Abstract:
Inspired by the possibilities of fiction, digital poetry and experimental digital art, *All the Delicate Duplicates* tells a complex psychological story through a combination of digital literature and experimental game formats. Developed by digital artists/writers rather than traditional game developers, *All the Delicate Duplicates* attempts to expand storytelling within games by including 3D elements spanning multiple time periods and incorporating animated and transitional texts, thus leaving the story wide open to multiple revisits and interpretations. The poetic, digitally born language called ‘Mezangelle’ forms a central part of *All the Delicate Duplicates*. Mezangelle involves constructing poetic phrases to extend and enhance meaning beyond the expected. As Mezangelle remixes the basic structure of English and code to create language where meanings are nested, players need to read, re-read, then re-read again in order to piece together a narrative. This article traces how *All the Delicate Duplicates* was initially conceived, the commission parameters of the project, the use of Mezangelle as a project story component, and overall reception.

Biographical note:
For over two decades, Mez Breeze’s award winning digital fictions have been influential in shaping interactive genres, Extended Reality (Augmented Reality, Virtual Reality, and Mixed Reality), electronic literature, and digital fiction. #PRISOM, her anti–surveillance Augmented Reality game co–created with Andy Campbell is ‘…the digital equivalent of Orwell's 1984’ according to academic James O’Sullivan. Mez’s Mixed Reality projects, games, and code poetry reside in Collections as diverse as The World Bank, Cornell’s Rose Goldsen Archive at Cornell University, and the National Library of Australia. Duke University have also invited Mez to develop a career archive to be held at the David M. Rubenstein Rare Book & Manuscript Library. Mez is currently a Co–producer, Creative Director and Author of the Inanimate Alice: Perpetual Nomads Virtual Reality Adventure. She is a Senior Research Affiliate with The Humanities and Critical Code Studies Lab and an advisor to The Mixed Augmented Reality Art Research Organisation.

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Creative Writing – Creative practice – Narrative games – Digital literature
Collaborative origins

In February 2014, I sent an email to my long–time creative collaborator, Andy Campbell, which outlined a potential new project to be based on a recurring dream I’d been experiencing at that time. The project, suggested as a collaborative project between myself and Campbell, was tentatively entitled [T]His BitRot Chest. This article centres on a work Campbell suggested in an immediate reply email on which we might instead collaborate, a project which (at that time) was entitled Pluto and that would later be re-titled All the Delicate Duplicates. Campbell described the potential focus of the project with this intriguing premise:

The concept is based on the idea that consciousness shifts into another universe after death…The landscape is huge around you, but also very flat, with barely anything to see – minimal but also oddly beautiful…Across the landscape there are very strange objects to be found…each item is accompanied by language, which is not English and yet kind of makes sense… (Campbell 2014)¹.

In light of my and Campbell’s collaboration history, and building on my two-decade development of a networked poetic language system termed Mezangelle, we subsequently agreed to move the project forward.

The digitally born Mezangelle forms parts of the texts encountered in All the Delicate Duplicates. Mezangelle involves the creation of sentences and phrases designed to disrupt traditional poetic construction. It remixes the basic structure of English and computer programming code to create nested words and sentences. This article references how Mezangelle became a crucial textual component of this experimental game and backstory couched within a digital literature format.

Commission parameters

Having decided to advance the project beyond a conceptual mapping stage, the next major step in developing All the Delicate Duplicates was one concerning financial backing: what would be the best route to procure fiscal backing for the project, a project caught between the seemingly disparate disciplines of video gaming and digital literature?

After several futile attempts at procuring a funding source that would suit the overall orientation of a hybrid work comprised of a narrative game and experimental digital fiction, in November 2014 I decided to submit an application for an Open Call Commission with a UK based organisation called ‘The Space’:

Set up by the BBC and Arts Council England, The Space is a commissioner of art that employs technology to push the boundaries of creative expression. Supporting new talent and great artists from all art forms, creative industries, technical and digital backgrounds, through regular Open Calls, commissions and partnerships. The Space will showcase commissions of artists who employ new and existing technologies in their work and help nurture and develop projects on the cutting edge of the digital arts (Open Data Institute 2014)².
As these stated aims intersected well with our intention to create a work that would straddle a traditional gaming space and literary format, in March 2015, on being informed that *All the Delicate Duplicates* was successful in being awarded the Open Call Commission, we began progressing project development by securing the involvement of audio creator Chris Joseph. The original brief, which was drafted as part of the primary Commission parameters, is important in illustrating the original scope of the project (such as key features and audience involvement):

![Key features](image)

**Figure 1:** Still 1 from the Initial Commission Brief Provided to ‘The Space’ 2015

Interestingly, this original project brief initially included a Virtual Reality component which was – much to my and Campbell’s disappointment – eventually deemed too expensive to fund but is still to be realised pending additional financial support. The brief also included our primary project aim: to create a compelling narrative told through digital platforms, including an immersive 3D game world. Originally conceived as a transmedia project that would span multiple platforms including a video gaming space, social media platforms, an app, a Virtual Reality experience, and a web-based backstory, the final *All the Delicate Duplicates* format focused instead on the game world in tandem with a web-based backstory.

