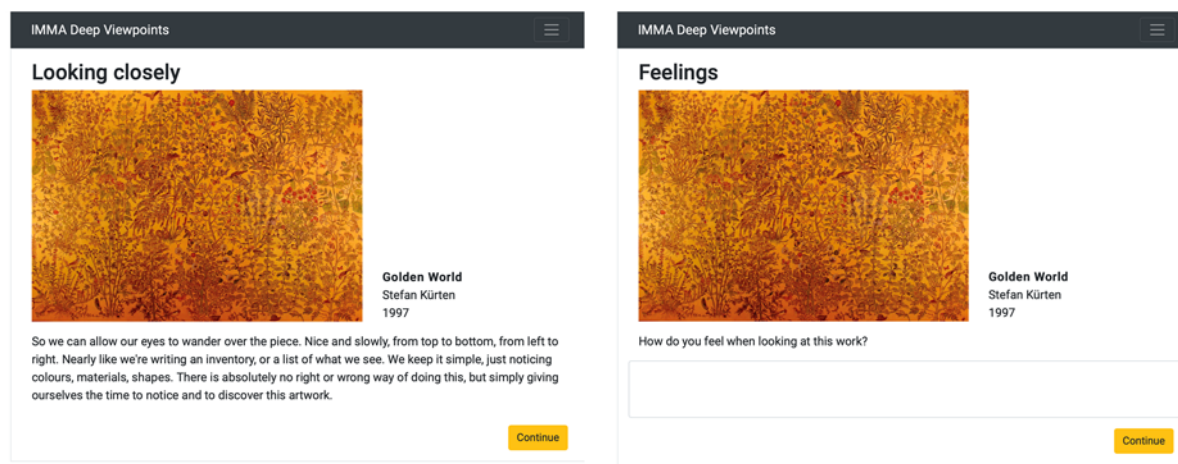
Figure 4. Script stages showing a statement (left) and a single question (right).
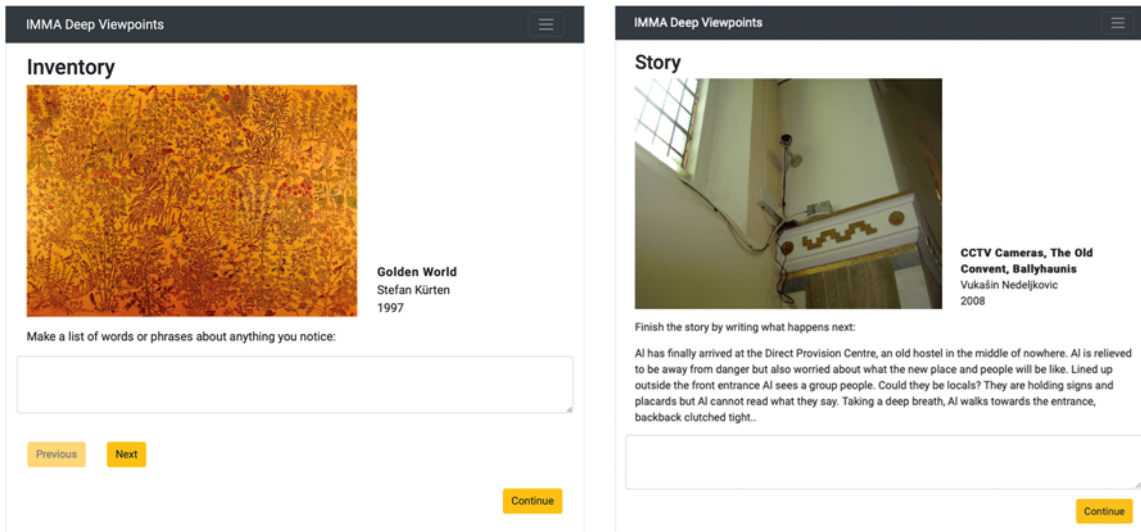

Figure 4. A multi-question stage (left) and a story stage (right).

