Digital Edible Literacies: Ephemeral and Highly Affective

Natalia Kucirkova

University of Stavanger, Norway and The Open University, Stavanger, UK

ABSTRACT

Digital edible literacies (DEL) are a new media phenomenon that has recently surfaced in social media but has not been examined in scholarly literature before. I exemplify the entanglements of food, media, and children's stories in three DEL exemplars shared on a private blog, Instagram, and connected Meta channels. Drawing on a genre analysis, I position DEL within affective theories and connect them to the concept of ephemeral and material affect. I argue that the ephemeral materiality of DEL expands children's literacies with new temporal relationships that exemplify the sensory dimensions of affect in literacy. This theoretical expansion is important to facilitate understandings of the complex affective qualities of new literacy ecologies.

Introduction

In October 2021, Jacqueline Poirier, an US-based artist known as "thecrazyplatelady" posted an Instagram photo with her pregnancy belly painted in the form of Mike, the green one-eyed monster from the Monsters Inc. Pixar film and allied children's story. The post was accompanied by photos of Jacqueline wearing a bright green costume, adding legs and body to the monster's head depicted over her womb. Poirilier's followers commented with a combination of surprise and admiration (e.g., "Wow!"; "So Beautiful") as well as suggestions for other story characters (e.g., "Do a witch next time!"). The post caught my attention for two reasons: the creative way in which Jacqueline's frustration with her overdue pregnancy capitalized on literature to elicit collective sympathy and also the ludic approach that a mother took to enmesh a story character to the living human body carrying a pre-literate child.

Jacqueline's post offered a unique "take" on embodied literacies that integrate children's story characters with malleable, impermanent, and atypical materials. It prompted me to reflect on the alliances between the human body and literacy. Social media posts linked to "thecrazyplatelady" and those shared under the hashtags of #foodart inspired me to try out creative ideas linked to plate-painting, food, and children's stories, including crafts with apples and onions (e.g., "Apple stamping" during autumn and citrus printing on plates), fantasy painting with broccoli florets (in lieu of a brush), and bruised bananas to create story images on their skins as part of toddler crafts. During my practice of making and sharing such edible artifacts with children as a researcher and voluntary educator, I often wondered about the impermanence of food creations and the possibility to extend the artifacts' lifespan through social media sharing. I became interested in the ways in which children's stories are expressed and reconstructed in materially atypical ways and how the social dynamics of media might impact their temporal dimensions.

In this study, which is part of a multidisciplinary and multilevel project of children's sensorial engagement in literacy, I highlight the ways in which the edible stores sketch new directions in affect theories and thus expand the study of children's literacies [Correction added on 18 August

2023, after first online publication: The published version contained a "reference withheld" reference, which was de-anonymised in the published version.]. I analyze the practice of popular food artists, literacy, and mum's bloggers who create and share digital edible literacies (DEL). I am interested in what these marginal practices might reveal about affect in literacy, particularly in relation to time and materiality. Through a close analysis of the embodied properties of three DEL genres, I aim to offer new insights into the sensory qualities of children's literacies and their affective qualities.

Edible Literacies

Children typically begin their literacy journey by mouthing books; in Global North this includes cloth or sturdy toddler books. Yet, neither print nor digital children's books are produced to be consumed. Edible books turn the book tradition on its head: they are made to be consumed and digested. As such, edible books both substantiate and temper the boundaries of books' temporal materiality: unlike traditional books, edible books are not created for reading but for eating. The reason edible books still qualify as "books" is that they share all other properties of traditional, paper-based books: they are printed (through 3D food printers), they contain a set of pages, or layers, placed between front and back covers and they contain information or stories conveyed in images and text. While traditional books are often made of toxic and nonedible materials, edible books made for children are made of nutritive ingredients. In my practice of making edible books with children, I used various fruits, vegetables, and rice flour, and Alaca (2022) describes her artistic practice of making edible books with phyllo dough, flat bread, and fresh local ingredients.

While an edible *book* is a static, material object, edible *literacies* are more process-oriented. Edible literacies are a wider social practice through which humans put food and stories into action to interact with each other and their inner worlds. The tradition of edible literacies dates back centuries and finds examples across cultures, for example children eating letter soups that combine letter-shaped pasta; opening fortune cookies in China that contain written messages inside (Fussell, 2016, cited in Alaca (2022)); or consuming the so-called emoji apples in Japan that are created by an intricate technique of harnessing sunlight on growing apples to leave a permanent inscription (emoji mark) on the apples' skin to transmit the message of prosperity or peace (Goodmacher, 2020).

