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Meta-reference in media arts and the interactive instantiation of non-digital artworks

ABSTRACT

The aim of this article is to analyse interactive reinterpretations of two of Raul Meel's artworks. They were created after the original works were made; they reference the original artworks and are meta-referential. These reinterpretations allow the original artworks to be opened and explained and become instantiations of their algorithmic content. The questions that arise in this article are as follows: how can physical artworks be opened up for audiences by means of interactive emulations? How can this serve to document and preserve the unique experience of the artist? The aim of this article, in addition to the practical analysis of the two case studies, is to discuss the wider context of the problems of meta-artworks and the following direct questions that arise out of analysing them as research objects. I analyse in detail a selection of media artworks in which meta-referentiality is foregrounded. A focal point of my discussion is an interactive emulation of Raul Meel's Under the Sky, which was created for his biggest retrospective exhibition entitled Dialogues with Infinity (2014) at the Kumu Art Museum in Tallinn. My second object of interest is the mobile app 'seeESE' based on Meel's installation The Dice, shown in the same exhibition at the Kumu museum in 2014, of which the original version dates back to 1969.

KEYWORDS

meta-reference digital instantiation reinterpretation interactive installation meta-art post-media The aim of this article is to analyse interactive reinterpretations of two of Raul Meel's artworks. They were created after the original works were made; they reference the original artworks and are meta-referential. These reinterpretations allow the original artworks to be opened and explained and become instantiations of their algorithmic content.

INTRODUCTION

The questions that arise in this article are as follows: how can physical artworks be opened up for audiences by means of interactive emulations? How can this serve to document and preserve the unique experience of the artist? There are two main reasons why these interactive emulations are important. First, works with participative content that are exhibited as museum exhibits can no longer be used according to their original purpose – which was to permit participation and interference from visitors. Second, an interactive interpretation allows the possibility to model the concept of creation of the artwork, to reveal the manner in which the artwork was technically produced and conceived. The technical and algorithmic method that was the basis of the original artwork is revealed to the viewer, the interactive instantiation functioning as a form of a research tool.

RAUL MEEL

Raul Meel (born in 1941) is a self-taught print, installation, painting and performance artist and concrete poet. He represents the radical wing of 1960–80s' innovation in Estonian art and is known as the most renowned Estonian autodidact and outsider.

Starting in the 1960s and the 1970s, the work of Raul Meel expanded into a giant universe comprised of many historical influences and artistic backgrounds. A focal point of my discussion is an interactive emulation of Raul Meel's *Under the Sky* (originally created at the beginning of the 1970s), which was created for his biggest retrospective exhibition entitled *Dialogues with Infinity* at the Kumu Art Museum in Tallinn, from 9 May to 12 October 2014. My second object of interest is the mobile app'seeESE' based on Meel's installation *The Dice* (exhibited as an installation from 1994), shown in the same exhibition at the Kumu museum in 2014, of which the original version dates back to 1969.

The goal of both digital emulations/instantiations was to 'revive' the artworks, to 'open' them up to the audience and to allow audience interaction with the dice, which are not permitted to be touched in the museum. The emulation of *Under the Sky* enables the visitor to experience how the prints were designed based on formulae developed by the artist when they were originally produced.

META-REFERENTIALITY IN MEDIA ARTS

Meta-referentiality is understood here in its broadest possible sense, i.e. as second-order images whose existence depends on other images or on themselves as such. Existing scholarly debate deals with meta- and inter-imaging contemporary practices both in various artistic media (such as painting, photography, film, installation, printmaking, casting, comics, etc.) and in intermedially (Taban 2013: 11).

Talking generally about the meta-image, C. Taban offers a semantic network that she divides into four sections:

- 1) a first, inner layer, where terms such as meta-painting, metapicture, metafilm and metaphotograph designate meta-imaging phenomena where the visual dimension is as important as other sensory-medial dimensions
- a second language-centred layer, which includes 'meta-fiction', 'meta-theatre', 'meta-language' and 'meta-discourse'
- 3) a third layer where 'meta-representation', 'meta-reference', but also 'mise en abyme', 'self-reference', 'self-reflexivity' and 'trompe l'oeil' describe meta-processes that are applied to the previous layer and the following one; and
- 4) a fourth layer, including 'meta-physics', 'meta-logic', 'meta-mathematics', 'meta-history' and other 'meta-disciplines'. As C. Taban writes: 'This rather complex semantic network suggests that whatever "meta-image" [...] may mean today, its informed meaning(s) will have to account one way or another [...] related, networked terms and meanings' (2013: 20–21).