As in Viewpoints, Deep Viewpoints has a distinct Other People section for viewing the responses of others (figure 5). Within the Other People section each interpretation activity was presented in a Q&A style, as in Viewpoints, except this time a single interpretation may comprise answers to multiple questions. Script responses can be moderated by the script author or site administrator before being displayed on the Other People page. The contributor of a response (if logged in rather than contributing anonymously) can access, edit or delete their contributions. Edited contributions may be returned to the moderation queue.
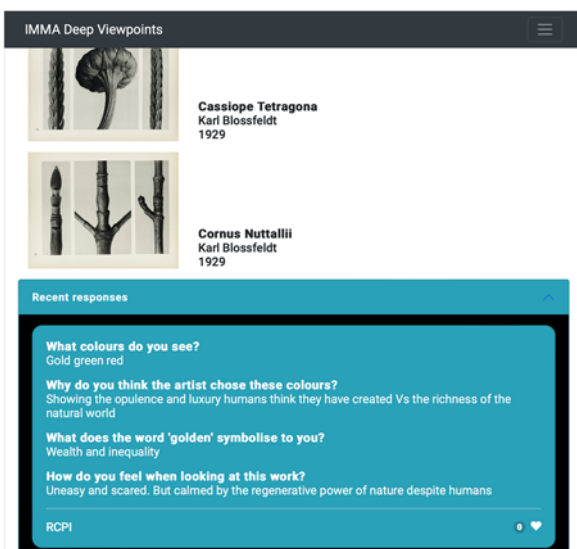

Figure 5. Viewing a recent response to a script from the Other People page.

The authoring interface can be used to specify scripts. Before developing a script, the author selects the artworks and defines the themes to be used in the script. Each user login can build its own personal collection of artworks to be used in their scripts, which can be searched from the IMMA

collection using artist, artwork name or year (figure 6). The author can also browse currently available themes and contribute any additional themes they wish to associate with their script (figure 6).
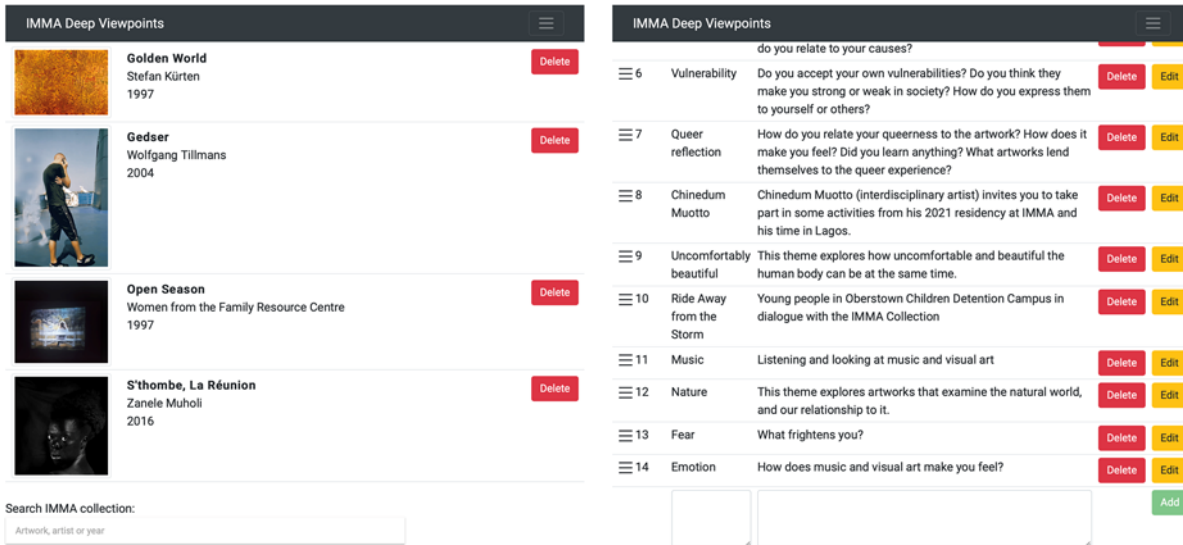

Figure 6. Building a personal collection of artworks for use in a script. (left). Browsing and managing themes that can be associated with a script (right).

