

# **The Library of Babble**

by Demi Schänzel

2020

An exegesis submitted to the Auckland University of Technology  
in partial fulfilment of the requirements for the degree of  
Master in English and New Media Studies

# Abstract

The *Library Of Babble* is a microcosmic social network, a practice-based endeavour designed through the use of the Self-determination theory, the Needs-Affordances-Features theory and the Values at Play methodology to imbue a collective sense of intimacy within its digital ecosystem. The ambitions of this project include critically engaging with emerging academic literature on the contemporary state of commercial social networks, and attempting to divine an alternative vision for digital communication through the use of explicit value-based frameworks. Developed over the course of eight months, the practice-based submission represents a critical perspective on the intersection of academic theory and theoretical modalities of interactive play, with the written submission acting as a testament to the grounding principles used throughout its development process.

On booting up the Library of Babble, you're not asked for any form of identity-clarification or guided through the construction of a digital identity. You're simply greeted with a small simple message ("Love is one of the most important things on this planet" - anonymous) buried into the side of some abstracted geography, with no indication of authorship or immediate interaction. Besides the small psychedelic realm before you, the interface remains minimalist and almost brutalist in its absence of features, including only a few coordinates and a single mysterious compass. Using your keyboard to maneuver about you'll eventually discover other messages, each as anonymous and disconnected as the last. Simple testaments that others who have wandered through this space have felt inclined to leave behind. Stories and fragmented sentences which in combination with one another begin to express an intimate sense of humane reassurance and compassion, creating a space to feel safely open and explore one's true self within.

The Library of Babble can be downloaded from itch.io (download key below), and is available to play for MacOS and Windows desktop systems. Although it is recommended the software be launched directly from within the itch.io app, it can also be launched independently by tapping on the executable file (Library Of Babble.exe).

[https://idlemurmurs.itch.io/babble/download/ERzN\\_w\\_GotvFzdfftg\\_ARck71kqFT8W9row3\\_Qem](https://idlemurmurs.itch.io/babble/download/ERzN_w_GotvFzdfftg_ARck71kqFT8W9row3_Qem)

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I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

A handwritten signature in black ink, appearing to be 'Jm.' with a stylized flourish.

March 9th, 2020

# Acknowledgements

This research would not have been possible without my supervisor, Tof Eklund, who kindly guided the binding principles of my theory, and consistently allowed for the opportunity to explore alternative perspectives throughout the practice-based process. Tof was an invaluable editor during all aspects of this thesis, reading through the written supplement as it grew, and offering innumerable support during the long nights of development. Constantly questioning base assumptions, recommending alternative theories of critical thought and lending a keen perspective throughout the entire making process. Their support was always of welcomed comfort in moments of hesitancy, bringing immeasurable clarity to an otherwise unknown endeavour.

The independent games industry local of Auckland also lent immense support throughout, kindly listening into diverging theories of social support systems, snuggling up over cheap vegetarian curries and bringing a delicate perspective to the structural systems necessary for any such practice-based endeavour. To the many friends, family and communities that surrounded me throughout, you have my long-lasting love and enduring gratitude for supporting me along the way. Without you this adventure would barely have begun, let alone have come to such a gentle close.

Lastly, this practice-based endeavour and the discoveries found within wouldn't have been possible without the many anonymous contributors who engaged with the Library of Babble on release. As without the submission of their gentle written compositions and willingness to engage with such an experimental work, the Library of Babble would surely still remain an empty expanse absent of any theoretical binding. In many senses the community and narratological atmosphere that grew there remains undividedly theirs, this exegesis was simply the empty page that gave them the opportunity to take it where they pleased. Their support and kindness remains immeasurable, and I'm deeply thankful to have been a part of this small journey.

To the many secondhand bookshops and cafés of Auckland, you have my warmest thanks for reminding me of the atmosphere I was designing toward, and supporting me through moments of inexplicable smallness.

# Chapter 1

## Introduction

### 1.1 Overview

The *Library of Babble* is a microcosmic social network designed to imbue a sense of collective intimacy within its digital ecosystem, to critically engage with emerging academic concerns surrounding the contemporary state of commercial social networks, and attempt to divine an alternative vision for social communication through the internet. Within the practice-based outcome anonymous participants possess the opportunity to wander through a minimalistically-rendered realm, discover the small messages and antidotes abandoned there by other wanderers, and in time be given the opportunity to leave a few of their own — leading to a small digital ecosystem brimming with delicate unsigned messages.

This exegesis is not necessarily a critique of social networks as being intrinsically harmful or psychologically-detrimental toward socio-cultural communication, but rather one which attempts to confront immediate concerns identified within existent literature on socially-intrusive design practices and principles of extrinsic motivation. This is accomplished by drawing on existent literature within the Values at Play framework to establish a practice-based methodology that considers socially-conscientious values throughout the entire making endeavour, and attempts to critically engage with emerging sociological concerns on the state of contemporary social networks. The practice-based outcome synthesizes contemporary research on Self-determination theory, Needs-Affordances-Features theory and Critical Nostalgia to explore the process of imbuing digital spaces with moments of communal



understanding, and thus allow for spaces which grow organically from acts of intimate self-expression.

By its own design, the Library of Babble is a publically-accessible work that may be downloaded and engaged with by anyone with an available internet connection and the necessary hardware to run it. Since the Library of Babble effectively relies on the engagement of its discovered community to closer reflect how the systems designed within lead to emergent behaviour, it felt critical to identify the practice-based section of this exegesis as an independent publicly-focussed work that could be released to consenting (and otherwise anonymous) participants, even without a wider public awareness of the critical research or literature backing it from an academic perspective. It was necessary to both closely reflect on how audiences receive its diametric critique of other contemporary social networks, and to critically examine any theories established in the written exegesis in an active unsimulated setting. By not only situating the practice-based outcome in a controlled academic setting, but also one which breathes unabbreviated amongst a number of existent social networks — It was felt any findings would be intrinsically more reflective of the anticipated outcomes if consenting participants interacted with it in an uncontrolled setting of their own choosing.

The Library Of Babble was released on August 19th, 2019 as an independent software package on itch.io, an online digital marketplace for smaller independent makers commonly associated with independent game design and other experimental activist works. As of March 9th, 2020 it has been downloaded over 900 times, and acquired a unique corpus of over 18,500 words (averaging out to about 600 uniquely-submitted messages). It's been featured by a number of editorial websites covering the independent games industry, and exhibited at a number of non-academic conferences and exhibitions, including a talk at *Freeplay Parallels* in Melbourne (a smaller-scale conference committed to the curation and celebration of experimental interactive works). Although a structural discourse analysis was beyond the bounds of this exegesis, preliminary observations support the anticipated outcomes addressed in the methodology, including the hoped-for rise of a digital ecosystem imbued with genuine self-expression and interspersed intimacy. This sets a clear precedent for similar academic work in the field of English and New Media studies, situating it as academic research both applicable to the continued study of social networks, the Values at Play

methodology, and any other practice-based works pertaining to possible public interest.

## Chapter 2

### Literature Review

#### 2.1 Overview

The literature review covers the existing literature and research used in developing the practice-based outcome of the exegesis, including the Values at Play methodology, which provided the foundational structure the *Library of Babble* was designed under. Setting a precedent for the development of other practice-based research advocating for sociologically-conscious features within social network design.

Developed by Edward Deci and Richard Ryan (2011), Self-determination theory postulates that motivation is an inherent and crucial part of human behaviour, offering a key framework for dissecting certain behavioural symptoms addressed in emergent literature on the sociological effects of social networks and wider game theory. Self-determination theory identifies three fundamental needs (autonomy, competence and relatedness) driving intrinsic and extrinsic behaviour in these digital ecosystems, beneficial in identifying how virtual settings potentially mediate and allow for the natural emergence of one's *internal-persona* (or *true-self*), as further identified in "Can you see the real me?" (Bargh et al., 2002) and "Ideal Self at Play" (Przybylski et al., 2012). These studies hypothesise that virtual settings organically facilitate alternative forms of the self, and allow for the exploration of internal identities that might otherwise be considered provocative in ordinary sociological settings. This can include the ability to express oppositional political perspectives, emotional temperaments or gender identities; or even explore desirable tenets of oneself not applicable within everyday existence (such as *commanding* a fictitious battalion into battle). This perspective is

furthered in "Da-Sein design: Linking phenomenology with Self-Determination Theory for game design" (Conway & Elphinstone, 2017), which utilizes the Self-determination theory in combination with principles of phenomenology to suggest our sense of realness is not necessarily ascertained through corporeal reality, but rather through our continuous exposure to meaningful experiences. They theorize that the mere act of exposing ourselves to mediums of literature, film (and by extension games and social networks) provokes a sense of being comparable to our own corporeal existence, and the experiences felt within may be considered no less significant when analyzed through theories of Self-determination. This provides a succinct explanation for the genuine connection people experience through media, and potentially the influence media possesses over our psychological wellbeing and inherent sense of self. In combination with wider theories of Self-determination and one's internal-persona, this provides a critical perspective into the development of a virtual social network explicitly designed to explore the emergence of different modes of sociological behaviour.

In developing the "Needs-Affordances-Features Perspective for the Use of Social Media" (Karahanna et al., 2018), researchers synthesized the Self-determination theory with other critical theories of psychological motivation to create the Needs-Affordances-Features framework, which is intended to be beneficial for identifying central motivators of social media use, and how these may be addressed through the implementation of different sociologically-focussed features. They categorized seven identifiable psychological needs in the design of contemporary social media features to ascertain how they support different *allocentric* or *egocentric* modes of behaviour. This theoretical grounding allows them to swiftly categorize and determine how different features facilitate or motivate different modes of behavioural expression.

The chapter within this exegesis on "Symptoms of contemporary social design" provides a broad overview of emergent literature observing social media, and the psychological influence these communal ecosystems possess on our psychological wellbeing. Research cited within reflects on the role certain features have on emergent sociological patterns in their wider social ecosystem. Attempting to divine the function of more psychologically-harmful aspects therein, as well as to provide a

critical perspective on the design of more socially-explorative spaces, and to allow for the natural emergence of a kinder more therapeutic community. Whilst the chapter on "Critical Nostalgia" cites research suggesting critically-aware nostalgia may be beneficial in distinguishing sentiments about the past, as founded from within the present setting. In culmination, the chapters provide a critical perspective for the dissection and rejection of certain leanings within the design of contemporary social networks, and how these concerns may potentially be addressed through our subjective relationship to the past. Lastly, the chapters on Video Game Values and Values at Play formulate the grounding methodology for the development of the practice-based contribution of this exegesis, synthesizing notions of value-inspired design and critical theory into a concise academic structure beneficial for the development of public-orientated works. In combination with the grounding chapters of this literature review, this process was beneficial in identifying those values necessary for the design of a socially-conscious ecosystem, and how these may be integrated through the use of an actively practice-based methodology. This process culminates in the release version of the *Library of Babble*, an academically-critical work pertaining to the exploration of alternative features and emergent behaviours within the design of a contemporary social network.

