Imitative or Iconoclastic?

How young children use ready-made

images in digital art

Abstract

Digital art-making tends to foreground the inclusion of ready-made images in children's art. While some lament children's use of such images, suggesting that they constrain creativity and expression (McLennan, 2007; Szyba, 1999), others have argued that ready-made digital materials offer children the opportunity to create innovative and potentially iconoclastic artefacts through processes of 'remix' (Lankshear & Knobel, 2006) and 'mash-up' (Lamb, 2007). In order to further this debate, observations are needed to explore the different ways that children use ready-made images in their digital art and the various purposes that these images can serve. Adopting a social semiotic perspective, this paper offers an in-depth examination of five episodes of 4-5 year olds' digital art-making that collectively demonstrate the diversity of approaches that young children take towards the inclusion of ready-made images in their digital art-making. The paper discusses these findings in relation to suggestions for what adults can do to support children to adopt a playful and critically aware approach to the use of ready-made images in digital art-making.

Introduction

Ready-made images are possible components in children's art in both digital and non-digital environments. In digital art-making however, the use and manipulation of ready-made images is often foregrounded and facilitated by the design of the art-making software. In digital art-making software like *tuxpaint* for example (figure 1), a 'stamp' tool enables the user to scroll through a large number of ready-made images - both photographs and illustrations - that can then be applied to the screen at the single click of a button. Different opinions exist among early years educators regarding the role of such ready-made images in children's art-making. Some educational perspectives suggest that ready-made images inhibit children in the creation of their own representations or distract and detract from children's expression (McLennan, 2010; Szyba, 1999). On the other hand, digital art-making environments and the ready-made images they typically contain have been celebrated for their potential to be used in 'remix' practices (Lankshear & Knobel, 2006) and even as part of parody and iconoclasty (Ivashkevich & shoppell, 2012). According to these theories, children's expression is achieved by playing with and ultimately re-making the images that they choose to use in their art. In the midst of this debate, little empirical research has focused on how young children actually incorporate ready-made images into their digital art and the purposes they fulfil.

Figure 1. A screenshot of *tuxpaint* in use [INSERT HERE]

A social semiotic approach can help us to investigate how children use ready-made images in their digital art-making. Social semiotics concerns itself with the material and social aspects of how meaning is made (Hodge & Kress, 1988). The particular materials used in art-making, and the interactions they engender, constitute distinct 'semiotic resources' that will influence how meaning is made as a result of their physical properties and social associations (van Leeuwen, 2005; Jewitt & Kress, 2003). The influence of these materials can be explored through observations of use, which demonstrate how materials are drawn into meaning-making (i.e. 'semiotized') in particular social settings (Bjorvall & Engblom, 2010). From this perspective, ready-made images are an important aspect of and influence on digital art-making. Understanding this specific influence however, depends on observing how children apply ready-made images and make meaning through them (Vannini, 2007; Bjorkvall & Engblom, 2010). Related to this emphasis on observation, the paper uses Dyson's (2010) notion of 'child agendas' (p. 9), which emphasizes the perspectives and desires of children themselves rather than seeing children's meaning-making through adult eyes. It does this by exploring how children actually incorporate images into their art and what purposes they are using the images to achieve.

Children's digital art-making

Digital technologies are increasingly prevalent in the lives of young children (Ofcom, 2012; McPake et al., 2013). Through their engagement with computers, mobile phones, MP3 players, and other technological toys and games, children

are rapidly building their familiarity and competence with digital resources. In the context of this landscape however, there has typically been a focus on numeracy, literacy and information gathering (Burnett, 2010; Formby, 2014). Activities that engage digital resources for expressive meaning-making, including visual art, are less frequently discussed in research or used in the classroom. This could be, as Edwards (2013) argues, the result of a failure to see activities involving technologies as part of a playful, process-focused curriculum, and instead a persistent connection of digital technologies with skill acquisition and specific learning outcomes.

