

**The significant other: the value of jewellery within the conception, design and experience of body focussed digital devices**

WALLACE, J., DEARDEN, Andy <<http://orcid.org/0000-0002-5706-5978>> and FISHER, T.

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# The Significant Other

## The value of jewellery within the conception, design and experience of body focused digital devices

**Jayne Wallace**

**Art and Design  
Research Centre,  
Sheffield Hallam  
University, Sheffield,  
S11 8UZ UK**

**[jaynewallace@hotmail.com](mailto:jaynewallace@hotmail.com)**

**Andy Dearden**

**Communication &  
Computing Research  
Centre, Sheffield  
Hallam University,  
Sheffield S1 1WB, UK**

**[a.m.dearden@shu.ac.uk](mailto:a.m.dearden@shu.ac.uk)**

**Tom Fisher**

**Art and Design  
Research Centre,  
Sheffield Hallam  
University, Sheffield,  
S11 8UZ UK**

**[th.fisher@shu.ac.uk](mailto:th.fisher@shu.ac.uk)**

### Abstract

In this paper, we demonstrate how craft practice in contemporary jewellery opens up conceptions of 'digital jewellery' to possibilities beyond merely embedding pre-existing behaviours of digital systems in objects, which follow shallow interpretations of jewellery. We argue that a design approach that understands jewellery only in terms of location on the body is likely to lead to a world of 'gadgets', rather than anything that deserves the moniker 'jewellery'. In contrast, by adopting a craft approach, we demonstrate that the space of digital jewellery can include objects where the digital functionality is integrated as one facet of an object that can be personally meaningful for the holder or wearer.

Keywords: jewellery, digital jewellery, craft practice, hybrid research, personal significance.

### Introduction

In everyday parlance, the term jewellery is used to refer to specific objects located on the body, often at a set of archetypal locations (e.g. rings, brooches, earrings, necklaces etc.). This interpretation of jewellery may lead to conceptions of 'digital jewellery' that focus on embedding the behaviour, services and functions of existing digital devices in objects to be worn in these pre-defined ways. Descriptions of work from the digital jewellery project at IBM's Almaden research centre typify this conception:

"The thinking behind digital jewellery is that as you push more functionality into pervasive devices, they are getting harder to use: smaller screens, tiny inputs, or just trying to talk and input at the same time; all these become a challenge. By taking the interface apart, putting it in the appropriate places, and allowing them to communicate wirelessly, IBM thinks it has a practical way to solve the problem. So we have a microphone on a pin or necklace, an earpiece on an earring or ear cuff, and a ring with a track point. There's a bracelet with text entry or dialling capability as well, or it might even have a small display." [Schwartz]

"If you have something with you all the time, you might as well be able to wear it."  
[Cameron Miner as quoted by Schwartz]

Whilst this approach may enable us to talk with each other, the motivations neglect any deeper notions of human communication. This is in stark contrast to our relationships with other objects to which we attach strong personal, emotional or interpersonal value.

## Contemporary Jewellery Practice

Contemporary Jewellery is a rich craft discipline that seeks to extend concepts of jewellery by embracing new, and reinterpreting old, materials, processes and perspectives, whilst challenging preconceptions of jewellery and its role in society.

In the 1960s 'New Jewellery' movement makers such as Emmy Van Leersum and Gijs Bakker went far to establish the basis of how we perceive the breadth of the potential role of contemporary jewellery today. They protested against the use of expensive materials, limited translation of the meanings jewellery could represent, conservatism of form and placement on or relationship to the body. (Fig.1)

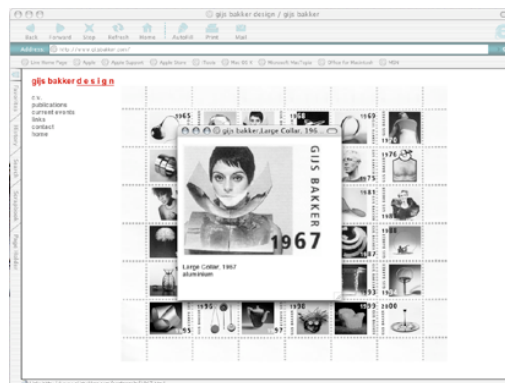


Fig.1. Gijs Bakker 1967 'Large Collar' Aluminium. From <http://www.gijsbakker.com>

Since the early work of the 'New Jewellery' movement, jewellers have explored the potential and advanced the boundaries of our relationships with objects related to the body. Within the strand of 'Conceptual Jewellery' objects have been used to provoke and stimulate reactions from wearers and viewers. Otto Künzli's 'gold makes blind' (Fig.2) operates in this way.