Our enthusiasm for developing *All the Delicate Duplicates* increased noticeably when, in March 2015, we were informed that Tumblr, the popular social media platform, had awarded the project an International Digital Media and Arts Prize. This award marked the beginning of an intense research, production and development cycle that culminated in the project’s commercial release in February 2017 on the Steam gaming platform.
Narrative housing

Told across a time period of 19 years, *All the Delicate Duplicates* is a work that takes place in a story world where reality is subject to continuous fluctuations against a backdrop of rapidly changing technology. The backstory centres on single parent, John, a computer engineer who inherits a collection of weird objects from his enigmatic relative named Mo. When exploring this backstory, it’s revealed that Mo has bequeathed these odd objects to John and his daughter, Charlotte. Over time, John and Charlotte begin to realise that the objects have unusual physical properties and that the more they are exposed to these objects, the more their realities and memories appear to change. Through a game world constructed using the game engine Unity, and the web-based backstory, *All the Delicate Duplicates* attempts to construct a story world where perceptions stretch beyond the phenomenological ‘real’.

![Image of the game world](https://example.com/game_world_image)

*Figure 2: All the Delicate Duplicates* Game World Image: Mezangelle Tree

*All the Delicate Duplicates* explores concepts centred on cloning, duplication, and symbolism related to multiplicity and identity. These concepts manifest particularly in cutscenes which portray a domestic setting and that seek to induce in a player a sense of (false) normalcy. Players are compelled to repeatedly traverse four time zones in order to progress through the game component. These repetitions illustrate the mundanity of the everyday, and we strove to establish this sense of the ‘everyday normal’ early in the game by crafting a house filled with the detritus of the domestic – children’s drawing pinned to corkboards, out of date calendars scrawled with dates for events and obligations, kitchen bins bulging with rubbish. As *All the Delicate Duplicates* progresses, this sense of the everyday normal proceeds to progressively degrade as the story unfurls. The resulting combination of themes examining domestic pressures, quantum theories, and traumatic psychological states acts to create an increasing surreal and nonlinear narrative.

John’s perception and retelling of events (including his complex relationship with his family members) form the story core. The character of Mo operates as an emblematic crux, while John and his troubled relationship with Charlotte operates as a key backdrop.
which foregrounds the eventual revelation of the truth surrounding Mo’s identity and her time shifting through kaleidoscopic multiverses.

In each time zone, a player encounters different story fragments (Mezangelled and otherwise), interactive objects, and cutscenes with which a player can engage. Each time zone in the house shows a snapshot of how John and his daughter Charlotte are living in that particular year (their preoccupations, their state of mind as gleaned from encountered objects including calendars, books, mobile devices, interior decorations), but the characters themselves (nearly) never appear, with their presences instead being implied.

Collaborative precedents

*All the Delicate Duplicates* continues a suite of works previously developed by myself and Campbell. Mezangelle forms a core aspect of each of these projects, specifically the following:

- *The Dead Tower* is a project based in a 3D game environment comprised of an explorable landscape that is littered with 3D objects and Mezangelled texts. A player must piece together these texts in order to form a narrative while navigating their way towards a looming abandoned tower (Johnson 2015). In terms of creating the Mezangelled components, I worked to develop specific criteria (including particular sentence placement and text colour, brightness and size) to ensure aspects of the floating text wouldn’t overwhelm the atmosphere of the 3D space, a technique that we would also employ when constructing the Mezangelled splines found in *All the Delicate Duplicates*. 

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Figure 3: *All the Delicate Duplicates* Game World Image Showing Charlotte’s Room
#PRISOM is an Augmented Reality game with social commentary at its core, with issues related to privacy, surveillance, and the underlying ethical associations of civil liberty encroachment being explored throughout. The project manifests in a 3D space that mimics the First-Person Shooter genre, but which does not allow a player to typically engage within the space as in a standard First-Person Shooter, such as controlling game progression through the use of weapons, health packs, and levelling (Aardse 2016). #PRISOM premièred at, and was commissioned by, the 2013 International Symposium on Mixed and Augmented Reality, in conjunction with the University of South Australia University's Wearable Computer Lab and the Royal Institution of Australia. When creating the Mezangelle scripts for the #PRISOM Drones, my main influence was creeping global surveillance and the increasing monitoring of individual’s private data/lives – a theme that would influence All the Delicate Duplicates in regards to how mobile phone technology has become increasingly pervasive.

