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## ***Love Letters – Wearing Stories Told: A performance-technology provocation for interactive storytelling***

### **Abstract**

This article focuses upon artistic modalities for the dissemination of personal and intimate memories to examine the relationship between technology, performance and audience. Drawing upon theoretical frameworks from social science and performance studies, sound art and computer science, the discussion is contextualised by combining three different perspectives. In doing so, the article concentrates on the authors' collaborative and ongoing performance project *Love Letters*. The piece invited the participating audiences to write letters that capture platonic, familial or lustful emotion; share other audiences' letters and interact with the performer's costume by attaching the letters to her dress in addition to documenting names, memories, and streams of consciousness to the costume and onto the performer's body. *Love Letters* was recently augmented with creative technologies and redeveloped as an interactive sound installation that's both content and curation is user-generative. Through contextualising the performance project, this article investigates the different types of interfaces used in the performance (considering both their cultural and biological significance): body, skin and dress, which have been used to communicate written narrative. Viewing the project from a ubiquitous computing standpoint, we focus on the role of technology in such a setting. However, the primary importance is not the technology in itself but the pervasive effect it has on the storytelling process. Through our case study we propose how pervasive technology can support reminiscing and facilitate a sustainability in performative settings such as storytelling practices, while not drawing attention away from the performative and storytelling aspects of the piece.

### **Introduction**

*Love Letters* is an ongoing performance project initially conceived by live art practitioner and academic Yiota Demetriou. It combines aesthetics of performance and sound art/installation. The work involves sharing private memories, exhibiting public histories, and uses audience participation and the act of storytelling. The original form of the piece invited audience members to write anonymous love letters to a significant other using the four types of Greek love:<sup>1</sup> Agape, Eros, Filia, Storge. In turn, the audience selected and read aloud other audiences' love letters (from the bank of letters collected from each performance); they inscribed the name of the sender and the addressee on the performer's dress and/or body and furthermore pinned the narrated letter onto the dress. From being re-performed,<sup>2</sup> the current love letters collection holds more than 200 audience letters. Past audiences' letters are re-activated in each performance, and new love letters are written and added to the collection (See Figures 1 and 2).

*Love Letters* was recently augmented with creative technologies and redeveloped as an interactive sound installation, the content and curation of which is user-generative. This piece is used as a primary case study to address the uses of ubiquitous computing and wearable technology in performance, to make personal histories exchangeable and accessible. Through contextualising the performance project, this article<sup>3</sup> investigates the different types of interfaces used in the performance (considering both their cultural and biological significance): body, skin and dress, which have been used to communicate written narrative. Viewing the project from a ubiquitous computing standpoint, we focus on the role of technology in such a setting. However, the primary importance is not the technology in itself but the pervasive effect it has on the storytelling process. Through our case study we propose how pervasive technology can support reminiscing and facilitate a sustainability in performative settings such as storytelling practices, while not drawing attention away from the performative and storytelling aspects of the



piece.

Figure 1: *Love Letters* at *Performance and Live Art Platform 2013*. Photo by Petros Mina

