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Digital Revolution. Exhibition. Onassis Cultural Centre, Athens, 20 October 2015–10 January 2016. Curator: Christos Karras. Documented at < www.sgt.gr/gre/SPG1530/ >

'Digital Revolution' was curated by Christos Karras and hosted by the Onassis Cultural Centre, Athens, an institution promoting contemporary art 'as well as the co-existence and interaction of sciences, innovation and arts' (Onassis Foundation), between 20 October 2015 and 10 January 2016. One key aspect of the exhibition, which makes it relevant to discussions of digital art and literature today, is that it aimed at a comprehensive presentation of digitality and the ways it affects artistic production and design. In that sense, it may be seen in the light of N. Katherine Hayles' claim about the 'necessity to think digital' (2007: 17) and as a contribution to the dialogue concerning the implementation of digital technology in media and art. The aspirations for exhaustiveness of the exhibition helped underline the multimodality of digital technology as well as its vast range, but it may be argued that that the exhibition did not deliver fully on its promise to address the revolutionary aspects of the digital.

The exhibition space was organised into eight different sections. The first, 'Digital Archaeology', covered the history of digitality. The second, 'We Create', focused on how digital tools are used for new creations based on already marketed products. 'Creative Spaces' explored how digital technology is implemented in movies, animation, and online narratives, while 'Sound and Vision' focused on the implementation of digitality in music. The fifth section, 'State of Play', explored the role of kinaesthesis in the latest video games with sensors that trace the bodily movements of the player. The sixth section was dedicated to 'DevArt', an international

initiative that explored code and coding in four installations that were specifically commissioned by Google and the Barbican Centre for this exhibition. 'Our Digital Futures' discussed the incorporation of digital technology and the human body in the form of wearable technologies. Finally, on a separate floor, 'Indie Games Space' showcased digital games created by individual programmers without the financial support of big companies and distributed through the web.

As evidenced by the section titles, the content of the exhibition was heterogeneous. 'Digital Revolution' attempted to cover a massive phenomenon, and it succeeded in showing the vast scope of digital technology, with stations raging from music videos and visual installations to video games and haute couture. In this context, the exhibition argued in favour of the depiction of digitality as an attribute that dissolves barriers between different media and genres. A pertinent example was the non-linear short film *Energy Flow* (2012) by Field, a studio for digital art and design in London. *Energy Flow* consists of an algorithm that weaves together video and sound taken from two separate libraries that combine into ten different animated stories.

Energy Flow could be received as a music video, an experimental film, or a game intent on exploring possible video and sound combinations. Considering examples like *Energy Flow*, it can be claimed that digital technology unsettles the categorisation of artworks, fostering convergence and multimodality instead. This multimodality is a defining aspect of electronic literature, as in *The Dead Tower* (2012), a visual poem set in navigable space created by digital artists Andy Campbell and Mez Breeze. Similarly to *Energy Flow*, *The Dead Tower* combines 3D design, sound, text, and ludic elements, and like a wide range of digital artworks, *The Dead Tower* may be thought of in different ways, including as a virtual reality game.

This flexibility in categorisation is related to another aspect of digitality (also explored in 'Digital Revolution'), namely, amenability to open access. The possibility of the audience freely using production and design tools enables them to participate in the creation of an augmented artwork or an altogether new one. An example of the productive possibilities of open access is the *Johnny Cash Project* (2010) featured in the exhibition and produced by Chris Milk and Aaron Koblin, founders of the company Vrse that specialises in virtual reality storytelling. The *Johnny Cash Project* is essentially a constructed music video of the artist's final studio recording, 'Ain't No Grave'. For its filming, the two collaborators used black and white portraits of the artist, which Johnny Cash enthusiasts from all over the world drew and contributed through the project's website by means of a simple painting tool. The audience's ability to participate creatively in an artistic product they are interested in is one of the allures of digitality that is evident in electronic literature as well. As Scott Rettberg claims: 'one particularity of electronic literature is that the predominant publishing model is that of a gift economy' (2009), meaning that authors of electronic literature tend to distribute their work freely on the internet, and they also often release the code of their artwork for others to reuse in their creations. In the installation, *Clouds* (2013), an interactive documentary by artistic developer James George and director

Jonathan Minard, artists and designers gave their accounts of working with open source tool kits.

One of the reccurring themes of the exhibition was interactivity, which, in the context of *Clouds*, can be understood in two ways. Firstly, the project highlights the ways in which open access can break the barriers between creator and user, rendering them both interactors. *Clouds* recounts, among other matters, how *The Johnny Cash Project*, the music video created by Chris Milk and Aaron Koblin, is made up of portraits made by fans, who in turn used a tool developed by Milk and Koblin. Apart from showing how digital artworks are often collaborative achievements, *Clouds* is also interactive in that it allows the viewers to shape the progress of its storytelling through gestural navigation of the digital space of the projection screen. The resulting experience is a synergy of actions: by the developers of the documentary, by the artists whose narratives the documentary was based on, and by the participants who choose in what sequence its story is to be told. This process shares several characteristics with hypertextual fiction, in which the reader can choose the sequence of a story, as is the case, for instance, with Stuart Moulthrop's *Victory Garden* (1992) and other canonical, early works of electronic literature.