Fig.2 Otto Künzli 1980 'Gold Makes Blind' Armband. Rubber, gold.  
Image courtesy of private collector.

The piece consists of a black rubber armband completely concealing a gold ball. As viewers we must consider whether we believe there is a gold ball within the piece; if so, do we perceive the piece to be of greater value even though the gold is hidden? The piece also invites us to consider the way gold bullion is stored in underground vaults, protecting the world economy and reflect on the importance of South Africa in gold production (where apartheid was still in operation), and question our willingness to use the products of such regimes.

Whilst jewellery has departed from the notion of value based on, amongst other things, the rarity of the materials used, many pieces of contemporary jewellery reflect a concern with preciousness. The fact that jewellery relates to the body or is worn close to the body, within the wearer's personal space, gives it a particular intimacy that may be absent from other objects or devices that we encounter.

There is a further reflection of intimacy created through the relational qualities of jewellery pieces where the maker handles personally significant subject matter. Work by Iris Eichenberg, Hiroko Ozeki and Lin Cheung all raise issues of personal preciousness and meaning.

Eichenberg's work (Fig.3) consists of small objects seeming to draw from memories and childhood, telling fragments of stories.



Fig.3 Iris Eichenberg 1998. Brooch. Wool, silver.  
Image courtesy of Rob Koudijs, Galerie Louise Smit, Amsterdam.  
Photographer Ron Zijlstra.

For Eichenberg the elements of preciousness connect to and extend from the memories she works with and the connotations they bring to her work.

Hiroko Ozeki and Lin Cheung (Figs 4 & 5) have both used specific events from their own lives in their jewellery dealing with their feelings of loss and as a way to express this, the resulting pieces offer something beautiful and poetic from their experiences.

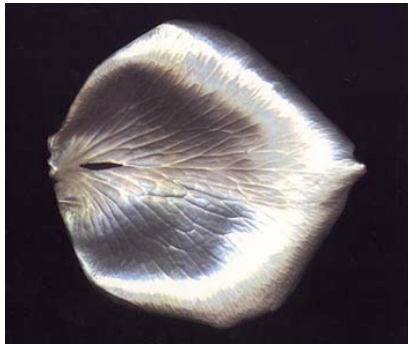


Fig.4 Hiroko Ozeki 2001 'Tear Collector'  
Silver  
Image courtesy of the artist



Fig.5 Lin Cheung 1999 'Memoria' Neck  
hoop. Silver, gold.  
Image courtesy of Galerie Marzee,  
Netherlands. Photographer Michiel Heffels

Ozeki's 'Tear Collector' is a silver cupped rose petal made following the death of her Father. Cheung's piece titled 'Memoria' is a neck hoop of which she says

"In memory of my Mother. Whilst sorting through her belongings, I came across several ear scrolls that did not belong to an earring. After putting her affairs in order, I gave the lost scrolls a meaning once more in the form of new jewellery." [Marzee 2001 p.25]

These pieces are intended to evoke strong emotional responses from those who encounter them. These designers are not merely designing a form; they are seeking to design an environment for a rich experience for an audience. For a detailed discussion of these pieces and the practice of contemporary jewellery, see Wallace & Dearden, 2005.

Contemporary Jewellery is not about high street fashion & accessories. It moves focus away from location on the body to question our relationships to objects, the body, our environment and each other. In extension Contemporary Jewellery develops a discourse about relationships: between self and object, individuals and groups, maker, audience and practice. In what follows, we describe how contemporary jewellery practice has been applied to question and to expand notions of 'digital jewellery'.

## Creating digital jewellery

Our analysis of craft, jewellery and digital technologies arises from a doctoral research investigation, conducted by the principal author, exploring the integration of digital technologies within contemporary jewellery objects. Within this research one aim is to

learn elements of what is personally significant to someone and to echo fragments of this back in the form of digital jewellery. The aim is not to translate existing modes of communication, such as mobile phones, into digital jewellery, but to create objects which echo those types of communication that are significant to people in a far less prescribed way.