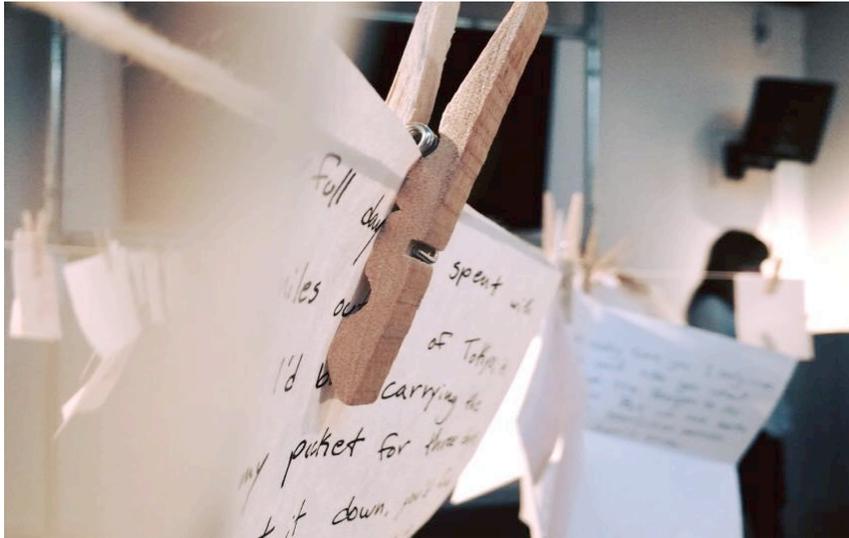


Figure 2: *Love Letters* at iDocs 2016. Photo by Yiota Demetriou

### The Dress as Interface

*Love Letter's* symbolic actions do not only intervene in the notion of 'keeping' private memories by compelling the audience to participate in an exchange of them, but also by further witnessing others. This is realised by 'exposing' their intimate and personal testimonies (with their consent). Psychologist Jerome Bruner reasoned that narrative is a cultural mediator that 'mediates between the canonical world of culture and the more idiosyncratic world of beliefs, desires and hopes' (1990: 52). If this is indeed the case, then the stories written and told in *Love Letters* – even though they do not have a collective or empirical significance, still make evident how narrative is a vital component of the human mind, key to making sense of the world around us. In light of this, the collected works are types of candid cultural artefacts or resources that carry 'intangible' personal heritage. As Barthes suggested: 'the special dialectic of the love letter, both blank (encoded) and expressive (charged with longing to signify desire)' (1977: 157), tell stories that are sometimes profound and intense, and at other times superficial and trivial, which are then given existence through their mediation.

The action of writing a letter was used as a tool to evoke memories. The different sets of praxis undertaken during the performance in *Love Letters* intervene further in the idea of 'keeping' private remembrances to oneself. This is achieved by having the audience engage with the performer by dressing her in particular ways so that the shared memories become attached with new environments, connotations and other ways of telling. These modes of engagement occur through two strands of audience – performer interaction: (1) writing the letter and reading another aloud (see Figure 3), or (2) pinning the narrated letter onto the dress and writing on the dress and on the performer's body. The second additional layer comprises of addressee names, memories, notes, streams of consciousness, a sentence, or a word (specifically on the theme of love), which capture an experience of platonic, familial or lustful emotion by inviting the audience to document these on the performer's body.

The act of writing on skin may be viewed as an approach to embody text through flesh or using skin (with all its individual [genetic and cultural memory]<sup>4</sup> and added connotations) to tell a story. This is typified in Eleanor Fogg's performance *13 Books Written on Skin* (2014), where 13 audience members wrote memories relating to parts of their bodies on the artist's body. In another performance by Nahed Mansour entitled *Write my Identity* (2010), the performer invited audience members to select an identity for her by writing it on her body. Still yet another example may be found in Guillermo Gómez-Peña's *Nock-Ma: El Shame-Man Meets el Mexican't y la Hija Apócrifa de Frida Cola y Freddy Kruger in Brazil* (2005), where Peruvian artist Amapola Pradalies was naked on a dentist's chair as the audience intervened on her body with text. The idea of skin writing in these performances builds on Jennifer Rowsell's argument that performance 'requires the body to enact text' (2013: 110). This occurs within the context of viewing performance as a medium of communication in which the body is used as the primary communicative vessel, thereby manifesting itself as a principal mode of meaning-making. Taking this into account, the use of writing on the performer's body in *Love Letters* is in the context of seeing the subject as a type of user interface, a vessel that 'programmes', 'stores' and 'holds' data as well as communicates it to external parties. As Jill Scott argues:

Many inbuilt components of interaction are naturally present in the body for example, the skin is interactive, the nervous system, the qualities of sound and sight and all these form the memory of the body's location in a given space (in Ascott, 1999: 86).

This school of thought relates to Vilem Flusser's realisation that 'the body stores and transmits equal amounts of both acquired and inherited information over successive generations' (in Ascott, 1999: 86). In consideration of this, the performer's body in *Love Letters* can be seen as a type of interface that produces an outcome of engagement that is embodied text (See Figure 4).

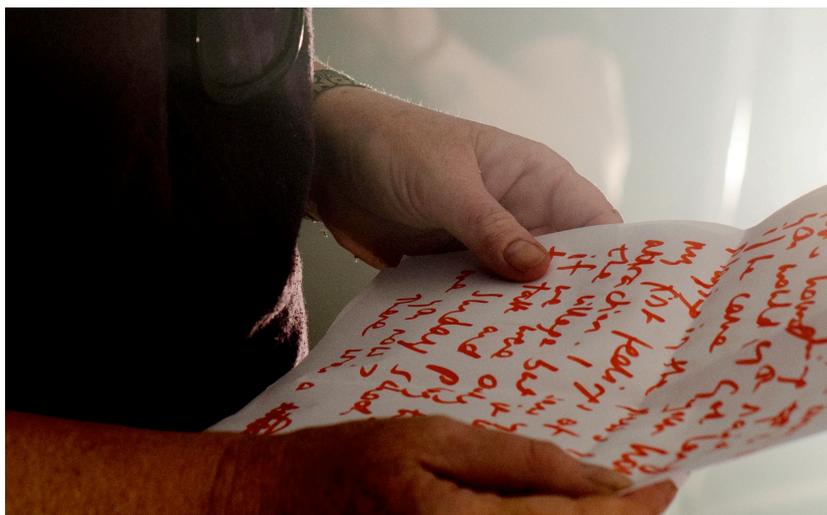


Figure 3: *Love Letters (Tempting Failure)*, Latitude Festival, 2015. Photo by MM.