The goal of this article, in addition to the practical analysis of the two case studies, is to discuss the wider context of the problems of meta-artworks and the following direct questions that arise out of analysing them as research objects: first, which interactive and media artworks could be categorized as meta-referential – that is, as interpretations, additions or instantiations of already existing physical or digital originals? Artworks are referred to as meta-referential if their content is based on another artwork or if they reference external works.

Second, I would like to investigate to what extent interactive interpretations are instantiating and 'correcting' the existing originals on which they are based. Do they bring out qualities that cannot be found in the originals? This question will be addressed in connection with Raul Meel's works.

Third, inspired by the 'meta-media' term that was brought into use by Marshall McLuhan and discussed by Lev Manovich, I would like to ask: is an art, which has been discussed as meta-media – and according to which the whole of media-based art is placed in the same context as post-media – related to meta-referential art? Lev Manovich describes three characteristics of meta-media as follows:

In contrast to media, meta-media acquires three new properties. First, with software, data can be translated into another domain – time into 2D space, 2D image into 3D space, sound into 2D image, and so on. [...] Secondly, media objects can be manipulated using GUI (Graphical User Interface) techniques such as: move, transform, zoom, multiple views, filter, summarize. And third, media objects can now be 'processed' using standard techniques of computerized data processing; search, sort, replace, etc.

(2005)

We can see that thanks to digital technology the original media becomes the source material for subsequent transformations and media productions. Something similar is happening with Raul Meel's emulations: his original ideas are transferred into other informational and material forms that live their own life. Interestingly, if we wish, we can use Raul Meel's transformational concepts with a variety of source material. For instance in his *Under the Sky* project, any image could be offered for manipulation and could replace his 'schemes' and 'graphs'. In this sense Meel's work contains practically endless possibilities for future versions.

Fourth, we can talk about meta-referential art in a broader sense, as pre-, pro-, post- and meta-art. The meta-artwork contains some sort of 'secondary' notion – it is made after the original. At the same time we should ask questions about the opposite reality of certain pro- and pre-artworks. Although they are not necessarily described as such, they fit into the context of our discussion because they share the same similarities with post- and meta-artworks – they are related to the original, but they are made before it, not afterwards. What sort of art are these pre-artworks? This topic concerns not only Raul Meel's works – we can discuss examples of participative art where the materiality of the artwork is the basis and precondition for the subsequent schemas of how the artworks are used. According to this definition participative and interactive works could belong to the category of pre-artworks – their materiality is available for further use; hence in that sense they are pre-artworks. The artwork's existence is conditioned by the physical configuration of the objects (in the sense of the constellation of the artwork) that is leveraged, emphasized and complemented by audience behaviour. The final artforms are manifested through action and functionality, through the act of user participation. The physicality of the artwork contains potentiality, 'virtual scenarios' of use and the manifested artwork experiences a temporary existence through a collaboration between the objects and the audience.

META-REFERENTIAL ART AS POST-ART - ART AFTER THE ORIGINAL

The term 'post-medium' was used by Rosalind Krauss in her essay A voyage on the North Sea: Art in the Age of the Post-Medium Condition (1999). Her objective was to reject the medium's Greenbergian interpretation on the basis of works by Marcel Broodthaers. This in turn significantly differs from the earlier Félix Guattari definition of the term 'post-media', which he used as early as 1985 to characterize the new situation, meaning post-(mass)-media, expressed in the blending of television, telematics and information technology, which actually happened over the course of the following decades.

Lev Manovich compares the avant-garde of the 1920s with the decade of the 1990s:

The new avant-garde is no longer concerned with seeing or representing the world in new ways but rather with accessing and using in new ways previously accumulated media. In this respect new media is postmedia or meta-media, as it uses old media as its primary material.

(1999)

Here Manovich describes new media art as meta-art and post-media. It follows that this is art made with reference to an original or a prototype, or art referencing existing media, which uses existing (old) media as the source media.

The term 'post-media' was also used by Lev Manovich in his article 'Post-media aesthetics' (2001); he wrote that the traditional concept of media no longer worked in a post-digital, post-net culture:

[...] the traditional strong link between the identity of an art object and its medium becomes broken.

Everything is reduced to the same digital bases, the common denominator.

The Post-Media Condition is the title of an exhibition curated by Peter Weibel in 2006 and an essay from the same year (2006). In his interpretation, the 'post-media' situation is the situation of all contemporary art; even painting and sculpture are influenced by the new media:

Hence in art there is no longer anything beyond the media. No-one can escape from the media. There is no longer any painting outside and beyond the media experience. There is no longer any sculpture outside and beyond the media experience. There is no longer any photography outside and beyond the media experience.