The small body of literature that has focused on children's digital art-making has looked at a range of digital resources. Carter-Ching et al. (2006) and Kucirkova et al. (2013) for example, have explored the use of digital story-making software and apps that enable children to take and arrange photographs according to oral or written narratives. On the other hand, research by Author et al. (in press) and Klerfelt (2006) have focused on digital software that enables children to 'paint' on the screen and to include ready-made images and shapes. It is the latter type of digital environment that is of particular relevance when considering the role that ready-made images play in children's digital art. The software in which these images are presented typically offers them in limitless abundance, so that children can use as many of them as they like. In the case of *tuxpaint*, images can be photographic or cartoon-like, and the stamping of these images onto the screen is accompanied by musical sounds and an audio recording which states what the object in the ready-made image is. A written message also appears

along the bottom of the screen when an image is stamped onto the screen; this message can be praise (e.g. 'Great job!') or a label for the image (e.g. 'A cuckoo').

Ready-made images in children's art

Some researchers in early years education, such as McLennan (2010) and Szyba (1999), have argued that when children use adult-created resources their creativity is constrained. McLennan (2010) discusses non-digital activities involving ready-made images including: the assembly of pre-cut shapes, using stickers, collage and colouring outlines, arguing that such activities limit children in their expression. Szyba (1999) similarly argues that open-ended activities constitute more rewarding learning activities for children and require materials that are made by children rather than imposed by adults. Other researchers however, have a more positive attitude towards the inclusion of images in children's art. Klerfelt (2006) for example, uses Kristeva's (1986) notion of intertextuality to suggest that children's art will always draw on everyday experiences, and as part of this, it will always involve images from popular culture (see also Thompson, 2003). According to this approach, images are always at work in children's art-making, but particular types of art-making – such as digital art-making – foreground this aspect of the experience and make it more explicitly visible. As Malin (2013, p. 7) highlights, such approaches contrast with romanticized views of children's art-making that construct children 'as uncorrupted and unintentional conduits of creativity' (p. 7). Instead, these

approaches suggest that children are in constant dialogue with the popular visual culture in which they live, and will inevitably engage in this when they make texts of their own.

Beyond the inevitability of children drawing on pre-existing images in their art-making, the possibilities that physical images offer for practices of remix and bricolage have been celebrated by theorists since the 1970s (e.g. Wilson & Wilson, 1977). From this perspective, when ready-made images are used in art, they are appropriated and re-made as part of a process that has the potential to be 'heterogeneous, dissonant and absurd' (Tam, 2012, p. 251). Images cannot simply be inserted or applied, they are necessarily re-contextualised and re-made as part of the art-making process. In some instances of art-making, these processes of re-making may be more visible than in others. For example, Heydon (2011) found that the re-making of images in collage was achieved differently by young children and adults in an inter-generational art class. In comparison with the adults in the class, the children tended to use ready-made images in a more open way and showed a desire and ability to push against the literal meanings of the image and express meanings through the images in non-literal ways.

Engaging with and using images can also be seen as a means for participating in particular communities of practice. Jenkins (2006) suggests that image use can be a part of participatory multimodal literacies, whereby children signal their membership of particular groups through elements of visual culture that they involve in their meaning-making activity. Such an approach to art-making is at

odds with individualistic ideologies of self-expression in which 'individual child authors are urged to focus inward' (Dyson, 2010, p. 25). This participatory aspect of art-making is brought to the fore in digital environments, where the de-materialisation of popular culture symbols (in the form of images, animations and theme tunes) creates the potential for children to engage in popular culture without necessarily having to buy or consume material goods. Considering the potential role of ready-made images in constructing child-led communities, opens up other possible purposes underlying the use of ready-made images in digital art. When considering the diverse range of purposes underpinning children's art-making more generally (as in Malin, 2013), we can ask whether this multiplicity of purpose is also applicable when thinking about the different ways that ready-made images are drawn into children's digital art-making.