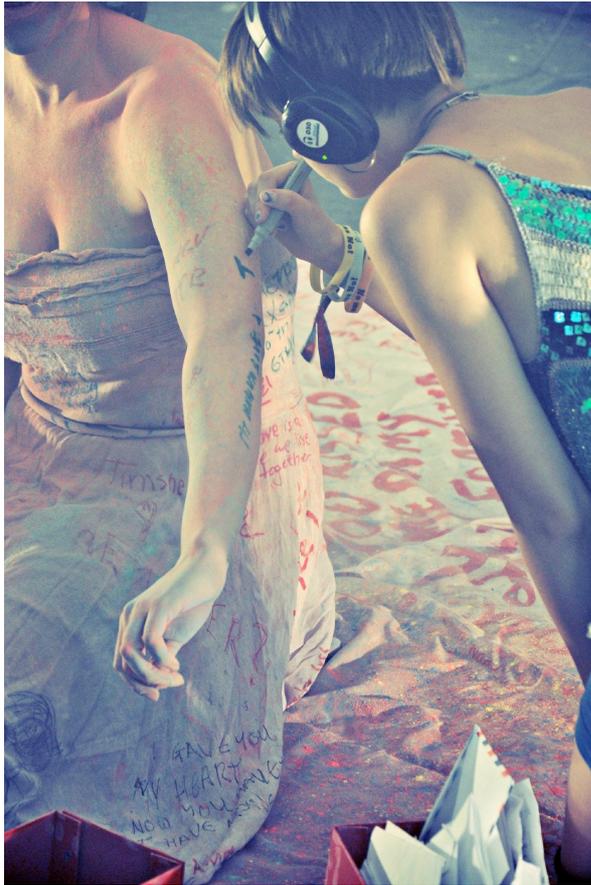


Figure 4: Love Letters (*Tempting Failure*), Latitude Festival, 2015. Photo by MM.

The dress worn in every performance is the same. It is 'stained' with past and present audiences' contributions, playing with the notions of presence and absence. As described, the audience would note the name of the sender and the addressee on the garment and or the performer's body. Additionally, the dress also contains 'memo'-type messages that people left on it, for others to see and perhaps to not see. Thus, the dress is a crucial component of the performance. It becomes part of the audiences' recollections, not only as given traces of past written and narrative acts, but also as an in-between, a mediator, of what was said and what was lost. It most importantly becomes a vessel that embodies these people's intimate stories. In this sense, the dress witnesses the different tellings and shares a different type of intimacy with each and every audience member that has interacted with it. It is a technology that is physically embedded with their memories, as well as the cultural connotations it carries because of its material form. Theorists such as Nikolai Trubetzkoy (1939), Roland Barthes (1957), and Umberto Eco (1986) understood the generic sense of 'dress' as a form of technology taking into account both its material and conceptual values: a semiotic device and machine for communication. Another approach to viewing clothing as a type of technology, which links to the idea above in terms of its sociological significance, is through an Aristotelian lens, whereby technology is thought of as an external object, a tool for the human, 'that promises us pleasure' (Kember; Zylinska, 2009: 8). For Sociologist Read Bain (1937) 'technology includes all tools, machines, utensils, weapons, instruments, housing, clothing, communicating and transporting devices and the skills by which we produce and use them'. This idea can be related to Bernard Stiegler's (1994) work.