Unlike printed texts, the artifacts of edible literacies are based on materials that are malleable and inconsistent. Plant (e.g., birch bark) and animal (e.g., tortoise shell) properties of early text surfaces evolved to papyrus from around 3000 BC, and this was later replaced by paper and ink with first printed book production in 868 AD (see Alaca, 2019). Literature also shows that the first recorded edible reading materials made for children were letter biscuits baked in the 15th and 16th centuries (Alaca, 2019). Today, we find several letter-based edible products for children, including letter soups, cereals, biscuits, or candies. Inscribing fruit skins with letters and words, and decorating plates with references to children's favorite story characters, thus builds on the centuries-old tradition of marking food with messages that communicate stories.

While edible literacies are relatively well described in the literature (see Alaca, 2022), *digital* edible literacies (DEL) are a less-known phenomenon. DEL are a digital media form that re-structures and expands the canon of emergent media forms by digitizing the social practice of literacy and food. Examples of DEL include story-related #foodart posts on Jacqueline's timeline or carved fruit arranged in the form of a known children's story character shared on social media. Another example is the family dinner book club project by GrowingBookByBook.com, where families discuss a featured book while they eat a themed menu and share their ideas with other families and the project team online. These examples show how DEL connect the social practice of narratives, texts, and foods. I am interested in the type of DEL that have a connection to children's literacies, by the narrative, text, or food intended for children (e.g., a mother who shaped her son's sandwich in the form of his favorite Harry Potter character). Overall, I seek to understand DEL's educational, creative, and health potential for children, and in this paper, I focus on DEL's conceptual value for literacy and affect theories.

Theoretical Framework: New Literacies and Affect

The tradition of new literacy (Gee, 2015; Leu et al., 2018; Street, 2003) shifted children's literacy studies from linear representations to literacy events in-the-making and in-the-becoming. Much of scholarly thinking in this tradition has been about children's multimodal and multisensory meaning-making children undertake with stories (e.g., Mills, 2015). Despite the call for re-positioning "higher senses" to give more space to the "lower senses" of touch, taste, and proprioception, the study of children's literature has a long tradition of linguistic and cognitive dominance in reading (Kümmerling-Meibauer, 2019).

I highlighted the importance of "hidden" and "lower senses" and proposed that an increased attention to the lower senses of gustation, olfaction, and proprioception problematizes the digital-print divide in contemporary literacy studies (Kucirkova, 2022). My current analysis expands this argument with edible literacies that are materially different from both print and digital books, and thus offer new vistas for literacies in *any* format. The unique value of the noncognitive senses of touch and

proprioception (i.e., haptic and proprioceptive feedback that situate the reader and body in space) lies in the affective potential they carry. Adult literacy scholars highlighted that reader-book bodily feedback constitutes pleasure in reading (Hillesund et al., 2022; Mangen & Schilhab, 2012) and facilitates readers' immersion in texts (Kuzmičová et al., 2020). Immersion, reading enjoyment, and deep engagement are at the core of children's intrinsic motivation to read and lifelong reading habits (Burnett & Merchant, 2018; Jerrim & Moss, 2019), and unsurprisingly, they motivate scholarly interest in affect.

Affect is defined and studied differently in different literacy traditions. My own approach to affect is marked by the desire to consider senses and the full sensorium (including the sense of smell and taste) in children's contemporary literacy and meaning-making experiences. I understand affect as a relation and a state of becoming (see Deleuze & Guatarri, 1980). I adopt the definition of Lara et al. (2017), who build on previous research to see affect as a "non-conscious, non-cognitive, trans-personal, and non-representational" process (p. 31), and posit that affect's communicative power lies in generating connections that go beyond discourse. I turn to affect as a transpersonal, nonrepresentational process with a deep interest in the relationality of how affect moves between bodies and materials. The role of affect in literacies has been richly theorized, particularly in relation to the ways in which attention to affect can "enlarge and enliven perspectives on the feeling of literacy in social life" (p. 202, Ehret & Rowsell, 2021). I propose that unpacking the scope and manifestations of DEL can expand our understanding of affect in children's literacies in relation to the close allegiance of affect to materiality, sensorial meaning making and relational practice (Hickey-Moody & Haworth, 2009). Given that DEL have not been examined or discussed in scholarly literature before, I adapt an exploratory genre analysis to provide an initial exemplification of their affective qualities.