Study design

In a social semiotic approach, there is a focus both on how semiotic resources are used to make meaning and the semiotic resources themselves (van Leeuwen, 2005; Vannini, 2007). Such studies therefore involve observing processes of meaning-making as they unfold in order to see how resources, like ready-made images, are 'semiotized' through use (Bjorkvall & Engblom, 2010). This is similar to the focus placed by researchers such as Cox (2005) and Frisch (2006) on observing the processes and interactions that surround children's art-making, rather than engaging only with the texts that children produce. The research presented in this paper builds on these approaches by exploring

'episodes' of art-making, which involve both the processes and products of young children's digital art-making. The episodes of art-making presented in this paper all involve the exploration of children's use of ready-made images by engaging in their 'talk around the text' (Lillis, 2008, p. 355) as well as the visual texts created.

The examples of digital art-making that are the focus of this paper are drawn from a larger study that compared the content and composition of children's paper and digital art-making. As part of this study, 18 children aged 4-5 years were observed for 20-25 minutes creating digital art. The children were from three state-funded schools in an urban area of South East England that all follow the Early Years Foundation Stage (EYFS) statutory framework for England, which suggests a range of learning goals in communication, physical activity and personal development.

Of the 18 children who participated in digital art-making, 10 created digital art that included ready-made images in the finished product. Those who did not use ready-made images were not studied further as the use of images was the focus of this particular analysis. Preliminary analysis of the episodes involving the use of ready-made images made it clear that the images were being used in a range of ways. To explore this further, five of these episodes were selected to undergo a more in-depth analysis. The episodes chosen for this stage of analysis appeared to each represent a distinct approach to the inclusion of ready-made images, that is, the images appeared to 'do' different things in each of these episodes. The analysis was therefore intended to explore the variety of children's possible uses of ready-made images rather than examining the popularity or

prevalence of particular types of use across the sample. This paper therefore focuses on five children and the distinct way in which they used ready-made images in their digital art-making. Adie attended School 1 - a Catholic primary school with a reception year. Seb and Mischa attended School 2 - a school dedicated to foundation stage provision and offering places to children living nearby. Ben and Gertrude attended School 3 – another school dedicated to foundation stage provision and offering places to children living nearby, though typically serving more affluent families than in School 2. All names have been changed.

All children participating in the study were observed by the principal researcher who audio recorded the episodes and made field notes for each participant. Their digital art-making involved using the researcher's laptop and mouse and art-making software called *tuxpaint* (figure 1), which is designed for 3-8 year olds. The software *tuxpaint* was chosen for both practical and theoretical reasons. Practically, it was readily accessible and freely downloadable, which meant that practitioners and children would have access to the software after the study if they wished. Theoretically, the features of *tuxpaint* map onto potentially interesting material properties of the digital art-making experience. Most importantly to the research reported here, the software offers the use of a wide range of ready-made images, photographic and illustrative in nature.

The children were removed by the researcher individually from their classroom and taken to a quieter place that was nearby – either the library, the corridor just outside the classroom, or a playroom adjacent to the classroom. Children were

guided through an interactive demonstration of *tuxpaint* during which they engaged in: choosing a background colour, using the 'paint' tool (including painting with different colours), using the 'stamp' tool, writing using the keyboard and erasing the picture. Each child was then asked if they wanted to make something by themselves. Over the next 20-25 minutes, the children took the lead in digital art-making but spontaneous conversation with the researcher was maintained.

The first stage of the analysis involved transcribing the audio recordings for each participant and checking and enriching these with reference to the fieldnotes written by the principal researcher during or immediately after each session.

Analysis of the use of ready-made images focused on identifying the episodes of digital art-making during which images had been applied (even when not present in the finished product) and examining, with reference to the 'talk around text' (Lillis, 2008), how these images had been applied. This examination was guided by the following questions:

- Have images been used as representations of the objects they show or as representations of something else?

- How are the images related to each other (e.g. duplicates, thematic links)?

- How are the images related to other content present in the artwork?

- How are the images linked to the conversation between child and researcher or to the child's 'directive talk' (Dyson, 1986)? 'Directive talk' refers to the talk that a child uses to guide their activity.