(Weibel 2006)

PRE-ART AND META-ART

Is the name 'pre-art' relevant and what is my interpretation of the term 'pre-art'? In connection with pre-art and meta-art can we refer to artefacts and events that preceded the original but that are later inseparable from the final artwork? Can we add this pre-art to this category of artworks that could not be understood without reference to their context of creation and context of activity? Such artworks are conceptually connected with the activities and actions from which they result.

To explain my thoughts I will refer to some classical examples: 'Anthropometries' and 'fire paintings' by Yves Klein, Schaumalen-actions by Hermann Nitsch, 'shooting paintings' by Niki de Saint Phalle, *Homage to New York* (1960) and *Study for an End of the World No. 2* (1962) by Jean Tinguely. All these examples date from the 1960s and they are distinctive because of the iconic event with which they are associated and that is associated with the content of the work. In addition, some actions (such as shooting) become a 'brand' of the artist and become part of his/her biography. The physical artwork cannot be understood without the influence of the notion of its original environment of creation or the activity necessary to produce it. Naturally, this refers to the case in which post-action the physical artefact emerges and remains – Tinguely's works were recorded on film.

In this sense all these practices in their ephemerality are 'pre-artworks'; they precede the original, material form of the physical artwork. They could physically exist or equally they could be non-existent. If we take as an example the sequence of events of Tinguely's *Study for an End of the World No. 2*, there was a pre-explosion action, an explosion (which could be understood as a pre-activity and pre-artwork) and finally only the recording of the event remained. We can even argue that the 'original' did not remain, only a copy of how the pre-artwork's activity was transformed into a final result (original, i.e. the explosion), and even this became ephemeral.

META-REFERENTIAL MEDIA ART

I would like to analyse in detail a selection of media artworks in which metareferentiality is foregrounded. Which kinds of interactive and media artworks can be discussed on the same level of meta-referentiality, in the sense that they are made after an original? In addition, are there emulations among them that instantiate and supplement already existing physical and digital originals?

In Ly Lestberg's video *Pieta* (1997) the author was understandably inspired by Pieta but she employed contemporary models. Christian

Boustani's Cities from the Past: Bruges (1995) and The Voyage (1998) refer to Dutch paintings and Japanese watercolours. Patrick Prado's Van Gogh's Sun (1979) interpreted van Gogh's potato eaters and the unbearable heat of the sun, which, according to the legend, caused the insanity and suicide of the artist. Among the above-mentioned artists Boustani has persistently used digital video to incarnate paintings using the language of earlier times. Jeff Desom's Rear Window Timelapse (2012) rebuilds the backyard of Alfred Hitchcock's Rear Window and condenses film shots into the simultaneous activity of characters.

Among video works I would like to mention Bill Viola's *The Nantes Triptych* (1991), which is a video-triptych, a classical format in itself (as in Viola's *The City of Man* [1989] and *Stations*, [1994]). Different themes are portrayed on the screens through impressive visuals: the death of Viola's mother, the artist submerging into deep water, the birth of the artist's child. Viola's video *The Greeting* (1995) is worthy of mention because it is inspired by the mannerist painter Jacopo da Pontormo's (1528–29) painting of the same title. Viola tried to translate the earlier language of the painting into video art language. Viola is distinctive because he tries to elevate video art to a higher art form and by using quotes from art history and referencing the visuality used by earlier artists he infuses the video with higher values.

Darrin Butts' animation *Legacy* (1993) could be mentioned here as a project moving to the next technical level: cave paintings and the characters portrayed in them are animated in film and integrated into the narrative. For example, a horse jumps down from the wall but is killed by an arrow at the exit. The author refers to well-known cave paintings and from a conceptual point of view the work is intriguing: cave painting and computer animation.

Similar to this is Cécile Babiole's *Arpish Torso'* (1992). In her work *Le Pépin Géant De Arp*, an *Arpish Torso* lives through various scenes of a computer animated world. The work was shown as part of *L'Art en Jeu*, a twenty-minute programme about artworks at the Musée National d'art Moderne at Centre Georges Pompidou in Paris. The programme consisted of twenty films of one minute each that introduce one work by a contemporary painter or sculptor: Matisse, Picasso, Braque, Klee, Kandinsky, Giacometti, Warhol, etc. Cécile Babiole explains her motivation as follows:

In front of this sculpture I had the feeling of being confronted with something hybrid, ambiguous: partly hard, partly soft; partly sex, partly toy; partly torso, partly cell; partly man and partly woman. And this feeling guided me. I wanted to play with the anthropomorphical shape in various scenarios: seen from close and from far, from different – even unusual – angles, clothed in various lighting, the figure reveals itself as never identical and always unique. It changes its shape, breathes, marks the space with its shadow and leaves behind the impression of its manifold outlines. It breaks apart, it is sliced to recreate the artist's sculptures in painted wood, and finally it is multiplied, as the sculpture has several sisters.