## 2.2 Motivations at play

### 2.2.1 Self-determination theory

Developed by Edward Deci and Richard Ryan (2011) over the last forty years, Self-determination theory is a theoretical framework that allows researchers to differentiate motivations in terms of being *intrinsic* or *extrinsic*, *autonomous* or *controlled*; developed under the hypothesis that people are "inherently active, intrinsically motivated, and oriented toward developing naturally through integrative processes." (Deci & Ryan, 2011. pp. 417). Self-determination theory identifies three basic psychological needs that contribute to a person's well-being and inherent sense of motivation, necessary for achieving the sufficient conditions for effective self-regulation. Commonly referred to as **autonomy** (to feel that one can act volitionally in accordance with personal values and desires that are harmoniously integrated into social demands and expectations), **competence** (the capacity to overcome difficulties and make a meaningful impact in one's environment), and **relatedness** (to interact, connect and care for others) (Deci & Ryan. 2000a). Establishing a theoretical framework that runs counter to alternate theories of psychology by suggesting that motivation is not necessarily a learned behaviour, but rather inherent to human nature and thus a psychological attribute that does not require enforcement by external forces. When people remain intrinsically motivated, they are engaging with an activity because it's internally rewarding, and are in active pursuit of these fundamental needs (autonomy, competence and relatedness) - which in turn brings about a deeper sense of self-fulfilment.

A hypothesis theorized in "Effects of externally mediated rewards on intrinsic motivation" (Deci, 1971) and further supported through external analysis, not only confirms that intrinsically-engaging activities inspire deeper intrinsic engagement, but that monetary rewards may even actively undermine the intrinsic motivation

toward the activity by supplementing it with an external motivation. Not only may monetary rewards, threats, competition or unconstructive feedback actively undermine intrinsic motivation, but extended exposure may actively undermine both intrinsic and extrinsic motivation, impeding a sense of self-autonomy and leaving individuals amotivated (without motivation toward the activity). A theory deeply applicable when designing motivational systems in games, which often rely on external motivators and rewards to give a sense of continuous progress, despite these systemic motivators often remaining deeply divisive to players seeking a more intrinsic experience.

### 2.2.2 Selfhood within digital games

The "Ideal Self at Play" (Przybylski et al., 2012) draws on familiar principles of the Self-determination theory to hypothesise that video games are intrinsically motivating (in part) because they present a setting in which players may explore "different aspects of their selves" (Przybylski et al., 2012. pp. 69) and examine otherwise inaccessible or undesirable characteristics of their self. This hypothesis is based on an article published in the *American Psychologist* by Edward Deci and Richard Ryan (2000b), suggesting not only that psychologically-intertwined experiences of autonomy and competence may reduce a person's perceived discrepancy between their actual selves and the characteristics they desire, but that people with a wide discrepancy in self-perceived selfhood and desired selfhood were also increasingly linked with lower levels of well-being and inclined to seek out experiences that mitigated those psychological discrepancies (Higgins, 1989). Przybylski et al. (2012) believe this may extend to the virtual experiences of video games, as video games not only allow players to act congruently in line with their idealized selves, but also provide experiences which often remain inaccessible in everyday life (such as *commanding* a battalion into battle, *sailing* through a distant solar system or *tending* to a garden of self-grown produce). They hypothesize that the convergence of one's experience in the game and one's desired self may be linked to high levels of intrinsic motivation and self-confidence, despite these experiences still only being limited to a virtual setting.

By documenting and drawing conclusions on a study composed of nearly 1000 participants on the relationships between one's ideal-self (how one desires to experience themselves), one's game-self (how one experiences themselves playing video games) and one's actual-self (how one experiences themselves), Przybylski et al. (2012) were able to determine that the games most intrinsically motivating to players were those which fostered a closer game-self/ideal-self correlation, and that participants with a wider discrepancy between their actual-self and ideal-self were most intrinsically-motivated by virtual experiences that allowed them to draw closer parallels to their ideal-self.

### 2.2.3 Selfhood within the internet

Nor is this theory purely limited to the classical definition of virtual game experiences. In the chapter "Can you see the real me?" (Bargh et al., 2002), the contributors draw on psychological theories of the *social/internal* persona (as forwarded by Carl Jung and Erving Goffman) to hypothesize that the internet enables people to explore facets of themselves that would otherwise be considered provocative in their ordinary social circles<sup>1</sup>. They suggest that through the internet's anonymous nature (as observed in 2002), one was permitted to behave in ways not usually available without anticipated social repercussions, such as the ability to express oppositional political perspectives, temperaments or even gender identities, or to explore tenets closer to one's own internal-persona. This hypothesis was later refined in a collection of experiments (Bargh et al., 2002) which tested voluntary college students within a myriad of offline and online interactions, to determine how approximate their communication was in each setting to their perceived internal-persona (or *true-self*). They determined that, by its own nature, anonymous aspects of online communication facilitate a closer more

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<sup>1</sup>It should be noted that this article was published before the contemporary manifestation of the Internet, and so, though hypothesised, the deeply-interconnected relationship of one's online-presence and offline-presence was yet to be established to the degree it has since. Though it may also be suggested that the act of possessing anonymous social accounts secondary to one's public social account is still a display of this earlier internet manifestation.



effective expression of one's true-self to new acquaintances, relative to more traditional forms of offline communication in a similar social setting. Bargh et al. (2002) conclude that the internet organically facilitates alternative forms of the self (in particular the expression of one's true self) and can have demonstrable effects on explorative self-expression and authenticity. Although not necessarily linked with Self-determination theory, the research nevertheless drew on similar psychology to substantiate an adjacent hypothesis in the field of digital humanities. And with the Library Of Babble being developed at the intersection of video game literature and the emergent psychology of social network design, it remained pertinent research to consider throughout the literature review and wider practice-based methodology.

#### 2.2.4 Immersion within digital experiences

In "Da-Sein design: Linking phenomenology with Self-Determination Theory for game design" (2017), Conway and Elphinstone apply principles of Heideggerian phenomenology to suggest that analyzing games through a Self-determination theory lens grounded in mere corporeal realness may be academically-limiting when attempting to understand the motivations of the player and their *dasein* (the feeling of being present, or immersion) within a virtual setting.

Heidegger (Heidegger, 1927/2003, as cited in Conway & Elphinstone, 2017) theorizes our experience of realness and the accompanying feeling of *thereness* or immersion is not set by knowledge, truth or reality, but rather is formed through our continued exposure to experience, and an existence informed by certain physiological, historical or socio-cultural situations we inherently draw meaning from. Simply put, we derive meaning from how embedded we discover ourselves in a setting, and from this miasma (sub)consciously draw on certain principles to inform our motivations and acts of being. Heidegger terms this *dasein*, the feeling that emerges through being embedded or present within a world of things that matter; insinuating that our inherent sense of *thereness* may not be limited to our corporeal experiences, but rather may be abstracted to include experiences both imagined and beyond. Conway and

Elphinstone theorize that the mere act of drifting through the realms of literature, film, games (and similar mediums) possess an existence comparable to our own corporeal existence, and the experiences felt within may be considered no less significant when analyzed through theories of self-determination. Nor is an emergent sense of *thereness* purely dependent on mediums which evoke a corporeal realness or form of mimetic reality (accurate imitations of normal sensory experiences, as within games which incorporate photorealistic visuals), rather the authors theorize it arises organically through our connection with the experience and how we derive meaning from it. Conway and Elphinstone stress the importance of acknowledging the corporeal body as purely a phenomenal hermeneutic apparatus, as something secondary to the feelings of realness that're often felt when engaging with continuous meaningful experiences in a virtual setting, and how such imitated realness may bring about genuine experiences of autonomy, competence and relatedness. This runs counter to an earlier research endeavour conducted by Przybylski (2010) which presumes relatedness (as explored in the Self-determination theory) is purely limited to fostered relationships with other *real* people. Przybylski discusses the importance of other human players in Massive-Multiplayer Online games to evoke an emergent sense of relatedness, and draws on this observation to suggest this remains a primary indicator of relatedness within virtual worlds. However, Conway and Elphinstone counter-theorize that digital games and virtual settings may provide phenomenological lifeworlds (*lebenswelten*) that allow for players to "establish stable cognitive and interactive relationships with them, (wherein) computers effectively function as heuristic instruments. Digitally mediated simulations do not, in fact, reveal new worlds fictionally... they effectively and objectively open new experiential, phenomenological horizons" (Gualeni, 2014, as cited in Conway & Elphinstone, 2017, pp. 56).

This perspective provides a pertinent basis for understanding how users experience virtual settings, potentially allowing analysts to begin abstracting beyond the corporeal activities used to engage with these activities (tapping a button, shifting the mouse), and begin to observe theories of Self-determination through the fictitious and simulated actions these experiences present (slashing a monster, fighting for survival and similar narratological conceits) within a virtual setting. From this abstraction, analysts may begin to determine how a person's *intrinsic* or *extrinsic* motivations would be reflected and explored through a game settings atmosphere, emergent storyline

and delivered experiences. In other words, a person may be intrinsically motivated to sit still for extended periods of time tapping away on their keyboard if they are able to abstract this endeavour from their physical actions and translate it into a meaningful (resonant with your sense of self) action because they genuinely care for the non-playable character they are assisting or the simulated storyline they are involved in. In moments of *dasein* that aren't impeded by external factors, they are no longer simply motivated by a sensation of external regulation (finger muscle exercises, ignoring an awkward phone-call), but are able to internally recognise their actions as meaningful and worth pursuing in accordance within the presented virtual setting (wanting to assist in slaying the monster), or in drawing a closer parallel in how they wish to perceive themselves or realize their *ideal-self*. (Conway & Elphinstone, 2017)

### 2.2.5 Needs Affordances Features theory

In the "Needs-Affordances-Features Perspective for the Use of Social Media" (Karahanna et al., 2018), the authors attempt to synthesize isolated psychological principles such as the Self Determination Theory and Psychological Ownership Theory (summarized as fundamentally pertaining to how our sense of self is defined by our possessions) to divine a holistic framework for identifying central motivators of social media use, which they've self-identified as the Needs-Affordances-Features theory. This theory remains particularly critical to note in how it connects the Self Determination Theory with wider research into the psychological nature of contemporary social media, and as such remains pertinent to consider in relation to the development of a social media platform such as the Library of Babble. The Needs-Affordances-Features theory arose from research into existing literature on social networks, which Karahanna et al. (2018) felt predominately lacked perspective on the wider prevalent psychological effects of social media use. In the majority of the studies reviewed, the focus on online communities was usually limited to specific virtual worlds, social networking sites or communication-facilitating games, as opposed to identifying overarching psychological principles embodied within all forms of social media. Controversially, as most people use a myriad of social networks and features to fulfil these psychological needs, The authors posit it was more beneficial to synthesize and abstract these features into a set of identifiable affordances that all (or

most) social media provide. By abstracting specific social media features into a set of design affordances (or action possibilities), it was possible to begin documenting how certain psychological needs were being met over a wide range of online applications. A theoretical framework which has become particularly pertinent as information technology becomes increasingly ubiquitous and embraced as a persistent part of contemporary communication.

For this study, Karahanna et al. (2018) define social media as applications fundamentally resting on participant-generated content that becomes social through its ability to be shared with and experienced by others: spaces within which participants possess a wide degree of flexibility in determining which applications (or features) they wish to be a part of, "when and to what extent, what to create, what to share, and what to read" (Karahanna et al., 2018, pp. 739). This definition critically doesn't discriminate against virtual worlds or similar game experiences, but rather incorporates them in the wider definition being defined. By drawing on theories of Self-determination and Psychological Ownership, the authors suggest one might begin to formulate a theory for understanding the affordances these applications supply, and why individuals are willingly (personally and voluntarily, without mandates or extrinsic motivations) drawn to communicative technology beyond the physiological needs supplied through traditional forms of offline communication, or how such systems are further energizing human behaviour at such scale.