- What happens to the images when they are used e.g. positioning, manipulation?

Notes written according to these questions were used to suggest broad 'child agendas' (Dyson, 2010) for the use of the images in their digital art-making. This phase of the analysis was inspired by and in dialogue with the categories of Malin (2013) which relates to the different intentions for why children engage in art-making more generally. Malin suggests that these agendas include storytelling; representing self; experimentation; imagination; aesthetics; and relational reasons. When appropriate (as suggested by the process and product of the art-making), the episodes of digital art-making presented in this paper were related to these broad categories of intention. The following categories of image use are suggested through the five examples of art-making that were considered:

1. Image use is an opportunity to make aesthetic choices (Seb)

2. Image use is an opportunity for experimentation (Ben)

3. Image use is the basis for the development of narrative (Gertrude)

4. Image use stimulates conversation (Adie)

5. Image use is part of a coherent and static representation (Mischa)

These categories are not intended to be exhaustive, nor are they thought to be mutually exclusive, but by considering which category is most appropriate in each episode of art-making, analysis can offer some insight into the variety of purposes for which images are applied in the digital art of young children.

Findings

For each episode of digital art-making presented below, notes were made regarding how images were used and what category of intention the episode most closely related to.

Seb: Image use offers an opportunity to make aesthetic choices (Figure 2)

Figure 2. Seb's artwork [INSERT HERE]

Seb was clearly aware of the content of the images that he used since he often named them (e.g. 'duck', 'hammer') while applying them to the screen. The content of these representations did not however seem to guide his art-making. There are no thematic or referential links between the images that Seb used, which include ceramic jugs, hammers, toy ducks and nutcrackers. Instead, Seb used the images as 'empty signifiers' (Barthes, 1977; Derrida, 1980) where the particular objects that they referred to were unimportant. On the other hand, Seb's artwork is characterized by a strong visual coherence. There are multiple copies of each image and these are stamped evenly around the screen. The artwork achieves symmetrical unity as a result of 'complete fill' (Winner & Gardner, 1981), whereby the lack of blank space on the screen creates a sense of 'visual completeness' (Arnheim, 1974/1954; Golomb & Farmer, 1983). There is also a sense of coherence in the colour that is used. There is a striking contrast between the yellow of the duck images and the mostly blue background, and the

blue of the background is echoed in the colour of the detail on the ceramic jug images. Seb demonstrated that visual, rather than referential, coherence was important to him through his talk during the episode, which was most often concerned with position and colour. For example, he spoke aloud the colours that he wished to add and then said 'different colour' when he wanted to engage the researcher in helping him to change the colour of the 'paintbrush'. These verbal clues suggest that Seb was engaging in the use of ready-made images as a means for making aesthetic choices relating to position and colour; this relates directly to the purpose of aesthetic pleasure in children's art-making as suggested by Malin (2013).

Ben: Image use is an opportunity for experimentation (Figure 3.)

Figure 3. Ben's artwork [INSERT HERE]

In a similar manner to Seb's art-making, Ben did not appear to be guided by the content of the images he included in his art-making. There are no referential links between the different images that he included or other drawn aspects of the visual product. The visual coherence in Ben's artwork is harder to discern than in the case of Seb's art-making as a result of the images overlapping and in places being covered by marks of black 'paint' freely applied. Ben's 'directive talk' (Dyson, 1986) was not concerned with spatial positioning or colour use. A closer look at Ben's talk suggests that he was most concerned with the manipulation of

ready-made images in playful ways, as indicated by the prevalence of non-linguistic utterances ('wee wee wee') and various questions ('What is this?' 'What does this one do?'). Ben experimented with tools that had not been part of the interactive demonstration, turning images upside down and changing their size. These actions and the accompanying talk suggest that in the case of Ben, images inspired an experimental approach towards the art-making experience, where the focus was on tools rather than the text itself. This relates to Malin's (2013) and also Kolbe's (2005) argument that experimentation comprises a key purpose in children's art-making, and to Heydon's (2011) observations that young children are eager to challenge the facilities of the media they are working with. Furthermore, Wohlwend (2009) has noted the high proportion (45%) of play activities in the classroom that involve children exploring materials, and so Ben fulfils an expectation that such a purpose would underpin at least some cases of image use.

