"More than a cliché": Experiencing Hybrid Gifting in the Wild

Jocelyn Spence

The University of Nottingham, UK

Boriana Koleva

The University of Nottingham, UK

Steve Benford

The University of Nottingham, UK

Dimitrios Darzentas

Napier University, UK

Martin Flintham

The University of Nottingham, UK

Kevin Glover

The University of Nottingham, UK

Hanne Wagner

The University of Nottingham, UK

Rebecca Gibson

The University of Nottingham, UK

Emily Thorn

The University of Nottingham, UK

Gifting is socially and economically important. Studies of gifting physical objects have revealed motivations, values, and the tensions between them, while HCI research has revealed weaknesses of digital gifting and explored possibilities of hybrid gifting. We report an 'in the wild' study of a hybrid chocolate gift deployed as a commercial product. Interviews reveal the experiences of receivers and givers, as well as the producer's friction points and tangible benefits. We reveal how in hybrid gifts the digital elevates the physical while the physical grounds the digital. We discuss how hybrid gifts bridge the tension between receiver-preference and relationship-signalling motivations, the need to further strengthen the exchange and reveal stages of hybrid gifting, and to manage the privacy of sensitive personal messages. We propose to extend the concept of hybrid wrapping to include a finer-grained interleaving of digital into complex packaging and multi-layered wrappings to create more holistic gifting experiences.

1 INTRODUCTION

Exchanging gifts is a widespread practice that pervades many cultures and that is recognised as being socially important by building social bonds and promoting wellbeing (Berking 1999; Lévi-Strauss 1996 [1949]), and economically important by driving the sales of products (Camerer 1988; Cheal 1988). Gifting has therefore become a topic of extensive academic interest across many disciplines, which have considered the rich complexities of gifting practices from different perspectives. One of these that we explore in this paper concerns a key tension between different motivations for giving gifts. In essence, receivers tend to prefer receiving personally meaningful gifts that signal their relationships with the givers, while givers tend to favour gifts that are useful to receivers or signal material value (Givi and Galak, 2017). Receivers would like more of the former, but givers appear to prefer the apparent safety of the latter.

Gifting has also emerged as a topic in HCI where there is a growing thread of research in digital and hybrid gifting. Research on digital gifting has revealed some confusion over the status of digital items as gifts. On the one hand, some digital items such as personal text messages may acquire the status of gifts even if not originally exchanged as such (Taylor and Harper 2002). On the other, digital items overtly given as gifts may be experienced as being less engaging than conventional physical gifts (Kwon et al 2017). The idea of hybrid gifting is to combine elements of both physical and digital gifts to create new kinds of gift experience. Studies of initial hybrid gift prototypes, from advent calendars (Benford et al 2018) to museum tours (Spence at al 2019), suggest that that the approach could transform conventional gifts into being personally meaningful ones (Spence 2019) and has given rise to the concept of hybrid wrapping in which either digital materials are used to wrap physical gifts or vice versa (Benford et al 2020).

In this paper, we present our experience of designing and studying a hybrid gift 'in the wild', by which we mean one that was deployed as a genuine commercial product that was directly purchased by givers for receivers. Our gift product took the form of a hybrid chocolate box, a high-quality box of chocolates to which givers could attach digital media, that was co-created with and sold by an artisan chocolate maker. Technically the product was relatively simple (at least compared to previous research prototypes) so as to engage the widest possible range of consumers, involving a webapp to upload personal digital media and a QR code to connect these to the box of chocolates. However, it transpired to be experientially rich for both givers and receivers and shed light into their various motivations and reflections as genuine consumers. In what follows we report findings from the initial offering of the hybrid chocolate gift over the Christmas

period[1] in 2020 during which time it was purchased by 31 people. In-depth interviews with nine participants shed light on both givers' and receivers' experiences throughout the gifting process of prepare, exchange, reveal, use and reflect, and these are further supplemented with an interview with the chocolate maker.

We offer five key contributions based on our findings. First, we highlight the role of the digital in elevating an otherwise clichéd gift while the physical grounds and occasions the gift. Second, we propose that hybridity can help bridge the tension between receiver-preference and relationship-signalling motivations highlighted by the gifting literature. Third, we discuss the need to strengthen both the exchange and reveal stages of hybrid gift experiences when givers and receivers are remote. Fourth, we consider how hybrid gifts may enable private exchanges of personal messages, but only if potentially revealing these in front of bystanders can be managed. Fifth, we revisit the current concept of hybrid wrapping, arguing for a more subtle interleaving of digital materials with complex packaging structures and multi-layered gift wrapping than simply layering physical and digital.

2 RELATED WORK

We consider related work from two perspectives. First, we provide a brief introduction to key gifting concepts raised in the wider literature beyond HCI that has mainly focused on conventional physical gifts. We then consider work on digital and hybrid gifting as discussed in HCI.

2.1 Wider perspectives on gifting

Here we turn to the wider gifting literature, which spans multiple fields from anthropology to marketing. The work we present here was designed expressly for personal gift-giving, most likely between individuals or households. We are therefore looking solely at the literature to do with 'relational' gifting, excluding 'transactional' gifts such as tips or charitable donations (per Davies 2010). Relational gifting includes a wide body of work on gifting specific to Christmas in terms of personal relationships, financial resources, and social status (Cheal 1986); retail environments (Sherry et al 1989, McGrath 1989); gender roles (Fischer & Arnold 1990, Laroche et al 2000); choosing for difficult and/or easy receivers (Otnes et al 1992, 1993); and the role of both social and commercial 'influencers' (Anton et al 2014). Any of these lenses could prove useful for future work on gifting in HCI. However, for the purposes of this paper, we chose to focus on literature that more directly addresses the various motivations of givers and receivers and the value they place on different aspects of personal gifts.

For *givers*, gift value is closely tied to their motivations for choosing one gift over another. The obligation to reciprocate, which has been and continues to be so dominant in the literature (e.g. Mauss 1922, Gouldner 1960, Lévi-Strauss 1996 [1949], Komter 2007), is almost certainly one motive, whether as a contest between altruism and personal satisfaction (Sherry 1983); in tandem with the pleasure of giving for its own sake and the desire to make a practical difference in the receiver's life (Wolfinbarger & Yale 1993). Givers can also use giving to express closeness – as noted by (Anton 2014 p. 39) who observes that 'in personal situations, relational ties and symbolic gifts—those that symbolise the relationship—are the main determinants of reciprocity'. Fuchs et al (2015) find that givers prefer to make handmade gifts for close friends and family rather than more distant friends or acquaintances. Givi et al (2021) find that givers falsely anticipate that their receivers will compare the value of their gifts to others received for the same occasion. The range of motivations for different types of giving makes it impossible for givers to be certain of how their gifts will be received.

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[1] The Christmas period is generally considered to run from early December to early January

For *receivers,* gift value is closely tied to the sense they make of the thing they have been given. Gifts related to the preferences and tastes of individuals tend to be well received (Gino & Flynn 2011), as are gifts that serve as reminders of special events and relationships (Belk 1988, 1993). This latter type of gift, termed a sentimentally valuable gift, is particularly interesting because of its ability to provide a recipient with happiness for years after the gift exchange (Yang & Galak 2015). However, choosing a gift with such meaning is rarely certain, as the power to make sense of the gift lies outside the giver's hands.

Thus, it is unsurprising that the gifting literature reveals an important tension between the motivations of givers and receivers. Givi and Galak (2017) show that givers do not give relationship-signalling gifts as often as recipients would like because they feel more confident that recipients will prefer to receive the things they have indicated a liking for ('preference-matching gifts'), when in fact recipients would often have preferred something the giver felt inspired to give based on their relationship (a sentimentally valuable gift). As a result, givers tend to shy away from sentimentally valuable gifts that their receivers might have strongly preferred over the perceived safety of the preference-matching gift. This disjunct between giver and receiver preferences has been established in previous work looking at financial cost or giver effort, for example (e.g. Robben & Verhallen 1994, Galak et al 2016). Other research underscores the seriousness of this discrepancy: when givers give gifts a close friend will like but that threaten their own identity, such as buying an item representing a sports team that the receiver loves but the giver detests, givers tend to exhibit verbal and non-verbal behaviour corresponding to responses to actual threat (Ward & Broniarczyk 2011). Adding to the complexity is the finding that although both givers and receivers tend to prefer gifts that the receiver enjoys, they also report feeling closer to each other when the gift reflects something of the giver (Aknin & Human 2015). It is important to note that all this research deals with consumers who know their receivers and are choosing among potential gifts – outside of offering traditional personalisation such as name-engraving or printing digital photos onto cups and blankets, there is little consideration of how a producer might sell products that could target receivers in such a personal and relational way.

Because gifts often symbolise relationships between givers and receivers, they are not simply objects for use, but carriers of semiotic and thereby emotional meaning (that can be misplaced as well as misunderstood). Gifts indicate the giver's feelings about the giver-receiver relationship as judged by the giver considering the receiver's expected response (e.g. Schwartz 1967, Belk 1976). Key concepts here include 'social symbols' (Camerer 1988) 'symbolic interactionism' (Wolfinbarger 1990), the 'symbolic benefits' of different brands (Parsons 2002), and the related concept of 'personal value' (Larsen & Watson 2001). It therefore comes as no surprise that the degree of closeness currently experienced and desired by both parties is important to the choice of gift and how well the choice is received (e.g., Houston & Gassenheimer 1987, Camerer 1988, Ruth et al 1999).

The concept of inalienability provides a lens for understanding the relationship-signalling facet of gifts. Inalienability, according to anthropological research re-examining the original seminal works on the topic (Weiner 1992; also e.g. West 2002), refers to the element of the giver that becomes inextricably linked in the receiver's mind with the object being gifted. Think of inheriting your beloved grandmother's engagement ring or receiving a book from your best friend inscribed with their name and the occasion. It is this emotional reference that cannot in and of itself be gifted that underlies the tensions mentioned above, and that we believe accounts not only for the relational semiotic phenomena noted above of, i.e. 'relational signaling' and the like, but also for the concept of 'responsiveness to the self'. This is described by Kelly et al (2017) as a perception that the giver responds to something 'central' about the receiver, and that the receiver understands and appreciates the giver's effort to

respond to that self. Kim & Kim (2019) demonstrated that the more intimate the relationship and the less the sense of obligation involved, the likelier the giver is to give a 'hedonic' and 'expressive' gift that both delights and expresses their feelings towards the receiver: one might call this a recipe for inalienability. Reflection on an app-based hybrid gifting experience has indicated that inalienability need not apply only to physical objects, and that digital objects including photos, video, and audio, can serve the same purpose, possibly even to the same degree (Spence 2019).