In synthesizing Self-Determination theory and Psychological Ownership theory into a holistic theory for the critical understanding of online communication, the authors were able to determine five psychological needs (*autonomy, competence, relatedness, having a place and self-identity*) nourished by a set of given affordances within social media, identified as *self-presentation, content sharing, interactivity, presence signalling, relationship formation, group management, content browsing, meta-voicing, communication and collaboration*. Whose comprehensiveness they assessed by examining twenty-one different social applications available online, categorically chosen using Kaplan and Haeliens' (2010) documentation on different instances of social media application. From blogs, social networking sites, content communities, collaborative projects, virtual social worlds, and virtual game worlds (alongside crowdsourcing applications, which weren't available in the original documentation). By identifying the salient

features in each respective application, they were able to determine 140 unique features, which were then mapped to the respective affordances (including *competition* and *sourcing*, which were identified during the mapping process) identified earlier in their research. Further categorizing their findings into two distinctive groups, labelled *egocentric* and *allocentric* affordances, wherein *Egocentric* affordances (self-presentation, content-sharing and interactivity) reflect action possibilities which may be "solitary in nature do not necessarily involve others to be actualized" (pp. 145), whilst *Allocentric* affordances (relationship formation, presence signalling, content browsing, meta-voicing, communication, collaboration, competition, and sourcing) reflect action possibilities which are intrinsically social in nature and require the involvement of others. They triangulated from this to establish the Needs-Affordances-Features theory, an emergent set of affordance definitions and how they integrate and indulge on certain psychological needs.

Using Facebook as an example, the authors use this framework to distinguish possible psychological needs driving its persistent use. By identifying different features related to content browsing, relationship formation, self-presentation, meta-voicing and communication (amongst others) present in its ecosystem, and numerically quantifying those features based on use, the authors identified that the platform fundamentally thrives on aspects of *self-presentation* and *meta-voicing* (the ability to engage in conversation through reacting to others presence, and observe how others react to one's own presence). The study concludes that Facebook is primarily focussed on satisfying psychological needs inherent to *autonomy*, *relatedness* and *self-identity*. That the most commercially-successful social network is inherently designed to satisfy three of the five psychological needs identified by the Needs-Affordances-Features theory seems no mistake, and sets a clear precedent for how prolific this platform has become as a medium of communication.

The authors suggest that by utilizing the Needs-Affordances-Features theory in accordance with similar design research, it can provide an invaluable perspective into the intrinsic affordances supplied by a theoretical feature. Provide guidelines for designing features that nourish certain innate psychological needs, and explore how conjoined features may grow toward fulfilling complementary psychological needs over the course of an entire application experience. This would allow a researcher to

not only predict how different experiences may fulfil certain physiological needs, but also determine how individual participants may be drawn toward different experiences based on their independent psychological needs. And though the theory still remains relatively fresh in its conception, by possessing a consistent and easily-abstracted sociological language for the documentation of different social features, this gives researchers a valuable grounding for translating psychological need affordances over a myriad of different experiences.

## 2.3 Symptoms of contemporary social design

### 2.3.1 Emotional wellbeing

By designing under a mindset abstracted from the common principles of established commercial design, one can begin to critically reflect on the role certain features have in practical design. Determining what features are relevant to the consumer (and the corporate institution), and how these may be subverted to explore different methods of meaningful *need*-supplementation. By critically engaging with familiar features within social networks (such as the ability to *like* someone's contribution, as a less-consuming means to acknowledge you've read it) (Scissors et al., 2016) in an isolated research context, emergent literature suggests researchers can uncover secondary motives or limitations that would otherwise remain undocumented.

As determined by research (Blachnio et al., 2015) conducted on over six hundred anonymous individuals, there's a distinct and determinable correlation between extensive Facebook use and diminished emotional wellbeing and depression, often referred to as *Facebook addiction* or *Facebook intrusion* (Elphinston & Noller, 2011). And although Blachino et al. (2015) weren't able to determine a concrete consensus on whether depression was the *effect* or *cause* of intrusive Facebook use, even when cross-referencing with former studies identifying similar symptoms, their study does reaffirm a direct correlation between excessive intrusion and depression, particularly in young-adult males who spend an increased percentage of time online relative to other demographics. Even with this limited understanding, this suggests a genuine need for critical thinking in the design and development of online spaces, and for further research into the psychological influence of these spaces. As although a single feature may only possess a small modicum of influence over a participant's emotional resonance or social-need acquisition, and no research has yet determined the degree of such feature-specific influence, this research indicates there's nevertheless

overwhelming academic evidence suggesting a potential decrease in emotional wellbeing within participants excessively engaging with these social networks. As such, it feels critical for practical researchers to begin to work toward exploring alternative features which facilitate kinder (more constructive) digital experiences, and mitigate and mitigate emotional trauma.

### 2.3.2 One-click feedback

In a paper (Scissors et al., 2016) published on the psychological underpinnings of the Facebook *like* feature (a feature in which participants can respond to a contribution with a simple thumbs-up visual acknowledgement, as opposed to a comment or similar), researchers conducted an extensive study on over two-thousand participants to uncover *why* the ability to like someone's contribution is an almost universally-embraced feature in all contemporary social networks, specifically within the context of the Facebook timeline. Noting that *one-click feedback* has retroactively become associated with positive social grooming, affirmative social transaction and relationship maintenance behaviours (Ellison et al., 2014). With the researchers noting this function often (consequently) manifests in a social setting where certain forms of self-expression are more socially-embraced than others, wherein the perceived value of a contribution is directly correlated with the number of received likes, or who specifically has liked (such as a close friend, a romantic partner or someone with significant social influence), acting as a socially-pervasive signifier for likemindedness and support. From the outcome of this study, Scissors et al. (2016) hypothesize this could be a beneficial technique for the natural self-curation of a social community, and for establishing necessary social hierarchies within more accessible social communities which benefit from established perspectives. However, this feature has also often become associated with motivating consistent engagement from those contributors characterized with low self-esteem or seeking a certain degree of social affirmation. Enabling the ability to consistently self-monitor their online presence to see how their contributions are socially tracking relative to others, (consequently) often elevating personal insecurities when meaningful contributions aren't met with the same degree of approval as others (without the necessary critically-supportive



feedback for a contributor to determine why). This perspective is further supported in the paper by observing how contributors struggling with self-esteem often perceive an increased number of likes (relative to their expectations) as "validation of their self-worth" (Scissors et al., 2016, pp. 1508), despite results suggesting that in the context of the Facebook ecosystem, there's little correlation between the number of received *likes* and the associated value of a contribution relative to others. Otherwise referred to as the *Like Paradox* ( Scissors et al., 2016, pp. 1505), the number of received *likes* often remain largely subordinate to the contributors' follower count, the algorithm ranking system and similar unresolved determinants.

### 2.3.3 Self-worth validation

This observation around the diminishing returns of (sub)conscious self-worth determination in social networks is further supported by an earlier article (Forest & Wood, 2012), which studied a small sample of students exhibiting symptoms of low self-esteem, and tracked the number of engagements relative to the emotional-sentiments of their contributions on Facebook. And although the researchers accurately hypothesized that people with low self-esteem would perceive the social network as a safe alluring space for the self-disclosure of more vulnerable feelings, their study also indicated these interactions possessed diminishing returns when the participants exhibited overwhelmingly negative emotions across numerous contributions, leading to a significant decrease in meaningful engagements relative to participants that exhibited overwhelmingly positive emotions. This potentially leads to circumstances where contributors with low self-esteem feel pressured to self-moderate their contributions to better facilitate engagement, or use the service more as a form of self-worth validation when contributions don't meet expectations. This last case in particular appears to remain the most beneficial for the social media corporation. As since the central stream of revenue for most social networks is supported through consistent advertisement viewership, it's essential that their audience spends an increasingly-significant portion of their time on the social network to increase profit margins. As such, it's not inconceivable to imagine designers

consciously using psychological principles of *relatedness* need-supplementation and perceived insecurity to spark further engagement. This possibility is further supported by the immediacy at which contributors are notified about affirmative engagements, receiving a personalised (but nevertheless ambiguous) notification within moments of someone interacting with their contribution, drawing them back into the social network ecosystem. As such, features which may commonly be associated with increasingly-abstracted social maintenance, should also be observed through a more critical perspective relative to the profit motivations of the parent corporation. Though the researchers (Forest & Wood, 2012) were unable to determine whether this was a symptom of social circumstance or integral to the design of the digital Facebook ecosystem, it should be noted that (as of the time of writing) Facebook designers have since implemented a wider spectrum of emotional *one-click* responses (ranging from *like love*, *wow* and *angry* emoticons). And as identified in "Facebook is testing hiding like counts to see if that makes people feel better" (Lee, 2019), Facebook designers have also begun experimenting with softer alternatives to these engagement features by hiding *like* (and viewership) counts on a limited number of accounts in a publically-acknowledged effort to minimise anxiety and facilitate more meaningful communication..

### 2.3.4 Peer-to-peer support and self-therapy

However, this is not to suggest all aspects of social media are inherently detrimental to psychological well being. As identified in "The future of mental health care: Peer-to-peer support and social media" (Naslund et al., 2016), "Exploring opportunities to support mental health care using social media: A survey of social media users with mental illness" (Naslund et al., 2017) and "Social Media Use as Self-Therapy or Alternative Mental Help-Seeking Behavior" (Gere et al., 2020); social media has profoundly shifted how people express themselves and examine their psychological concerns amongst communities of like-minded others. Referred to as *peer-to-peer support* (Ziebland & Wyke, 2012, as cited in Naslund et al., 2017), research suggests that many people with serious mental conditions are increasingly drawn to social media to

share their experiences, seek guidance and form digital communities (beyond the immediate mediation of governmental health boards) with others struggling with similar symptoms. Allowing both patients and undiagnosed individuals with diverse health concerns to commune from within the comfort of their own space of refuge (Naslund et al., 2016), without requiring them to overcome barriers of "social isolation, reluctance to use formal health care services and challenging social circumstances such as traumatic life events or disruptive home environments" (Naslund et al., 2016, pp. 114). Participants with serious mental conditions have even reported (through self-diagnosis) greater social connectedness from interacting with friends online (both long-distance and personal), feelings of communal belonging and increased benefits from sharing personal stories and strategies for coping with certain conditions. Online communities may also assist in challenging certain socio-cultural stigmatization through personal empowerment, promote healthcare-seeking behaviours and bring beneficial awareness to a wider demographic of observers (Naslund et al., 2016). For individuals with deeply stigmatized or misunderstood conditions, social media even makes it possible to connect with others without needing to disclose substantial personal information, allowing participants to remain anonymous while still benefiting from a wider communal conversation and social structure. Thus they can experience the benefits of community participation while avoiding concerns associated with interpersonal deficits (interpreting social cues or nonverbal communication), information processing challenges, increased social anxiety or struggles with social interaction (Schrack et al., 2010, as cited in Naslund et al., 2016). As identified in "Can you see the real me?" (Bargh et al., 2002), research also suggests one's *true self* may be expressed more easily in these online spaces without the accumulative anxiety of making mistakes. This allows individuals to express (and by extension, explore) elements of themselves which remain fundamental to their sense of being, safeguarding themselves against the potential public stigma or negative attitudes they've observed in their offline surroundings (Gere et al., 2020).