The author can also create and manage their own scripts. From the script home page, the author can create a new script or browse their existing scripts (figure 7). When the author selects to view one of their scripts, a summary of the script is shown above (figure 7). The summary specifies the overall descriptive information of the script (title, description, author, themes, associated exhibitions and artworks). The status of the script determines whether it is open for new contributions. The visibility determines whether it is displayed on the Home and Other People pages. New contributions can be sent to the moderation queue or approved automatically. The summary also provides direct URLs to the script and the responses to the script which can be shared by the author.
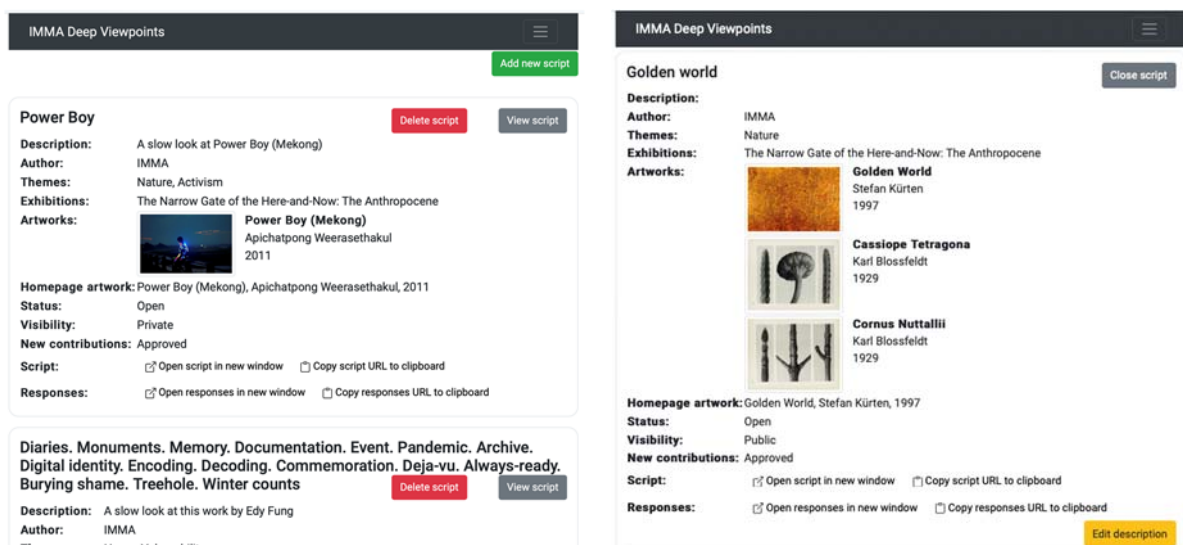

Figure 7. The script list of an author (right). Summary of a selected script (right).

Below the script summary, the script stages are shown (figure 8). The top row of buttons can be used to add new stages to the script. The stages can be reordered using the menu icon to the top left of each stage. Using the 'Edit stage' button, the author can edit the textual content of any stage and set which artworks should be displayed at that stage of the script (figure 8).
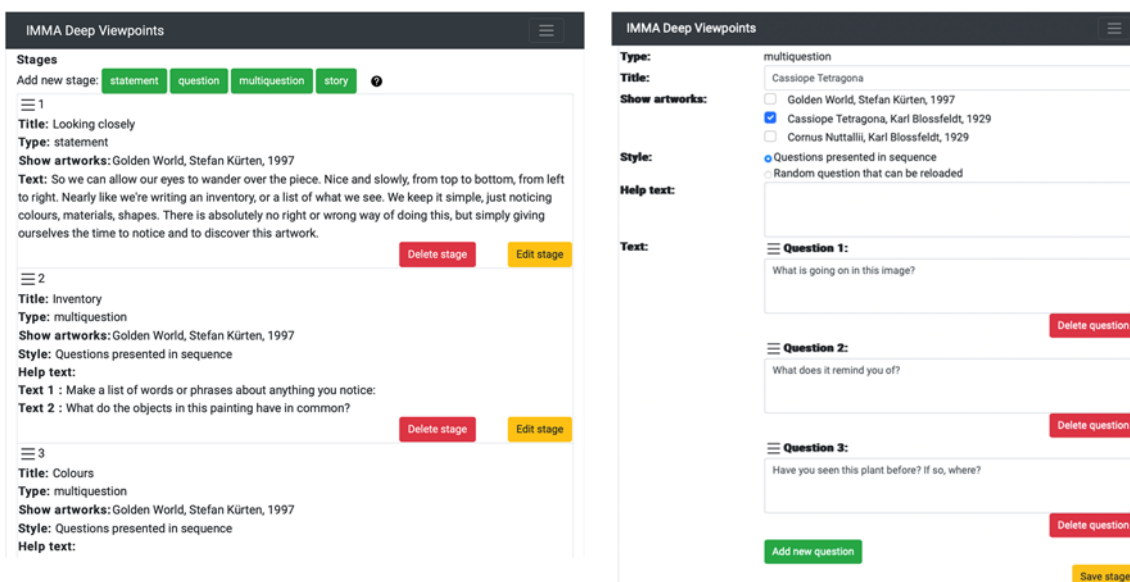

Figure 8. Managing the stages of a script (left). Editing a stage of a script (right).

Deep Viewpoints is built on the SPICE Linked Data Hub developed in WP4. The Deep Viewpoints client is developed as an Angular web app and accesses the SPICE Linked Data Hub via the API (SPICE consortium 2022e). All scripts and script responses are stored in the SPICE Linked Data Hub and can be accessed either via the API or the SPARQL endpoint.