Interactivity, understood as embodied participation, was prominent in the exhibition, since most stations featured works that required the audience to press buttons, move in front of sensors, or even utter speech into microphones. It is worth noting that assistants showed visitors what they could do with certain artefacts. One such instance was the entry by Varvara Guljajeva and Mar Canet, whose work is concerned with the themes of art and technology. The project, called *Wishing Wall* (2014), was inspired by the practice of wish-making spread among various traditions and cultures across the globe. In *Wishing Wall*, the participants whisper their wish into a standing microphone and see it being scribbled on the wall opposite them. Then the letters of their scripted wish crumble in a swivelling motion forming a digitised cocoon, which subsequently metamorphoses into a butterfly. The interactors then raise their hand and envelop their realised wish in the form of their butterfly, before releasing it into open space for it to fly away with other butterfly-wishes. The colour of each butterfly is calculated by a specific algorithm, integrated in the code of the artwork, based on the sentiment in the voice of the wish-maker; for example, anger is red, joy is yellow, and trust is green.

Wishing Wall is an interesting example of what form interactivity can take in digitality. Its execution demonstrates how digital media may use the whole body of the participant, something elaborated at other stations of the exhibition, most notably in the project *Petting Zoo* (2013) by the experimental architecture and design studio Minimaforms. Consisting of long, spiral tubes made by LED lights that give the impression of futuristic worms, *Petting Zoo* requires participants to use their hands and body to make these artificially intelligent 'pets' move along with them.

In *Wishing Wall*, on the other hand, the participants engage actively with the transformation of text from speech to letters, to image, to movement. In this way,

the project echoes many works of electronic literature that use text as an element for interactors to play with. For example, in *Text Rain* by Camille Utterback and Romy Achituv (1999), text behaves like raindrops that people can collect with their bodies, just like the butterflies in *Wishing Wall*. In *Text Rain*, the words are formed with or on a silhouette of the interactor's body; in *Wishing Wall* the participation is found in the initiation, in uttering the wish that becomes the text and allowing the metamorphosed butterfly-text to open its wings and fly away.

In that sense, both creations reflect on how digitality alters the manner in which a text – whether literary or not – is generated and perceived. The focus shifts from the text as an end product to the processuality of its production. In the case of *Wishing Wall*, this process can be interpreted as a metaphor for the mechanisations of interactivity in digital media. There is written code – which, interestingly enough, is also available online – that awaits the stimulus of a participant in order to be actualised. This actualisation is the expression of the wish, which is in effect also a wish to interact with the coded system. This wish is articulated in human language, which the participant understands, and then it is transformed by means of an algorithm into its coded counterpart: the butterfly as the unit that the system can manipulate. Yet, for that operation, the energy of the interactor is required.

This understanding of interactivity is intrinsic to digitality. As Espen Aarseth writes, albeit about cybertext, but arguably the principle is the same, unlike in non-digital media, in digital media interactivity is a performance in an 'extranoematic sense' (1997: 1). This 'extranoematic performance' was unmistakable in 'Digital Revolution', where audiences were required to interact with the works at each of the stations. However, it could be said that this is the furthest the exhibition went towards revolution. Despite its title, the exhibition made no reference to what is revolutionary and unique about digitality, in terms of interactivity or otherwise.

The exhibition demonstrated how digitality is implemented and how it affects production and design methods, yet it did not elucidate its effect on human perception. It included many historical and technological breakthroughs like the first home console, *Odyssey* by Magnavox, and original artworks, but it did not provide an articulated critical challenge to the concept of digitality. It treated digital technology as a tool, yet as Marshall McLuhan (2011) argues, technology does not simply consist in the production of new tools but is a force for reinvention. Indeed, there are prominent theorists (see Penny (2015), Bourriaud (1998), and Jenkins et al. (2009)) who speak about participatory culture in the context of digital technology, and an exhibition entitled 'Digital Revolution' may have been expected to address such claims.

Instead, 'Digital Revolution' focused on the multimodality and interactivity of digital technology as well as its impact on the methods of art production in the form of open access and free distribution. Its approach favoured an encounter with digitality in breadth, if not in depth. Admittedly, it is difficult for a single exhibition to do everything, but its title created expectations that its content did not meet, particularly with respect to how digital interactivity may alter the way people perceive themselves

and the world around them. Nonetheless, 'Digital Revolution' provided impetus for further thought about the digital arts and electronic literature, and an indication of just how much about digitality and its potentialities needs to be explained and / or staged before the critique of claims concerning its revolutionary impetus can be entertained.

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