Methodological Approach: Genre Analysis

Genre is an "interdisciplinary concept with analytical potential as it connects texts and social organization" (Lüders et al., 2010, p. 948). Genre analysis appears to be well suited to DEL because it allows for an examination of both individual and collective authorship, which are typical of social media: "genres are both medium and outcome of textual practices in socially organized settings" (Giddens, Lüders et al., 2010, p. 949). Furthermore, a genre analysis centers on the agentic continuation and innovation of texts and their role in society (Lüders et al., 2010) and can thus reveal what DEL "do" to children's literacies as they get produced and interpreted by children and their caregivers.

To select representative case studies for my genre analysis, I first examined DEL with a hand-coded content analysis of 200 Pinterest posts with hashtags associated with stories, children, art, and food (e.g., #foodartforthought, #FoodArt #FoodArtForThought,#CulinaryTalents, #graphicfood, #fooddoodle, #kidsstories, #childrensstories, #funnykidscharacters). I searched four popular social media platforms—Instagram, Twitter, Pinterest, and TikTok—and I also performed a Google search for blogs and bloggers associated with keywords associated with food, art, literacy, and children. Both searchers were completed in July 2022.

The hashtags led me to accounts similar to that of Jacqueline, but also the images of various sophisticated fruit carving that represent dragons from bananas or avocados and melons formed as houses and children's games. I selected three case studies and analyzed them both inductively and deductively, with a hands-on analytical approach of digital ethnography (Murthy, 2008a, 2008b). The approach was inspired by Rowsell and Pahl's (2007) ethnographic perspective that fuses reflexivity, positionality, and multiple sources of data in an artifactual literacies method. According to this method, literacies have distinct physical features, they are "evoked in language, they embody identities and experiences, and they are valued by a meaning maker in a specific context" (Pahl & Rowsell, 2019, p. 11). By adopting this methodology, I positioned DEL as a subtype of artifactual literacies. Rowsell and Pahl (2007) refer to the various ways in which artifactual literacies "come into being" as their material qualities intertwine with family identities. In this study, I explore, through a theorized genre analysis, how DEL change their artifactual qualities through social dynamics and communication flows and their existence gets sedimented in social dynamics and solidified in relationships.

Ethics and Researcher Positionality

I am a scholar living in a high-resource country and studying children's literacies with digital media. My work adopts Euro-Western understandings of the senses and my hermeneutics are intertwined with my experiences and the theories I mobilize in this work. Aware of the "ethics of 'harvesting'" (Murthy, 2008a, 2008b) in the analyses of freely available digital artifacts, I sought consent from the authors of the three case studies that I analyze. All three authors agreed to be named in the article and for photos of their artifacts to be shared in the paper. Through a theorized, scholarly attention to DEL, I pay close attention to these new texts to advance our understanding of the affective and relational sources of literacy in children's contemporary experiences. I seek to experiment rather than represent and offer my analysis of the case studies as one of many possible reflections on how affect may be invoked by edible literacies.

There are two main aspects of affect that relate to DEL and that I pay attention to in my analysis of the case

studies: materiality and ephemerality. I first explain what I mean by each, followed by how I see them play out in the analysis.

Materiality and Ephemerality

As humans tussle with their own impermanence, they tend to favor stable materiality and durable relationships. A deviation from this stability generates interest in ephemeral artifacts. DEL's appeal to social media audiences and blog readers relies on some unique affective qualities. On the surface level, by being edible, DEL's materiality is short-lived. This is similar to ephemeral art, such as pop-up exhibitions or statues made with perishable materials, which too are short-lived. Some ephemeral artists use the non-permeance of their works to resist a market that requires permanence and draw in audiences (Naguib, 2017) and this represents a challenge to museum creators who are tasked to archive and preserve objects from the past (Levent & McRainey, 2014). A good example of such practices are pop-up exhibitions or street art that are malleable and open to destruction through their public exposure (e.g., Banksy's artwork that shredded after it was sold at an auction). There is a certain mischief, as O'Neill (2007) suggests, in creating something that physically disappears and suggests that the uncontrollable nondurability of ephemeral art is part of its "inherent vice" (p. I, O'Neill, 2007).