#Carnivast is a code poetry application created with Mezangelle. It contains synthetic (or virtual) environments crafted from Mezangelled texts which are housed in individual 3D Segments. Segments 1.1 to 1.3 encourage a user to piece together meaning by navigating through text blocks scaled to a massive size, and by manually manipulating text areas where reading is actually a secondary consideration. Such spatial construction techniques in #Carnivast helped guide the aesthetic directions of the Mezangelle snippets used in All the Delicate Duplicates.
Having successfully developed methods for dealing with the constraints and challenges presented in developing *The Dead Tower*, #PRISOM, and #Carnivast, such practices proved instrumental in shaping my and Campbell’s unique approach to text and landscape construction in *All the Delicate Duplicates*, including expanded Mezangelle deployment.

**Mezangelle manifestations**

*All the Delicate Duplicates* unfolds through a combination of an immersive 3D game world and backstory that both delicately tread – and blur – the line of fantasy and scientific realism. It does so by crafting a non-linear narrative that combines a mix of fantastical visual, audio, and text–based elements, the latter of which is created in part via Mezangelle.

The origins of Mezangelle can be traced back to 1993 when I was first exposed to the work of VNS Matrix, an art group who:

…was a cyberfeminist media art collective formed in Adelaide (South Australia) in 1991 (VNS Matrix 2017).

At the time, I had started using computer technology in my creative practice, and this all-female Australian based cyberfeminist collective thoroughly intrigued me with their mix of anarchofeminism, text/image merging and virtual engagement. In 1993, when creating mixed media installations involving painting, computer text and computer hardware, I also began to explore notions of networked and performative identity-play after being inspired by VNS Matrix. I first delved into the Internet in 1994 by using Telnet/Unix to create interactive texts, and Mezangelle had its roots here, initially evolving from immersion in email exchanges, computer programming languages and online chat software such as Y-Talk, Webchat, and IRC.

Mezangelle is highly conceptual and fuses English language conventions, image and text, programming code, social commentary, and online communiqué. My gradual integration of Mezangelle into more expansive projects such as the complex 3D/Virtual Reality Game environments (like collaborations outlined previously) were preceded by Twitter based Fiction projects #OutsideUrDoor, and feralC, a netprov/’socumentary’ or social media mockumentary (Marino & Wittig 2015).

Mezangelle seeks to question binary systems that influence the formation of meaning, of comprehension. Mezangelle, through a reliance on making meaning a multifractured affair, systematically obfuscates binaries aligned with gender, race, sex, age and associated variables. Accordingly, works created in Mezangelle are designed to establish meaning via an individual’s own subjective meaning framework. There is no ‘wrong’ way to interpret Mezangelle: many people perceive only the evident poetic underpinnings, whereas some instead focus on the programming elements.

A detailed analysis of a typical Mezangelle work comes from theorist Florian Cramer, who gives here his interpretation of the work _Viro.Logic Condition[ing][ 1.1_ :

What seems like an unreadable mess at first, turns out to be subtle and dense if you read closer. The whole text borrows from conventions of
As the four readings of the title tell already, this particular text is about humans and machines and about a sickness condition of both. The square bracket technique is used to keep the attributions ambiguous. For example, the two words in the line 

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::Art.hro][b:otic][scopic
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can be read as “arthroscopic” / “art robotic” / “Arthrobotic” / “horoscopic” and “Nintendos” / “intentions” or “DOS”. So the machine becomes arthritic, sick with human disease, and the human body becomes infected with a computer virus; in the end, they recover by “code syrup & brooding symbols”. So mez has taken ASCII Art, as we can see it in the exhibition above, and Net.art code spamming and refined it from pure visual patterns into a rich semantical private language. She calls it Mezangelle which itself is a mez hybrid for her own name and the word “to mangle”… it’s also a sophisticated reflection of cultural concepts of software which rereads the coding conventions of computer programming languages as semantical language charged with gendered politics. It’s imaginary software which executes in the minds of computer–literate human readers, not unlike the Turing Machine which was an imaginary piece of hardware (Cramer 2002).

In Mezangelle-constructed works, determination of meaning depends on an acknowledgment that there is never one level of interpretation, or definitely correct (or indeed incorrect) options. Mezangelle rarely, if ever, promotes singular definitive meanings or their formulation pathways, and this is illustrated perfectly in the methods used to construct the backstory components of All the Delicate Duplicates. When a reader attempts to select a monotone image in the backstory in order to read a particular section, the image instead switches to a colourised version, complete with a title. The selected backstory snippet now materialises into text. When clicked, each of these backstory snippets unfold to a single screen containing a segment of the story. These snippets are designed to be accessed randomly, in a non-linear fashion. On each story snippet screen, a reader has the option to order the story as they wish by clicking on the text bar that says: “ALL :::: JOHN :::: CHARLOTTE :::: MO”. Clicking on each of these names orders the narrative snippets according to that specific character’s point of view in the story.