6.2 Findings: Citizen Curation workshops

From November 2021 onwards, the Deep Viewpoints prototype was used in onsite and remote workshops with citizen groups. The citizen groups were:

- Migrant Women - Opportunities for Work (Mi-WOW) via New Communities Partnership,
- Black and Irish: an activist and advocacy organization for Black and mixed-race communities in Ireland.
- Black Queer Book Club, a community-led collective in Ireland
- Asylum seekers and staff and students from Dublin City University as part of the MELLIE Programme
- Young people at Oberstown Children Detention Campus
- Staff from St. James Hospital Dublin
- Helium, an arts charity for children living with illness

For all groups except Oberstown and Helium, the workshops followed a similar on-site three-part structure. First, a member of IMMA staff gave the participants a tour of the exhibition. The staff member acted as mediator, helping the participants to develop their own responses to the artworks.

The mediator made use of the types of questions typically used in Slow Looking activities such as "What's going on in this artwork?". Second, the participants revisited the exhibition each with a tablet computer displaying a number of thematically organized scripts (figure 9). For the first workshop there were four scripts authored by IMMA. The later workshops also featured the scripts authored by participants in the previous workshops. While walking around the gallery, participants shared their impressions with each other and the mediator as well as entering their interpretations on the tablet. Participants could undertake as many scripts as they wished. Third, after a refreshment break, participants developed one or more scripts of their own. In this third stage, participants were encouraged to develop scripts giving their own perspective, drawing on their own concerns and interests.

Figure 9. Participants from Black & Irish (left) and a participant from the Mi-WOW group (right) using scripts to interpret the exhibition.

In Oberstown Children Detention Campus, citizen curation was used to facilitate engagement with the IMMA Collection for a group of young people who lack physical access to the museum. SPICE tools and methods helped the young people articulate and share their perspectives, both on their own paintings and works they had selected from the museum's collection. Their selections and perspectives, captured over a series of workshops in Oberstown, formed the basis for a physical exhibition of the young people's work at IMMA, The Ride Away from the Storm, which opened in May 2022 (IMMA May 2022).

For Helium, the workshop format was adapted to be conducted remotely over several sessions. This involved discussing the exhibition with IMMA over web conference, taking part in scripts and collaboratively authoring scripts of their own.

The scripts produced by the workshop participants covered a range of topics. For example, Black & Irish created a script titled "Necessary discomfort", with the following subheading: "Bringing about change can often feel uncomfortable. This is because you need to face difficult topics, have difficult conversations and hear about the experiences of others which may be unpleasant. However, without this discomfort change would never happen." The group opened their activity with a reflection:

"The […] team were really struck by a number of pieces in this exhibition. Part of our work is having honest discussions around race and racism in Ireland. At times these conversations can bring about a level of discomfort. We found that while some of these pieces were uncomfortable to look at. We found that their message is what's necessary to create change."

Their script examined three artworks in succession, posing a series of questions such as "What uncomfortable aspect of the human experience is revealed here?", "What does opening up and speaking about your experiences do to help others?" and "How would you feel living under constant surveillance?"

One of the scripts developed by Mi-WOW demonstrated the potential for citizens to contribute a new mediation of an artwork they had previously interpreted. For this, the group focused on Alice Maher's work, Berry Dress (Maher 1994). This work, a child's dress, decorated with berries that have withered and dried over time, was first introduced to the group through a script authored by IMMA. The IMMA-authored activity framed an understanding of the work in terms of temporality, focusing on the passage of time and the loss of childhood innocence – "What happens to berries over time?". However, the participants took a radically different view of the significance of the artwork. The theme they chose, "Activism", reflected their understanding of Berry Dress as a political and feminist artwork. The questions they posed focused on the meaning not of the berries but of the needles with which they are affixed to the dress; "Look inside the dress at the needles and describe how you feel." Their mediation thus reframed the work as political and connected it with bodily autonomy and reproductive rights. This was not the first time that participants in a museum workshop had offered new understandings of an artwork. However, the novelty for IMMA was the ability to record these citizen mediations digitally and to share them with other museum visitors in order to shape how they understand the artworks.

All of the participant groups were able to use the software for both interpretation (i.e. following a script) and mediation (i.e. authoring a script) without difficultly. Feedback elicited after the workshops was overwhelmingly positive:

"It was an amazing experience, we learned a lot and I believe your project has huge potential."

"If there are any future opportunities to take part again, please let me know as it was a pleasure to attend the session. "

"I had a wonderful time. I found it so thoughtful, engaging and a very relaxing but creative way to spend a couple of hours over the two weeks. It was such a great opportunity [...] I thought he did a great job of guiding and coaxing the creativity out of us, he was very patient and encouraging. "

"Had a fantastic time and was a great experience"

"Is the curation workshop an end in itself or is there room for it to develop? What I mean by this is, will it be the one half day workshop and whatever we accomplish there is the end or can it be developed on with the museum?"