Grounding his theories on the works of Gilbert Simondon (1958), Stiegler defines technology in two ways: as 'the pursuit of life by means other than life', and as 'organised inorganic matter'. For him technology can be defined as both material and immaterial entities, which are produced through applying mental and physical labour towards attaining value (1994). Following this train of thought, for both Simondon and Stiegler the human and the technical are co-constituted. This state of Technocity, as Stiegler coins, suggests that technology is constitutive and simultaneously a supplement of the 'human', for the reason that the contemporary comprehension of the experience of being human and what is understood as technology are reciprocally co-constituted. Marshall McLuhan also wrote about this in his chapter *Clothing: Our Extended Skin*, suggesting that western civilization moved towards an ideology of 'postindustrialism', which views clothing as a technology that is a 'direct extension of the outer surface of the body' (1966: 163). Thus, by having the audience pin the letters, it simultaneously works as a platform to exhibit these different stories and experiences, embodying the audience members' personal stories that were shared during each performance. As Susan Elizabeth Ryan maintains:

Interfacing is a traditional sartorial term for an internal layer of stiffened fabric that supplies body and shape and helps edges lay straight. Technology adds physical and behavioural layers and can further articulate, or give shape to, its role in constructing the body and its subjectivity (2014: 134).

Hence, if the skin is a surface, then a dress adds layers to the body and becomes an embodied cultural interface performing a type of speech-act or performative utterance between ourselves and our environments (Ryan, 2014: 134, 140). Since the Futurist movement, artists have used dress in performance to provoke a social critique. An existing example of a technology-based performance work that used the idea of 'dress', is *Electric Dress* or *Electric Clothes* (1956) by Gutai artist Atsuko Tanaka, which culminated in a series of electrically wired clothing pieces. The main piece consisted of a kimono made of electrical wiring and diversely shaped and coloured fluorescent bulbs, which flashed on and off in a casual pattern scheme. When Tanaka wore the robe, it projected 'a visuality of a body transforming itself in quick succession [...] a body which alters minute by minute' (Ryan, 2014: 17). Initially the artist performed the dress itself, as a dress act, seeing that it formed a flux in the space between art, technology and the body. The artist would wear it and perform in it, in terms of thinking about the costume as a sculpture. Tanaka's piece dealt with intangible features such as electricity and sound, and a certain automatism that was inspired by the different industrial mechanical workings of her time (Butler, de Zegher, 2010: 167). The artist enacted her body by using the format of the dress as its main interface with technology. As Susan Elizabeth Ryan suggests the dress 'was a means to "speak technology" – not merely to covertly enhance a function but to use technology as a communicative action' (2014: 50). For further development of the project the dress used in *Love Letters* has been thought of as a type of interface that connects present and absent audiences. Jennifer Sheridan et al. write that the purpose of technology is to mediate the interaction and interfacing between the

people involved in a performance and the performance itself. In this role, technology can support the integration of performers, participants and observers into the performance (in Fincher, et al., 2004: 7).

Using a 'gedankenexperiment' approach, the dress from *Love Letters* has been reworked in collaboration with Electronics/Signals Engineer Odysseas Pappas and Composer/Sonic Artist Stathis Kampylis, as an interface to examine the relationship between participation, technology and performance. Using creative technologies, the *Love Letters* dress has been redeveloped into a freestanding interactive sound installation, which is augmented with recordings of the letters from the existing collection. Audience members are invited to follow the initial process of writing a letter and engage with the dress and the performer by reading another letter from the collection and pinning it onto the dress. The audience's engagement with the garment triggers a reaction where the costume narrates another story from the love letters collection. Recordings of the collected letters are played via a sensory interface that is crafted onto the dress, and which has mini-speakers as outputs. The stories are held on a modular microcontroller. Triggered by the audiences pinning the letters onto the dress, it reacts by feeding back a different story from the *Love Letters*' database to the audience. In this way, the dress becomes a storytelling object and facilitates a two-way exchange of personal testimony: the garment becomes a listener/witness to the story being told by the audience member, but it also becomes the storyteller. Simultaneously, this shift of roles also happens to the audience members.

The audiences' engagement in the work was active even before augmenting technologies onto the dress, as the content was 'user-generated'. However, by technologising the performance beyond this initial process, the approach is taken further in actively involving them in the conceptual, 'dramaturgical' and developmental structure behind our work. This raises various questions in relation to how technologies used in contemporary performance practices shift the role of the audience and redefine the notion of participation. In the piece, they cease to be called merely audience members; they become witnesses, storytellers, experiencers, participants and co-creators of both developing the content and curating it through their interaction.

*Love Letters* takes this idea of the body and dress as interface further. The rhizomatic manner that occurs through the different modes of interaction with the dress produces various outcomes: computer/controller and software and audience member as creator and performer. Every interaction generates a different outcome, activating a distinctive story from the collection. The productions via these interactions depend on the myriad of possibilities programmed in the software and augmented onto the modular micro-controller. As discussed above, the concept of audience member is speculative. It also raises questions around whom the active observer is if both the technologies and the participant/audience members are performing and curating the content together. The selection process for playing back the material is based on the algorithm coded in the software and influenced by the metadata that occur during the performance because of the different interactions. The recordings were put through a software process that was generative, live and

immediate – almost like improvisation – as the playback of the recorded material is unique to each performance due to the interaction with the audience.