In a study conducted on "Exploring opportunities to support mental health care using social media: A survey of social media users with mental illness" (Naslund et al., 2017), the researchers conducted a survey by reaching out to two hundred active accounts on Twitter that possessed descriptive terminology of serious mental conditions in their biography (such as *schizophrenia*, *schizoaffective*, *schizotypal*, *psychosis*, *bipolar disorder*,

major depression, and depression), in a concentrated effort to closer understand how these participants benefited from the personal use of social media, and how receptive they may be to online interventions and digital support systems. Of the 135 participants that responded, the researchers reported no significant differences in age demographic in regards to the use of social media for mental health. 60% (rounded) of participants reported they used social media to connect with others who also possessed a mental illness, while over 50% of participants indicated that they also use social media to share personal experiences of their condition, and as an additional resource for discovering coping mechanisms and strategies. There were not any demonstrable differences between age demographics wanting to use social media for mental health purposes through structured health programs, suggesting programs explicitly designed to assist with mental illness could be mutually beneficial for participants of all ages. Although Naslund et al. (2017) weren't able to determine specific motivations for connecting with others through social media, these findings are nevertheless consistent with prior research into online communities founded on supportive illness-management, and may be valuable to those with limited access to supportive communities in offline settings (Fergie et al., 2016, and Ziebland & Wyke, 2012, both as cited in Naslund et al., 2017).

Although no documented research has yet demonstrated the exact psychological effects of self-therapy through social media, "Social Media Use as Self-Therapy or Alternative Mental Help-Seeking Behavior" (Gere et al., 2020) posits that through using the theory of Planned Behaviour in combination with the Health Belief model, an individual's decision to engage in a particular behaviour is fundamentally motivated through their desired anticipated outcome. With Gere et al. (2020) suggesting that individuals who perceive themselves as susceptible to a particular health concern will be further motivated to engage in behaviours which (by their understanding) alleviate or reduce any anticipated concerns. In the context of closer understanding the connection between mental health and social media, this observation may be drawn out to suggest that in some instances social media is perceived by participants as possessing outcomes more beneficial toward alleviating their mental health concerns than more traditionally prescribed methods, as well as being used by those without access to such traditionally prescribed methods. And although the researchers also raise concerns around how social media may consciously utilise psychological rewards

that encourage increased social media retention and engender behavioural patterns, this accumulative response nevertheless supports a central tenet of this exegesis that there remains critical academic interest for the design of such socially-explorative spaces. Something which remains particularly noteworthy in relation to the *Library of Babble*, as although the practice-based outcome of this exegesis was not explicitly designed to foster *peer-to-peer support* systems, one of the central ambitions was nevertheless to minimise some of the more harmful incentives observed within major social networks, and allow for the organic emergence of a kinder more therapeutic community.

## 2.4 Critical Nostalgia

### 2.4.1 Modalities of nostalgia

In "The Modalities of nostalgia" (Pickering & Keightley, 2006), the authors attempt to specify numerous definitions of nostalgia, how it has been misrepresented in existing literature and how it may be utilized in an academic setting for the betterment of future critical analysis. Suggesting that despite acting as a relatively acute barometer for our socio-cultural associations with the past (and which perspectives we still hold relevant), and despite accommodating not only regressive but also progressive attitudes, nostalgia has traditionally been observed through a critically diminishing lens. With prior research often depicting nostalgia as nothing more than an emergent endemic associated with defeatist attitudes toward the contemporary, the melancholy of those "seeking to attain the unattainable, to satisfy the unsatisfiable" (Pickering & Keightley, 2006, pp. 920), and as the reactionary curtailing of progress and a homesick longing for the distant past.

Though not necessarily an inaccurate perspective, Pickering and Keightley (2006) argue that this definition of nostalgia should also be expanded to accommodate arguments which critically reject the fervour and passionate pull of the transient "now" from a more productive perspective. Suggesting that nostalgia *should* indulge in the heresy of exploring historical tenets which may otherwise have been abandoned or forgotten in the present setting, both as a form of critical reflection and to integral academic critique. To "linger[s] in the dreams of another place and another time" (Boym, 2001, as cited in Garda, 2013, pp. 2) and critically engage with our ardent sense of longing for such reminiscent times. As although nostalgia can certainly diminish and undermine our historical consciousness or even subjugate the credentials of our historical narrative, "sop up the ravages of progress"

(Pickering & Keightley, 2006, pp. 933) or carry convenient conservative ideological precedents. When analysed alongside a broader stroke of literature this same limitation also lends itself to understanding the varied relationships different communities possess toward a shared past. In essence, nostalgia may even be considered a willing embrace of our subjective history, an awareness historical literature may occasionally leave unacknowledged in an attempt toward an unobtainable objectivity. In other words, "nostalgia is not the property of the object itself but rather it is generated in our innerly experienced relation with it" (Garda, 2013, pp. 2).

As a point of reference, the *Library Of Babble* was largely designed to echo the small personal sentiments felt when reminiscing over an indeterminate era of internet history. The long nights of writing to other mysterious strangers on small (seemingly) unmoderated websites, the surreal sense of intimacy which might be discovered there, and the endless wonder of discovering a new hyperlink or similar. Those memories aren't necessarily accurate to my genuine experiences, nor necessarily historically representative of the technological tenacity or socio-cultural atmosphere of those spaces. Rather, it's a work which may be "conceptualised as conveying a knowing and reflexive relationship with the past, as a yearning for a better but irretrievable past, or, in more sceptical accounts, as emblematic of an engrossing but ultimately fabricated approximation of the past" (Drake, 2003, as cited in Pickering & Keightley, p. 936). This nostalgia is anchored on certain reminiscent sentiments founded in the present setting, to both critically dissect and reject certain leanings of contemporary design and act as a personal subjective interpretation of the past. It is an abstraction of a point in time in which different or more stigmatized marginalized communities will most-certainly possess widely differentiating experiences and sentiments toward.

### 2.4.2 Nostalgia video games

Sloan (2016) attempts to further define nostalgia in relation to video games in "Nostalgia Videogames as Playable Gameplay Criticism". Arguing for critical nostalgia by echoing Lowenthal's (1985) conclusion that it can "reveal as much about the present (and our aspirations for the future) as it can the past" (as cited in Sloan, p. 36). Although not as rigorous as other methods of historical documentation, Sloan suggests such reflective imitation may be used to expose certain temperaments toward contemporary situations (such social, economic or political quandaries) and how they've been framed respective to our personal or collective memory of the past. Suggesting that in the context of video games, nostalgia refers to any game which explicitly incorporates past aesthetics, game design practices and philosophies, or discreetly emulates technical limitations of a bygone age in order to evoke a certain sentimentality toward different periods in the historical lineage of video games (and other interactive media). As although video games often nostalgically draw on different historical settings to evoke a certain sense of atmosphere or narrative, these wouldn't technically be considered nostalgia games unless they are also imitating the technical software limitations of a bygone age of video game development. Either through exhibiting a historical pastiche of the past now juxtaposed through a fresh perspective on a contemporary setting, or through explicitly satirizing different periods of history in an attempt to challenge or enlighten our preconceived notions of the past. In essence, through the use of selective referencing, imitation or romanticized observation, critically-nostalgic games may be understood as a theoretical framework for engaging with the past through a present perspective.



## 2.5 Video game values

### 2.5.1 Values in video games

In *From pushing buttons to play and progress: Value and Interaction in Fable* (Barr et al., 2006a) and "Video game values: Human-computer interaction and games" (Barr et al., 2006b), the authors adopt principles of the Human-Computer Interaction theory to divine new techniques for dissecting video games as a unique medium divorced from the traditional ambitions of computer software. Which they accomplish by drawing on Milton Rokeach and his theory on the nature of human values outlined in a *Nature of human values* (1973) to determine how video games intrinsically express intent through their mediated experience.

Barr et al. (2006b) theory suggests that *value* may be defined (in the broader hemisphere of games) as the understanding that certain modes of behaviour are favoured (or even enforced) over others, reflecting the "enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence" (Rokeach, 1973, as cited in Barr et al., 2006a, p. 2). This suggests that as the digital interface mediates all participant behaviour within video games, certain behaviours are closer enforced or supported over others, instilling in participants a (sub)conscious understanding of the behaviours they should be pursuing when inside the game space. This definition remains particularly striking in the context of video games, where the diversity of behaviours you're allowed to engage in remain strictly controlled by the restrictions or opportunities imposed by the game designers.

Although values are indicative of the socio-cultural inclinations the designers may wish to evoke in their players, they are not necessarily equivalent (or even indicative) of the designer's moral inclinations, but rather an indication of desired motivation and behaviour: "illuminating the relationship between player and interface as regards to particular expressions and interpretations of gameplay values" (Barr et al., 2006a, pp.

2). As an interactive medium, game spaces may even allow us to explore theories of thought antithetical to current thinking, exposing alternative methods of conduct which would otherwise be unattainable (or provocative) in more established academic or social mediums. An interactive experience may even morally condemn the behaviours that a player engages in, while still only equipping them with the necessary motivations and actions to engage in such behaviours. As observed in “The Positive Discomfort of Spec Ops: The Line” (Jørgensen, 2016), which reflects on the discomforting nature of how the game *Spec Ops: The Line* critically engages with the players' increasing aptitude at committing war crimes (as required by the game setting), leading to measurable discomfort and self-reflection on the part of the playtesters that engaged in their study. Only through critically instigating an active rapport with the game may academics begin to determine the binding values being explored within a game space, and begin to determine how these value-based systems are reflective or contrarian to the wider sociological setting they are being expressed within, or (sub)consciously imposed onto the gamespace by their respective designers (Barr et al., 2006a).

### 2.5.2 Human-Computer Interaction theory

In “Video game values: Human-computer interaction and games” (Barr et al., 2006b), the researchers identify Human-Computer Interaction as a theory widely-embraced for the critique and dissection of computer software (and by relation, video games), which the researchers postulate attributes some significantly diminishing perspectives when purely used in the critical reflection of video games. As although this theory is not fundamental to the practice-based methodology of this exegesis, Human-Computer Interaction theory nevertheless remains a pertinent point of interest to consider as many of the theories discussed in this chapter were derived from its founding literature. And as such, it remains critical to acknowledge how Human-Computer Interaction has contributed to the wider critical theory surrounding software design — and how this pertains to the intersectional nature of the *Library of Babble* in relation to both video game and social network praxis. In

*Human-Computer Interaction: Fundamentals and practice* (Kim, 2015) Kim defines Human-Computer Interaction theory as a cross-disciplinary area of engineering, psychology and design referenced in relation to computer software, sitting at the intersection of critical academic theory and commercial practicality. In essence, Human-Computer Interaction may be considered the academic approach and evaluation of contemporary interface design, and the manner by which humans interact with their computing systems on an individual-by-individual basis. This research has grown in prominence over the last decade as computer software becomes deeper integrated into the infrastructure of our contemporary society. Kim identifies eight principles (*know your user, understand the task, reduce memory load, strive for consistency, remind users and refresh their memory, prevent errors and naturalness*) used to critically determine how effective a specific section of software may be in meeting the requirements of a particular task, valuing task-oriented efficiency and the external motivations of the participant. Aside from striving toward making necessary computational functionalities available to a wider audience, it's a theoretical approach which also attempts to make these functionalities as accessible as possible (eg. including support for *language barriers, colour-blindness or technological naivety*), drawing on contemporary engineering praxis and principles of human engagement to develop a concise method for designing and interfacing with software.