The pieces are meant as objects for the specific individuals involved in the research, not as prototypes for mass manufacture, and is an approach that echoes a tradition within craft and jewellery practice. The pieces pose a polemic for the design of digital jewellery: what this new category of object can potentially be and how it can be an extension of contemporary jewellery rather than of current digital devices or gadgets.

Within the research six individuals shared stories, memories and reflections of their lives through a set of 'stimuli', which draw influence from 'Cultural/Domestic Probes' (Gaver 2001) and jewellery project 'KPZ-02' (Bartels and Lindmark-Vrijmann, 2002).

The set of object based 'stimuli' involve action, play and reflection to ask questions, tell stories and create images to gain insight and information of experiences, interactions, relationships, events and memories etc. which, for each individual, are important and valued. The stimuli are related to the themes of:

- personal ideas of preciousness, significance and symbolism
- the meanings and roles attached to each person's ideas of jewellery, in practical, evocative and emotional terms
- communication, both interpersonal and concepts of existing and future modes
- positive memories, aspirations and goals
- transience and permanence

Within the researcher's practice jewellery has often played the role of objects that stimulate a discussion or act as a focal point within a relationship. The use of objects as mediators in the collection of inspirational data about each participant is therefore a continuation of the way jewellery often functions within the researcher's practice.

The digital jewellery pieces result from an interpretation of these shared fragments. The process does not instruct an audience what they should want or need, nor is the individual dictating to the maker what to make, but through a conversation of perspectives found through the iterative process an empathic, intuitive idea arises. One key importance of the process is an openness, which allows the audience to interact as individuals, adding their own interpretations within the interaction. From the six response packs, three were selected for development as digital jewellery pieces.

Each of the three pieces produced consist of a crafted jewellery object together with a DVD to illustrate the digital potential of the piece.

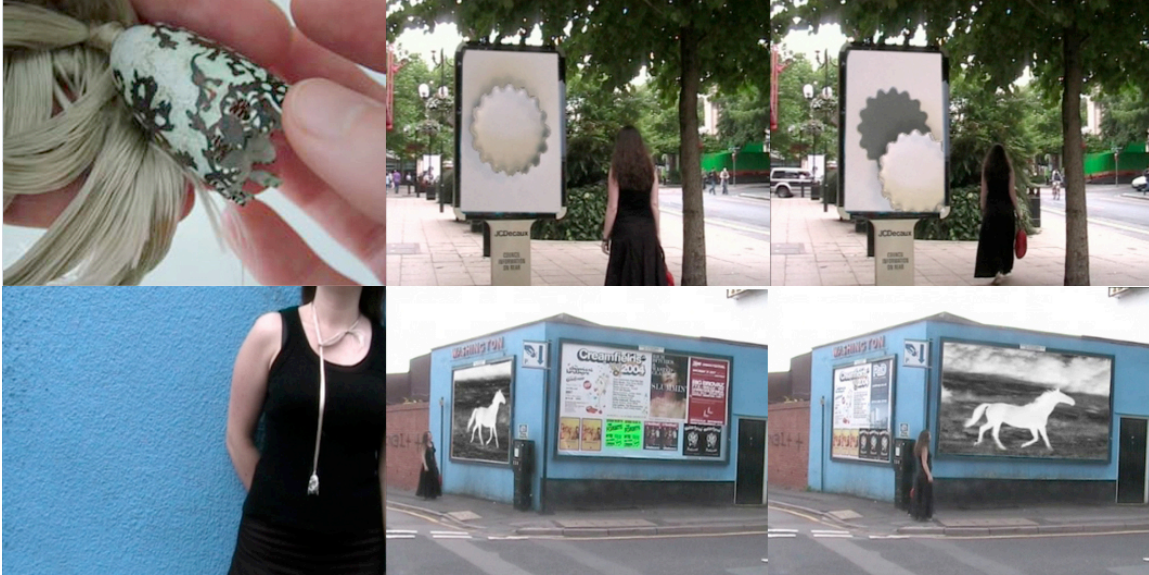


Fig.6 Jayne Wallace 2004 'Sometimes'

"Sometimes..." (Fig.6) is a necklace, made from enamelled, etched copper and synthetic silk. The form and digital potential of the piece refer to objects, memories, human connections and experiences, which are described as meaningful by the participant.