Therefore, the responsibility of curation is not only taken up by the patch created on the software and the numeric values given by the programmer, but it was also dependent on the audience member's subjective choices of where to pin each letter after reading it aloud. In this way, the process of curating the recordings was democratised and shared rather than having someone solely responsible. Implementing user-curation as the method for display meant that the exhibit was based on participants' subjective arrangements rather than a dogmatic taxonomy. The strategy used here is to homogenise the human actor(s) involved in the decision-making process and allow space for the production of experiential data. As Markopoulos, Moore, and Ruddle suggest, 'when interaction is purely observational, performances tend to involve video displays, computer graphics, audio presentations' and so on. (2004: 8). However, wireless technologies such as those used in *Love Letters*, are beginning to expand the parameters of observational engagement in performance, 'making the audience an active participant in the making of the piece' (Markopoulos, et al., 2004: 8).

Wearable technologies have mostly been used for utilitarian purposes or in fashionable technology design through smart clothes and performative provocations such as: Kobakant's commissioned *Extravagant Electronic funeral gown*, also known as *The Crying Dress* (2012), which was worn by the wife of the deceased commissioner in attendance of his funeral. The dress was made to shed endless tears of mourning. Additionally, *(No)Where (Now)Here* (2013) by Ying Gao, a series of two dresses created out of photoluminescent thread and embedded eye tracking technology that is activated by a spectator's gaze, were inspired by Paul Virilio's *Esthétique de la disparition* [The aesthetic of disappearance] (1989). Preceding this, Gao also produced *Walking City Dresses* (2011), which were garments that consisted of hidden pneumatic pumps that filled origami-style creases in the fabric used with air. The series of dresses were either activated by proximity and movement sensors, which detected approaching spectators, or reacted to sounds picked-up through a suspended microphone. Another example is the collaborative project *Exchange-Dress* (2004) by Celine Studder, Sabine Seymour, Marscha Jaggi and Françoise Adler that is inspired by human encounters and fleeting conversations that leave mental marks, traces and impressions. The garment created, uses colour as a metaphor to express that very notion. Triggered by colour-coded bracelets worn by the audience members, and made with proximity sensors, an IR transmitter-receiver and a modular micro-controller, the dress's white luminex fabric changes colour according to the colour of the visitor's bracelet, making each individual encounter between performer and audience visible and unique. These examples of using wearables beyond utilitarian parameters, as with Atsuko Tanaka's *Electric Dress* given earlier, mediate different ways of perceiving the world around us and have acted as springboards for the remaking of the *Love Letters* dress through their diverse approaches and contextualisation. However, what makes the garment used in *Love Letters* different is that firstly it was not created with fashion design/technology intentions but instead with a performance perspective, and secondly it attempts to take the exchange encounter of interaction between

dress/costume and audience further by sharing personal stories of previous audiences that are absent at the moment of each performance. This mirrors the notions of presence and absence touched upon by Gao in her piece, as well as the response to fleeting encounters that is colourfully projected through the *Exchange-Dress*.

As well as inputting the different sound recordings in the software used in *Love Letters*, the patch created also continuously plays, at a low volume, a soundscape that is made of acousmatic sounds of previous performances of *Love Letters* put together. The outcome of this was a hubbub of sounds/voices from numerous past audiences in addition to the space's acoustic and location sounds and the resonant frequencies of the different past sites that the piece was performed at. The soundscape was captured using 'two-point stereo recording'. This documenting approach was taken to reflect the notions of presence, absence and in-situ when encountering the love letters heard. Playing this in the background produced a sonic experience for the listener. It created the impression of actually being in a space at the moment of happening. With the soundscape, we attempted to focus on the musical qualities of the sound content rather than using an informative process, shifting the attention from communication to the sonorous tones and textures of the recordings played, as with Alvin Lucier's *I am Sitting in a Room* (1969).<sup>5</sup>

The soundscape in *Love Letters* played in the background to accompany the stories heard through the dress-interface, offering the audience member/witness an in-situ experience of the content. This transported the experiencers to previous performances, almost providing them with the opportunity to become future ghosts of past performances. LaBelle suggested that it progresses 'into an accentuation of acoustic space whereby the sound source (voice) loses its original shape through the resonance of the spatial situation' (2006: 126). This is an element that occurs in the soundscape produced for *Love Letters*, as in each performance the recordings are played and rerecorded along with the acoustic spatial sounds adding another layer to the soundscape. The sound and the voices are disseminated into a much larger interaction, through which the rerecorded, acousmatic voices make the aural soundscape evident through its disembodied reproduction.