(1992)

All my above examples were presented as single-channel videos. Returning to the earlier questions I would like to ask how are they related to the original to which they refer? It is somewhat a matter of taste, but I would evaluate as refined works those by Christian Boustani because they are distinctive

and – similar to Viola's works – they elevate this art to a higher level, making it a more nobler art.

Patrick Prado is conceptual whereas Jeff Desom surprises – his *Rear Window* is the rebuilding of the backyard of the movie and could be called research into *mise-en-scène*. Prado illustrates the maddening emotion that might have been felt by van Gogh under the burning sun of southern France. The other artists' relationship with their material is rather rational. Viola is very personal in his *The Nantes Triptych* – there is not much loaned other than the 'triptych' itself. Butts transforms flatness into spatiality by bringing it into three dimensional (3D). Babiole plays much more with the material: Arp's sculpture is 3D anyway and she tries to find answers in the hybridity of the sculpture.

Extending the selection of examples I would like to mention more spatially oriented solutions. Nam June Paik's *TV-Rodin*, realized during the years 1976–78, was created as twelve copies (Christie's 2010). A copy of Rodin's *Thinker* is situated opposite its feedback image displayed on a monitor. The author is related to the original rather ironically, embedding it into his artwork and adding a narcissistic dimension to the work.

Some installations or object-based works function rather like homages, such as Shigeko Kubota's *Duchampiana*. Starting from Marcel Duchamp's work *Nude Descending a Staircase* Kubota created different versions in the years 1976–91. *Bicycle Wheel* inspired at least three copies: *Duchampiana: Bicycle Wheel* (1983); *Duchampiana: Bicycle Wheel Two* (1990); and *Duchampiana: Bicycle Wheel Three* (1990). Bicycle wheels with small, five-inch colour monitors attached to the spokes are motorized so as to spin (Kubota 1960–81).

Following this thread and moving to more 3D projects I will first mention the installation *Body Brush* by Alex Tang Chi-Chung et al. (2002a). The authors state quite sincerely that they were inspired by Jackson Pollock's technique:

The installation creates a human-computer interface that transforms human body gesture into 3D paintings in real-time. The interface consists of a novel body motion capturing and analyzing system and output and a virtual canvas space that is filled with virtual 3D color-paint-brushstrokes as a result of the painter s motion within the 3D canvas.

(Chi-Chung et al. 2002b)

The viewers can emulate Pollock's physical practice. The results, however, are different because the recording is made not on the surface but in electronic space: the viewer can see three-dimensionally his recorded movements on-screen. In addition, the authors evaluate their experience very highly, saying that 'It will provide an aesthetic experience that is unprecedented' (Chi-Chung et al. 2002b).

Jeffrey Shaw's *Virtual Museum* is an interactive installation in which users can utilize their body to influence the artwork (1991). The source material for the visuals comes from Eadweard Muybridge's photo series. The interactive museum portrayed on-screen is the same as the space in which the installation is located, which makes the work self-referential in addition to being meta-referential. Dirk Lüsebrink and Joachim Sauter's *Zerseher (Disviewer*, 1992) uses Giovanni Francesco Caroto's work *Portrait of a Young Boy holding a Child's Drawing (c.* 1515) (Lüsebrink and Sauter 1992). The viewer can erase the image with the movement of his eyes.

1. The silkscreen prints were based on graphs from the book Masinaehitaja käsiraamat I (Manual of Mechanical Engineering, ed. by Heino Lepikson, 1968) and a Russianlanguage Handbook for Protective Relaying (Справочник по релейной защите, Москва, Ленинград: Государственное Энергетическое Издательство, 1963), which had been cleared of numerical information.

I would now like to discuss other examples in order to offer some generalizations. Eva and Franco Mattes are an artist duo based in New York. Their Reenactments (2007–10) are realized in Second Life and allow users to create avatars and act with/through them (Mattes and Mattes 2007–10). The authors created a collaborative environment for re-staging classical performances – users and their avatars can encounter performances of Marina Abramovic, Gilbert&George, Vito Acconci, Chris Burden and Valie Export.