"Once I have feedback on the outcome of the activities and the reaction of the public, I would like to know how they reacted to the questions we proposed… When there is another opportunity for activities, please get in touch, it would be a pleasure to participate."

"So exciting seeing it all together actually!"

"They would like to know when they can share with family and friends or when you will make their contribution public?"

6.3 Findings: Analysis of the scripts

During the workshop period, 32 scripts we authored within Deep Viewpoints. 19 were authored by the workshop participants, 11 by IMMA staff. A further two scripts were developed by an artist to mediate their own work. In total, during the workshops, the scripts received 118 responses. Across the 32 scripts, there are 163 authored stages (table 2). 88 of them were statement stages. The rest

invited some form of response (e.g. question, multi-question, story). The total number of questions across the scripts (including the questions inside the multi-questions) was 127.

Table 2. Stages used in the scripts by IMMA staff and non-IMMA staff.

	Total	IMMA staff	Non-IMMA staff
Stages	163	93	70
Statement	88	50	38
Question	40	24	16
Multiquestion	31	17	14
Story	4	2	2
Question total	127	74	53

Table 3 shows the average number of stages per script. On average IMMA staff scripts contained 6.36 stages and non-IMMA staff scripts contained 4.43.

Table 3. Stages used in the scripts by IMMA staff and non-IMMA staff.

	Total	IMMA staff	non-IMMA staff
Stages	5.09	6.36	4.43
Statement	2.75	3.45	2.38
Question	1.25	1.45	1.14
Multiquestion	0.97	1.27	0.81
Story	0.13	0.18	0.10
Question total	3.97	4.82	3.52

The text of the script stages was analysed for episodes of interpretation and mediation. Interpretation was defined as the script author offering an interpretation to the reader. Mediation was defined as the author assisting the reader to develop their own interpretation.

Interpretation and mediation were further broken down as follows:

Interpretation:

- Observation: Giving an observation about the artwork
- Signification: Giving a view on what the artwork or a component of it means or symbolises
- Artist: Giving a view on the artist's intent, work or background
- Personal: Giving a personal view on what the artwork makes you think or feel

- Perspectival: Giving someone else's view such as that of a character in the artwork or other observer
- Societal: Giving a societal and/or historical perspective related to the artwork

Mediation:

- Observation: Inviting an observation about the artwork
- Signification: Inviting a view on what the artwork or a component of it means or symbolises
- Artist: Inviting a view on the artist's intent, work or background
- Personal: Inviting a personal view on what the artwork makes you think or feel
- Perspectival: Inviting someone else's view such as that of a character in the artwork or other observer
- Societal: Inviting a societal and/or historical perspective related to the artwork
- Imaginative: Inviting a creative response to the artwork such as answer to a hypothetical question

Appendix 1 provides some examples of interpretation and mediation episodes from the scripts. The selected examples are taken from Citizen Curators, i.e. none of the examples are taken from the IMMA scripts. A further type of episode identified was Meta-comment, which was defined as talking about the activity itself (e.g. welcoming and thanking someone for taking part).

The overall frequencies of episodes are shown in table 4. Overall, there were 95 interpretation episodes and 149 mediation episodes. The most common type of interpretation was about artist intent/background (27 episodes) followed by societal interpretations (19). The most common type of mediation was observation (39 episodes) followed by personal interpretations (32 episodes). Artist and societal episodes are the only episode types that have a higher frequency in interpretation rather than mediation.

Looking only at the IMMA authored scripts, the text leans more strongly toward mediation with 18 interpretation episodes and 70 mediation episodes. Artist has the most interpretation episodes and is the only type with a higher frequency for interpretation rather than mediation. Looking only at the non-IMMA staff scripts the frequencies of interpretation and mediation episodes are very similar. Artist and societal episodes lean more toward interpretation. Personal and perspectival lean more toward mediation.

Table 4. Frequency of interpretation and medication episodes for IMMA staff and non-IMMA staff.

	Overall	IMMA staff	non-IMMA staff
Interpretation episodes	95	18	77
Observation	10	2	8
Signification	16	3	13
Artist	27	10	17
Personal	16	0	16
Perspectival	7	1	6

Societal	19	2	17
Mediation episodes	149	70	79
Observation	39	31	8
Signification	19	4	15
Artist	10	7	3
Personal	32	11	21
Perspectival	22	10	12
Societal	12	4	8
Imaginative	15	3	12
Meta-comment	28	18	10

The differences between the IMMA and the non-IMMA scripts can be expected. Similar to the Slow Looking videos, the IMMA scripts aim to support the viewer in interpretating the artwork for themselves. They therefore offer minimal interpretation except for information about the artist, which the viewer could be expected to have little prior knowledge. As the citizen curators were encouraged to offer their own perspective, interpretation and mediation are more evenly balanced. This analysis suggests that the citizen curators could not only technically use the scripting software but also successfully employ it to both share their own perspective and invite the responses of the script user.