Finally, before moving on, we acknowledge literature that reveals the darker side of gifting. Gifting may evoke happy connotations, but it can easily be a fraught and destructive process. Sentiments such as 'irritation' emerge alongside 'joy' (Macklin & Walker 1988), and a wealth of work has explored the anxiety involved in both giving and receiving gifts (e.g. Godelier 1999, Wooten 2000, Salovaara 2008), especially for 'difficult' receivers (e.g. Otnes et al 1992, Sherry et al 1992). Opportunities abound for givers to make choices that can expose the 'dark side of the gift', where gifts can be weaponised to damage relationships and turn receivers into victims (Sherry et al 1993) who must decide what to do with the unwanted gift (Sherry 1992) and how to manage altered relationships between giver and receiver (e.g. Ruth et al 1999, Roster & Amann 2003).

2.2 Digital and hybrid gifts as considered by HCI

HCI has previously studied the giving and receiving of digital gifts. Based on a review of the gifting literature, Kwon et al (2017) proposed a five-stage model of gifting as involving preparation, exchange, reveal, use and reflection. Their interview study probed the levels of "excitement" felt by givers and receivers regarding physical and digital gifts throughout these five stages, concluding that digital gifting is experientially far weaker than its physical counterpart, especially at the exchange and reveal stages. Other research has highlighted weaknesses of digital-only gifts and revealed how these were redressed by introducing a physical component, such as ordering an engraved music player to house the digital music being gifted (Leong & Wright 2013) or adding a personal photo to a digital music track being gifted (Odom et al 2011). Effort has come to be understood as a positive aspect of creating gifts that is to be encouraged when it demonstrably reveals the (often, mostly) pleasurable work invested by the giver into the receiver's experience. HCI research into giving and receiving Christmas cards shows how they support this kind of effort and personalisation (Gooch & Kelly 2016). Kelly et al (2017) further revealed how receivers could experience close personal communications as gifts that were judged to be "thoughtful" and "challenging to [the] sender's capacities" (p. 77). Golsteijn et al (2012) studied cherished physical and digital objects as kept or used by "crafters" of either physical or digital materials. The authors revealed that physical objects might be valued for their role in on-going occasions and the memories they embody, whereas digital objects, while also valued for their role in on-going occasions, tend to be appreciated for their utilitarian value and their embodiment of ideals (such as perseverance) and sense of achievement.

The idea of hybridity, generally viewed as the interleaving of the physical and digital, has become woven throughout HCI research and increasingly prevalent in adjacent disciplines such as service and product design. By employing various technologies from embedded electronics to computer vision it becomes possible to add digital layers and interactivity to physical artefacts. Many projects have leveraged such approaches to create 'storytelling objects'. The Significant Objects project (Glenn & Walker 2012) used eBay to imbue otherwise mundane objects with crafted narratives that increased their perceived monetary value tenfold. The TOTem project (Speed & O'Callaghan 2011, Barthel et al 2013) used QR codes to link second-hand products with stories of previous use while Spyn connected digital media with specific locations on hand-knitted garments (Rosner & Ryokai 2010). The

Mixed Reality Storytelling (Darzentas et al 2015) and Carolan Guitar (Benford et al 2016) projects explored hybrid objects that were tangibly attached to a lifelong data footprint that accrued over an artefact's lifetime. The VRtefacts project (Spence et al 2020) created a mixed reality experience that enabled museum visitors to interact with hybrid physical/digital proxies of museum artefacts and contribute their personal narratives. Orth et al (2020) created a bespoke music player called Melo that played music related to each of four objects representing specific stories and found that entwining physical and digital elements increased the likelihood of assigning personal meaning and value.

A recent thread of research has explored how these various techniques for creating hybrid storytelling artefacts might enable new gifting experiences. Benford et al (2018) created a hybrid advent calendar as a technology probe, looking at how both physical and digital layers could be customised, leading to the idea of customisation maps to show the possibilities or both physical and digital customisation by different stakeholders in a product. Spence et al (2019) reported on a study of deploying an app at a museum that enabled visitors to create 'hybrid gifts' made of photos of museum objects plus personal comments on why the giver had selected that photo of that object for that one receiver. Givers and receivers both commented on seeing the museum afresh, as though through the other person's eyes, as well as the pleasure of 'making an effort' for the receiver. Finally, a recent reflection on a portfolio of hybrid gifting experiences led to the idea of 'hybrid wrapping' in which either digital media is seen to provide a layer of gifting wrap around a physical gift item, or physical materials similarly provide a layer of gift wrap around a digital gift item. This work also considered how the two layers involved in such wrappings – physical and digital – come to be combined, experienced together, and are ultimately separated again through Kwon et al's (2017) five stages of the gifting process.

3   DEPLOYING AND STUDYING A HYBRID CHOCOLATE GIFT IN THE WILD

Our contribution in this paper is to report an 'in-the-wild' (Chamberlain et al 2012, Rogers and Marshall 2017) engagement that moves hybrid gifting research beyond studies of early prototypes to instead study a genuine product experience. Our aim has been, as far as possible, to understand people's motivations for and experience of hybrid gifting when it is offered to them as a genuine commercial proposition. This involved collaborating with a commercial chocolatier to develop, deploy and study a hybrid chocolate gift.

3.1   The context – Studio Chocolate

The design of the Hybrid Gift originated with the intention of delivering a lightweight hybrid physical/digital product. We chose chocolates as the physical component as they are often gifted, and premium versions are used for special occasions that range from business-to-business to romantic celebrations. In both cases, buying a pre-selected collection of fine, relatively expensive chocolates can be seen as a bit of a cliché - something that is usually highly enjoyable but not requiring much imagination or effort to acquire (see e.g. Aydin & Akcan 2017). Ryokai et al (2018) have also shown the potential of layering chocolates with captured digital media. In their case participants reported enjoying the taste of chocolate and hearing laughter simultaneously, appealing to multiple senses.

Consequently, our project partner for this work is Studio Chocolate, a local independent chocolatier specialising in small-volume, high-quality handmade chocolates and baked goods. Additionally, they provide services for corporate events and weddings, and classes for chocolate making. They maintain both a physical store and a website for online orders. They advertise primarily through Facebook and Instagram as well as word of mouth. .We approached Studio Chocolate's owner/head chocolatier as they had been recommended to us as a creative business

that might be interested in the use of new technologies to enhance the customer experience. We then collaborated over a period of approximately 10 months to design, develop, deploy and then study a new Hybrid Gift offering for their customers that was made available through their regular commercial website and was strongly informed and guided by their current practices and workflows.

3.2 Embedding within Studio Chocolate's practices

Due consideration needed to be given to all aspects of the collaboration with the partner, so as to minimise any potential negative effects and seamlessly integrate our product into their offerings and ways of working.

Aiming to familiarise ourselves with our partner's practices, our research team conducted regular meetings with the chocolatier to follow her lead in what she believed to be the best approach for integrating a hybrid gift into her existing range, and physical and e-commerce workflows. Key factors for her were to maintain the integrity of the business in terms of chocolate quality, attractiveness, high reputation for service and reliability, and the personal touch afforded by keeping the entire process in the hands of a few craftspeople.

The Chocolatier used an eCommerce Website Builder, Wix.com, to build and manage their online business, which constituted a considerable portion of their overall sales. She described her company's relationship with the website as "*difficult*", explaining that the platform had enabled them to create and run a webstore, but the processes were opaque, and the management of the contents complicated, especially when adding new entries or any unconventional item, such as a page or product with any functionality we might create as part of the research.

Thus, she chose to keep her existing range while adding a hybrid version of a single product – a manageable addition to their range that could be altered or removed with minimal impact to the core business, as detailed in the following section. By presenting the Hybrid Gift to the public directly via our project partner's website, we were afforded genuine insights into the value of our research project to customers choosing this product over any other possibility, and to a producer/retailer personally invested in the quality of her hand-crafted offerings and her company's relationship with its customers.

3.3 The Hybrid Chocolate Gift

We determined that the most suitable product would be a hybrid version of their three most popular collections of chocolate bonbons. As seen in Figure 1, these are collections of 12 colourful chocolates with unusual and evocative flavours such as Cardamom Coffee, Blackberry Violet, and Popping Pretzel. They arrive arranged in plastic insert inside an elegantly branded box. The Hybrid Gift adds a digital component to this chocolate selection.

Figure 1: Chocolate gift. Images courtesy of Studio Chocolate, studio-chocolate.co.uk

The Hybrid Gift is advertised for purchase alongside the other chocolate selection offerings on the chocolatier's online store along with a brief video to explain the concept. To purchase and create their Hybrid Gift, the customer – the gift giver – adds the gift to their cart and checks out as usual. They then receive an email acknowledgement and receipt from the chocolatier, including an order number to uniquely identify their gift as they go on to create its digital component.

Each Hybrid Gift is comprised of the chocolate selection and up to four pieces of digital content chosen by the gift giver. To create this digital component, after purchasing the gift, the giver is asked to promptly click through to the custom Hybrid Gift maker website, entering their order number and creating a gift giver's password. Creating the gift involves assigning digital content to the gift, one for each of the four available slots, and this could consist of any of the following content types: text messages, links to URLs for which a preview is automatically generated, or uploaded still images or audio up to 10MB in size. Figure 2 shows the digital elements of a gift being constructed. Using the same site, the gift giver can preview the digital content and return to alter or add to the gift at a later time.
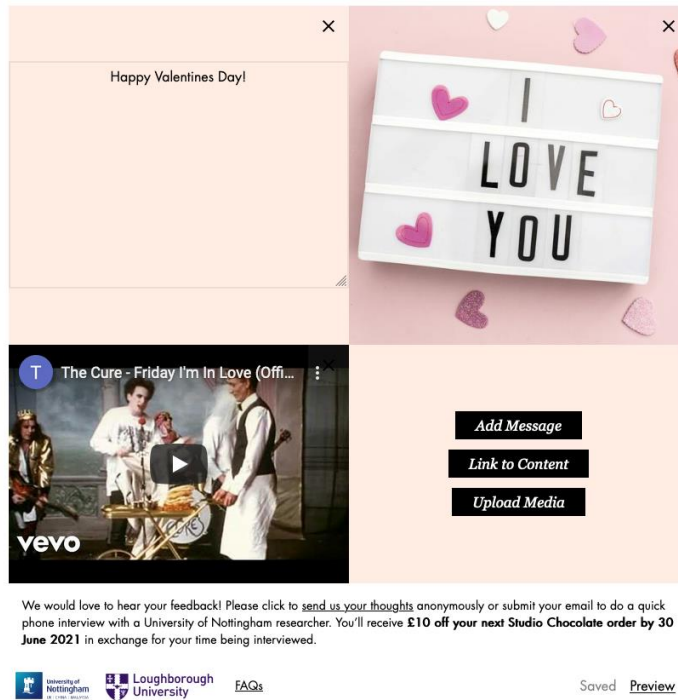
Figure 2: Authoring the digital part of a gift on the website

The custom Hybrid Gift maker website was a bespoke solution deliberately kept at arm's length from Wix's off-the-shelf e-commerce platform serving the chocolatier's online store. The rationale for this separation had several components, most important being the need to eliminate any chance of compromising the important customer data held by the store. European legislation would also introduce significant obstacles for us to overcome if we were to hold this data, which was unnecessary to our purposes. While the Wix platform does provide a REST API that could have been used to create an automated process for connecting the orders to the Hybrid Gift Maker website, this was deemed too risky. It would have necessitated the Chocolatier, who was not knowledgeable with these aspects of the e-commerce platform, to generate an authentication token and entrust our team with it. While this may have been acceptable on some levels, it would have created a vulnerability in a system that included considerable amounts of personal customer data, including names, contact information, and payment details. Furthermore, this would not have meaningfully reduced the manual workload overhead of the Studio Chocolate staff, who would still need to print and attach the correct QR code to each handcrafted gift box, as described below.