The previously discussed examples provide a selection of works ranging from single-channel video art to telecommunicative artworks, all of which relate to art historical conventions or artistic styles of artists. If we question what is happening to the original idea to which they are referring, then the conclusions are varied – the works range from homages to ironic interpretations. Some works are meta-referential only indirectly, for example *Body Brush* does not remind us of Pollock's painting style at all, which raises the question of whether the authors of this work have referred to a known master for marketing purposes and to link their own work to something familiar to a wider audience. In Eva and Franco Mattes Reenactments we see that new technologies allow an emulation of classical artworks quite convincingly. Understandably, to obtain a more realistic experience the viewer should wear touch-sensitive and mediating paraphernalia, but few prototypes currently exist. Nevertheless, placing your avatar into the environment of a Second Life reenactment permits at least the possibility to acquire an informational experience of 'how things were in an original environment'.

RAUL MEEL'S UNDER THE SKY

Under the Sky seems to be the work that has attracted most attention amongst Raul Meel's creative output. This seemingly endless project contains thousands of prints and hundreds of exhibition versions. The current, latest draft, is supposed to have 97 graphic elements. In the 101 pages of *Conspectus of the Past* Meel (2002:101) discusses the reasons and meaning of the colour choice in the series. The initial blue had been almost pure ultramarine:

However, I recalled the big blue blooms of the ordinary bellflower of my childhood, unbleached cornflowers, the blue of Estonian flag – and the blue in the new pictures of 'Under the Sky' became lighter: the blue of my pictures matched the Estonian flag blue.

(Kelomees 2014a: 93)

From there onwards, he affords the blue, black and white more of a meaning of totality:

Using blue, black and white in creating a perception of cosmic universe is regarded as something quite normal [...].

(Kelomees 2014a: 93)

Disregarding the personal associations that the abstract images¹ and colours in the pictures might evoke in the viewer, I would like to emphasize the combinatorics realized by the artist. In this respect everything stems from Meel's 'engineering background' – his ability to think technologically with the instincts of an inventor and constructor. Since he lacked any earlier art-making experience, his approach was founded on the familiar, using mathematical

constructions and control mechanisms. Mathematics, according to Meel, is good and impersonal. Relying on this, using a formal method made it possible for Meel to regard art-creation as a rational process of realization (Kelomees 2007).

Following Meel's methods, we only rarely feel that a work has been born out of momentary emotions – a work of art is the outcome of deliberation and formal construction. This, however, does not indicate any lack of expressiveness. Employing a certain formalism and avoiding direct emotional and singular creative explosion has enabled the artist to develop massive series, of which *Under the Sky* is an excellent example.

Another aspect to consider is the serial approach. A work of art is understood as a set of works, not as individual works. The authorship has been transferred to the component elements of the series, but they cannot be understood as artworks: the work is a set, a series, an ensemble. The artist has indeed called them thus – a field ensemble.

It is fascinating from my personal point of view that Raul Meel's series *Under the Sky* was preceded and accompanied by 'theoretical' and 'dry' manipulations with formulae that described the placement of two serigraphy screens in relation to each other. Meel wrote the picture formulae down in three



Figure 1: Under the Sky, *picture formulas*, © *Raul Meel*.

2. Image C is from the Manual of Mechanical Engineering; D is its reflection. Meel writes about other images: 'The drawings of F and H are visualisations of temporal changes of the characteristics of two different electromagnets; G and I are mirror images derived from F and H' (Meel's letter to the author, 25 January 2014).

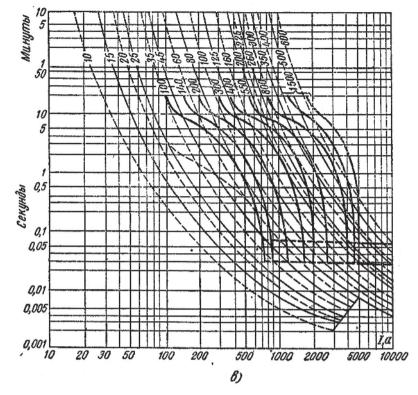


Figure 2: Graph from Russian-Language Handbook for Protective Relaying, 1963, © Raul Meel.

versions (minus, standard and plus) in three adjacent columns (see Figure 1), generating a total of 5328 formulae. Standard means 1776 combinations, which multiplied by three produces 5328. These columns fitted on twenty pages, which the artist himself considers as avant-garde drawings.