As technology becomes an integral part of many modern performance pieces, questions can be raised with regard to how principles of Human-Computer Interaction (HCI) affect the interaction of performer and audience with the interface. This has been addressed by Reeves *et al.* (2005), who characterise and classify interfaces according to the extent that a performer's manipulation with the interface and its subsequent effects are hidden, obscured or augmented. These can be characterised as 'secretive', when both interface manipulations and resulting effects are hidden; 'suspenseful' when the effects are hidden while manipulations are amplified (for example as in the case of observing someone trying out a Virtual Reality simulator); 'magical' when this relation is reversed (as in the case of a magician performing a magic trick), or finally expressive when both manipulations and effects are amplified (See Figure 5).

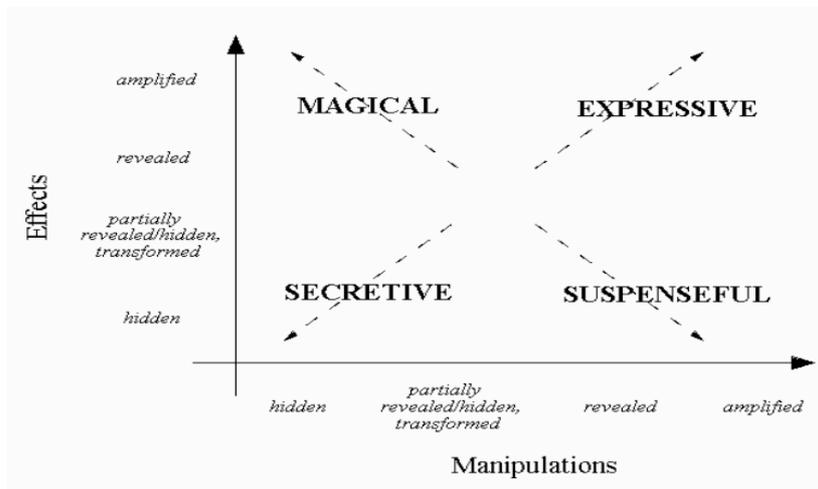


Figure 5: Reeves, S., Benford, S., O'Malley, C. and Fraser, M., 2005, April. Designing the Spectator Experience. In Proceedings of the SIGCHI conference on Human factors in computing systems (pp. 741-750). ACM.

Viewing the dress in *Love Letters* as an interface, with which both audience and artist interact (hence blurring the boundaries between a passive observer and an active performer), we can access the performance as being in the 'expressive' spectrum as seen in figure 5. This reveals and perhaps even amplifies the manipulation on the audience's part by their walking up to the performer, reading a letter from the collection and pinning it to the dress. At the same time, amplifying the effects of those actions in the form of the resulting auditory effects through narration of the letter by the dress, as well as alterations to the performance's soundscape, are perceived by all participants present.

This is of particular importance as a mechanism for widening audience participation; by keeping to an expressive paradigm not only can the performance attract more spectators while in progress, but it also allows any member of the audience to learn by observing, allowing them to prepare for their own turn of participation in the performance. The format of the dress plays on the concept of ubiquitous technology. Ubiquitous computing includes main elements such as: multimodal interfaces, context-aware or adaptive computing, automated capture, access to live experiences and connecting the physical to virtual worlds – similar to features of performance art. According to Giulio Jacucci, these ubiquitous computing tenets can be related to features found in performance practices, as they share common objectives such as staging and performing embodied experiences (in Ekman, et al., 2016): 352). Other features of ubiquitous computing such as adaptivity and context awareness are essentially reducible to the agency of the system, which need to intervene following certain 'rules' and improvise given certain situations. In this manner, pervasive technology propositions sensing systems that measure and encourage space and sense situations. With the use of such systems in performance, space is configured and performed rather than measured and situations are 'staged' rather than acknowledged by the subjects. As Sheridan *et al.* state, the aim of these technologies is to aid the performer, who creates the piece in order to tell the story, disclosing a message or engineering an experience for the audience (in Fincher, et al., 2004: 7).