However, it's important to note that these existing principles of Human-Computer Interaction theory are primarily designed around the critical identification, design and dissection of traditional computer software, and how participants interface with such software to accomplish certain ambitions. And as such, the researchers of "Video game values: Human-computer interaction and games" (Barr et al., 2006b) felt it pertinent to develop a more dynamic understanding of how these experiences might be expressed in more creative technological mediums, wherein the intent of such experiences may not necessarily align with the need for external task-orientated efficiency and intuitive interaction flows, but rather with the hope for more emotionally salient and evocative encounters from within the game space itself. As although communicating necessary information (reduce memory load) and retaining a consistent interface language (strive for consistency) may be desirable in most instances of navigating through game space, the intrinsic need to integrate challenge and interactive provocation (prevent errors) is inherently intrinsic to contemporary game design, as is obscuring the

relevant task in a certain level of narrative abstraction (understand the task). As such, the researchers felt it pertinent to declare that Human-Computer Interaction theory not only introduced some pretty diminishing perspectives onto the medium of video games, but also risked obscuring some of the nuanced values communicated through the game space interface.

### 2.5.3 Dissecting video game values

In *From pushing buttons to play and progress: Value and Interaction in Fable* (Barr et al., 2006a), the researchers dissect the classical fantasy role-playing game *Fable* (Microsoft game studios, 2004) to determine how it facilitates certain value-based practices of play and how these desired practices are communicated and supported through the given interface. They draw a parallel to the key bindings of the game controller, whose control system and available command inputs often remain indicative of the kinds of behaviour a participant may be anticipated to engage with. In games these commands are often the only way through which a player is allowed to express themselves within the game space, and therefore they not only facilitate the kinds of conduct the game anticipates from the player, but also determine the kinds of values the player is beholden to. This may represent a relatively minimalistic perspective on the conduct expressed within a game space, yet it nevertheless also presents an apt representation of how this conduct may be weighted relative to the available button inputs. In the context of *Fable* the researchers note that of the fourteen available controller buttons, ten are directly correlated toward the facilitation of different combative methods. Suggesting the predominant mode of self-expression within the game space is through violence, and may even be the *desired* behaviour toward progressing further. "The player can certainly kill a bandit to express their valuing of justice and also of achievement, but they cannot, for instance, try to talk the bandit out of their wicked ways" (Barr et al., 2006a, p. 4). The researchers were able to bring further credence to this observation through engaging in deeper non-combative *oppositional play* (the practice of going against the directed experience, to observe how the game handles discrepant behaviour), which deeply limited their ability to further progress the

narrative. As such, they determined that to obtain a meaningful experience from the game, the participant must fall in line with the established value system, as it's the only set of actions which will allow them to progress further. This sentiment is further echoed in Fable's classical fantasy narrative of the storybook hero growing in power, as possessing physical dominion over others is directly correlated to the players' personal sense of progression and self-worth — and conversational aptitude and measured argument often remain secondary to battle-hardened might.

Natalie Lawhead (2019), an independent internet artist and experimental games designer, draws on similar sentiments in their critical reflection on *Grand Theft Auto V* — and how it both exposes its hyper-satirical perspective on the brutal violence of American culture, and actively enforces those same nihilistic practices in how the participant interacts with different objects within the simulated setting of Los Santos (itself a satirically-stylistic interpretation of Los Angeles). Lawhead draws on a scenario they experienced when they went to *pet* an innocent dog by tapping on the primary interaction button, and instead dishearteningly experienced their avatar *kicking* the dog to death — "I kick the dog. Dog is now lying there, not moving. I feel very bad" (Lawhead, 2019). Despite the hope of residing within a simulated setting and roleplaying a character capable of expressing some small semblance of kindness, they were left betrayed and disappointed at the limitations imposed on them by the game space. By critically reflecting on what interactions *weren't* available, what arose was the uncomfortable realisation that even despite its critical satirization of American culture, this was nevertheless a space that not only valued violence over compassion, but strictly limited such interactions and forced the participant to only interact with the game space through violence, further entrenching the participant in the satirized depiction, and normalizing their behaviour irrespective of any allusions of critique. And although one might pretend to *pet* the dog through *oppositional play* (such as kneeling beside the dog), the game space doesn't visually acknowledge or reward this kind of oppositional behaviour, suggesting it wasn't part of the experience intended by the designers. Although this remains a relatively small encounter compared to the remaining game experience, it nevertheless acts as an appropriate allegory for the extrinsic values echoed throughout. As addressed in a "Design Heuristics for Activist Games" (Flanagan & Nissenbaum, 2008), games are a cultural medium with certain representative beliefs (sub)consciously embedded through their systems and

structures, reinforced through consistent gameplay loops and incidental learning. Although the *Grand Theft Auto* series was not designed as an educational game, it nonetheless portrays its world (and by extension our own) as a violent place, uncritically justifying an inherently nihilistic perspective that "rewards criminal behaviour and reinforces racial and sex stereotypes" (Flanagan & Nissenbaum, 2008, p. 264).

By itself these observations possess a relatively minimal reach, remaining indicative of only one text from a singular source. Though when observed in relation to a wider library of interactive literature and its intended sociological environment it swiftly becomes apparent that these specific value-based principles around resolving conflict through physical dominion (or through purely engaging in one's surroundings through violence) are actively-endorsed in a myriad of differentiating game spaces, and remain emblematic of a much wider symptom in commercial games that only support a limited range of values through their experiences. As such, further textual analysis may even expose the lingering sentiments surrounding such representation and how it remains reflective of our wider socio-cultural values. Such analysis may even be utilized by practical scholars to identify under-represented values in interactive mediums, giving them the opportunity to design alternative systems both controversial and critical of such over-represented principles of game design. As although this particular line of critical theory on value-based principles and Human-Computer Interaction within contemporary games may not strictly be necessary for the development of a practice-based exegesis, it nevertheless felt pertinent to include in the wider methodology review — to both acknowledge the analysis frameworks being utilized in academia to dissect existing material, and closer identify those same *values* that felt under-represented or otherwise neglected in their observations of the contemporary games medium.

## 2.6 Values at Play

### 2.6.1 Introduction to value-based frameworks

In *Game Design Values* (Annakaisa & Sandover, 2016), the authors identify a trend over the last twenty years in academia focussed on the development of concise value-based frameworks in software-based technologies. With frameworks such as Worth-Centered Design, Value-Sensitive Design and most notably Values at Play acting as the leading model for grounding the development of interactive games in a more ethically-minded practice. These frameworks are in part informed by the study of information ethics, and the suggestion that all technology include the (sub)conscious beliefs, political aspirations and socio-cultural values of their designers, often addressed within games through acts of "moral play, ethical ecosystems of games" and "ethical stewardship in games" (Annakaisa & Sandover, 2016, p. 2). Initially explored in *Values at play: Design tradeoffs in socially-oriented game design* (Flanagan et al., 2005a), *New Methods of Activist Gaming* (Flanagan et al., 2005b), "Embodying Values in Technology" (Flanagan et al., 2008) and "Design Heuristics for Activist Games" (Flanagan & Nissenbaum, 2008), the authors advocate for the Value at Play methodology as a form of moral political activism against contemporary technological conformism, specifically in the context of emergent interactive technologies. By informing their work on existing frameworks (such as Human-Computer Interaction, and Value-Sensitive Design), the authors were able to forward a more practice-based methodology for the development of these abstract virtual experiences. In which socially-conscious values are embraced throughout the entire design process, with the intent of developing software with a closer focus on affirmative socio-political change. As identified in "Video game values: Human-computer interaction and games" (Barr et al., 2006b), game interfaces are by their own nature commonly abstracted from the Human-Computer Interaction framework, wherein function often remains secondary to the ludonarrative atmosphere evoked through the game setting. Game interfaces act as heuristic spaces that inevitably embody some form of incidental learning, or the

(sub)conscious socio-cultural leanings of their designers (Barr et al., 2006b). And as such the Values at Play framework is not intended as a replacement for these former design methodologies, but rather as a conscious augmentation of contemporary software philosophy, such that it also examines the unconscious prejudices associated with these contemporary practices (Flanagan & Nissenbaum, 2008). The goal is not only to identify moral deficiencies found within certain contemporary technological artifacts and our own inherent thought-processes, but also to radically challenge the former beliefs these technologies were founded on and develop artifacts that more effectively embrace socially-conscious values. Wherein the theoretical artifact not only incorporates such "instrumental values such as functional efficiency, safety, reliability, and ease of use", as observed in Human-Computer Interaction — "but also the substantive values to which societies and their peoples subscribe" (Mitcham, 1995, as cited in Flanagan et al., 2005b).

By advocating for an approach that remains critically-sensitive to the shortcomings of contemporary principles of commercial design (such as *audience retention*, *apolitical content moderation* and *numerical social transactions*), and by observing contemporary artifacts through a lens appropriated from the guidelines of Human-Computer Interaction, designers may develop a closer sensitivity to concerns which would otherwise have remained unexplored. Under contemporary Human-Computer Interaction theory, a social network that uses one-touch social transactions (such as *favoriting* a twitter post) would only be observed on how efficiently these transactions are executed through the interface, as opposed to what the long-time social repercussions or benefits may be on introducing a numerically-visible endorsement hierarchy to an existing community. In this specific example, the repercussions of this would potentially be amplified within marginalised communities, whose often politically-sensitive material and the discussion thereof may require a more nuanced metric for publicized endorsement, rather than the predominantly visible endorsement metric currently standardized across a majority of contemporary social networks. Although, the authors of these respective articles also acknowledge that the embodiment of value-sensitive design principles within technological artifacts and software is not necessarily a unique perspective, but rather has long since been growing within disciplines (both in academia and commercially) relating to the study of *technology*, *society* and *humanity* (Flanagan et al., 2005b). The authors also identify



that most critical literature has been purely limited to the critique of existing technological artifacts, as within the example given earlier in *From pushing buttons to play and progress* (Barr, P et al, 2006b) on the socio-political nature of the keybindings in *Fable*. With little academic material having been published on practical methodologies that do incorporate principles of value-sensitive design, in part due to how even practitioners who support the implementation of value-based systems in commercial artifacts, struggle when confronted by the standardized needs of their commercial industry. Flanagan and Nissenbaum (2008) argue that it is no longer simply enough to recognize that human principles should be embodied within interactive design, but also that those particular principles of ethical aspiration must be consciously woven into the practical rhythm of game design production, through the embodiment of existent methodologies such as the Values at Play theory — whilst still meeting the necessary criteria required of any commercial software product.

## 2.6.2 Definition of Values at Play

The Values at Play methodology identifies three key constitutive activities (*discover*, *translation* and *verification*) to be integrated into the production process, to be undertaken in parallel and as a form of iterative critical reflection throughout more practice-based endeavours:

**Discover:** In which designers identify those values relevant to the focus of their project (such as *liberty*, *autonomy* or *collaboration*), and how these values may be abstracted more concisely toward an identifiable aspiration, such as abstracting *collaboration* into the aspiration of allowing open-minded conversation and sharing within the development of a digital learning ecosystem. Collateral or secondary values may even emerge throughout the development process, appearing in consideration of functional elements being introduced to the emergent interactive work. This brings into deeper focus those values that may otherwise be considered implicit or indeterminate in other frameworks (Flanagan & Nissenbaum, 2008).

**Translation:** Where discovery serves to identify those values considered pertinent to the project, translation acts to transform those concepts into explicit design specifications. Designers explicitly envision and develop features applicable to abstracted aspirations and values identified in the discover activity, while still remaining considerate of the implicit architecture, infrastructure and production process of an interactive work. For example, the design of an anonymous messaging system which meets the requirements for open-minded conversation should also require careful consideration of how this feature may retain the participant's anonymity within the architectural infrastructure of the work, and keep them safe from potentially abusive or harmful conversations.