7. Relation to the scripting ontology

A part of the WP6 SPICE Ontology Network (SPICE consortium 2022f) a scripting ontology was developed (Asprino and Daquino 2022). The ontology is illustrated in figure 10.
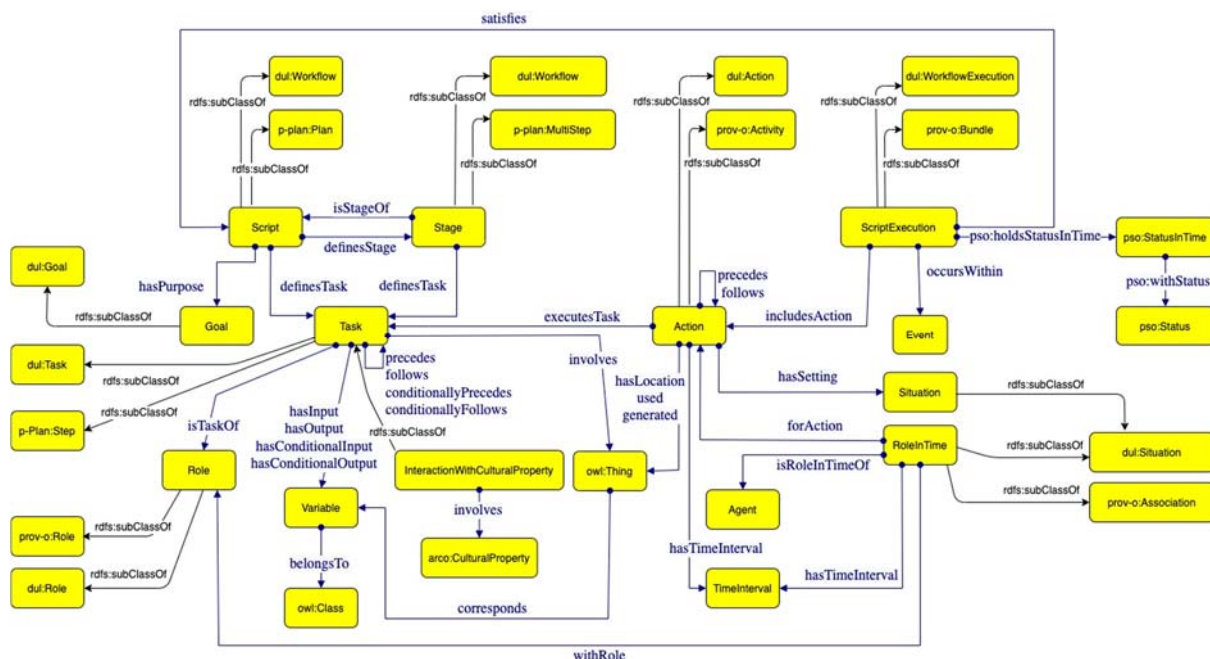

Figure 10. The SPICE scripting ontology (Asprino and Daquino 2022).

There is a simple mapping between the data objects used to represent the scripts in Deep Viewpoints and the classes of the scripting ontology. The mapping is illustrated in table 5. The mapping to the ontology enables cross-case study analysis of scripts according to a shared representation. For example, SPICE consortium (2022f) describes how the GAM Game can be described as a Task. Taking part in the GAM Game produces a series of Actions that comprise a Script Execution. Similarly, a Slow Looking script can be described as a Task. Undertaking the script produces a sequence of Actions that comprise the Script Execution. This enables cross-case study analysis of relationships between the Tasks and the series of Actions they produce, for example, how and whether sentiment expressed in a Task is reflected in its associated Actions.

Table 5. Mapping Deep Viewpoints scripts to the scripting ontology.

Data object	Description	Mapping to scripting ontology
Script	Definition of the script and its parts.	Script
Stage	A point in the script with associated artworks, statements and questions	Stage
Stage component	A statement or question contained with a stage.	Task
Activity	A record produced by carrying out a script.	ScriptExecution
Action	A response to a stage component contained with an activity such as an answer to a question.	Action

8. Conclusions

This deliverable has described the iterative design, development and testing of a software environment for scripting citizen curation activities. The term mediation was adopted to describe the curatorial process of authoring a script to guide the visitor experience. The term interpretation was adopted to describe the process of developing a response to one or more artworks guided by a script.