Dalsgaard and Hansen (2008) consider interaction as expressive acts of co-experience. They observe how the user is simultaneously operator, performer and spectator, underlining the concept of performing perception. This emphasises how the user/audience is strongly influenced by the awareness that the knowledge of the system engaged with is in itself a performance for others which is similar to the processes that occurs in *Love Letters*. They maintain that a central component of the aesthetics of interaction is founded in the user's experience of themselves 'performing their perception'. This condition continuously shapes the users' understanding of interaction. Therefore, designing for such interactive experiences necessitates reflecting on theories found in performance studies such as embodiment and social interaction. The decisive contribution of 'multiuser' participation (audience, experiencer) in engagement advocates that a subject's experience and ludic hedonism is ingrained in the embodied, performative interaction with installations and is conveyed with other experiencers in the interactive encounter. This is because the engagement with such systems, as with performance, produces data, which is experiential and accordingly subjective, and for this reason is difficult to capture. Considering this, it can potentially be measured as another layer to what Diana Taylor (2003) calls the repertoire.<sup>6</sup> These modalities are considered non-discursive 'anti-evidence'. In one way or another this is the effect that the interaction with technology causes, as it produces different types of ephemera, which according to Moñuz (1996) do not vanish but are distinctly material. Taking this into account, the use of technology used in our piece may not be directly related to the repertoire but certainly has the ability to produce experiential ephemera; as with the idea of interface, it can be seen as an extension of such embodied practices.

### **The Dress as Sound Installation**

*Love Letters* places the audience member as the user and experiencer in the position of storyteller and listener, an element that the project uses towards democratising both the communication and presentation of the material. Playing with the conditions of presence and displacement, the user embodies the storyteller by controlling which 'displaced' stories will be told. Simultaneously, the user performs the role of the listener by taking in the information played through the garment as interface. The piece intends to put to test the user's interaction with databases of memories and personal testimonies by taking a collection out of its original context. In addition to this, it aimed to develop an approach of mapping digital stories from absent sources into tangible objects, such the costume. The material is combined and a new narrative is generated each time according to the user's choices. In this sense, the documented material collected is re-performed through the user's choice of a subjective narrative. Thus, the dissemination of the material and its curation is up to the user playing with the existing frameworks built into the system.

Working with the medium of sound was selected to reflect the ethos of narrative and orature, in addition to thinking of the voice as sound – considering Aristotle's definition of the voice as sound with meaning (Dolar, 2006: 11, 23). As Linda Sandino propounded, sound art practice offers an effective alliance with practices of embodied cognition, like storytelling, oral history and performance. This is due to the

specific arts practices embracing several emotional and theoretical properties that identify with registers found in narrative recordings, such as voice as sound, embodiment, presence and the desire to communicate (2013: 5). Sandino also argues that the process of using recorded testimonies as material for sound artworks reflects several components of Bourriaud's 'relational aesthetic' (2013: 5). This mode is characterised by a collection of artistic practices that theoretically and practically draw on human relations and their social context, instead of concentrating on an independent and individual space (Bourriaud, 2002: 113). This is a distinctive context that practices of the repertoire encompass, using narration as a technique to relate and communicate, and to further create a collective remembrance of the event that is taking place. The personal individual recollections found in the recordings often enclose evidence about how things felt to individuals, and as discussed earlier in this paper, they hold information about the narrator, due to the accents used, the turns of expression and the para-linguistic exclamations. These components are as enlightening as the stories themselves and reveal the time and place of narration, performance and recording. LaBelle suggests that sound art pieces provide audiences with an auditory experience that 'situates the listener within an intensification of immediate experience' (2006: 197). This appears to underline components of interactive art, which create a sense of existence through engagement and an exchange demonstrated through the work contextualised in this article.

## **Conclusion**

The artistic work discussed in this article attempted to foster a cross-fertilisation between arts, humanities and sciences and to accumulate writing around performance theory, sound and computer science. The technology used in the performance was not only a tool to enhance the component of audience engagement, but instead it also used the medium of performance as a platform for wider technological experimentation. By reworking the piece through augmenting the dress or costume with technology, we aimed to explore how pervasive technology can support reminiscing and facilitate storytelling. As explained we are 'storied' beings; our identities are built with social and individual stories; we interact through sharing stories and we learn through stories.

Thus, *Love Letters* opened up avenues for thinking about different modalities of text/narrative delivery. This is manifested through thinking about the body and its flesh as an interface of communication and a mode of capturing text. Additionally, it also considers the dress as a type of technology and interface. This is not least because of its linguistic and performative properties in the material and cultural sense, but also because of how it is utilised within each performance, whereby it becomes physically and conceptually attached to the audiences' reminiscences.