**Verification:** In which designers critically dissect their work (often through user-testing drawn from their intended audience, and observing the outcome in behavioural patterns), and determine whether their project addresses those values formed throughout the development process. Verification may also exist in parallel to the other consecutive activities, to closer identify the structural-validity of their values and how they've been realized in the design of explicit features or the wider experience-flow of the interactive work. It's not unexpected for unfamiliar behaviours to arise from even the most structurally-designed features, whether from unanticipated actions allowed through the interface or technological-inexperience on the part of the participant (alongside a myriad of other circumstantial possibilities). Such that integrating points of conscious *verification* throughout the entire production process potentially assists in mitigating any dramatically value-opposing behaviours in the published work (Flanagan et al., 2005b).

In not only advocating for establishing the Values at Play framework as a necessary component of the design process, but also an aspiration by which the merit of these technological artifacts are critiqued and designed, designers and participants may begin to develop a shared emergent language from which these artifacts may grow. In a broadly-addressed liberal socio-political setting, this language may emerge around values grounded in *liberty, autonomy, justice, freedom, security and personal privacy*. Whereas, within a technological community designed to introduce under-represented

women to the male-dominated field of software engineering, it may also be pertinent to consider values grounded in *feminist theory*, *authorship*, *collaboration* (as opposed to competition) and *creativity* — as in Flanagan et al. (2005a) academic exercise *Rapunsel*, a networked game environment consciously designed under the Values at Play framework to teach basic programming skills to middle-school girls. Intrinsic to *Rapunsel*'s design was the underlying motivation of including girls' perspectives in software design and increasing their technological competence and confidence (Flanagan & Nissenbaum, 2008).

### 2.6.3 Use of theory

It should be noted, however, that even with *Game Design Values* (Annakaisa, Sandover, 2016) identifying Values at Play as the current predominant practical framework in academic game design and the development of interactive activist works, the application of this methodology within practice-based academic works has still remained mostly limited to the small insular community of academics that contributed to the founding literature of this methodology. *Rapunsel* operates as the grounding example of how this framework may be incorporated into a functional academic exercise, both illuminating how under-explored this framework remains beyond the small insular setting it was founded in, and lending some small allowance for academic scepticism and critique. Nevertheless, with its focus on value-based design principles and an explicitly activist-orientated approach to practical design, it was felt the Values at Play framework remained the closest and most effective approximate methodology to fit the wider ambitions of this exegesis. The *Library of Babble* embraces both a conscious understanding of the standard work processes associated with the development of a digital experience, and the ambition of releasing this software into an open marketplace beholden to the expectations of other software products. The versatility offered by incorporating other methodological frameworks such as Human-Computer Interaction and Value-Sensitive Design was also considered necessary, in part due to the fusion of elements the *Library of Babble* incorporates relative to classical interpretations of video game and social network design, and how

familiar these frameworks felt relative to former experience within the software industry. Allowing ample breathing space for the anticipated exploration and experimentation of emergent socially-orientated behaviours on release, both in the form of behaviours internal to the *Library of Babble* ecosystem, and externally discovered in the form of published articles, write-ups and tweets.

With both *Rapunsel* and the *Library Of Babble* operating under the wider classification of socially-orientated communication software at the intersecting point of interactive entertainment and structural software, and alongside a shared infusion of ambitions inspired by values of *autonomy*, *safety* and *intimacy*, the critical dissection of the researcher's own development journey operated as a welcome comparison to draw from. The Values at Play methodology brings an invaluable structure to the practice-based structure of this exegesis, grounding it in an academically-founded language that may be used by external scholars to contextualize the theoretical learnings and ambitions addressed throughout. This potentially situates the exegesis as substantive academic material from which to draw further contextual and critically-sensitive analysis from, in the instance of a post-mortem critique of either the practice-based exegesis outcomes or the methodological space it's found exploring within. As such, it in part remains a secondary ambition that this exegesis will further ground the Values at Play methodology as an effective framework for the development of further practice-based academic work, identifying both its strengths and shortcomings in the process.

## Chapter 3

### Methodology

### 3.1 Research project development

#### 3.1.1 Selecting values

From this literature review, and related text pertaining to the Values at Play methodology, certain fundamental principles of meaningful value-inspired design may begin to be addressed and drawn from, in particular the design of features in the *Library Of Babble* that support some form of intrinsic motivation. Allowing for the design of formative acts of egocentric communication, and by extension the nourishment of certain physiological needs as identified through the Self-determination Theory, Needs-Affordances-Features framework and the Values at Play methodology.

By drawing on existent literature developed in the field of Self-determination theory and the Needs-Affordances-Features framework, and determining how certain features may be considered psychologically-detrimental or possess unseen consequences, it was possible to determine how certain elements of commercial software design may be abstracted out into identifiable values to control for. This was not a concrete empirical analysis, but rather one drawn from existent literature on the design of contemporary social networks, with the ambition of practically observing how the abstraction, inclusion or exclusion of different features may shift the atmospheric ambience of a space and allow for the emergence of unique sociological

behaviour, partially determining how specific features fit with the wider critical theory surrounding *intrinsic* or *extrinsic* motivations, *autonomous* or *controlled* behaviour (as expressed through Self-determination theory). Thus we can ascertain whether those features allow for the emergence of genuine autonomous behaviour un beholden to the sociological influence of an emerging community, or allow for the emergence of other systems within the digital ecosystem. This was critical in identifying how those values (inspired by the three basic psychological needs *autonomy*, *competence* and *relatedness*) addressed through the Self-determination theory may be abstracted into pertinent and critically-salient features to be implemented throughout the development of the practice-based thesis.

By abstracting common social-media features identified in the Needs-Affordances-Features framework and theorising how they may be abstracted to fit in a non-linear timeline (as opposed to how content is structured on contemporary sites such as Facebook) like that discovered within the geography of the *Library of Babble*, it was possible to determine how incongruent or harmonious those features may be relative to values addressed in the Values at Play methodology. By abstracting different *psychological needs* and *affordances* from salient features discovered within contemporary social networks, and lightly observing them through the *discover* section addressed in the Values at Play framework, what emerged was the overwhelming sentiment that certain physiological needs (such as *autonomy*, *competence* and *relatedness*) could still be nourished by consciously uncoupling them from principles of commercial design, even without the need for explicit allocentric affordances or extrinsic motivators. Whilst through the literature review into existing research surrounding emergent instances of intrusive design, alongside research advocating for the inclusion of peer-to-peer support systems (as supported by psychological principles of Self-determination theory and the Needs-Affordances-Features theory), what eventually arose were three fundamental values (*autonomy*, *safety* and *intimacy*) for technologically-supported wellbeing that could be explored further in the practice-based process of this exegesis. Defined below, these values remained central to the creation of the *Library Of Babble*, eventually becoming concrete features that would become the grounding praxis of the entire practice-based work.

**Autonomy:** The opportunity to act willingly within the parameters of the interface, such that audience members should never feel pressured to act without their full and knowing consent, expose personal information they are uncomfortable with or feel unduly motivated to engage in activities for extrinsic reasons beyond their immediate wishes.

**Safety:** The personal safety of the audience is preserved at each respective point, such that they feel comfortable setting their own boundaries in expressing themselves throughout the mediated experience. For example, even in the instance of an unanticipated data breach their information would remain anonymous and untraceable. This structural consideration became pertinent in the construction of certain features and how relevant information was displayed.

**Intimacy:** The inherent atmosphere and social ecosystem that these emergent behaviours occur within should help the audience feel comfortable discovering and exploring "different aspects of their selves" (Przybylski et al., 2012. pp. 69) alongside those aspects of themselves that remain unreflected in more socially-formulaic social networks. Although not necessarily a value within itself, it nevertheless acted as a welcome departure from the Values at Play methodology to explore how the atmospheric setting of a constructed space may be shifted to open up different avenues of self-expression.

### 3.1.2 Feature evaluation

In the first design pass, it was theorized that other players would have the opportunity to *admire* (not dissimilar to similar one-tap *like/favourite* features in most contemporary social networks) messages they most admired or related to, which would be represented by a set of numerical values beneath the message indicating how

many other players had both discovered and admired their message. This would be accompanied with an interface (or notification panel) where one could track how much admiration one had accrued relative to one's published messages. This was commonly requested as a necessary feature in discussion with other user-experience designers (both within the games and interface industry), who felt it a necessary component in simulating the structural integrity of a functioning social network. Although still a relatively literal interpretation of similar systems identified through the Needs-Affordances-Features framework, in dissecting the behavioural influence of this feature through the Self-determination theory — this feature was eventually abandoned as it no longer addressed the values identified throughout the *discover* methodology (such as *autonomy* and *intimacy*). I theorized that as this feature drew on extrinsic, allocentric affordances (such as *competition*) it may motivate certain players toward publishing messages that accrued the most admirations, actively undermining the intrinsic motivation and introspective intimacy of the space by supplementing it with external competitive motivations. I.e., by replicating similar extrinsic behaviours and social hierarchies observed within other social networks, it would draw attention away from the simple pleasures of self-autonomous writing. By removing any extrinsic competitive element (such as the number of viewerships and admirations), it was felt players would feel more intrinsically-enabled to pursue their own intimate introspective writing, irrespective of how those publications would be viewed by other observers. In noting how overwhelmingly-present this feature remains on other commercial social networks, its distinct absence here is intended to reassure those players needing someplace smaller to express their thoughts and feelings.

In the original conception of the practice-based output, it was also theorized that the *Library Of Babble* would remain more of a storied space, one in which fictional storytelling flourished and would allow for the natural emergence of a deeply-narratological community. Within this environment, players would have the opportunity to publish amendments and narrative extensions to other anonymous publications, almost akin to underlining certain sentences or writing handwritten notes in the margins of a paperback book. By their own anonymous nature, stories wouldn't remain beholden to any author, but rather would incrementally grow over time with the added contributions of each passing wanderer. And although this feature still draws on a sentimental atmosphere that may be explored in further research on



communal storytelling, this feature was eventually cancelled as the overwhelming sentiment from observers was that the depicted atmosphere allowed them the opportunity to write untethered from any narrative conceit. Such that designing any systemic structure that coupled your contributions to others would inherently limit the self-expressive nature allowed through a much less restrictive system, and could potentially lead to moments where contributions might be considered harmful when written in confluence with messages that were deeply-intimate in nature. This was an instance in which the use of public *Verification* (and the guiding-influence of public discussion on twitter) guided how this feature may be interpreted relative to an audience's own expectations and intrinsic needs. As such, although this feature might function smoothly in a more narratological creative storytelling setting, the inclusion of other editors within your most intimate writing felt like a social faux pas that could not be adequately controlled for in such a flexible setting. In combination with limitations imposed by software-infrastructure and limited development time (all of this infrasture would have had to be programmed from scratch, such that it could be preserved within a unique database structure), this feature was eventually abandoned in favour of something much more minimalistic and closer to values identified in the Values at Play discover framework (such as *autonomy* and *intimacy*). Throughout the *Discover* process, one emerging sentiment was that it felt critical to identify *intimacy* as an atmosphere pertinent to the entire experience, such that any participant would feel secure in publishing their feelings with the fullest reassurance that it would remain anonymous and wouldn't be tampered with by any other misunderstanding (or malicious) participants.