Several early design ideas had to be abandoned because they would have required a wholesale rebuilding of Studio Chocolate's website, which was outside the scope of both this project and Studio's wishes. Most importantly, especially during Christmas, the overall online commercial platform had a zero tolerance for failure. For these reasons, the only point of connection between the personal content uploaded by a giver and their identity or other personal data was the order number, and only the chocolatier had access to both. This separation allows the Hybrid Gift to persist, be altered and viewed outside of the expected lifecycle of a specific box of chocolates.

Once the digital component is created, the Hybrid Gift is ready for shipping. Deliveries can be made directly to the receiver, or to the purchasing gift giver who then delivers the Hybrid Gift themselves, or alternatively 'opens' it with the receiver (e.g., co-habiting partners gifting from one to the other). The shipped package consists of the collection of chocolate bonbons and a card that allows the receiver to access the digital component of the gift, which is included within the packaging, so that it is encountered at the same moment as the box of chocolates. The card is printed with a QR code corresponding to the gift order number along with brief instructions to use a mobile phone to scan the code to experience the gift. Scanning the code prompts the phone to display the digital gift content tiles as seen in Figure 3, with the invitation to "Open the box while you look, listen or both". This QR code mechanism for integrating the digital content was deliberately chosen for its simplicity of use by the receiver of the gift. While more direct tangible interaction mechanisms with food have been previously demonstrated, such as picking up a chocolate (Ryokai et al, 2018) or cutting a dessert (Kwon et al, 2017), it is recommended that off-the-shelf technologies that are readily available to participants be used for sustained community engagement (Balestrini et al, 2014). QR codes have become commonplace and well understood by users due to their increased prevalence during the Covid 19 pandemic, which was less than a year old during the time of data collection for this project. Furthermore, the barriers to use have been further reduced by the incorporation of QR code detection into the default camera apps of most Android and iOS mobile devices.
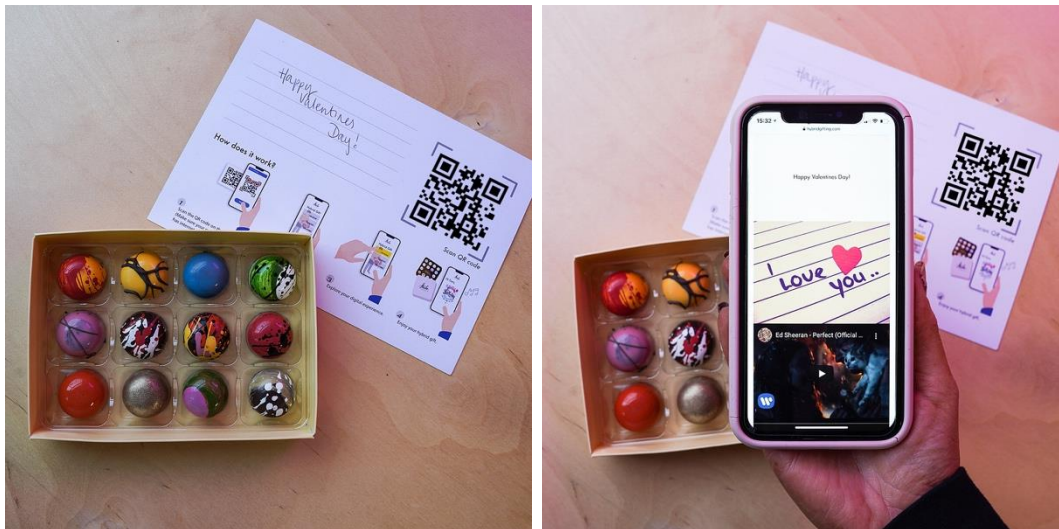

Figure 3: Hybrid gift on receipt

The Hybrid Gift was added to the online shop as of the end of November 2020 and featured alongside the existing shop contents. The only overt 'incentive' to purchase the Hybrid Gift rather than its physical-only version was free shipping. This decision was taken primarily for practical purposes, because each gift needed to be linked to a separate order number. Therefore, a potential customer who wanted to buy multiple Hybrid Gifts, or a Hybrid Gift plus one or more other products, would be forced to pay multiple shipping costs. Therefore, the 'incentive' was in fact more a negation of a disincentive than an incentive in its own right, unless the potential customer wanted to buy only one gift.

Once an order for a Hybrid Gift has been placed, the chocolatier sets aside the product for purposes of tracking inventory levels but does not immediately send the product in the upcoming delivery (hand delivery in the local area on Thursdays and Fridays or 2-day shipping farther afield, usually dispatched Wednesdays) to allow for the giver to create the digital content. Following this, staff prepare the corresponding box for the next week's delivery and print the unique QR code as a sticker to be attached to the card. If, however, staff note that a purchased Hybrid Gift will soon miss its scheduled delivery time – in that the digital component and therefore the Hybrid Gift are incomplete – they contact the customer. These interactions range from a simple reminder to a full explanation of the Hybrid Gift premise. There were a few instances where customers were not aware they had purchased a Hybrid Gift. This was attributed to the visual similarity of the Hybrid Gift to the non-hybrid version on the e-shop. In these cases, the chocolatier converted the Hybrid Gift to the regular version if requested, but several of these customers were happy to create the Hybrid Gift they had unwittingly purchased.

3.4 Studying the hybrid gift in the wild

As a regular product, sales could go through with no researcher involvement; only participants who chose to contact us to be interviewed were treated as 'research participants' in the usual sense of the term. All points of contact with participating universities were fully transparent with GDPR-compliant terms and conditions, plus the contact email address of one of the researchers.

Of the 31 Hybrid Gifts purchased and completed over the Christmas period in 2020, a total of 9 customers consented to be interviewed about their experience. In addition, the chocolatier was interviewed following the busy Christmas period. Each participant was interviewed for approximately 25 minutes. Table 1 below lists the interviewed participants, who were primarily gift givers, and their relationships to their corresponding gift receiver.

Table 1. Overview of the participants and their relationships.

Interviewed Participant ID	Gifting Role	Relationship and ID of corresponding receiver/giver	Receiver Feedback Received	Giver Present for Gift Reveal
P1	Giver	Husband to receiver P1R, co-located	Yes, direct	Yes
P2	Giver	Mother to receivers P2Ra and P2Rb (sons), co-located	Yes, direct	Yes
P3	Giver	Husband to receiver P4, co-located	Yes, direct	Yes
P4	Receiver	Wife to giver P3, co-located	Yes, direct	Yes
P5	Giver	Daughter to receiver P5R (father), remote	Yes, indirect	Yes
P6	Giver	Partner to receiver P6R, co-located	Yes, indirect	Yes

P7	Giver	Father to receiver P7R (daughter), remote	Yes, indirect	No
P8	Receiver	Friend to giver P8G, remote	Yes, direct	No
P9	Giver	Son to receiver P9R (mother) remote	Yes, indirect	No
P10	Chocolatier			

Interview schedules were a combination of literature-driven (deductive) and exploratory (inductive) questions, helping us come as close as possible to participants' own conceptualisations of the hybrid gifting experience. Based on the work of Kwon et al (2017) on the 'excitement' of physical vs. digital gifts, we explicitly solicited opinions on the 'excitement' of this hybrid gift. We also pursued opinions on the 'thoughtfulness' of the hybrid gift and how integral the digital and physical elements might feel based on our own previous work (see e.g. Spence et al 2019). Direct questions of their perceived monetary value of a hybrid gift were inspired by the existing literature (e.g. Leong & Wright 2013; West 2002), including our own prior work (e.g. Koleva et al 2020). First and foremost, though, we asked open questions about the experience and followed up unexpected topics and perspectives.

We chose to analyse the qualitative interviews through reflexive thematic analysis (Braun and Clarke, 2012) following the 6-step framework, as we wished to understand the lived experience and views of hybrid gifts from the perspective of givers, receivers and the chocolate maker. The analysis was predominantly inductive in that the data was open-coded and respondent meanings were emphasised. However, there were also deductive elements as the top-level themes were organised based on Kwon's et al's 5-stage gifting model (2017). Both semantic and latent coding were utilised by three researchers through a collaborative and reflexive process, aiming to achieve richer interpretations of meaning (Braun and Clarke, 2013). This thematic analysis of the interviews with 9 customers and the chocolate maker uncovers some rich insights into people's motivations for purchasing and experience of hybrid gifting when it is offered to them as a genuine commercial proposition, with Braun and Clarke (2013) stating that 4 to 5 participants are sufficient for thematic analysis studies.

Working with a real product and customers in the wild gives our findings high ecological validity; however, it also led to a methodological conundrum. We could not stipulate that pairs of giver-receiver participants had to be involved or control the numbers of each. Perhaps unsurprisingly, a higher number of givers contacted us to be interviewed (7 versus 2) as they had invested time and effort with the hybrid gift. Consequently, our results are skewed towards the giver perspective. Where gift receivers did not take part in an interview, their responses were either provided as written or audio recorded comments, or the gift giver verbally reported their responses. While this is a somewhat unusual means of acquiring data, it was quite natural in the context of a situation in which only half the potential pool of interviewees (the gift givers) had any knowledge of the research before making and giving their gifts, and the nature of holiday gift-giving almost always entails the receiver describing to their giver what they thought of the gift, research project or not. Knowing that the gift was also a research project relieved the receivers of at least some pressure to express any positive feelings they did not feel out of a sense of social obligation or relational upkeep, and co-located gift givers could see and assess their receiver's reactions directly.

We acknowledge that there could be a tendency to over-report positive responses on the receivers' parts because of this method of data collection, but as our interviews probed for specific elements of a novel hybrid gift experience rather than a simple evaluation of how good or successful the gift was, we believe that receiver data as represented by givers are still valuable. Also, the similarities between themes from direct feedback from 4 receivers (2 interviews and recorded comments from 2 others) and those received via indirect feedback give us confidence

that receiver data as represented by givers still offers valuable insights into the receiver experience. Ideally, future work would have a more even balance of givers and receivers from whom data can be drawn.