Ephemerality in literacy studies is not associated with mischief but it does carry negative connotations: short texts and short reading are typically described as fugitive, and fleeting and literary scholars make several compelling arguments for the superiority of long-form reading (Schüller-Zwierlein et al., 2022). Nevertheless, short online reading formats are popular and widely practiced by both adult and young readers (Loh & Sun, 2022). The so-called "short experience culture" places value on short experiences (Twenge, 2014) and has stimulated new study directions, especially in relation to teenagers and pre-teens who place a significant meaning making and communication value on the immediacy (Livingstone & Pothong, 2022) and the there-and-then communication via social media (De Veirman et al., 2019).

DEL complicate an established notion of temporality in literacies by positioning their materiality as ephemeral and edible. The edible status might provoke rejection from traditional children's literacy advocates, but also greater interest from young children. What is certain is that the edible character of DEL radically challenges the limited sensory stimulation of traditional (paper) and more recent (screen) reading substrate. Indeed, DEL's physical properties challenge the dominance of higher senses in that they offer multisensory stimulation through visual prompts, the possibility of kinesthetic and tactile feedback from texture, size, and weight, and the added stimulation of olfactory and gustatory senses.

DEL engage multiple senses in their creation and consumption, but the gradual decay of their edible parts makes the multisensory engagement impermanent. Moreover, through online sharing and DEL's digitized forms in the form of photos, social media stories, videos, and mass media appearances, DEL's materiality becomes virtually permanent. Thus, while digital edible books lack traditional physical anchors, the social dynamics of media platforms extend, and archive their existence in the form of social media posts and webpages. As such, DEL communicate knowledge and stories through both words and food, and in both symbolic and tangible forms.

I now turn to three genres of DEL (three case studies) and the symbolic ways in which they instantiate and signal new understandings of affect in children's literacies.

Genre Analysis of Three Case Studies of DEL

I selected three situated case studies based on the main analytical criteria of interdisciplinary approaches to communication media studies: (1) the extent to which they intertwine social media with literary cultures with attention to space, identity, and network collaborations (Thomas, 2020); (2) the diversity and volume of audience that they attract and sustain over time (as used in web history metrics, see Novak & Hoffman, 1997), and (3) the extent to which they challenge what critical, new modernist and new media studies describe as the aesthetic values of contemporary culture (Pressman, 2014).

The three selected examples are similar in that they are three (different) genres of edible literacies, but they differ in terms of the platforms and sharing models (private blog, Instagram, connected Meta channels) as well as different ingredients used by the DEL's authors (a child's lunch box, fresh fruit and vegetables, bananas) and audiences they target (parents and caregivers, art aficionados, general public). The three case studies are intended as exemplifications, not reportage, of DEL's potential to re-position linear representations of children's meaning making with texts (Leonardi, 2012).

Case Study 1: Story-Themed Lunchbox Shared via Blogs

The first case study relates to the so-called "Boogs' lunches" created by the blogger under the name Keitha. These Boogs' lunches represent the main story character or theme from a children's storybook with a small quadratic lunch box that is described and visually represented on Keitha's blog page. Each blog post is a short description of the bedtime story that preceded it, followed by a photograph of the lunch box in which Keitha recreated the main story idea or story character. In Figure 1, the colors and shape of the ingredients selected for the lunch directly

FIGURE 1
Keitha's Skippy Jon

FIGURE 2
Laleh's Kermit

correspond to those of the main story character Skippy Jon Jones depicted on the book cover.DEL such as Boog's lunches invite affective responses in two main ways: first, in Boogs' lunches, the meaning of the story got internalized by the mother, who remixed it with her knowledge of foods and in a creative bricolage process, layered her, and her son's shared history with the text with personal interests—a literacy practice that Rowsell and Pahl (2007) describe as sedimented identities in literacy texts. Keitha's "Boogs' lunches" support her son on the journey to the multisensory and multilayered practice of reading for pleasure—a journey that Stein (2007) depicts as chains of semiosis that invoke meanings, conversations, and situated literacies. Each artifact created by Keitha is an affect-laden artifact intended to be consumed by her son and followed by her blog's readers. I consider it to be "affect-laden" because it blends the proximal and distil senses with history and semiotics about the child's favorite story characters.