Though also abandoned in time, a feature that systematically-motivated the discovery and reading of other messages was also considered. Players would only be given the opportunity to publish their own messages after discovering a certain number of other anonymous messages, akin to a small inkpot slowly filling up with each story read (and slowly draining with each word written). And although a relatively unique feature relative to those addressed in the Needs-Affordances-Features theory (where the ability to publish content on social networks is often limitless and unrestricted) it echoed similar systems discovered in games which restrict certain behaviours until a certain task had been accomplished. Although this system thematically fit within the atmosphere of a more narrative-centered game (as within earlier conceptions of the

design), where such features may be utilized to motivate collaborative wordsmithing and the discovery of others' writing, concerns were swiftly raised when considering how this extrinsically motivated certain behaviours. In essence, it was feared that attaching a numerical counter to the intrinsic act of reading would diminish the outcome of values surrounding *autonomy*, and potentially lead to ennui as more self-expressive players became overwhelmed by the limitation (As observed in "Da-Sein design: Linking phenomenology with Self-Determination Theory for game design" (Conway & Elphinstone, 2017).

Eventually, the features that were encompassed within the release version of the *Library of Babble* were settled upon. This included the ability to slowly wander through an endlessly shifting diorama, composing small messages at opportune moments (with a maximum character-count of three hundred characters, just a few characters longer than tweets found on Twitter). A feature designed with the ambition of motivating audiences into drafting messages that feel both intrinsically small and fleeting, without inducing moments of overwhelming writing paralysis — while still inspiring a sense of self-autonomous control. With each message set at a uniquely generated coordinate of geography, they remain distant enough from other anonymous messages to encompass the full attention of whomever discovers them, allowing for their full undivided attention and bringing gentle breathing time in between each unique discovery. Entailing that messages feel distinct and untethered from any wider narratological conceit or inherent competitive behaviour. In combination with a minimalistic compass (which always points toward the nearest undiscovered message), this imbues the space with a natural wandering sense of rhythm, of a space mostly uninhabited but for the occasional story settlements of other wanderers. On entering the space, players may drift through the library discovering other messages and allow themselves to become familiar with the emergent sociological setting there, before eventually being given the opportunity to compose something of their own. This structure is supported through the interface itself, whose animations and minimalistic appearance were actively designed to slow down the rate of personal consumption, and push audiences toward lingering between each action. Consciously ensuring that the space remains without extrinsic features or significant information overload, such that each molecular decision on one's journey feels intrinsically motivated and individual to one's own desires. Although always retaining a sense of

abstract minimalism, it was felt that these features most embrace the values identified in the Values at Play methodology, drawing out sentiments of *autonomy* and *intimacy*, while always reassuring participants of their sense of *security* along the way.

### 3.1.3 Summary

Although this is a practice-based endeavour, this exegesis has fundamentally remained an exercise in identifying key symptoms of psychological neglect within contemporary social networks, with the ambition of constructing an alternative vision of how these spaces may be designed to reflect intrinsic values imbued in human interaction and communication. Although software design has historically been understood as an unbiased interpretation of human values, emergent literature (such as “Internet use, Facebook intrusion, and depression: Results of a cross-sectional study” (Błachnio et al., 2015) and “Embodying Values in Technology” (Flanagan et al., 2008)) has raised a unique perspective on how these often divided fields may be consolidated into a single project through the use of explicitly practice-based methodologies. It feels critical to note that although this thesis includes over eight months committed to the individual development of the practice-based endeavour, this methodology was not necessarily a dissection of the inherent making process (neither addressing the explicit endeavours of the development process, or a structural breakdown of the algorithms used to design an endlessly tessellating realm), but rather an attempt to engage with processes relating to the wider holistic design of a functioning social network. Under the belief that other practice-based researchers may benefit from observing how the Values at Play framework (amongst other value-inspired methodologies) was utilized in an active research project to translate existing literature on digital humanities into salient and demonstrable software for public use. As such, it is essential that this experience was structured as a sincere attempt at designing a fully-functional social network, one which, despite its minimalistic infrastructure and limited use, does function as an authentic network, and one which has since accumulated a significant audience of contributors.

It's also significant to note that this project remains quite unlike the simulation of a social network, as explored in *Hypnospace Outlaw* (Tholen et al, 2019), wherein each message or contributor is a carefully-constructed fiction written by the game designers to evoke certain sentiments or advance the critical narrative. Rather, each message published within the *Library Of Babble* was written anonymously by a genuine willing participant beyond the immediate influence of this exegesis. And as such, the emergent sociological atmosphere and contributions present there are not authored by this practice-based process, but rather they're the result of anonymous engagement with the released product..

In the structural design of contemporary social networks identified in "The Needs-Affordances-Features Perspective for the Use of Social Media" (Karahanna et al., 2018), it's anticipated that commercialism demands that social networks should visualize each available metric (*viewership, followers or likes*) and incorporate them into their ecosystem to increasing information overload. Computer hardware naturally operates as a data-gathering machine, and within the self-classified information age, it feels only natural to assume this data should be made publically available to closer discern how one is operating within existent social hierarchies and ecosystems. However, as identified in emerging critical literature such as "Internet use, Facebook intrusion, and depression: Results of a cross-sectional study" (Błachnio et al., 2015) and "When Social Networking Is Not Working" (Forest & Wood, 2012), this excess of information may lead to sociological consequences that researchers are still only just starting to comprehend. Contemporary design-thinking suggests all design decisions possess an influence over the atmosphere of a digital space, similar to how different architectural decisions possess an influence over the atmosphere or poetics of physical space. As such, there's ample opportunity to critically reflect on the consequences (or opportunities) certain features create in our interactions on social networks, specifically those features that remain overwhelmingly holistic or over-represented across networks. As addressed in the literature chapter on *Symptoms of contemporary social design*, when a central tenet of contemporary communication is extrinsically assigning an exact number to the perceived value of our personal expressions, it becomes central to consider is how this may influence the communicative poetics of our contributions and how we choose to express ourselves.

This remains a hypothesis central to the practical design of this exegesis, and a key reason for consciously diminishing extrinsic-numeric features (and similar features of engagement) in the *Library of Babble*, to both critically explore how the distinct absence of certain features may influence the messages written there, and how a conscious relaxation of these quality-determinants might influence a participant's engagement with other messages. One goal of the practice was to better understand how the targeted use of certain features may influence a participant's emotional wellbeing and use of communication, and to demonstrate how this increased understanding may consciously be used to design more socially supportive online ecosystems. Developed under the hypothesis that by designing a space without immediate extrinsic reward structures (such as *one-click feedback counts*, *follower* or *friendship counts*, or *comments*), one might be able to motivate participants to consider publishing more intrinsically-motivated contributions, with the reassurance that their contribution would remain anonymous and without the risk of social retribution or judgement. When your contributions possess an intrinsic baseline of worth, and are given their own space to exist and breathe, it dramatically opens up the social space for a much wider spectrum of self-expression and personal exploration. It's this particular sentiment that resides deep within the critical praxis of the *Library Of Babble*, the desire to design a social ecosystem that reflects values un beholden to any corporate commerciality, and one which operates respectfully in terms of its player's wellbeing and intimate sense of self-autonomy.

From an aesthetic perspective, by drawing on research within the literature chapter on *Critical Nostalgia*, the *Library of Babble* fundamentally grew from a space of retroactive allure and those small personal sentiments felt when reminiscing over an indeterminate era of internet history. Rather than focussing on accomplishing an accurate or historical representation of the internet, or authentically attempting to recreate the infrastructure of earlier modes of digital communication, its design rather seeks to evoke a personal sentimentality toward past experiences within this digital space. Nor is it a critical satirization or necessarily a commentary on the contemporary internet, as has been explored in similar methods of critical nostalgia (As within critical experiences such as the collective works of *Nathalie Lawhead* (n.d), whose pivotal works draw on the technical limitations of past infrastructure to evoke a sense of existential anxiety and hopefulness toward the present setting). In the *Library Of*

*Babble* there is no intentional satirization of our past or contemporary technology, rather it's an act of consciously diminishing certain design applications practised in contemporary social infrastructure, as a critical reflection and critique on how far we've wandered from former crossroads, and an observation on how much we've grown. The intent is a sincere reflection on how our social spaces might be designed were we to embody different value-inspired principles of design, and how these might be implemented were our focus less motivated by methods of commercial design. In an age of automated algorithms, discrete data-gathering and advertising-centric modes of revenue, it's not unusual for regular internet users to feel increasingly disenfranchised from corporation's infrastructural decisions, such that there's an emerging lingering wistfulness for the familiarity for older software that organically reflected their limitations and consequences. Software which was minimalistic and programmatically simple, and controlled through near-indecipherable interfaces and inconsistent pattern languages, but which nevertheless held traces of the sublime. These spaces weren't necessarily safe, but they felt intimate and existed as anonymous modes of self-discovery and exploration. From an aesthetic perspective, these are the sentiments the *Library Of Babble* most attempts to grapple with and examine, in a delicate attempt to use features embodied through critically-minded nostalgia and value-centred design to explore alternative forms of digital communication. To the undiscerning participant, the *Library of Babble* shouldn't even be read as a critically-abrasive work, but rather as a small alternative vision of things to be.

It is also necessary to touch on the geographical characteristics of the *Library of Babble*, and the delicate act of balancing these relative to the holistic ambitions of this exegesis. Although the physicality of virtual space wasn't explicitly identified in the literature review, it nevertheless remained a pertinent consideration throughout the development process. While this exegesis could theoretically have been prototyped as an empty space absent of any visual signature, with almost the exact same feature set, this wouldn't have been an adequate alternative to the visually-saturated piece that became the release version of the *Library of Babble*. Rather, by drawing on design considerations identified in *From pushing buttons to play and progress: Value and Interaction in Fable* (Barr et al., 2006a) and "Da-sein design: Linking phenomenology with Self-Determination Theory for game design" (Conway & Elphinstone, 2017), what eventually emerged was a geographical space inspired by early cartographical

renderings and minimalistic computer graphics, generated to give the sense of an endlessly shifting space that (sub)consciously reassures wanderers of their own psychological wellbeing. As although features may dictate the tangible diversity of behaviours available to participants, the aesthetic atmosphere that encompass them often indicate how these features should be interpreted within the narratological setting of their virtual ecosystems (Barr et al., 2006a). This can (sub)consciously indicate to participants what kind of behaviours they should be pursuing, subtly express intrinsic values through visual allegory, and even gently guide their emotional connection and sense of *thereness* to a space. For example, a similar experience designed under a stark fantasy setting composed of *crumbling architectural ruins*, *overgrown forests* and *fallen kingdoms* would have intrinsically shifted our sense of *thereness* and relationship to the *Library of Babble*, conceivably influencing contributors into composing more fairytale-esque narratives relative to the softly cartographical space and intimate recollections that became the release version. In combination with the limited development time, it was also felt necessary to design something that felt visually alluring and distinct, such that it stood out from any similar experiences, whilst still remaining minimalistic enough to be accomplishable within the limited time available. From a purely market-driven perspective, it also feels fair to consider that most participants were potentially ambivalent toward any experience that supports anonymous contributions (the internet possesses a poor track record in this regard), and although this remains undocumentable, it's conceivable that the majority of contributors were drawn to the visuals over any explicitly-stated social features.