There are also several options that can be selected to enhance the structure and format of the All the Delicate Duplicates backstory. These options are accessible under the ‘Settings’ Menu located in the top left of the screen. As each narrative snippet also contains optional text transitions such as additional fade-ins and fade-outs, text
rearrangements, and word vanishings and/or materialisings, readers may choose to turn these on or off, as well as enabling or disabling a ‘High Contrast’ setting that makes the text brighter, and having the option to also increase text size.

The challenge of integrating an experimental language like Mezangelle into *All the Delicate Duplicates*, a project so conceptually (and structurally) dense, was made apparent from the project’s planning stages. In order to adequately integrate Mezangelle in both the game world and the backstory, Campbell and I developed a process that involved constant rewriting and editing in order to parallel the thematic tensions created in the narrative structure itself, primarily in the ‘Back[and Forth]Story’ (or backstory). This rewriting occurred in a bespoke Content Management System which catered for concurrent editing of the backstory components, including the story texts, associated images, and the transition effects. This method of concurrent editing helped streamline the complex process of having two primary authors working on the project, as well as allowing ease of tracking edits.

**Reception**

After multiple iterations and extensive Beta testing, *All the Delicate Duplicates* was released to the wider public via the gaming publishing platform Steam in February 2017, precisely three years to the month after conception (although earlier demo builds of the work had been previously showcased).
All the Delicate Duplicates has an extensive exhibition history and has garnered a significant number of awards, including being awarded the Best Experimental Game Prize at the 2017 Game Design Awards, and the Best Overall Game at the 2016 Game City Festival.

From the outset, All the Delicate Duplicates was conceived as a work that would challenge traditional boundaries and definitions relevant to gaming and digital literature (Heckman & O’Sullivan 2017). As creators, Campbell and I were (and are) aware that it would indeed be a challenge to bridge the somewhat disparate audience sectors we were aiming to reach (a mainstream entertainment audience coupled with niche digital literature fans). This challenge is reflected in All the Delicate Duplicates overall reception, with audiences from the Digital and Electronic Literature spheres being fairly uniform in their praise for the work, whereas the gaming sector had more varied feedback:

Exquisitely produced immersive atmosphere, environment, tone, and narrative. It is an excellent example of how the poetic line is still one of the best ways to deploy language in digital environments. (Unspecified Electronic Literature Judging Panel Member 2017)

The writing is beautiful and evocative. The visuals are rich and immersive. Use of ‘physical’ text particularly engaging, whether forming objects, sculptures, or streaming across the landscape. (Unspecified Electronic Literature Judging Panel Member 2017)

Luminaries of [short interactive fictions] include Journey and Limbo and Firewatch, and it’s safe to count All the Delicate Duplicates amongst such company... All The Delicate Duplicates is refreshing simply because it works the brain in ways that few other games even bother to try. It’s certainly a game that sticks with you. (Gardner 2017)
Few games leave me speechless, but that’s exactly what happened when I finished *All the Delicate Duplicates*…This is incredibly effective storytelling that will stick with you long after the credits roll, and may end up being one of my favorite gaming experiences of the year. (Lachel 2017)

I rarely ever play a game twice, especially campaigns or story–driven games…However *All the Delicate Duplicates* wants to smash that…And while your first time might be quick, second time around you’ll likely take your time and soak in what the game has to offer. *All the Delicate Duplicates* has certainly left a mark. I’ve thoroughly enjoyed my time with a game that I could see kick start a new form of storytelling. (Richardson 2017)

This game is super–bizarre. I love everything about it, I just don’t know what’s happening…Shout out to the BBC for funding [it]. This game is the perfect F–U–up game. I’ll simply say you should play this. (Cox & Rosen 2017)

Campbell and I are confident that our joint intention when developing *All the Delicate Duplicates* – one defined by the use of game engine technology (Unity) to create a memorable work of digital literature that would potentially appeal to gamers as well as readers, and bring our experience of creating digital narratives/experimental art to new audiences – was met, and met well. Hopefully this act of documenting the evolution, development, and reception of such a hybrid project may act to assist similar future digital storytelling experiments.

**Endnotes**

1. This paper makes multiple reference to private/unpublished email correspondence between the two primary creators of *All the Delicate Duplicates*.

2. As presented via this Vimeo video hosted by the Open Data Institute.
Works cited


Heckman, D & O’Sullivan 2016 ‘Electronic Literature: Contexts and Poetics’ *Literary Studies in the Digital Age: An Evolving Anthology* MLA Commons


VNS Matrix Arts Collective Website, at https://vnsmatrix.net/about (accessed October 19th)