The augmentation of technology onto the dress shifted the roles of performer and audience as they become active participants and co-creators of the piece, which through each and every interaction with the garment they receive a different experience. It is important that in the model of representation used in *Love Letters*, and especially for exhibiting oral history or personal narrative, a collective creation of

narrative and interpretation should be allowed, as this would potentially acknowledge a past co-creation of a series of performative or communicative acts. In this context, visitors to the exhibition or the audience to the performance become enfranchised through different strands of participation and co-create a further narrative, adding more layers of interpretation to the materials (letters) exhibited, and the stories (sound) embedded on the dress. When contextualising the shift of roles and exchange between audience and performer that occur through such modes of participation it is useful to look at Bourriaud's relational aesthetics: '[t]he status of the viewer alternates between that of a passive consumer, and that of a witness, an associate, a client, a guest, a co-producer and a protagonist' (Bourriaud, 2006: 168). Bourriaud also points explicitly to the duty of the artist, because of the 'symbolic representations' exhibited, that facilitate the notions of interaction and communication rather than 'bare' participation. He maintains:

Their works bring into play modes of social exchange, interaction with the viewer inside the aesthetic experience he or she is offered, and processes of communication in their concrete dimensions as tools that can be used to bring together individuals and human groups (2006: 165).

With the re-making of *Love Letters* we intended to create a performance framework that can be used for the curation and dissemination of oral and written memories. In a performance setting, the 'gedankenexperiment' served to develop a model that could be transferred for exhibiting costume histories in culture heritage environments. This presents the potential for encapsulating the audience/experiencers/interactors in the story, which are present in the reminiscences of the specific garment used. In this way, the garment speaks its history and its memories are triggered by its audience. Through using performance to engage with technology in *Love Letters* (vice versa), and thus developing a system whereby the audience member becomes experiencer through learning via process within the use of creative technologies, the performance's interactive properties are not being isolated and substituted by the technological apparatus. *Love Letters* is a provocation rather than something fixed and complete. It is an on-going attempt towards devising interactive approaches for the purposes of engaging with different oral histories and personal recollections – as well as written narratives – with a transferability to other contexts of learning about history and learning through process and interaction. This is achieved by using performance as a tool to showcase such tools. In this manner, it can be suggested that the format we propose of using technology in performance or performance in technology can provide a common 'algorithm' or language for the discussion of technology-based performance, which supports discourse between performers, curators, technologists, and researchers/theorists from different fields.

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1 Agape [in Greek *Αγάπη*] describes unconditional love; eros [in Greek *Έρωτος/Έρωτας*] denotes intimate and/or romantic love of physical attraction; filia [in Greek *Φιλία*] means friendship. Storge [in Greek *Στοργή*] is used to define affection a type of parental love.

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2 The work was initially performed at the *Performance and Live Art Platform* (2012) in Cyprus as a performance happening. Since then, it has taken the shape of a performance lecture, a sound installation and a durational, processed-based performance installation. The performance's shape may have shifted several times, however the work's main content – which through every performance emerges from the very act of participation, engagement and interaction of the audience – remains unchanged. This on-going piece has been performed more than five times in different countries across the EU and at renowned performance festivals and conferences such as: *Performing Documents* (2012), *Performance and Live Art Platform* (2012, 2014), *Tempting Failure* (2013, 2014), *Latitude* (2015), and *iDocs* (2016).

3 The article has been written by the three individuals from different fields (Performance, Music, Computer Science) with the attempt to merge their ideas on the relationship between technology, performance and audience, towards finding crossovers between their work. In this paper, we use our interdisciplinary and on-going performance project as the primary case study to experiment, to invoke further interdisciplinary dialogues between artists, researchers and technologists. The structure does not comprise of three individual sections reflecting each person's perspective, but rather echoes our shared desire and attempt to fuse these 'categories' and each person's ideas into one.

4 Flusser realises the human body to be composed of both genetic and cultural memory (in Ascott, 1999: 86).

5 Lucier recorded his voice, played it back into a space and repeated this process of playing back and recording several times, until his words were no longer discernible and became sound.

6 Within Taylor's thinking, the repertoire/embodyed cognition produces a type of historical knowledge that is rejected from orthodox or dogmatic archival practices, as it denotes the domain of corporal gestures and speech: 'alternate modes of textuality and narrative like memory and performance' (Muñoz, 1996: 10). As Muñoz states they 'reformulate and expand our understandings of materiality' (1996: 10).

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