We also note the extraordinary circumstances of Christmas 2020 in England, where our study took place. The population had gone through a period of nearly full lockdown throughout the spring, which was eased in summer but then gradually reintroduced to various regions and finally, suddenly, the entire nation only days before Christmas. Many plans to spend the holiday with loved ones fell through, leaving much of the nation struggling to find emotional closeness while physically separated. On one hand, this sad situation affords us a unique opportunity to examine the value of gifts between loved ones in a commercial context, when emotional connection was desperately needed. On the other, our findings may therefore overemphasise the emotional and personal value of these gifts as they would be experienced during pre- or post-pandemic times. While none of our participants were untouched by the difficulties of Covid-19 and restrictions on holiday gatherings, their own ways of describing the value of these gifts does not seem to be exclusive to such an extreme situation. Any enforced separation might create a similar craving for closeness, even when the parties are kept apart for positive reasons such as moving far away for an excellent job or romantic opportunity. We hold it as an open question the degree to which Covid-19 amplified or distorted the responses we received, especially as the medical consensus leans towards increased chances of future outbreaks and disruption.

This said, we now report on both givers' and receivers' experiences of the hybrid gift through the main stages of the gifting process (Kwon et al 2017). We follow with the producer's perspective on selling such a gift and its effects on their business, both internally in terms of workflows and externally in terms of public perception.

4   FINDINGS OF HYBRID GIFTING IN THE WILD

Before turning to the interviews which constitute the main body of our findings, we first offer some broader context in terms of the overall pattern of interactions with the hybrid gift product. Figure 4 visualises the metadata captured by the hybrid gifting web app for the period from which we recruited our interviewees (noting that sales have continued since then). This spanned 30th November 2020 when the product was launched to Christmas 2020. Each horizontal line in figure 4 represents a distinct hybrid gift experience (i.e. a separate order). Blue dots show time(s) that the giver added to or edited their digital elements; yellow dots represent time(s) that someone viewed the digital elements (until 12 December this could be giver or receiver in possession of the order number); and purple dots represent an extra functionality added on 12 December providing givers with a separate preview functionality (after this time the yellow dots only show views of the digital through scanning the QR code). Darker or distorted colours indicate frequent visits over a short period of time. The figure shows that 31 hybrid gifts were both purchased (physical chocolate component) and made (digital component). 4 of these were configured but never viewed (solitary blue dots along a line), while the rest were configured over the course of several days. 7 were viewed only once with the remaining 20 being viewed multiple times. 8 experiences unfolded over the course of a month or longer. 9 were viewed well into January, 6 of which had also been viewed on Christmas Day (25 December). We note that the Hybrid Gift had to be removed from sale occasionally because of stock shortages. We originally expected all users to be buying for Christmas or other public holidays in that season, but our 9 gift-exchange examples include an anniversary present (P3 to P4) and a birthday present (P8), a good reminder of December gift-giving scenarios that have nothing to do with the dominant theme of the season.
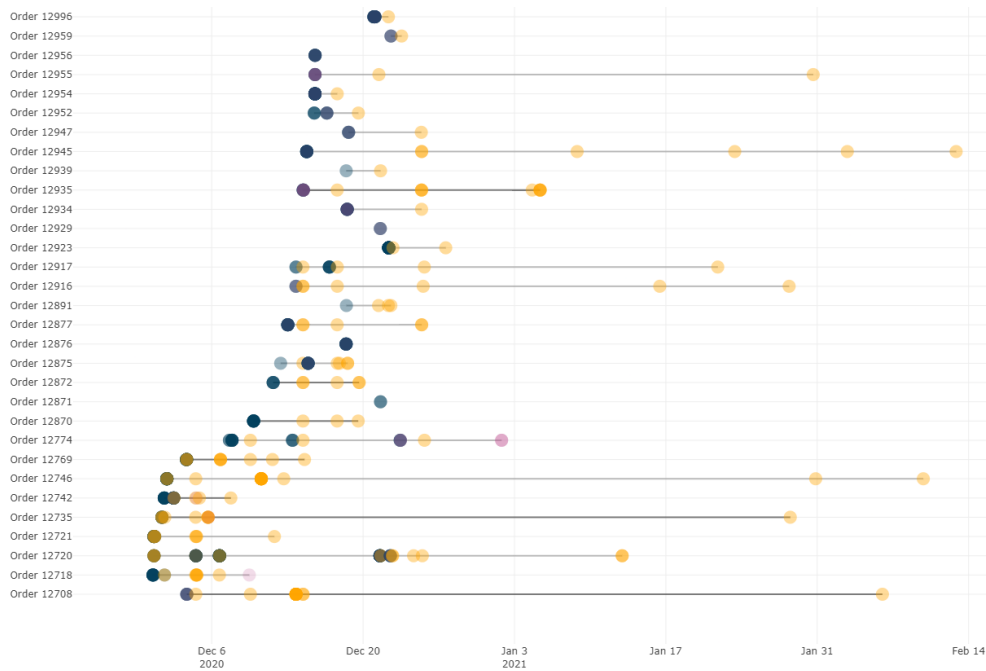
Figure 4: Hybrid Gifts up to Christmas 2020

We now turn to the findings from our interviews. In what follows, we structure these around three distinct perspectives, those of givers, receivers and that of the chocolatier as the producer of the hybrid gift. We bring further structure to the first two of these by following Kwon et al's (2017) 5-stage gifting process of preparation, exchange, reveal, use and reflection that describes how a gift progressively moves from giver to receiver.

4.1 The experience of givers

In this section we cover the reflections of our 7 givers (see Table 1) on their experience with the Hybrid Gift, divided according to their key points of engagement and "excitement" throughout the gifting process, using the framework of Kwon et al (2017). This covers their processes of selecting the physical component (originally the Artist, Playlist, or Cosmic chocolate collection, eventually limited to the Artist collection to avoid under- or over-counting stock), creating their own digital component (up to 4 elements of text, photo, short audio or video upload, or link to external URL), making the exchange or arranging delivery, and sharing in or receiving feedback on how the gift was revealed to their receiver(s).

4.1.1 Preparing the gift

All participating givers interviewed chose the hybrid chocolate gift for someone close/special due to a combination of its monetary value and the emotional closeness that can be conveyed through the digital layer. For example, P2 stated "*most special people are the ones to choose for this gift, particularly during a hard year*" (Covid-19 in 2020) and similarly P1 noted "*this gift isn't for an acquaintance or even any friend*". P3 and P5 independently explained that they had decided not to exchange gifts with their receivers (for an anniversary and for Christmas respectively) but this did not feel right to them, and the hybrid gift felt an appropriate way to transgress. "*I saw an opportune gift,*

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and it was opportune that I was like, yeah, actually, that would work really well. So, you know, it's for both of us, wasn't it" (P3, who could eat some of the chocolates given to P4).

The givers chose the chocolates because they knew their receivers like good food and/or quality chocolates (P2, P5, P6), were already familiar the quality of the chocolatier's products (P6, P9), anticipated what the chocolates would taste like (P3) and were impressed with the lovely colors of the hand-painted chocolates (P1, P2, P5). For example, P9 explained of his mother, "*She loves chocolates. And yeah, I was fitting a gift to the recipient rather than the other way round.*" Some givers also commented on choosing a particular collection because of the color design of the chocolates (e.g. P1 picking the Artist collection) or because of the theme (e.g. P5 selecting the Cosmic collection because of their receiver's interest in interplanetary space). On the other hand, P1 noted that as a musician he did not pick the Playlist collection as he did not like the songs each chocolate was named after. He would have preferred the music-oriented collection, but only if he could have selected the songs himself.

All givers explained that they chose to add a digital layer, because it makes the gift more thoughtful. P2 explained "*I think the thing that I noticed was that it meant giving a box of chocolates became more than a cliché. Giving a box of chocolates, even the best box of chocolates in the world, is still a box of chocolates, right?*" P5 (a giver) believed this way of sending digital content to be more thoughtful than regular comms channels such as WhatsApp: "*the hybrid tool I thought would just make it more special 'cause you can grab a box of chocolates and … that would be nice, but I think they would find that [digital element] exciting and it would have lifted their mood a bit I think.*" The excitement and "novelty" (P5) of the digital layer embodies time and effort on her part to prepare it. In a similar way, P3 would not reuse the QR code in a future gift so that he could "*show that I've gone through the effort again.*" Unfortunately, much as P3 would have wanted to send a different, personalised Hybrid Gift to his mother, the fact that she does not own a smartphone prevented him from purchasing one as a holiday gift for her.

All the givers enjoyed preparing the digital content, noting that they found it rewarding thinking about what their receiver likes and would make them happy, and anticipating that the receiver will find the gift exciting (P2, P5), surprising (P1, P2, P5), and elevate their mood (P2, P5). All participants picked more than one type of content with two (P1 and P9) reporting that they picked one of each supported type (photo, video, song and text message). Three participants (P5, P7 and P9) recorded new video content (video of their children in two instances) with P9 saying this was the most exciting part of the preparation and P7 saying it made them feel emotional. Some participants (P1, P2 and P3) also reported that this form of communication prompted them to write thoughtful messages. P6 and P9 said they saw the digital layer as replacing and extending the role of a gift card.

Overall, the givers reported valuing both the physical and digital components, though the emphasis was on digital in the interview discussions. P5 said that the value was evenly split between the digital and physical even though the digital cost her nothing, speaking in monetary terms. All participants commented that they would pay more for the hybrid gift with P6 explaining "*You pay more for personalisation with other gifts. I don't see why it should be different for this*" and with P3 going as far as to say that not charging at least a token amount of £1 or £2 would "cheapen" it, seeing the producer as providing a monetarily valuable facilitation service.

Some givers made a thematic link between the digital content and the chocolates. P1 included a picture of a chocolate saying "you are my bonbon" in their native language for his wife, strengthening the connection to physical and making thoughtful effort legible. P2 reported that she included a message in her gift to her sons, who she lived, with saying "I love you more than chocolate"; she also thought she could have gone further in the integration of the physical and digital (e.g. relating to the different flavours and themes of the chocolates). P3 added content related to shared experiences with chocolates with his wife and explained that "*the message related to times when we'd had*

chocolates before. … It felt important somehow to connect the chocolates to the digital element, the message and the bits of media." P3 felt that interconnectedness of digital and physical is necessary to keep the digital from feeling secondary.

Most of the givers saw the chocolates and digital content layer as one gift. As well as the strategy of putting in effort to make a thematic link, for some (P1, P2, P5, P6, P9) this was facilitated through the physical QR code card, which was delivered in a bag with the chocolate box and so the receiving/unwrapping of the physical and digital would happen in tandem. On the other hand, they felt that email delivery of the QR code, for example, would have made it feel separate. P9 thought of the digital component as "integral" to the gift and arranged for both to be consumed together by his mother who lived remotely, "*So yeah there was a song for her to play while she was nibbling her bonbons and looking at the grandkids with the video*". P6 put the value of the combination succinctly: *"It's nice to see both of them [digital and physical] at the same time because that's the gift."*

P1 and P3 suggested that the integration of the physical and digital could go further with the card placed inside the box or the chocolates themselves being scanned to reveal content (P1) or automatically playing content when the box is opened (P3). P6 raises the interesting point that while the physical and digital are integrated now, this could change over time as the chocolates are consumed "*And yeah, as, it felt part of the whole gift, but… So that was nice to be able to give those almost experiences with the chocolate… but I think the fact that you know you could just keep the card and that lasts longer than for example just the chocolate.*" On the other hand, P7 saw the components as separate, speculating that if he could have attached the content at the point of purchase on the chocolatier's website, that might have made the hybrid gift feel complete for him.