The visual basis used in these serigraphs was the schema from the *Manual of Mechanical Engineering I* (an example is shown in Figure 2).

The artist first determined marks (see Figure 3) and their corresponding original images C, D, F, G, H, I.²

Every image had four versions, each rotated by 90 degrees (see Figure 4).

The colours used are: M – black (Estonian *must*), S – blue (*sinine*), P – red (*punane*), h – light (*hele*), t – dark (*tume*). The clockwise rotation of the images is marked with degrees of 0°, 90°, 180° and 270°. Additional symbols '+' and '–' were also used, denoting that the lower image lies more or less at 0°, 90°, 180° or 270° in relation to the upper image.

As an example of reading the formulae, let us look at one of the field ensembles of *Under the Sky* consisting of ten serigraphs (Figure 5) and at the ensemble's schematic sheet with colour and location annotations (Figure 6). Take, for instance, serigraph VI, which has the formula DM90/CS-180. The formula means that uppermost is the black image D, turned clockwise at 90 degrees, with the lower blue image C, turned slightly less than 180 degrees.

TAEVA ALL serigranfond, a 65 x 63 cm Salvocal. 1) ... 4. vars / 3. vars / 2. vars / 1. vars pabrol 2) C.D. F. G. H. 1 - algorifunded 3) M - must view 4) 5 - strong vow 5) P - punque vor 6) h - hele vor 7) t - frame vari 8) 0°, 90°, 180°, 270° - algenfundite. (friskinjundite) poordenura porripaiera 9) + morgob, et alnura purksenjund on alenore subter picardud enam Kui 0°, 90°, 180°, 270° 10) - morgib, et alware friesarjund on itemse subfer poorafud

Figure 3: Under the Sky, *markers*, © *Raul Meel*.

The basic images C and D, which constitute the screens of the serigraph, look like elegant clusters of curving lines (Figure 7).

The first image to be printed is blue C with black image D placed on top of it, turned clockwise by 90 degrees. The result obtained from the formula DM90/CS-180 resembles an egg or a diving fish (Figure 8). However, it would be naïve to suggest that the image was created to evoke mimetic associations. The viewer may see parallels in the picture with other artworks depicting elliptical objects, but in the current context this picture is one of many compound images, and the viewer is at liberty to guess what it 'recalls'. Knowing that abstract art in the 1970s produced ideological side meanings, perhaps even directly anti-Soviet ideas, we can but guess the tense effort of imagination of the dedicated interpreters (censors and KGB officials), who tried to 'read' something into these serigraphs.

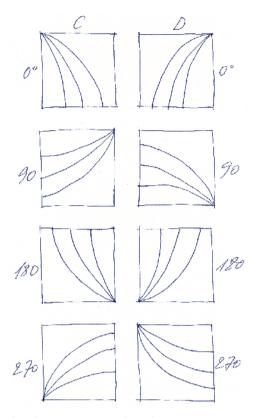


Figure 4: Under the Sky, images, © Raul Meel.

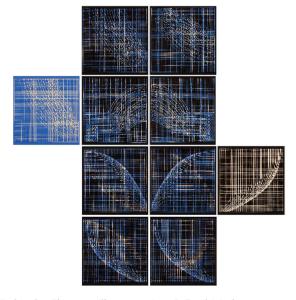


Figure 5: Under the Sky, ten silkscreen prints © Raul Meel.

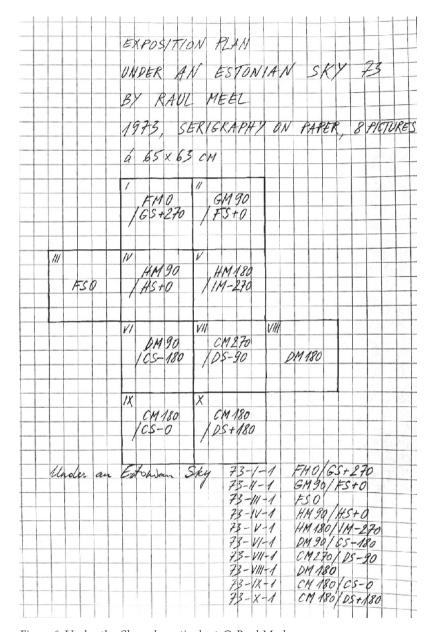


Figure 6: Under the Sky, schematic sheet, © Raul Meel.