As different features associated with common social networks were drawn out and eventually discarded for being antithetical to the values identified in the Values at Play discovery process (*autonomy*, *security* and *intimacy*), what slowly grew was the feeling that even within its minimalism, it may be possible to design a critically-sensitive social network which imbues its participants with a purely intrinsic lure for the written word. Such that the absence of any immediately-identifiable extrinsic features from the Needs-Affordances-Features framework makes *Library of Babble* feel critically distinct from contemporary communication software, while still supporting the values of *autonomy*, *security* and *intimacy*. As addressed within the respective literature and research of the initial Values at Play methodology, this value-driven system of design became an iterative act throughout the entire making process. This functions as a

clear structure by which to analyze any potential features throughout, and observe how they may challenge or shift the existent atmosphere of the virtual space. By uncoupling the *Library of Babble* from an extensive list of possible communication features, and rather focussing on how the atmosphere and molecular interaction of navigating through a liminal space imbued players with a reassuring sense of safety and introspective intimacy — what emerged was a critically-sensitive work that both echoes principles of values-sensitive design, and feels cognitively distinct from the experience of browsing through any other social ecosystem. Eventually this grew into the digital ecosystem that became the release version of the *Library Of Babble*, a gentle journey of wandering through a miasma of messages (both distant and distinct) abandoned by other anonymous wanderers, with the opportunity to leave a few of your own (should one possess the wish to do so).

On booting up the system, you're not asked for any form of identity-clarification or guided through the construction of a digital identity. You're simply greeted with a small simple message ("Love is one of the most important things on this planet" - anonymous) buried in the side of some abstracted geography, with no indication of authorship or immediate interaction. No advertisements or features are vying for your attention. And besides the small psychedelic realm before you, the interface remains minimalistic and almost brutalist in its absence of features, including only a few coordinates and a mysterious compass. Using your keyboard to maneuver about you'll eventually discover other messages on your wanders, each as anonymous and disconnected as the last. Simple testaments that other participants have wandered through here and felt inclined to leave a little part of themselves behind. Stories and fragmented sentences which in combination with one another expose an intimate sense of humane reassurance and compassion, a space to feel safely open and explore one's true self within.



## Chapter 4

### Results

#### 4.1 Analysis

##### 4.1.1 Release structure

The *Library Of Babble* was released on August 16th, 2019 as an independent software package on itch.io, an online digital marketplace for smaller independent makers commonly associated with noncommercial games and experimental works. Released under the impression that this marketplaces' audience would be most receptive toward supporting a more minimalist storytelling experience, compared to other digital marketplaces more commonly associated with major commercial studios. Currently, the *Library Of Babble* is available to purchase for \$5.00US (although it has also been featured in sales), and was marketed through a personal twitter account in the preceding months before its release. This price was chosen in respect to similar-sized experiences featured in the marketplace, and in part to ensure its audience remained one naturally drawn to the intrinsic experience addressed through the marketing material (mitigating against audiences with malicious intent). As although placing a monetary restriction on a practice-based exegesis work may feel antithetical to the research process, it also felt important to respect the structure of an already financially-struggling industry, and not inadvertently devalue any similar work being released in the same window of time.

The marketplace site page was designed to be reminiscent of an indeterminate internet age, drawing on the minimalistic aesthetics of the game interface to suggest something both intimate and technologically arcane. Soft descriptive language was written to reassure readers of the intrinsically-motivated atmosphere, and to introduce the experience as something for those wishing for smaller spaces of self-reflective writing. As within many other apps featured on the itch.io marketplace, it was important to describe this experience as something designed by an independent maker (as opposed to through a corporation or normal studio structure), and to include how it was inspired by memories of drifting through the internet, with thanks for whomever considers supporting it. It was also this central space that guided participants to write with kindness and love, as although this space is reflective of how people present themselves online, it also felt necessary to set clear repercussions for cruel or malicious behaviour, and clearly identify that the Library of Babble remains a moderated space.

#### 4.1.2 Commercial response

Since its release, the *Library of Babble* has been purchased over 250 times, and accumulated over 900 individual downloads (people who purchase a copy can download it onto several different devices, and may share it with friends). It has been featured by a number of distinguished editorial websites covering the independent games industry, including a thoughtful op-ed by the award-winning journalist Christian Donlan (published through Eurogamer, 2019) drawing a comparison to the published work of food-writer Jonathan Gold, *Counter Intelligence*, and how both the books intermittent description of Los Angeles smallest eateries and the *Library of Babble* draw on a similar allure of the simple, in kindred disgrace of any unkempt opulence.

*"I love it, I think. I love it for its sparseness, for the manner in which it builds itself out of so few elements. In games we are often about more, more, more. This is such a trite*

*thing to say by this point, so obvious that I almost feel ashamed typing it. But inside that thought is another: I love to look the other way every now and then. Here is a something made from a handful of pieces - and all the pieces matter"* (Donlan, 2019).

Alongside a reflection by Jay Castello (published through Rock Paper Shotgun, 2019) focused on the delicate intimacy imbued through its asynchronous communication, and another by Catherine Brinegar (published through Rebind, 2019) which focused on the nature of its atmospheric warmth and coziness. There were also a number of other smaller publications, and each writer drew on a different sentiment from their time within the experience, validating what this exegesis was atmospherically (and critically) aiming toward. The *Library Of Babble* was also exhibited at the micro-conference *Wordplay '19* in Toronto, Canada, among a number of other creative endeavours celebrating the exploration of contemporary writing and narrative within interactive games, and showcased at *Hovergarden* (a small independent games gallery) during the *Game Connect Asia Pacific* conference in Melbourne, Australia. After its release, I was also given the opportunity to speak at the *Freeplay Parallels '19* conference in Melbourne, Australia. Although it wasn't an academic conference, it was nevertheless a heartwarming journey into some of the more atmospherically poetic inspirations behind the *Library of Babble*, advocating as a structural introduction to digital humanities. Although the *Library of Babble's* audience remains comparatively small relative to similar independent works, it nevertheless exceeded personal expectations and potentially remains indicative of a wider communal wish for smaller spaces of communication.

### 4.1.3 Preliminary analysis

Although within the given time available and the scope of this project, this exegesis wasn't able to include a structural discourse analysis of the contributed content. It nevertheless feels pertinent to document that since the *Library of Babble* released, over 200 anonymous contributors have composed over 600 written messages within its digital ecosystem. Ranging from short stories, to self-reflective memoirs and intimate meta-commentaries on players' time within the experience (and many other styles of

writing besides). Many messages also seem to linger on similar sentiments of broken hopefulness, of reminiscent longing and uncertainty, at times drawing on a form of reflective intimacy not often found on other social networks focussed on establishing genuine traceable identities. The anonymous nature of each message truly seems to draw on an identifiable style of self-reflective prose, with the feeling that many of those who engaged with the experience also deeply connected with the lingering sentiments expressed within the gradually emerging atmosphere of the space. Although the experience was always consciously designed using the practice-based methodological values of *autonomy*, *security* and *intimacy*, these were never explicitly addressed in any of the published marketing material — and as such the emergence of any social atmosphere organically grew from beyond the range of this exegesis's explicit influence.

At 18,700 anonymously composed words, the *Library of Babble* database theoretically establishes a substantial corpus for the examination and analysis of the discourse discovered within, and with given opportunity may bring insight into how the geographical structure and interface formed the specific semantics that have since emerged. The *Library of Babble* offers the ability to measure both how different geographical divisions (differences along the longitudinal or latitudinal axis) relate to different writing styles within distinct regions of the interface, potentially bringing understanding into how different language patterns organically emerge over time through collaborative exposure on social networks. By cross-referencing the corpus with corpora generated from other social networks (alongside a more general corpus generated from offline written-communication sources), analysts may even expose how messages written in the *Library by Babble* differ or exhibit similarities to other textual data structures. Determinations could even be made on how the language structures exhibited within display symptoms of conscious value-inspired design, expose different emotional tenets, or potentially break away entirely from the central exegesis hypothesis. Although no clear answer may yet be established from these observations, it nevertheless remains significant that the *Library of Babble* was met with resounding public embrace from those beyond academic influence, suggesting further practice-based study of the digital ecosystems of our contemporary internet could lead to genuine structural insight into emerging fields of digital humanities.

What may be drawn from these observations is that although the *Library of Babble* presents a relatively minimalistic interpretation of a functioning social network, the strong response from anonymous contributors and the emergence of a sociologically-abundant community nevertheless represents a reassuring metric for the success of these value-inspired systems. Even without explicitly-stated guidelines, the culture that grew there feels deeply reminiscent of the ambitions addressed within this wider exegesis, indicating the functional-integrity of the systems designed within and lending support for the use of the Values at Play framework as an operational methodology. The number of written contributions demonstrably reflect the explicit values (*autonomy, security and intimacy*) identified through the Values at Play methodology, and remain indicative of the sociological atmosphere that was instilled through the conscious implementation of these values. This lends critical support for the implementation of further intrinsically-motivated systems within communication software, and supports adjacent theories of psychological well being and intrinsic selfhood addressed in the methodology section. Providing evidence that there is critical demand for continued research into the design of similar sociologically-supportive networks, and that the medium of social networks is not intrinsically detrimental to individual psychological well being, but rather that negative consequences observed within other social networks may potentially be symptoms of misaligned design on the part of their parent corporations. Suggesting that through a conscious analysis of extrinsically-motivated behaviours addressed in prior academic observations, it may be possible for researchers to explore alternative features and modalities of communication through the use of explicitly value-based frameworks.

## Chapter 5

### Conclusion

#### 5.1 Closing notes

This exegesis may be summarized as setting out to synthesize contemporary interpretations of Self-determination theory, Needs-Affordances-Features theory and theories of Critical Nostalgia into a focussed practice-based endeavour, identifying different behavioural theories and how these may be integrated to support either *intrinsic* or *extrinsic*, *allocentric* or *egocentric* behavioural systems in the development of a smaller-scale communication platform. It also draws on research on the psychological influence of contemporary social media, and how certain detrimental consequences may be mitigated through the use of conscious design principles identified in using the Values at Play methodology. Culminating in the public release of the *Library of Babble*, a minimalistic social ecosystem intrinsically focussed on the sociological wellbeing of any community that emerges there, or any participants therein.

This exegesis is not necessarily a critique of social networks as being intrinsically psychologically detrimental to socio-cultural communication and personal wellbeing. But rather one whose design reflects an ambivalent hopefulness for this emergent communication medium, by critically confronting concerns in existing literature in an attempt to define a more socially-constructive method for the design and implementation of these digital ecosystems. By drawing on the Values at Play framework, it was possible to establish a practice-based methodology that weighted

the design of each considered feature relative to a set of values (*autonomy, security and intimacy*) identified in the preliminary methodology process, and attempted to critically engage with emergent literature through the design of an alternative social network structurally attempting to alleviate these psychologically-detrimental concerns. Although the Values at Play methodology possessed limited academic exposure beyond its original conception, it nevertheless acted as a foundational structure for the critical formation of the digital work, drawing on a conscious understanding of existing frameworks to closer analyze how explicitly-addressed values may be integrated into the making process.

Although this was a smaller-scale endeavour designed under constraint, and as such not necessarily applicable to the design of a more scalable social network, preliminary observations nevertheless remain representative of the wider anticipated outcomes addressed throughout the exegesis. Indicating sociologically-beneficial effects on the community that grew there, exceeding expectations and giving rise to a digital ecosystem imbued with genuine acts of self-expression and observational reflection. Although a structural discourse analysis was beyond the bounds of this exegesis, these observations nevertheless suggest a deeper analysis may bring closer understanding of how potential patterns of sociological wellbeing unfold within these diegetic environments relative to the features therein. The *Library of Babble* was also featured to critical acclaim by a number of notable websites covering the independent games industry, and featured in a number of smaller interactive exhibitions. Wherein the research outcomes of this project potentially set a precedent for similar studies seeking to explore the underlying psychological effects of social media through a practice-based endeavour, the Values at Play methodology, and other digital practice-based works pertaining to social networks.

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