Overall, the givers found the hybrid gift preparation process enjoyable and the interface for putting together the digital layer easy to use. P5 said she was initially unsure how much effort would be involved but it turned out to be as easy as card personalisation services, summing up that it was a "*time efficient way to make something in a special way*". P9 commented that he liked the 'low tech' aspect of the gift, as it was within his tech capabilities. Participants also made suggestions for adding additional features and for better integration within the gift purchasing workflow. P3 said he wanted to give more than 4 pieces of content, perhaps one for each chocolate. P1 would like the option of specifying that some digital elements (e.g. sound) start to play automatically in the background when the digital layer is revealed. P6 prepared the digital on their phone and expressed some uncertainty as to how the content would look on a mobile vs laptop/computer, which could be addressed with different previews. P2 suggested that the hybrid gifting could be better linked in the ordering process with an overview of steps and indication of the giver's current position in the process, perhaps supported by an animation or video. As mentioned above, P7 would like the digital personalisation to happen within the ordering process on the chocolatier's website. While on the other hand, P3 thought that a dedicated Hybrid Gifts website from which this and other physical gifts could be chosen, would be a better way of integrating the two sides. He felt that because at present you go to buy chocolates, the digital will be secondary.

Finally, while wrapping is often one of the final stages of the gift preparation process, only one of our givers (P9) reported adding gift wrapping. As will be discussed in the next section this is due to a combination of the delivery mechanisms (with some gifts ordered to go straight to the recipient) and how the chocolate gift is already packaged by the chocolatier.

4.1.2   Exchanging the gift

In this section we describe how the hybrid gifts were delivered and the givers' experience of the exchange (in 4.4.1 we report on the receivers' experience of getting and opening the gift). There were 3 different scenarios in which the givers delivered the gifts. Half of the givers and their recipients lived together and gave the gift (which had been physically delivered by local driver or postal service due to Covid-19 restrictions) in person (P1 and P1R, P2 and P2Ra and P2Rb, P3 and P4, P6 and P6R). The remaining participants were remote from each other with 3 of these givers (P5, P7 and P8G) using the chocolatier's delivery service for the gift (by their staff for the local area with the chocolate box and card placed in a branded paper bag, and post package delivery for further afield). P9, on the other hand, had the gift delivered to himself, gift-wrapped it and then dropped it off to his recipient (described as a "drop and dash" due to Covid-19 restrictions), as he valued the personal touch of giving in person versus it being sent. However, he was not aware of the role of the card that came with gift and did not give it to P9R, a problem quickly rectified by alternative means as described in the next section.

For givers with recipients in the same household, there was some uncertainty about when the gift would arrive and what a Hybrid Gift would look like. For example, P3 reported feeling excited about his wife's (P4) "reveal" but being unsure how and when the gift would arrive, whom it would be addressed to – possibly leading to a premature reveal if addressed to her – and whether he would need to re-wrap it to keep the digital element both secret before the reveal and prominent during the reveal. P1's delivery arrived unexpectedly late in the evening (after 7:00 pm) and was handed over by a staff member rather than standard delivery driver. This caused minor consternation for P1, but P1R saw this style of delivery and packaging as romantic. P6 knew the high quality of presentation of the chocolatier's products and therefore gave the gift straight away in its delivery packaging to her partner. If physically giving to someone not living in the same house, however, she would have put extra wrapping around the gift.

 P5, whose receiver was her father in a distant town, thought that giving to her (co-located) husband would make the digital element feel less special because she would share digital content he could already easily see. However, this was not the experience of the other givers living with their receivers. P6, who was present when P6R opened the gift, described it as experiencing a "joint gift" – "*I put some joint photos of us so it felt as much mine as theirs. It was something I could enjoy as well as them*". P3 also described opening the gift with P4 and experiencing it together as feeling "really good" and as well as a relief that his gift was being enjoyed. Similarly, P1 spoke positively about opening and experiencing the gift together.

4.2   The receiver's experience

As summarised in Table 1, two receivers (P4 who received the gift from her husband and P8 who received the gift from a remote friend) were interviewed directly. Two others (P1R and P2Ra) provided recorded comments to supplement their giver's interview. The experiences of the remaining four (P5R, P6R, P7R and P9R) were recounted by the givers. P1, P2, P3 and P6 were co-present when their receivers opened the gift. P5 observed the opening of the physical gift via video call on her smartphone, though this prevented her receiver from experiencing the digital element until later. P7 and P9 did not witness the reveal but had follow-up calls from their receivers (with P9 helping to resolve the problem with the missing QR card). While it is possible that some receiver feedback was more positive than it might have been if given in strict confidence directly to the interviewer, as happened with P8, we see enough detail, complaints about functionality, and negative responses (e.g. not wanting to send to distant friends or family, concern over delivery method and presentation) to feel confident that any face-saving false positivity is unlikely to fundamentally alter receiver experiences as reported.

4.2.1 Revealing the hybrid gift

All receivers expressed surprise and excitement about receiving a gift with personal content appearing this way. P8 described being 'intrigued' by the reveal. She was informed by the giver that a hybrid gift would arrive soon and was excited to see what a 'hybrid gift' would be like. She scanned the card and watched the content right upon receiving the gift and thought that the content was carefully chosen by P8G: "*this felt like it was very personal and very much chosen for us, and that's what made it special.*" In fact, P8G wanted to give a gift related to a memorable restaurant visit with her receiver. The restaurant had no published cookbook, they had no copy of the menu or card, and distance made a return visit unfeasible. A digital element, such as a link to the restaurant's menu or even a screen shot of the location, had not crossed P8G's mind as worth giving. Rather, this perceived need to make the digital element of the Hybrid Gift worth giving prompted P8G to create and find digital media prompting reminiscence over that moment in their relationship, and P8 did find that "personal" choice "special". P5R did not open the digital content right away because of an ongoing video call with P5. P5R appreciated the artistry of the chocolates and lined up the planet chocolates (from the Cosmic collection) in the right order to eat this way. He later reported enjoying the digital content. For some it was also a very emotional experience. P1R found it very romantic and P1 says "*Then she took out the packaging and she was like really happy to see, you know. Love.*" P7 was told the digital layer made a big difference to P7R. When P7R called, P7 had to wait 10 minutes for P7R due to initial emotional reaction to the video, "*I think that definitely one thing I did think when I come off the phone from talking to her. If I had sent in the same box of chocolates without the QR code on it, it would have been a completely different gift.*"

P2 directed her sons P2Ra and P2Rb to first scan the card before opening the chocolates. They each used their own device to reveal the digital content but described the process as having been done 'together'. There were two instances when assistance from the giver was needed. P4 initially discarded the card (thinking it was a receipt) and would not have known she had to scan it if P3 had not drawn her attention to it. This did not cause a problem in terms of the emotional value perceived by P4 (P3's receiver): "*the thought behind the gift, the richness of receiving the gift, is vastly increased by the digital element.*" P9R did not receive the card with the QR code (as explained in 4.3.2) so P9 sent the link by email afterwards. P9 also thought that the technology would be challenging for his mother "*Yes, it's asking to access to the thing with your QR code that there was a bit of, yeah, limitations on her site to using the tech, and so I think we probably were at the limits of what was needed to be honest from her perspective.*" However, P9 reported that P9R's experience was positive overall: "*I have had good feedback, so she was delighted by that. Yeah, the message and the photos of the kids that we put on it.*"

P1R commented that viewing the content on a phone structured the experience, making it linear and pleasurably taking more time to experience, as opposed to all 4 content tiles being simultaneously visible on a larger device. Similarly to one of the givers, P2Rb wanted some of the content (particularly the music) to automatically start when the gift is opened. This desire is also seen in casual mentions of music playing along with other digital elements.

4.2.2 Use and Reflection on hybrid gifts

Most receivers reported that they found the digital component the most exciting and thoughtful part of the gift. P1R thought the chocolates looked beautiful and the flavours were a nice surprise but appreciated most the personalisation of the digital. P1 said that his wife, P1R, "*even got a bit emotional and not about the chocolates*". Similarly, teenage sons P2Ra and P2Rb appreciated the quality of the chocolates but valued their mother's personal content. For P2Ra this was very personal photo in his favourite shirt that he had since grown out of, which happened

to include a fun joke they had forgotten about that led to reminiscing together. P2Rb's favourite Christmas carol was included. He was surprised and delighted to remember his mother asking him some days previously and realise that he had been asked for a reason. In the words of P2Ra, "*I liked how it was a hybrid gift and I felt that that added value to the gift itself because just getting the chocolates was nice, but then getting some pictures as well as summarising and music to go with it really personalised the gift.*" P6 said of their recipient's experience: "*It was a nice addition which people weren't expecting to get with that type of gift… then to have something they can look at while they eat is a really nice touch, actually, and just getting to relive the memories that you've chosen to share*". This sentiment was echoed by P4: "*for me the box of chocolates were [sic] beautiful, but that combined with the stuff that [P3] had put together, I think it's just, it's really amazing.*" She felt the digital was the most important part, because of the legible effort ("thought and attention") that cannot be bought.

Interestingly, P8 initially replied that chocolates were the most important part of the gift but then changed her mind, "*No, I'm gonna have to say it. It was watching the content and I'm going to say that because I did that straight away, whereas the chocolates are still being eaten at the moment. And yeah, chocolates are lovely. But yeah, it was the digital side of things.*" Similarly to givers, she then highlighted the thoughtfulness of the digital part, "*because the online content, that had been changed, just been chosen really well … the comment was a little bit cryptic, but when the YouTube clip played we just went 'Oh yes, yes, just yes, absolutely so.' It was the thoughtfulness that person put into that.*"

P8 did not feel like the two components were strongly connected, "*There wasn't, there wasn't anything, you know 'cause the chocolates were, they were the planets and the digital gift had nothing to do with planets. So in that sense they were, they were quite divorced. But I mean they did all come in the same package, so yeah, they are sort of a little bit connected but not through how the chocolates appeared as well*". P8 felt the QR code card was more like an extension of a physical card and said she would like to see more personalised physical content (in this case, a personalised slab of chocolate) allowing for a better connection between physical and digital component. This was not raised by the other recipients possibly because as described in 4.3.1 some givers made a conscious effort to thematically link the physical and digital.