The piece is made to contribute to the potential of our interactions with jewellery objects and our wider environments. The traditional notion of a necklace is used as a backdrop for a jewellery object, which refers in part to traditional methods and materials of production. The digital potential of the jewellery is to trigger a small number of silent filmic image sequences, of personal significance to this particular wearer, on digital displays in the near radius to the necklace. The digital potential is future focused, where these sequences could occur on digital screens and displays in a personal or public environment. The digital occurrences are not intended to be frequent; they will only happen rarely and in randomised succession.

The object is proposed as a memory trigger to the experiences it reflects and also as a literal digital trigger to occasional 'digital visits' in the locality of the object. The quietness of both the jewellery piece and these interactions mean that the hustle and bustle of a location are not altered, only the imagery draws attention to the event, indeed the 'digital visit' may be missed entirely or glimpsed as it fades.

The imagery will have a particular meaning for the wearer, but is not identifiable to others as belonging to the wearer. The films of a white horse in marshland and a pastry cutter making indentations in pastry are sufficiently ambiguous to open up interactions for other people who see them.

The necklace has an ambiguity of function, there are no buttons, no obvious ways of controlling the digital aspects of the piece and in extension to this the necklace remains visually dormant, using other digital devices and displays as vessels for the visual interactions.



Fig.7 Jayne Wallace 2004 'Traces'

“Traces’ (Fig.7), made for one of the participants; a jeweller who doesn’t wear jewellery, is about a discussion around jewellery and how it often functions as objects we don’t wear, but that hold strong attachments for us, something to pass on from generation to generation. The piece is made from a porcelain pearl, a series of porcelain clasps and a piece of velvet resembling the inside of a traditional necklace case, showing the contours, folds and hinges as etched lines on the surface of the fabric.

Traditional connotations of antique and conventional jewellery are used as a setting to capture fragments of sound or specifically speech, echoing how heirloom objects capture aspects of their owners through the marks or wear and tear embedded within the object. This piece reflects characteristics of the person it was made for in that it is driven by their input; it is something for them to fill with recordings relevant to them.

The digital potential of all of the jewellery pieces in general is not driven by using emergent technologies, or by newness in these terms. Here the digital concept refers to sound recording technologies that are not new. The aim is to propose pieces with digital concepts that are sensitive to and appropriate for the sensibilities shared by the participants through the project.

The separate components of the piece act together to make a recording possible. When the pearl is placed on the velvet the piece is turned ‘on’. Then by placing a fresh clasp on the velvet the piece begins to ‘record’. As speech or other sound is recorded it is registered by or associated to that particular clasp. When the clasp is removed from the velvet the ‘recording’ is completed. If or when the same clasp is replaced on the velvet at any future point the piece ‘plays’ the recording associated with that clasp.

Unlike most recording devices each clasp can only be used in a recording once and cannot be re-recorded or amended. The concept is about capturing speech or sound rather than recording pre-planned perfect messages. The objects act as blanks onto which to catch something fleeting.





Fig.8 Jayne Wallace 2004 'Blossom'

"Blossom" (Fig.8) is a hand held piece, made from wood, glass, silver and vintage postage stamps. The form and digital potential of the piece refer to the participant's shared love of nature, precious relationships with her Grandmothers, connections to family and family land in Cyprus.

The piece is an unconventional form of jewellery in terms of mainstream traditional associations and limitations of jewellery objects, but one, which sits within contemporary and conceptual jewellery traditions. The piece is not meant to be worn in a traditional sense, but is made to sit comfortably within the cupped hand, to be held.

It is made to act essentially as a connection to human relationships and to place, a feature resembling the status of much jewellery traditional or otherwise; a feature the digital aspect of the piece may strengthen and extend.

The jewellery object, residing with the participant in London, is connected to a rain sensor, planted on the participant's family land in Cyprus. Inside the glass dome of the jewellery piece the old Cypriot postage stamps are closed like the petals of a flower, attached to a mechanism, waiting to receive a signal sent initially from the rain sensor. Once the rain sensor has registered a predetermined quantity of rain in Cyprus, which may take months or even years a signal is sent to the jewellery object and the mechanism is activated, slowly opening the petals like a flower blossoming. The piece sustains the flower metaphor further by blossoming only once.