In trials, the software was not only used to author experiences for visitors, but also involve citizens in authoring their own curatorial experiences to be undertaken by other visitors. Participants from a wide range of communities were able to use the software to create experiences that both reflected their own perspective and invited the responses of other visitors.

As described in SPICE consortium (2022a), the IMMA Slow Looking approach and associated IMMA Deep Viewpoints application forms the realisation of the Interpretation-Reflection Loop (IRL) within the Ireland case study. As illustrated in figure 28 of SPICE consortium (2022a), the IRL is formed of two halves. The mediation half of the loop involves defining themes, selecting artworks and creating activities. The interpretation half of the loop involves taking part of activities and sharing and reflecting on the responses.

As described in SPICE consortium (2022b), Citizen Curation as the combination of interpretation and reflection aims to contribute to social cohesion in three ways. First, the approach supports social networks, through sharing and responding to scripts within and across communities. Unlike a

general-purpose social networking platform, the approach encourages the sharing of minoritized perspectives in the form of scripts and active engagement with those perspectives by taking part in scripts and reflecting on the responses produced. Second, the approach aims to promote a sense of belonging by supporting participating groups in the collective authoring of slow looking style activities, representing the community and its response to the artworks and exhibitions of the museum. Third, the approach aims to promote an orientation toward the common good through the sharing of perspectives across communities in order to aid mutual understanding.

Ongoing work is investigating how scripting can be integrated with research in WP3/WP6 and WP5.

1) Integration with WP3/WP6 user modelling and recommendation components. WP3 is developing tools for modelling citizens based on their contributions and known characteristics (SPICE consortium 2022c) and using this data to make diverse recommendations (SPICE consortium (2022d). WP6 is developing tools for recommendation based on the sentiment of previous responses. These tools can be integrated with scripting in several ways. Two straightforward ways are (i) recommending scripts that a user could undertake, (ii) recommending other people's responses to a script that a user could read. Both types of recommendation can be supported by data stored on the Linked Data Hub: the group membership of the user, the content of their previously authored scripts and the content of their previously contributed responses. In both cases, recommendation could be used to promote diversity, i.e. encouraging the user to undertake scripts different to the scripts they have previously authored and used, and encouraging the user to view responses different from their own responses to the same and other scripts. Beyond this, the scripts themselves can be customised programmatically, using the same API as used by the authoring environment. This facility could be used create and recommend script variants based on user modelling and recommendation.

2) Integration with interface customisation within the WP5 inSPICE platform. Within WP5, the inSPICE platform is being developed that can be used to customise and run different types of citizen curation activity. As described in SPICE consortium (2021) this includes support for Slow Looking style activities comprising a sequence of statements and questions related to an artwork. Customisation is supported by a "wizard" style interface using which, for example, the artworks and supporting text used in the activity are specified. Currently, the Deep Viewpoints script authoring environment imposes minimal constraints on the workflow through which the script is created and the size and constituent stages of the script. For example, the script author could move from defining the script to adding more artworks, and there is no constraint on the number of artworks used and in which order. A further simplified approach to script authoring could align with the customisation approach used in inSPICE. This could involve the use of a wizard to instantiate a script template predefined for a particular task, such as treasure-hunting with a constrained number of artworks within the exhibition.

Finally, the prototype will continue to be developed as part of the Ireland case study in WP7. So far, the use of IMMA Deep Viewpoints has focussed on supporting several workshops. The software will be extended to support further use cases. This is anticipated to involve trialling and refining the approach with other community groups, the incorporation of additional types of material within scripts such as video, and more publicly facing activities in which scripts are made available to a wider audience. Evaluation of the approach and software will also consider broader issues, beyond the utility of the platform, to consider how will it supports participating groups in being heard as part of the museum offer and how that can promote mutual understanding across communities.

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Appendix 1

Examples of interpretation and mediation episodes taken from the citizen-authored scripts.