P1R reported she wants to keep the card with link to the digital and suggests that it "*would be nice instead of a card could be a picture of us, with the QR code or maybe a stuffed animal with the code somewhere so I can keep it in display. I would like to keep it handy if I wanted to look at it again, maybe if was smaller to have it on my wallet.*" P4 would also like to keep the card to revisit the content and suggests it could become part of a scrapbook, an idea they both like. This raised the question of ownership. P3 and P4 discussed who would host the digital element if it persists: the chocolatier, the Hybrid Gifting service provider, or yourself? Both preferred full rights and direct ownership of their gift content in perpetuity.

4.3   The producer's perspective on hybrid gifting

Taking advantage of our close working relationship with the Chocolatier, we conducted an extensive interview over video call on 22 April 2021 to discuss her perspective on the experience of providing both the physical element and the physical infrastructure (printed QR code) connecting the bonbons to their matching digital element. Unless otherwise noted, all data and quotes in this section are taken from that interview. We also re-read the message threads between two of the authors and the chocolatier set up to facilitate immediate action as required by either party in order to maintain the excellent customer service that Studio Chocolate is known for. This allowed us to

corroborate facts and timings, and prompted us to remember issues we might have forgotten in the time between study and interview.

4.3.1   The Hybrid Gift offer

In response to the question of how the Chocolatier saw the Hybrid Gift in relation to her company's existing offer, she responded that roughly 90% of her business comes from people giving gifts. Her intention, independent of our involvement, was to push even harder at promoting her business as a great gift website and described one of her motivations in her work as her interest in 'connecting people'. She reported that Hybrid Gifts made up between 3–5% of her Christmastime orders, roughly 50 between early December and Valentine's Day (31 appearing in our metadata up to Christmas Day) out of a total of about 1,000 orders in December. This is the highest they have ever had, as orders of chocolate increased during the Covid-19 pandemic, and they had rolled out new categories of products. As the Hybrid Gifts were only advertised once on Facebook and Instagram and were out of stock a number of times, she sees the initial sales figures as signifying potential for real commercial value.

For the Chocolatier one of the key original motivations for incorporating the Hybrid Gifts in her range was the potential for personalisation. She later realised that there is an additional benefit of having a digital layer in that it ensures privacy of the personal message. Customers can add a personal message on any product at the point of purchase. The current e-commerce system and physical workflow require at least one member of staff to print or handwrite the message and add it to the correct package, making it likely givers would frame their gift messages appropriately. With the Hybrid Gift, as long as employees abide by the agreed workflow (i.e. do not look up any of the digital content associated with Hybrid Gifting orders), all digital elements are as private as the giver and receiver wish. The Chocolatier came to believe that this privacy could make a good USP (unique selling proposition) and further increase the value of the Hybrid Gift over its traditional counterpart with traditional message. With the concept of a 'gift message' as metaphor for the digital elements, she also likens it to a more 'elaborate' and 'thoughtful' gift card than a traditional one, obviating the need for their standard gift message and leading her to exclude that standard option on future Hybrid Gift pages.

The chocolatier also sees the potential of Hybrid Gifting in a corporate context. We found this surprising, given her enthusiasm for its personal and thoughtful aspects. However, the Chocolatier gets a fair proportion of her business from corporate clients, who send out items including the bonbon boxes to entire groups of clients, staff, and the like, each with an identical printed message. The Chocolatier sees increased thoughtfulness or excitement in including multimedia messages, such as a video of the milestone being celebrated, or of sending messages customised to individual teams within an organisation, for example.

The Chocolatier said she plans to create a special 'Hybrid Collection' as a companion for the digital component. This collection will have its own unique flavours and colours of bonbon fillings. The team would also make a unique physical accompaniment: the usual card identifying each bonbon and its fillings would be redesigned to integrate the instructions for receivers to get their Hybrid Gift and include space for staff to add the unique QR code to each gift. She believes that giving the digital element a corresponding physical component will make it 'more special', which is in line with the givers and receivers desires for a more holistically themed gift and unified product offering. Having a separate physical collection would also make their stock maintenance easier, but the 'specialness' of a physical bonbon collection dedicated to the Hybrid Gift was clearly where she saw a way to increase the value proposition, as collections are time-consuming and intensive to create. We also note that the Chocolatier, as a

Cordon Bleu-trained master artisan, finds a great deal of satisfaction and pleasure from this creative process, not unlike the gift-making processes behind the digital components of the Hybrid Gifts.

4.3.2   Integration into the Chocolatier's workflow

The Chocolatier found the adapted workflow, which includes printing a QR code, attaching it to the instructions card and adding the card to the order, did not take much time and caused no issues. She also reflected on the importance of providing easy-to-digest instructions and highlighting what the hybrid gift offer is. She has now published a video on the Hybrid Gift page, but during the period reported in this paper, only text instructions were available, and not all consumers took the time to read these (especially in the Christmas rush). Similar to one of the givers, she also suggested the possibility of customers starting their journey at a Hybrid Gifting website, creating their digital component there, and when finished, moving on to her website to select the chocolates of their choice and complete purchase of the Hybrid Gift.

The Chocolatier was introduced to the stages of the gifting cycle (Kwon et al 2017) and was invited to reflect on how she would like to support these in ways that more tightly integrate the physical with the digital. The Chocolatier stressed that she simultaneously wants to make the best possible experience for 'receivers', whom she explicitly identifies as her primary customers, and support the excitement and engagement of 'givers', who are in fact her direct customers. Her priority is ease of understanding and use. This is why, interestingly, for a company owner who prizes elegance and beauty at all points of customer contact, she has no problem featuring QR codes prominently: QR codes are the most commonly recognised direct way of accessing a webpage. She then quickly came up with further viable options for making the card with the unique QR code more obvious to the receiver as a necessary component rather than a piece of marketing, including inserting it between the open box and the chocolates, incorporating the QR code into the packaging or chocolate menu, and adding it into gift wrapping.

Packaging is important to the Chocolatier. When she began her business, she solicited opinions of potential customers about their packaging preferences: see-through plastic to show off the colourful bonbons or decorated, colourful cardboard. The two factors that led the majority to prefer cardboard were its recyclability and the fact that they would not know what was inside until they physically opened the box. She was, therefore, very interested to take further steps to make the 'reveal' of the Hybrid Gift more exciting. Her idea, described above in relation to physicality grounding the digital, are all aimed at increasing the 'excitement' of the reveal.

One final note is that P7, the father who gave a Hybrid Gift to his distant daughter for Christmas, is in the full-time business of making and selling gifts such as bags or badges. He began many years ago with personalised options but soon gave up because of the excessive cost, both financial and personal, of dealing with angry customers who had provided him with incorrect spellings, etc., and then blamed him for the errors despite a paper trail demonstrating their error. His experience with Hybrid Gifting, where the personalisation is entirely in the hands of the customer/giver, caused him to completely reconsider personalising his products. He knows from experience that he would be able to charge significantly higher prices for personalised versions of what he already sells, and he is considering his options in this regard.

5   DISCUSSION

Before drawing together the threads of our findings into generalised themes, we wish to establish the main ways in which the findings of this fully in-the-wild, commercial proposition validate earlier work. First, rather than causing resistance or resentment, paying full price for a high-end chocolate gift and investing the time and effort to create

the digital element resulted in a level of enjoyment and care on the part of our givers that has been noted in other work without significant financial cost to the giver (e.g. Kelly 2017, Spence 2019). Second, reflections on the ephemerality of digital media (and, eventually, of chocolates) would seem to provide an accidental extension to the work of Ryokai et al (2018). In their discussion of the fact that laughter, such as the laughter that might be caused by happiness at opening a successful gift, is 'usually fleeting', they suspected that 'non-permanent representations such as chocolates' might be a good fit for the ephemerality of laughter. However, their participants resisted this suggestion because they saw 'the representations as "part of me" or "reflection of me" that should not be discarded or "only consumed by me"' (Ryokai et al 2018, p. 9). Our participants commonly felt that the chocolates and the digital elements were intertwined and were therefore made meaningful to them in relation to the giver. We did not solicit information on their willingness to share, but the voluntary comments we heard certainly do not contradict Ryokai et al's (2018) findings.

We generalise four themes from our findings. The first two reflect on reasons why our hybrid chocolate gift appears to have been broadly successful in enabling a positive gifting experience for both givers and receivers. The second two highlight important challenges that need to be considered in extending our approach.

5.1   Digital elevates while physical grounds

We propose that the digital and the physical played complementary roles in the gifting experience.

5.1.1   Digital 'elevates' the physical

A key role for the digital was, in the eloquent words of P2, to 'elevate' the box of chocolates, raising it up from being a 'cliché' to become something far more valuable and meaningful. We recognise that the novelty of the hybrid gift idea may have played a role in refreshing an otherwise clichéd gift, but highlight other underlying reasons, most notably the ability to personalise the gift. Our findings were dominated by both givers and receivers talking positively about the ways in which the physical chocolates became personalised through their association with digital media. This was personalisation beyond simply embossing a name or printing out a 'Happy Christmas to Fred from Ali' sticker; rather, it provided the giver with an opportunity to imagine what would make their receiver happy, relive their own shared memories, and create something of their own that no one else could give. We saw the pleasure givers experienced in the number of elements used, the new content made, and reports of feeling emotional and inspired to put extra thought into their messages. In turn, receivers experienced the 'excitement' of discovering the unknown and feeling 'special' in a way that a gift available to the general public cannot. They wept with emotion (P7R), felt 'love' (P1R), and extended their experience of receiving and enjoying the chocolates. We interpret this as the digital element doing the bulk of the work of making the effort of personalisation legible to the receiver for the pleasure and benefit of both.

This use of digital media to personalise a physical experience has previously been explored in the context of gifting museum visits where it has been referred to as *interpersonalization* (Eklund 2020), a strategy in which digital platforms enable one human to personalise an experience for another, rather than directly and algorithmically personalising it. A previous study of interpersonalisation in museums highlighted how it can in turn employ intimacy in which the giver draws on a close personal relationship with the receiver (Ryding et al 2021). In the present study, none of our interviewees chose to give the hybrid gift to a casual or new friend, only partners, parents, children, or very close friends. At no point was this stipulated or recommended. Responses from givers talking about the fact that they would only give this Hybrid Gift to someone so close indicates to us the

possibility that from a customer's point of view 'elevation' might be reserved for only the most intimate of relationships, possibly a digital parallel to the handmade gifts in Fuchs et al (2015). Previous research has shown the importance of legible effort in both gifting and personal communication between close friends and family (Kelly et al 2017; Gooch & Kelly 2016; West 2002). The free rein to create challenges the giver's capacities (Kelly et al 2017), which are likely to be known by the receiver. Our Hybrid Gift accommodates a range of digital capabilities; someone uncomfortable with technology may delight a receiver with a simple message and photo, as did P6, while someone with advanced videography skills shows his care by making a custom video, as did P7. Likewise, the Chocolatier sees the 'care' and 'thoughtful' nature of the digital element as a valuable extension of the care and thought she puts into her physical products, and sees the digital element of the Hybrid Gift as a means of building emotional engagement in personal way that she cannot create through means of physical production alone.