Second, DEL such as Boog's lunches actively brokers affective literacies in the process of facilitating children's engagement with the cultural horizon that art and literacy represent. Keitha's conversion of a story into foodart is an act of embodying the literacy–art borderline in a creative way. The child's favorite story character becomes embedded in the material artifact of a book and reconfigured and transformed through the mother–child joint memory of a bedtime story. The care Keitha takes to make the lunchboxes and the time she invests in practicing DEL are demonstrations of affect for her son, but also for literacy and food.

Case Study 2: Children's Foodart Shared on Social Media

Laleh Mohmedi, known as Jacobs_food_diaries with over half a million followers on Instagram, has become world famous when she started transforming her son's daily

meals into foodart. The first creation were pancakes in the shape of a lion face, which, as Laleh revealed in an interview with The Craftsman (The Craftsman Agency, 2019) were an impromptu response to a request from her son.

The example in Figure 2 shows the letter J and the Kermit story character made of avocado, egg, strawberry, melon, and bread. Laleh's edible literacies include references to various popular children's story characters, which through social media sharing, give rise to affectively charged moments. While social media users cannot directly taste Laleh's creations, they express their appreciation through Likes, comments, and re-shares of her post. The common theme running through Laleh's creations is that of changing and relational materiality, which changes through a constellation of networks, crosses the local–global boundaries, and is attentive to the spatial and communication affordances of new media (Massey, 2005).Laleh Mohmedi's DEL exemplify how DEL mediate between artistic and literacy networks, meaning of which does not reside in their subjective and representational materiality but in how they communicate their shared value to a global audience. This DEL genre enmeshes the child's and adult's knowledge of stories, letters, food, and the world, with virtual social relationships. The physical nourishment and the intellectual stimulation provided through the Kermit example articulate the DEL's wider status in contemporary literacy landscape. Namely, with the direct connections to other story characters and their presence online, DEL enact affect that is relational and contingent upon relationships with food, stories, and people. When shared online, DEL become more-than-representation which neither represents nor non-represents. Indeed, "more-than-representationalism" offers both an attention to how the food is a representation of familiar story characters, but also "how it recirculates—'issues forth'—the affective intensities registered at the time of its composition" (Shannon & Truman, 2020, p. 7). In other words, the affective response evoked in viewers is generated by its nonrepresentational property, which proliferates the affective intensity that preceded its production. As such,

DEL are both deliberate representations, but also nodes of affect.

## Case Study 3: Banana Art with Children's Story Characters

Out of all fruit-related foodart shared on social media, the hashtag #bananaart is most popular and was in July 2022 associated with more than 55k posts on Instagram. Created mostly for adult audiences, banana art is a symbol of sensual but quickly decaying appeal that "has the power to perturb" (Jones, 2019, online) and has been used by many feminist artists (Natalia LL and Guerrilla Girls), and conceptual artists (e.g., Gaugin, Andy Warhol, Maurizio Cattelan) to convey political and artistic messages. While banana art can mean a banana affixed to a wall with duct tape (e.g., by Maurizio Cattelan) or a banana skin bruised with a portrait of Queen Elisabeth (e.g., by Anna Chojnicka), and is frequently evoked as phallic imagery, banana art is also a popular children's art form.

The artist Stephan Brusche, known as "iSteef" on social media, has been working with pears and kiwis but considers bananas his favorite art medium. Brusche's Instagram gallery of banana skins reveals sophisticated drawings that combine food carvings with penciled shapes of animals, historic figures, celebrities, and story characters. His banana art includes replications of popular children's cartoon series (Donald Duck, smurfs), film characters (SpongeBob SquarePants, Pink Panther) as well as adult film series (Spiderman, Grady Twins). Although based on children's stories, Brusche's story characters on banana skins communicate adult-oriented art stories, such as the human dysfunctional relationship with nature, and political and anti-consumerist culture messages (see Jones, 2019). The banana decay, which is a gradual close-up of black over yellow, is considered to be a cross-cultural symbol of death's gradual dominance over glory (Salim, 2017) and in Brusche's artifacts, it is skillfully used to entertain the ideas of disappearance, natural decay, and extinction.

The affective potential of DEL comes full circle in Brusche's banana art that combines the intense and immediate experience of food with everlasting literary qualities, uniquely exemplified by iSteef's banana carving of books with a heart (see Figure 3). The human hand holding an open print book with the text "I love books" is the artist's cunning juxtaposition of the ephemeral living banana versus the solid nonliving book's substrate. A literal interpretation is that the artist conveyed his love for print books on a gradually decaying banana skin. An abstract interpretation is that the artist demands of books/banana's consumers a serious engagement with issues of climate change and socio-ethical consequences of shoehorning old values into living, nonhuman artifacts.