The object acts as a memory trigger through its form and materials to past relationships experienced by the participant and as a connection to a specific place as the events of nature in one geographical location influence the internal physical form of the jewellery object in another. Again the form and digital potential of the piece are sufficiently ambiguous to allow a personal interpretation and interaction for other people who see it.

The jewellery piece involves a passive interaction and an ambiguity of function. The piece relates to time, and preciousness. It offers a way of viewing objects with digital

capabilities in an atypical way, one that echoes and values the fleeting quality of many of our experiences and the lasting quality of many of our feelings for other people. It uses digital technologies as a way to harness the ephemeral characteristics of a flower blossoming, rather than for the more common uses of digital technologies of repeatability and immediacy.

## Responses to 'digital jewellery'

The participants lived with the pieces and films for a period of approximately one month during which they reflected on their interpretations and appropriations of them through a response journal and disposable camera and finally through an interview and discussion session. Their responses were multilayered and complex and only the briefest examples of these are possible here. There were shifts in each person's perceptions to the pieces, but each individual expressed a perceived resonance and attachment to them, creating their own interpretations and appropriating or subverting the pieces to fit with them:

Faith (fictional name) commenting on 'Sometimes...'

"...it's a bit like picking up shells on the beach or stones that have a resonance in the way they look, sort of it's these things of you know these bizarre and peculiar objects that I mean I can imagine sort of having all these in a little box (laughs) and just like you know as an art piece if you like this thing of them being sort of little strange and unexplained objects bit like a Louise Bourgeois type sculpture where there's something that resonates with you but you don't really know why and they sort of have echoes of other things that you've come across..."

Ana (fictional name) commenting on 'Blossom'

"... when it blossomed, it kind of upset me that it was only the once, and I thought 'oh my god' (laughs) um, but I kind of, if it wasn't only once then that would defeat the object... for me anyway..."

"I just thought it was very poignant... life affirming in that it was about the sort of preciousness of life for me and that you only live it once..."

"I suppose its purpose to me is that it reminds you of the smaller things in life... it could help you to just take stock and stop and look at things..."

"...although it blossoms only once... if your family aren't all together that they've got time to come together and it could be to get people together for a meal, but it's like a little indicator to say come on everybody come over"

Emma (fictional name) commenting on 'Traces'

"...what's also really quite nice about them, that is the similarity but difference between all of the pieces... taking this as a family you know thing, a way of recording people and then being able to play them back and being able to pass that on... you might not know who you were about to listen to it would be really interesting in the

same way that you go through a photo album and you point out to people 'ooh that's your great aunt such and such' you could take one of these put it down and hear her voice er and somebody in the room would know who it was and other people might not and that would be really quite interesting and you might start to kind of, because they're slightly different, you might start to connect certain ones and you would vaguely know who you were getting with each one but not necessarily"

"they're more like document, it's like a documentary process...recording the real kind of reality of things"

"there is something there even if I can't see it that helps me connect with them and maybe it's one of those things and particular to the fact that I'm a jeweller in that I couldn't ever see myself wearing them as pieces of jewellery, but I can completely see myself as using them as something else...and them being part of me... I could have completely have imagined buying them, so there's definitely a way in which these have been made for me even though I can't quite see directly how..."

"... I don't want to give them back to you (laughs) and I know I have to... well you know obviously, it's fine, but I suppose the longer I've had them the more I feel like they're mine... So when you've had enough of them, then you can send them back if you want to (laughs)"

The pieces remained part of the iterative process of the research project and acted again as stimuli to unearth and develop opinion and feeling towards the idea, possibilities and relevance of digital jewellery, revealing aspects of the pieces that could be developed further.

## Conclusion

Combining existing computing and communications functionality into wearable objects and adornments risks closing down the category of digital jewellery in a way that reduces jewellery to the status of mere gadgets; objects to be consumed, used for a short period of time, then discarded as trash. The relationship with objects we propose is more about longevity and lasting personal attachment. As Pye reminds us: "Ruskin said 'If we build, let us think that we build forever'. Shall we say 'If we build, let us remember to build for the scrapheap'?" (Pye, 1968). Craft, while it is rooted in the making of physical objects, provides the conceptual and empathetic means of addressing a far broader range of experiential issues that extend the relevance and value of emerging technologies and the practice of contemporary jewellery challenges us to create objects that will be valued by their owners as jewels in their own right.

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