5.1.2   Physical grounds the digital

Perhaps the digital elements that participants expressed the strongest emotional attachment to might have felt like gifts in the absence of any physical element, but no one volunteered that opinion. Rather, we see the chocolate box – which is clearly intended to be understood and enjoyed as a gift by both its nature and its presentation – as grounding the digital content within a gift. This mirrors the literature reviewed earlier where digital music tracks did not feel like gifts unless accompanied by personally meaningful photos (Odom et al 2011) or personalised physical music players (Leong & Wright 2013), or more generally when digital media were not as strongly experienced as being gifts as their physical counterparts by either receivers or givers (Kwon 2017). In other words, the high-end chocolate gift box seems to have made the accompanying digital photos, videos, songs, and messages worth giving in ways that track with the gifting literature (e.g. Houston & Gassenheimer 1987, Camerer 1988) decades before taking family videos on a palm-sized telephone was a commercial prospect.

The first aspect of grounding is to clearly *signal* to the recipient that this is a gift. At a glance, the physical box of chocolates transforms the ubiquitous sending of digital messages, links, and photos into something to be appreciated as a gift; thoughtful effort is presumed to be legible, and positive emotions are expected to be felt and/or demonstrated (if the gift is successful). Not only is it a chocolate box, but a stylish box of beautiful, hand-crafted bonbons created locally by a skilled artisan. This sets the expectation not only at 'gift' but a moderately high-end gift that in itself has been made with care. Without the physical element that people can easily read as a 'gift', gifting intent of the digital component might easily be lost. Again, our experience with the Chocolatier who sold the Hybrid Gifts underscores the importance of the physical gift. At times she referred to the digital element as a type of 'card' and could see it accompanying any of her products. The idea that the digital element on its own might compete for attention of business never came up, either with the Chocolatier or the customers we interviewed.

The second aspect of grounding is to *occasion* the gift by enabling the familiar rituals of giving and receiving. The wrapped physical chocolate box can be kept and displayed with other physical gifts prior to opening – for example under the Christmas tree; may be dealt with alongside these more conventional and recognised physical gifts – for example when family gather to open their presents; needs to be unwrapped; can readily be shown to others who are present and acknowledged by them; and may even be sampled and shared at the time as part of a rich sensory experience. All of these important ritualistic elements of gifting are currently somewhat lacking when engaging with digital gifts on phones and other personal devices. We propose that associating digital media with the physical box directly embeds them into the familiar and established rituals of gifting in a way that supports rather than disrupts those rituals.

5.2 Bridging between recipient-preference and relationship-signalling

Our earlier literature review highlighted two key motivations for gifting: recipient-preference, in which gifts are chosen based on an understanding of the preferences of recipients, and relationship-signalling, in which gifts signal important aspects of the relationships between givers and receivers. The literature also highlights a significant tension between these, with receivers expressing a desire for more relationship-signalling gifts, while givers struggle to strike a balance between the two motivations (Ward and Broniarczyk 2016). We propose that the hybrid nature of the chocolate box gift helped bridge these motivations, mitigating the tension between them.

5.2.1 Recognising recipient preferences

A box of chocolates might be seen as satisfying an obvious recipient-preference – many people like chocolates, and relatively few dislike them to the point of not appreciating them at all. However, from the literature, we might have expected a gift of chocolates to be insufficiently suited to a close receiver's preference for a gift. All but serious chocolate connoisseurs might find a pre-packaged box of chocolates, even a luxurious hand-crafted one, to be somewhat generic, especially if it was the only gift given for an anniversary (P3 and P4) and/or a gift given after mutually agreeing not to exchange gifts (P3, P5). In our findings, though, we see that the Hybrid Gift meets other recipient preferences too, specifically a common desire for gifts to be personally meaningful and demonstrate that the giver has paid attention to them as an individual. Givers tended to take time imagining what digital content their receivers would like, such as P5 recording her young sons wishing their grandfather a happy Christmas, much as P9 did. Imagining what would excite, surprise, or lift the mood of their receivers were other key findings that point to a wider recognition of recipient preference beyond just liking chocolate. The Chocolatier's enthusiasm for corporate clients as potential buyers for Hybrid Gifts also indicates the range of recipient preferences that might be accommodated: even recipients without a close personal relationship to their giver might feel that their otherwise generic gift reveals something of their giver's feelings towards them in terms of work ethic, output, team contribution, etc.

5.2.2 Signalling relationships

When we looked at the responses of our participants, who had all selected close friends or family to give to, we were not at all surprised to see that relation signalling was a key motivation for givers. However, we did not detect compartmentalisation on their part. A good example is musician P1's wish that he could have selected not only the bonbon box with the music theme as well as his own tracks to give in place of the tracks already associated with the bonbons in the collection. Instead, he related his choices in the digital element to the concept of the 'bonbon', with a picture of a chocolate saying 'you are my bonbon' in their native language. His desire to use his own expertise to create an ideal gift, falling back on a reference to a common bond, is a prime example of strategies for making a relation-signalling gift that conveyed what his wife means to him. It also shows most of the relation-signalling work being done in the digital component of what his receiver would otherwise have perceived as a welcome but relatively impersonal gift. And, as described above, the result was a holistic gift whose physical and digital components both conveyed 'love'.

We also saw the Hybrid Gift fulfilling other roles noted in the literature, including how in close relationships, receivers often prefer gifts that reflect something of the receiver's self (Aknin & Human 2015) and sentimental gifts marking the closeness of their relationship with the giver (Givi & Galak 2017) – though of course only when these feelings are both appropriate and shared (e.g. Sherry et al 1993), which they seem to have been

with all of our participants. The relation-signalling, much of which is carried by the digital element, is amplified not only by the quality and uniqueness of the chocolates but by those givers who love the Chocolatier's work and introduce their receiver to something they themselves love. In short, the hybridity of a box of chocolates, which can be perceived as 'generic' or 'cliché' – precisely what a giver would *not* want to signal about their relationship with a close friend or family member – makes it possible for those chocolates to contain a richness and uniqueness of relation signalling that other purely physical gifts might struggle to rival. From the Chocolatier's point of view, of course, the ability for her products to signal a wider range of positive meanings is likely to continue to prove beneficial as they do not detract from the meanings associated with in her physical-only products.

5.2.3   The digital provides ready access to shared memories

Our findings show a strong tendency to draw on shared memories, especially when the exchange and reveal were jointly experienced. Of course, we are not trying to claim that no other personal gift is selected based on the desire to reminisce over shared memories, but we were not prepared for the predominance of this approach. In retrospect, it makes sense that shared memories would be an ideal way of demonstrating the receiver's importance to the giver by making part of the gift personalised to the point of uniqueness and, if it is received as well as our participants' gifts were, successfully affirming and/or investing in the relationship (e.g. Camerer 1988). Providing ready access to shared memories is one of the most powerful and pervasive features of contemporary digital platforms, from the storage of photos and videos on personal devices to their sharing via social media. Our approach to hybrid gifting makes it easier for givers to seek out meaningful shared memories through such services before then attaching them to a conventional gift.   Hybrid gifts show promise for maximising symbolism and satisfaction while minimising pressure from influencers and those in the giver's and receiver's social circles. We posit this effect as related to a hybrid gift's ability to combine public meanings (evidencing the most appropriate social, functional, and economic values) with private meanings (evidencing touching symbolic and relational values only to the receiver, see Richins 1994). West (2002) also points out the value of private meanings alongside the 'indexicality' of the thought and effort put into them in the context of a ritualised gift exchange (i.e. Christmas, Valentine's Day), resulting in an inalienability between gifted object and gift-giver (see also Weiner 1994, Spence 2019). And as the gifted object is a hand-crafted, high-end product, the Chocolatier sees nothing but benefit from an amplification of emotion, even when this happens through shared memories that she and her company enable but have no access to.

5.2.4   The physical provides a safety net

Based on these observations, we propose that the physical element of the gift offers the 'safety net' of a gift the receiver will most likely appreciate – a safe baseline upon which more personal and relationship-signalling aspects can subsequently be layered. Here, Ward and Broniarczyk (2016) come to the fore of our analysis again. Receivers tend to strongly prefer sentimental gifts from close friends and family over the things they would simply like to own, but givers tend to imagine that their receivers will always prefer what they want over gestures of the giver's feelings about the relationship. We speculate that this safety net characteristic of Hybrid Gifts might allow givers to shed this fallacy and trust themselves to give a gift whose digital element exposes their warm feelings towards their close receiver. With this safety net in place, givers may be liberated to throw themselves enthusiastically into seeking out shared memories that both find emotionally valuable and pleasurable. We see signs of this potential in the Chocolatier's own attitude towards the digital components of the Hybrid Gifts: the tension between

an intense curiosity to see what people found meaningful enough to share and an absolute respect for the sanctity of these private messages. (For clarity, the respect for customer privacy always won out over employee curiosity, though we foresee a potential to improve future approaches to Hybrid Gift creation processes by removing this tension from the producer's workflow.)

5.3 The challenges of exchange and reveal for remote participants

Our findings also reveal challenges that might be addressed through further research, most notably when giver and receiver were remote. We first consider the situation of givers who were co-located during exchange and reveal. They did not simply hand over their gifts to receivers. Instead, they took the opportunity to share the receiver's anticipation and reaction. In most cases, this seemed to involve some sharing of chocolate, but our participants spoke mostly in terms of jointly experiencing the digital messages. Moreover, givers were able to scaffold the receiver's experience, doing whatever was necessary to guide the experience of the reveal, from ensuring that the receivers were technically ready, to explaining how to use the technology (as they had already learned this themselves during preparation of the gift), to managing who else was present at the time in cases where sensitive personal messages might be revealed.

However, co-location was not an option for many people, both for the conventional reason of givers and receivers living far apart, but also due to the Covid-19 restrictions in force at the time. Here we turn to the gifting framework from Kwon et al (2017) as a useful language and benchmark from which to understand the challenges they faced. The 'exchange' of a gift is its handover, leading to hopefully pleasant anticipation until the moment of 'reveal', when the receiver unwraps the gift and discovers what it is. According to Kwon et al (2017), the 'exchange' and the 'reveal' are particularly engaging stages of conventional physical gifting, for both giver and receiver, but are far less engaging for digital gifting. In our study we saw various issues with both exchange and reveal for hybrid gifts when givers and receivers were remote.