Brusche's banana art with children's story characters exemplifies the strength of DEL to enact change by

FIGURE 3
iSteef's Banana Carving
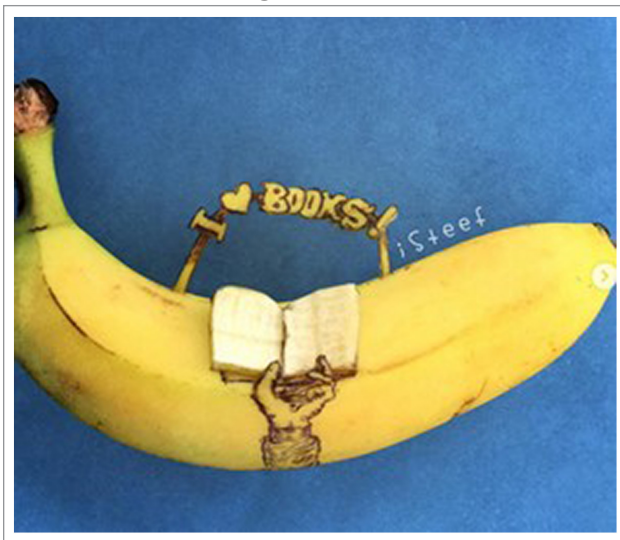
capitalizing on familiar children's stories to engage communities in ethical and values conversations. The banana art visualizes the complex process of sharing material (edible) artifacts, letting them disappear (through consumption) and then archive in collective distributed memory (through social media posts). The case study is rich in socio-moral-political messages and consequential for ethical discussions in children's literacy studies—as discussed next.

Discussion

The genre analysis highlighted the affective properties in three different DEL cases. In this section, I discuss the unique affect configurations these artifacts might introduce to children's literacies, with particular attention to the sensory dimensions of affect in literacy. This theoretical orientation follows Springgay's (2011, p. 67) call to "shift from the 'linguistic turn' and an emphasis on discourse towards the senses and ethico-aesthetic spaces." In particular, I shift the focus to intense sensory moments that DEL mobilize and that mark a departure from the highly "captured, controlled and rationalized" (Springgay, 2011) traditional approaches to children's literacies.

Sensory Transactions in Affective Literacies

Expanding Rosenblatt's (1982, 1988) transaction theory of reading, I argued that "the olfactory, gustatory and proprioceptory senses in reading for pleasure calls into question the received idea that affective reading is a consequence of the interaction of dominant linguistic

senses" (Kucirkova, 2022, p. 10). DEL facilitate meaning transactions that may be short in duration, but they are affect-driven and highly sensorial: DEL are being consumed, figuratively and literally, through the engagement of multiple senses. The transactions of affect are both sensorial and virtual, tangible and intangible, and they emerge in the encounters between DEL's materiality and social interaction. As such, DEL carry quintessential markers of literacies (books' materiality comes to life through readers' interaction), but also of the communicative dynamics on social and mass media. The hybridization of virtual–physical, material–intangible properties in DEL disrupts linear and static approaches to children's literacies. It opens the possibility of understanding literacy as an assemblage of sensory transactions that dynamically invoke affect.

Affect intermingles with readers' sensory transactions in some specific ways: DEL's aesthetics, as shown in the three case studies, manifest the deep care that goes into their creation by individual makers. Furthermore, DEL's popularity on social media shows the affective responses they call forth on a collective level. While these affective flows emerge in various sensorial combinations and social configurations, the digital nature of DEL means that the artifacts are physically transient but virtually permanent. The impermanence of edible ingredients available to the maker in a specific time and location intra-acts with the distributed tools available to virtual audiences (cf Kuby, 2017). This relationality corresponds to affective literacies that were described as sensitive to the needs of others and responsive to those needs with care (Leander & Ehret, 2019).