Type	Examples
Interpretation	
Observation	the branches are so close to each-other but never touch and that the tree never touches ground.
	A white woman, portrayed as a femme, slim, seductress lesbian.
	The art seems like a silhouette of blackness, undersaturated and the artists features exaggerated to prove that
	This meticulous work presents layers of meaning. Letters to and from inmates of the H-Block during hunger strikes in the late 1980s. Take the font to start... Times New Roman, the typeface born from British newspaper The Times.
	Although at first glance this painting may look abstract, it isn't. This painting is actually so detailed that it looks like an abstract.
Signification	The grasshopper could mean kindness and compassion.
	It could mean escaping, it seems a difficult thing to do to hold a grasshopper. The vulnerability, power dynamic holding it in your hand.
	Above building work has started, meaning new life and rebuilding from destruction.
	The themes of alienation and assimilation stand out to us. We think of being ripped from the roots and being unrooted and placeless.
	Afrocentric masks in the background to symbolise satanic and pagan imagery
	Lots of symbolism about war and peace in the world

Artist	The artist's whiteness obviously informs this
	yes this is a Black artist who has created a Black piece of art
	The artist's work comes "from a place of fun" showing that sometimes the queer experience has levity.
	In a world where a women's sexuality may be seen as taboo or provocative, the artist displays a part of their body and is open for conversation.
	For the artist to spend countless hours working on this piece with such preciseness, they must care quite a lot about sharing this message.
	is the mark of a true and professional artist that is not afraid to take their time to create a single piece of art
Personal	We carried more than one heart
	The pain of burning your own.
	It is jarring that the branches are so close to each-other but never touch
	Why is this the only available piece of Black Queer art in the exhibition? In our discussion we wondered whether this piece of art might be racist
	The Black & Irish team were really struck by a number of pieces in this exhibition.
	This is why I admire this painting.
	I believe this to be true, as we don't really know whether we are alone on a block of land in space, or are we just waiting for contact.
Perspectival	She is a temptress and succubus who lures the corruptible innocent straight woman.
	As seen through the male gaze, lesbians are still desirable to men, being portrayed as white, skinny and docile.

	this piece of art might be racist and who might be its intended audience
	Black Queer Artwork not distilled through a white gaze.
	The woman is expressing her sexual vulnerabilities by projecting them in a public realm for all to be seen.
	It's important to remember that a person is not just their illness.
Societal	The world in lockdown.
	There is a realationship to healthcare where the power over vulnerability is in your hands.
	African Immigrant people commonly find community in the Church. Many of them, especially those in the direct provision "temporary accommodation" system have very little stability.
	The lesbian as a predatory Jezebel and this fetishism image still persists today.
	Lesbian attraction was commonly seen as evil, alien and a danger to society.
	the exhibition doesn't include any obscure Black artists and how this might harm our community.
	This is opposite to how sex is taught in school or the lack of open conversation about sexuality amongst friends and family; everything is on full display here and open for interpretation.
	Part of our work is having honest discussions around race and racism in Ireland. At times these conversations can bring about a level of discomfort. We found that while some of these pieces were uncomfortable to look at. We found that their message is what's necessary to create change.
	the soldiers are the first part of the society affected by war.
Mediation	

Observation	Take in the entire room. Use all your senses. Look closely! What do you notice?
	Take a moment to take in the full piece not just the video but also the surroundings. What do you see?
	What do you see here? What are your initial thoughts?
	Can you name these items in English or another language?
	What is the first thing that comes to mind when you see this piece?
Signification	What does the grasshopper symbolise?
	Do you think the contrast of materials helps showcase the vulnerabilities on display?
	What's the importance of the roots
	Why is she alone?
	What do you think is the significance of the rope attaching her to the drawings on the wall?
Artist	why did the artist choose a tree?
	Consider the scale? Why has the artist made the people so small and the barriers so big?
	How long do you think this type of painting would take?
Personal	Finish the sentence in your own words: I wanted to cross the ocean but I never did. The one thing that pulled me back was ....
	What drew you to this image?
	Look inside the dress and the needles and describe how you feel.

	What does opening up and speaking about your experiences do to help others?
	How would you feel living under constant surveillance?
	What do you think of the painting?
	What do you think is the atmosphere in this room?
	Has your body ever been so out of control you felt like you were an empty shell?
Perspectival	When might a person feel a pain like this?
	What's the relationship with mother and child
	What is she protecting them from?
	Why is she alone?
	Does she feel in control of her body? Who is in control? who might be managing her body?
	Is she sexually independent? Does she have independence in other parts of life?
	Failing body parts are like a bloody noose around your neck. Sometimes there's so much calmness within the chaos. Why do you think this is ?
Societal	What was happening in Germany in 1989?
	What uncomfortable aspect of the human experience is revealed here?
	Why is it so important for the victims to lead the conversation around challenging and eliminating domestic violence?

	What other circumstances are you aware of that people living in Direct Provision live under?
	Do families always protect their children appropriately? Can customs and traditions affect this?
	Why do some countries war?
Imaginative	If this part of your body was made with fruits or vegetables, what kind of fruit or vegetables would it be made from?
	Who do you think made the shoes?
	If you could own anything gold, what would it be?
	If you were forced to leave your home right now, what is the one thing or person you wouldn't leave behind? and why?