Thus we have described the recipe book of Raul Meel's art creation. It is likely that with this kind of instruction system anyone could manage the copying and the printing – hence the authorship of the realized artwork could easily be transferred to someone else. Meel's approach within Estonian art is quite unprecedented because the combinatorics and formalization of serialism have been taken to a level whereby the graphic works could be described as formulae. We could call this an individual notation system. Since this notation

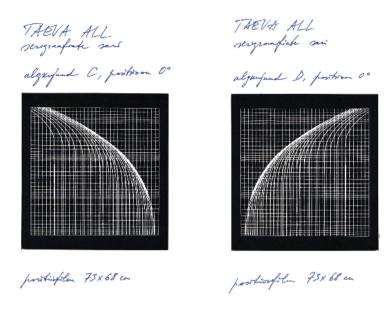


Figure 7: Under the Sky, primary images C and D, © Raul Meel.

consists of normal Latin letters and Arabic numerals we cannot easily attribute singularity and originality to it, but it is nevertheless fascinating.

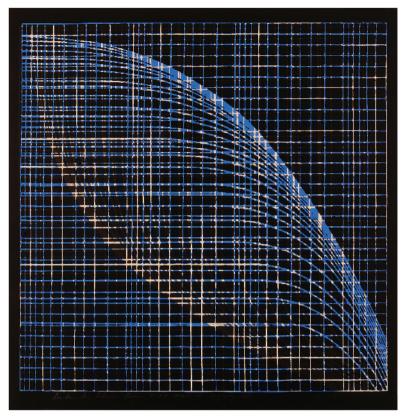
Solving technical tasks usually involves notation and marking with symbols, but this is much less commonly applied to artworks. We can quote as an example the approaches of Sol LeWitt, Frank Stella and others, and can refer to systemic painting and the anti-form movement of the 1960s in which artists realized artworks as a result of cold calculation. Raul Meel's ensemble *Under the Sky* takes anything but a cold approach; it is emotionally and historically arranged, plus it takes on a local meaning because of the use of blue-black-white (the colours of the Estonian flag), which makes the work contextually eloquent.

DESIGN OF THE INTERACTIVE TERMINAL

A formula-based system of instructions was given to a programmer for the design of an interactive panel/terminal that allows audience members to design their own compositions (concept: Raul Meel, Raivo Kelomees). The main rule was that two serigraphs/images were to be printed on top of each other. The audience was given this same opportunity to superimpose different images and print them out using a wall-mounted interactive 'mechanism' connected to a printer.

The following instructions were given to the programmer for the design of the terminal (design was realized by Raul Kalvo and Helen Oja):

The user can combine images in the manner of Raul Meel's *Under the Sky*. The work is based on combining two images. To describe the options for printing the graphical works the artist originally used formulae to define which basic images to use, their colour and angle of rotation. The terminal should allow a user to choose two basic images, define their colour and generate a



3. 'Instructional document' written by Kelomees (2014b).

Figure 8: DM90/CS-180, © Raul Meel.

print. The visitor of exhibition can take the print home as a souvenir of the serial work *Under the Sky*.

Practical use and the algorithmic sequence:

- The user chooses one from six basic images (in fact there are three basic images, but three other images are mirror-images of the first three) and then chooses another. The graphical work consists of two images printed on top of each other.
- The user chooses the positioning of each image, i.e. rotated 0, 90, 180 or 270 degrees.
- The user chooses colour, with options black or blue. Both images could be black or could be blue.
- There is an option not to choose one image in which case only one will be printed.
- There is an option not to choose either image a blank page will be printed.
- The user pushes the print button' (Kelomees 2014b).³

During the opening of the exhibition the visitors printed several compositions and they were signed by Raul Meel himself.



Figure 9: The interactive terminal for Under the Sky. Design by Raul Kalvo and Helen Oja (260 x 500 mm; plastic, plywood; hardware: Arduino, MacMini and printer; software: written in house based on Arduino, Processing and OSX automation © Authors and The Art Museum of Estonia – Kumu Art Museum, Tallinn, 2014).

The Dice

My second object of interest, shown in the same exhibition, is the mobile app 'seeESE' based on Meel's installation *The Dice* (1994), which had its predecessor in 1969. To give some background to *The Dice*, it is a concrete poetry artwork, one among many other visual poetry works by Meel, who started to play with a typewriter to create images whilst serving in the Soviet army. He served in a sports unit in Severomorsk, Kolan Peninsula, from 1964 to 1967. Later he was encouraged by Toomas Vint and upon coming home to Tallinn he joined a circle of young artists led by Tõnis Vint. As art historian Eha Komissarov writes:

Meel's typewriter poems acted clearly as a form of self-expression and his narrative varied according to his mood. In concrete poetry, the text should be more than simply a text. Words are expected to generate processes, and images are attributed qualities similar to interactive signs.