The unfolding of affect over virtual and physical spaces, including a book's page, a social media post, an edible ingredient and a child's mouth, give rise to an existence that aligns with Lara et al's (2017) definition of affect and what the social anthropologist Alfred Gell referred to as "distributed personhood." Gell (1998) argued that human agency is not confined to the borders of human bodies but is distributed through interactive networks, whereby each network has nodes that create an intense media environment. DEL are an example of literacies that are an art-work that becomes a net-work as the matter and human interact through affective bonding. Affect in this process "contributes to the processes of orientation through which the net-work becomes a centrifugal force in the relations between different nodes" (p. 219, Knudsen, 2014). In such a network, DEL's ephemeral nature creates a sense of pleasure and enjoyment, which grounds the presence of stories in the physical body of their makers and consumers. Affective literacies thus may not be the consequence of the interaction of dominant linguistic senses, as Rosenblatt and others argued, but rather of sensory transactions across stories and materialities.

One might argue that DEL constitute unique sites of affect for children because they contest the edible–nonedible boundary of books. Without a doubt, the edible quality of DEL problematizes the widely held belief that children should not eat books. Flewitt, Nind, and Payler's (2009) compelling case study of a 4-year-old girl with learning difficulties illustrates how such beliefs can go against children's desires to engage with books and inclusive, embodied literacy practices. As such, DEL and edible literacies, more broadly, offer uncharted opportunities for studying the full sensorium of children's reading for pleasure. Such studies might undo the visual primacy in traditional reading studies (Fors et al., 2013; Pink, 2015) and facilitate understandings of the complex affective qualities of children's literacy ecologies.

I conclude with a projection of how DEL could prompt a conceptual change in theorizing affect in children's literacy studies.

Theoretical Contributions of DEL

If we think of "affectus" as capable of prompting a change in the consciousness of the body in question (Hickey-Moody & Haworth, 2009, p. 3), then we can think of the affective potential of DEL as "a force, a movement or subjective modulation" (Hickey-Moody & Haworth, 2009, p. 3). Affect and cross-temporality are chief qualities of transformational literature that "lives on" in readers' minds. Material time, according to Blakey and Mitchell (2017), is about shared sensibility and "slowing and spreading in the emplaced encounter with material things" (p. 3). Blakey and Mitchell (2017) argue that practices with "heightened material presence," where diverse material things and various materials are open to hands-on manipulation such as maker's workshops or museums, give rise to "material time." A close study of the time manipulations of DEL "rewards" critical attention, to borrow Pressman's (2014) terminology, of both children's literacy, critical media and social media scholars.

With edible literacies shared online, their material time is offset with the "virtual" time as DEL become propagated to a state of virtual materiality on social media networks. While in traditional literacies, time was manipulated by the story author in crafting the temporal dimensions of stories and by the reader in engaging with the stories, in DEL, the affective relationality between reader and author is disrupted by DEL's ephemerality. This disruption can be both productive in generating intense moments of engagement or it can be accompanied with feelings of disappointment and disengagement.

The possibility of extending the short shelf-life of children's edible books with intense memories occurs, according to Alaca (2022) through an interplay of senses: "Although there is an impermanence to these products, the combination of stimulated senses gives the experience an intensity, a vigor that may well turn a child's attentiveness to a given word into a long-lasting memory" (Alaca, 2022,

p. 200). It could be that the short-lived nature of DEL is in readers' minds compensated with the embodiment of story characters that live on in the collective memory. Booja's lunches illustrate this point particularly well in that one can easily imagine how the memory of a joint bedtime reading continues as the boy eats the story-inspired lunch at school and his mother, perhaps at home or on the move, blogs about the experience. This creates an intense memory of an ephemeral encounter with literacy.

The sensory quality of DEL implies that they do not only augment food with literary qualities, but also decenter linguistic modes of meaning making as they assign higher role to gustation and olfaction. Tastes, just like smells, signal a physical presence that imbues DEL with a vitality that might bring about unique affective moments in children's literacies. In particular, DEL carry affective qualities that are short-lived but intense and this intensity is calibrated by both the reader-consumer and the DEL creator, who enjoy different affective qualities of the same artifact that can be consumed by one or many but once consumed, disappears for all. The role of pleasure, enjoyment, and affective qualities with literacies are often intensively felt through the body and attuned to relations with others and matter (Leander & Ehret, 2019). DEL's affective appeal lies in their edible character and the "mischief" that comes with contesting established social order—in this case children eating story artifacts.

Analyzing digital stories, Stougaard Pedersen et al. (2021, p. 290) highlight virtual time manipulations of stories as the site that readers can derive pleasure from: "there can be ludic elements in the app reading that deepen the reading experience in intense, shorter moments." Such intense, short dips in and out of digital stories reduce the distance between audience and creator and this closeness corelates with readers' well-being, both positively and negatively (Best et al., 2014; Keles et al., 2020). The ways in which DEL interweave ephemeral materiality with the human desire for virtual permanence opens up possibilities for a new appreciation of ephemeral stories.