One challenge for the *exchange* was whether the giver should add a further layer of wrapping. Whereas co-located couples seemed to be happy giving their partner a gift as packaged by the Chocolatier, with its accompanying QR code card tucked inside its delivery bag or box, those who delivered their gift to be opened later wanted to add their own layers of wrapping in some cases. This was in part a practical matter, wrapping the gift to ensure that the card was not lost, but also an experiential one, ensuring that it could be displayed alongside other gifts in the period up to its opening (e.g. at Christmas). A second challenge for the exchange concerned technically preparing the receiver to experience the gift. Remote receivers must be counted on to know or discover the purpose of the QR code rather than ignore it as marketing material (as P4 and P9 did initially), and they must be technically ready to interact with the gift at the reveal which might require advance preparation. Beyond this were various mundane, but nonetheless important, issues that might challenge any remote gifting service, including uncertainty about dates and times of delivery (as with the missed anniversary) and problems delivering perishable goods (the first author saw unappetising photos of a melted bonbon box sent to the USA under very high temperatures that ruined the gift, though a second box arrived looking and tasting perfect). Some people with close family equally far from the UK independently expressed a desire for their loved ones to have this Hybrid Gift experience but would not risk a failed gift. Both of these challenges to the exchange were mitigated as much as possible in the Chocolatier's workflow, but both could be improved given different technical approaches.

A key challenge for the remote *reveal* is that the giver cannot guide the receiver through the process, witness their reactions or offer additional explanation of either the gift or technology if required. This suggests a potential

need to more easily set up remote video connections for the moment the gift is revealed, although this would also entail pressure on receivers to respond appreciatively at the moment of the reveal even if they do not appreciate the gift, another well-known hazard of gifting (e.g. Sherry et al 1993, Wooten 2002).

A further challenge is that the giver has little control over who else is present when the gift is opened which may constrain their choice of content, as the giver might not wish to risk the embarrassment of sharing an inside joke or eyebrow-raising image with unforeseen witnesses. This is particularly important given the Chocolatier's observation that the privacy of personal messages could be part of the USP (Unique Selling Proposition) of a hybrid gift. Even if staff cannot see the messages that are attached, a privacy concern remains about the presence of bystanders at the reveal, especially if the giver is not present to steer the process and if these bystanders might be called on to provide technical assistance. Further thought is required into how to signal or otherwise control the viewing of personal and sensitive messages that might be attached to the gift beyond the Chocolatier's existing workflow.

More generally, we note that gift givers and receivers already rely on long established practices for handling the remote exchange and reveal of *physical* gifts. It is quite normal in many cases for givers to remotely order and send physical gifts and for receivers to be able to open there and then and reply with a thank you. So why should it be any different with the kinds of hybrid gift we are discussing here? We suggest that the distinctive role of the digital in hybrid gifts may demand additional social interaction between giver and receiver. By invoking shared memories to elevate gifts and signal personal relationships, hybrid gifts raise the 'social stakes' requiring more sharing, explanation and acknowledgement than scribbling a gift label or thank you note.

5.4 Towards holistic and extended gifting experiences

Our final theme builds on the above proposals for better exterior wrapping and greater user control over process to explore how we might design holistic gifting experiences that more deeply integrate the physical and digital. We note that participants generally found the digital and physical components of even our simple hybrid gift to be fairly well integrated, commenting that physical and digital felt integral and roughly equal and often speaking of the QR-code triggered digital media as being a 'card', another key signal of a gift. There appeared to be a satisfying sense of holism in these Hybrid Gifts that was at times achieved and at others only hinted at, that made them feel like 'a completely different gift' (as P7 said above). This said, participants had many interesting ideas for extending the experience. Some wanted more options and controls over the presentation of the gift, such as being to add more content and customise appearance, but also in some case to add interactivity, such as different reactions to when specific chocolates were removed from the box. Such ideas were mirrored by the Chocolatier's own ideas of how the Hybrid Gift might be extended in the future. Notable was the desire voiced by givers, receivers, and the Chocolatier for a better thematic integration of the user experience. Music automatically playing alongside photos; chocolate collections designed to order with each piece connected to a different digital element; levels of complexity and intricacy customised to suit the giver's appropriate level of challenge for that receiver. These are just a handful of the thematically driven changes that stakeholders believed would improve the experience. We see in these various suggestions an appreciation and appetite for each element of the hybrid gift to build on the other, leading to 'almost experiences' in their own right (P6).

Previous research has proposed the concept of 'hybrid wrapping' in which either digital media are seen to wrap physical gifts, or physical materials are seen to wrap digital ones, and has proposed that both layers need to be

brought together and eventually separated again through processes of digital wrapping and unwrapping (Koleva et al 2020). We propose that, rather than asking which of two horizontal layers, physical or digital, is 'on top' (i.e. which is viewed as gift and which as wrapping), the two should be more deeply integrated throughout to create a holistic hybrid gifting experience. One way of achieving this might be through a more subtle and complex interleaving of physical and digital in both packaging and wrapping. The packaging provided by producers is typically far more complex, and so provides many more opportunities for digital interaction, than simply adding a card with a QR code as was the case with this, our first attempt at a commercially available Hybrid Gift. Our own Chocolatier's box, for example, has an outer sleeve, protective internal sheet, and an inner box with multiple internal compartments, each of which contains an individual hand-decorated chocolate. Moreover, each of these offers multiple surfaces – top sides and bottom sides, or insides and outsides – that might become anchors for digital content. In much the same way as Benford et al (2016) decorated an acoustic guitar with six anchors for digital interaction, we might design packaging to support multiple points of interaction that are progressively revealed as the user gradually opens the box and consumes the chocolates. Wrappings too can be more complex. Remotely delivered gifts may at least have a separate delivery wrapping (box or 'brown paper') from a presentation wrapping (gift-wrap paper). Some gifting cultures, notably in Japan, involve far more complex multi-layered wrappings that are an extremely important aspect of the gift (Hendry 1995) and could provide inspiration for hybrid wrapping.

The combination of more sophisticated physical packaging structures and multi-layered digital wrappings provide rich opportunities for integrating the physical and digital to create gradually unfolding gifting experiences in the form of a hybrid user journey or trajectory (Benford et al 2009). Outer layers of wrapping may frame the experience (for example, linking to explanatory videos such as that created by our Chocolatier) and prepare the receiver for subsequent interactions, while individual compartments within may trigger new memories as each item is progressively consumed. Such an interleaved and unfolding approach might also help deal with the knotty challenge of sensitive personal messages raised above. Sensitive messages may be hidden 'deeper' in the packaging structure, 'underneath' initial messages that would be suitable for public consumption. These initial messages, or the physical packaging itself, may be designed to support privacy, for example through hidden flaps and compartments that have to be discovered, that clearly signal that are they secret, and that introduce a further layer of playful intimacy to the experience.

6 CONCLUSION

Previous research into the traditional gifting of conventional physical artefacts has revealed varied motivations for gifting and to the importance of relationship-signalling. It also uncovered a significant tension between givers' tendency to give gifts that they perceive to satisfy receivers' more material preferences for useful or financially valuable gifts, versus receivers' desire for more emotionally meaningful gifts that givers seem reluctant to give. In turn, recent HCI research has established the approach of hybrid gifting in which physical and digital materials are combined – most notably as layers of digital wrapping for each other – to create new kinds of gifts that provide opportunities for givers to display appropriate creative effort in selecting and attaching personally meaningful memories to gift items. Against this backdrop, the contribution of our paper has been to report an 'in the wild' study in which consumers directly engaged with such a hybrid gift as a commercial proposition. While the technical realisation of this gift needed to be kept relatively simple (at least compared to research prototypes) so as to reliably engage a wide swathe of consumers not familiar with the concept or novel technologies, we propose that our

commercial deployment yielded an ecologically valid and grounded understanding of the motivations and experiences of both givers and receivers who had chosen to pay their own money to take part. We draw five key conclusions from our study:

1. The physical and the digital can play complementary roles in forming a hybrid gift. The digital elevates what might otherwise be viewed as a clichéd conventional physical gift to something more personalised and emotionally resonant. In turn, the physical grounds the digital as being recognisably a gift that can be easily experienced as part of the familiar rituals of gifting occasions.

2. By playing these roles, hybrid gifts have the potential to bridge the tension between receiver-preference and relationship-signalling motivations that appear to be differently favoured by givers and receivers as noted above. In short, the physical aspect of a hybrid gift provides receivers with a safety net over which they can engage in more creative and personalised relationship signalling through personal digital media.

3. However, we still noted tensions in the experience of hybrid gifts, most notably around the remote exchange and/or reveal of gifts, suggesting a need for greater control over the process by customers and options for easily sharing exchange and/or reveal at a distance.

4. One new tension worthy of note concerns managing the privacy of personally sensitive messages that might be attached to a hybrid gift. While our commercial gift producer noted this as a potential USP of hybrid gifting – that givers could attach personal messages without production staff and others seeing them – there is then a further challenge of managing the reveal of the gift in the presence of bystanders, especially when the giver is not present to help manage this.

5. There appears to be great scope for moving beyond current conceptions of hybrid wrapping as involving the layering of physical on digital or vice versa to instead consider a far more fine-grained interleaving that extends throughout the entire journey of the gift. Specifically, we might recognise and build on the complex structures of packaging and/or of multi-layered wrappings to attach digital media to many parts, surfaces, and sublayers of a complex physical structure and so create an unfolding journey that scaffolds and prepares receivers, provides some publicly sharable experience, while eventually leading to more hidden delights as they delve further into the gift. This may result in more holistic and integrated gift experiences.

Our main caveat concerns a possible novelty effect. It is possible that just including a digital element was sufficiently novel in its own right to elevate the physical gift over and above being a cliché, and that giving a box of chocolates with digital media attached could return to being a cliché after a while. This noted, we suspect that it is an inherent strength of digital media – one most clearly embodied in social media – that one can easily draw on a large pool of shared memories to repeatedly elevate a gift into being personal and meaningful. Givers will then of course have to be creative in finding ever-new ways of doing this if their gifts are to remain elevated. The extent to which novelty is playing a role here and whether givers can seek out creative ways of keeping their hybrid gifts fresh is a topic for further research.

We are grateful to all the staff at Studio Chocolate and to their customers who purchased and experienced the hybrid chocolate gift.

7   STATEMENT OF PREVIOUS RESEARCH

This paper builds on the author's previous research into hybrid gifting, beginning with a study that revealed the relative weakness of digital gifting experiences compared to physical ones (Kwon et al 2017). This inspired us to develop hybrid gifting experiences, including in museums (Spence et al 2019), reflection on which informed discussions of inalienability (Spence 2019). Subsequent reflection across a portfolio of initial hybrid gift prototypes inspired the concept of digital wrapping as reported in a previous TOCHI paper (Koleva et al 2020).

The design, study and analysis reported in this paper are all new work that has not been reported in these (or any other previous papers). The new perspective here is to report the experience of collaborating with a commercial provider of gift items – luxury chocolates – to design and deliver a hybrid gift as a commercial product in the wild which then yields new findings into how consumers value the combination of physical and digital aspects of such gifts, how the producer needs to consider managing the privacy of sensitive personal messages used as part of them, and how hybrid gift designers need to consider complex multi-layered wrapping structures. These perspectives on hybrid gifting and specific findings have not been considered in previous work.

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