(2014:49)

The poems demonstrate quite a broad range of expressions denoting sadness and fear, which smoothly develop into descriptions of conflict situations. A separate group is made up of Meel's thoughts on the topic of marriage: Conflict, Marriage, Brutal Relationship, Longing, Key, Balance, Idealist Function, Dramatism, Monument, Farewell, A Letter in the Wife's Hands, Sorrow, etc. Meel also introduced social criticism in his artworks, dealing with the conflict between the individual and the society. He borrowed words and concepts from Soviet propaganda texts and focused on the shifting of their message: War-Peace; I Give, I Take, I Share, and I Rule; Fiscal Year Summarised; Anarchy; and Progress-Regress. Overall this demonstrates that Meel was not

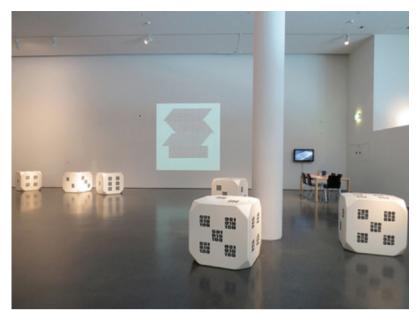


Figure 10: Raul Meel, Dialogues with Infinity. Kumu 2014.

doing typographic images 'mechanically', but was expressing himself and trying to embed his emotions in these artworks.

The words used in the place of the dots (pips) on the dice are presented below. As personally explained to me by Meel, his motivation derived from erotic connotations. The combinations of words used as 'dots' on the dice are:

SEE	ΑIΗ	SUU	EEL	001	UDI
ESE	ΙΗΑ	USU	ELE	010	UID
EES	HAI	UUS	LEE	1 0 0	IDU

Many words have a quite approximate meaning even in Estonian. I can propose some translations using the dictionary of the Estonian language compiled by the Institute of Estonian Language (Institute of the Estonian Language 2017): see – this, ese – thing, ees – in front of, aih – ouch, iha – desire, hai – shark, suu – mouth, usu – belief, uus – new, eel – before, ele – ?, lee – fireplace, 001/010/100 – combinations of numbers, udi – twig, uid – random thought, idu – plumule.

These physical dice with measurements of 75×75×75cm were the prototypes for the mobile app digital emulation. Originally all the dice were similar and there were six copies of them, with each dice containing a silver bell. All bells together make a melody that was designed by Aile Asszonyi.

For the digital *The Dice*, Estonia's leading mobile operator EMT (Telia) was approached and their programmer designed the mobile app, which was entitled 'seeESE' (for iOS and Android platforms) (EMT 2014). The title means literally 'thisTHING'. The goal of the app was to allow manipulation with concrete poetry dice. Shaking the phone each time will generate a different configuration of concrete poetry (Figure 11).

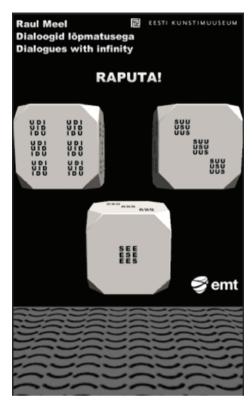


Figure 11: Mobile app 'seeESE' ('thisTHING') by EMT.

CONCLUSION

The goal of this article was to ask whether interactive art could be a method for opening, reviewing, instantiating and reinterpreting an artwork that has been realized in another, non-electronic medium. My conclusion is naturally affirmative, but it is based completely on the impression that I acquired during the Raul Meel exhibition: the audience gladly let themselves play and engaged in interaction with the interactive panel/terminal and the mobile app. A good example of this was the way in which audience members asked for Raul Meel's signature on the graphical compositions that they had created and printed with the terminal. Although no specific questionnaires were employed to obtain an objective evaluation of audience opinion, I believe that the digital instantiations expanded the audience experience and added a playful value to the exhibition. I also think that such instantiations bring back an original aspect of the original artworks that has been lost after they have been purchased into museum collections.

An additional goal of this article was to investigate meta-referential art in the context of media art. I discussed various examples, ranging from single channel video art to Internet applications, which were all related to other artworks. Generally, all these examples translated the content of the original artwork into another medium, and mostly they reinterpreted the original. Clearly this phenomenon is rather common and can lead us to talk about a trend of meta-referentiality in culture in general.

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