When DEL get shared on social media, they address the passing and temporary aspect of their materiality through distributed cognitive resources such as memory, decision-making, or reasoning, which are augmented by artificial intelligence of algorithms propelling virtual impermanence (Heylighen et al., 2004). As such, DEL serve the function of provocation in that they reshape the image of children's digital and print literacies: DEL are impermeant because they are physically consumable and yet, they are permanent because they are digitally conserved.

Returning to the example of banana art, we can consider it an illustration of how virtual sharing counteracts the loss of artifacts' material qualities and enables its survival in the distributed memory of the social collective. When introspecting the emotional dimensions of ephemeral art, O'Neill (2007) proposed that ephemeral art

engages people because of the sense of grief connected to human impermanence. With ephemeral art, the grief becomes interwoven into the artifact which appeals on an emotional level, but also carries a regenerative power in processing grief. Traditional marks of time in books such as chapters and reader's navigation through pages are not available in DEL. Instead, time is implied through their short physical and unlimited virtual existence.

From these perspectives, DEL are enacted in the body–mind during all cycles of their existence of life and death or conceptualization, creation, consumption, sharing, and archiving (see Semetsky, 2013); they exist in the digital-virtual liminal place, revealing a "transmediated self constituted as a browsable story-world that is integrated, dispersed, interactive, and episodic" (p. 233, Elwell, 2014).

Limitations and Reflections for Future Studies

My three case studies were from creators based in Western, affluent, and democratic countries, where access to food and social media is much more readily available than in other parts of the world. As such, they present a very limited view of the affective responses DEL might generate in humans. A scholarly study of how DEL might respond to social and ecological inequities of present times, remains an important direction for future research. Vea's (2019) notion of "im-mediacy" provides the vocabulary for capturing the immediate intensities of such affective experiences. Im-mediacy experiences counteract predictable media experiences and produce communicative acts that move others to action through unpredictable embodied intensities (Vea, 2019). The emergence of more and varied exemplars of DEL would introduce not only new theoretical insights, but also ethical questions to social and media studies.

In my analysis and interpretation of DEL, I adopted an adult perspective, even though the DEL objects were created for and consumed by children. The DEL I analyzed did not foreground children's perspectives or responses to the objects, and such empirical insights are vital to more fully understand their potential. My conceptual paper might prompt empirical investigations of children's views and experiences with DEL. Inviting children's responses to existing or newly created DEL could not only enrich the theorizations and adult inferences that I represented in this article, but also shape new forms of DEL and their affective representations.

I conclude that DEL can be considered a special niche in children's contemporary media ecology that carries a transformative potential to introduce new thinking into the affective qualities of literacy. Our lived environments shift in response to digital media that impact our identities (see Mills, 2015) and DEL's dual presence in tangible, gustatory realm as well as cognitive, virtual space, can

stimulate new understandings of the affective qualities of the stories we value. Namely, the natural time manipulations with DEL (edible ingredients that decay over time) raise the interesting proposition that the perception of time is in literacy facilitated by affect.

The reader constructs a different relationship with a historic or contemporary story character and even more so, if this character is depicted on a decaying edible object (e.g., banana skin). As Deleuze and Guatarri (1980) emphasized in their writings on intersecting "planes": affect and representation, affect can bring about change to the material world if it allows for dynamic-free moves of ideas and elements. While singular in nature, the three case studies offer generative lenses to reorient our thoughts on how affect is created and sustained in stories.

What future research could particularly benefit from is the concept of sensory dimensions of affect in literacy. As DEL creators compensate the immediate loss of naturally decaying ingredients with technological immortality, they grapple with the contemporary moment and manipulate the time configurations of literacies. Such grapplings can result in vivid and intense renderings, which influence the affective dimensions of children's literacies. Representing them through DEL might help us make sense of the inconspicuous ways in which children's literacies are part of wider social networks, virtual and social, and respond to current times of environmental vulnerability.

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NATALIA KUCIRKOVA is Professor of Early Childhood Education and Development at the University of Stavanger, Norway and Professor of Reading and Children's Development at The Open University, UK; email: Natalia.kucirkova@uis.no.