Gertrude: Image use is the basis for the development of narrative (Figure 4)

Figure 4. Gertrude's artwork [INSERT HERE]

In Gertrude's art-making, images were used as representations of what they were intended to represent, that is, images of ducks were used to represent ducks. Gertrude constructed a picture in which she (the drawn figure) is 'at the duck pond', which is represented through the application of the duck image nine

times. *Tuxpaint* readily affords the application of multiple copies of the same image, since an outline of the image continues to hover over the screen immediately after an initial application so that copies of the image can be applied at the single click of a button. The application of images in multiple quantities is a common characteristic of children's digital artwork (Author et al., in press). In Gertrude's art however, this multiplicity is justified through the development of a narrative in which she is in the physical context of a duck pond. Once this narrative has been initiated, Gertrude is eager to remain within its parameters. When she applied an image of smoke to the screen without realizing what it was, she quickly removed it since it did not have referential coherence in the context of what she has created so far. The positioning of images in Gertrude's artwork also attests to her desire to create a referential scene, since the ducks are clustered around the bottom of the Gertrude figure, thereby creating a groundline in the picture (Golomb & Farmer, 1983). The use of images in Gertrude's art-making for the purposes of storytelling relates to a category of children's art-making suggested by Malin (2013), but also observed in various studies linking children's art with the creation of multimodal narratives (e.g. Ahn & Filipenko, 2007; Coates, 2002; Wright, 2012).

Adie: Image use stimulates conversation (Figure 5)

Figure 5. Adie's artwork [INSERT HERE]

Adie discussed each image that she used in terms of what it represented. While there are no clear referential links between the images that she used, they are linked thematically since they represent things that Adie enjoys thinking and talking about: predominantly food and flowers. For Adie, duplicating images was a way of demonstrating how much she liked something and therefore acted as a springboard into discussion about the object with the researcher. For example, by positioning multiple Christmas puddings in the centre of the screen, she was able to begin a long conversation about how much she was looking forward to Christmas and the presents she was expecting to receive. Other images were used in a similar way e.g. the flowers were used as a starting point for talking about favourite colours, and the candy canes supported her talk about previous holiday experiences. Adie did not include any content other than ready-made images in her artwork. The images therefore appeared to be a quick and efficient means for stimulating conversations. This relates directly to the 'relational' purpose of children's art-making suggested by Malin (2013), and highlights the importance of contextualized accounts of children's art-making that focus on the 'talk around text' (Lillis, 2008; Cox, 2005; Dyson, 1986).

Mischa: Image use is part of a coherent and static representation (Figure 6)

Figure 6. Mischa's artwork [INSERT HERE]

The 'stamp' tool was the last tool that Mischa engaged with in her art-making. By the time she looked through the images available, she had carefully drawn a face onto the screen using a 'paint' tool. This face resembles the sort of common human figure representation that children often create when drawing on paper (Cox, 2005; Malchiodi, 1998). When she approached the images, she was looking for something that would 'fit' into this human figure representation. The consequent image use is entirely complementary to the face that she drew – a single hat carefully placed onto the top of the face. Mischa's image use is noticeably restrained in comparison to the other examples presented in this paper and that appeared in the study, where images were typically applied multiple times. Mischa used just a single image a single time and then declared that she had finished. It is interesting to note that when the teachers in Mischa's school were shown the various examples of digital art-making created by children in the class, they showed particular admiration of Mischa's artwork, declaring it to be an example of 'mature use' of the media (see Author, 2013). This highlights the common perception in early years education that children's art-making is a journey towards visual realism (Soundy & Drucker, 2010), which Mischa's art-making – including the particularly careful use of the ready-made image - represents a step towards.

Discussion

The findings from this study demonstrate the different purposes or 'child agendas' (Dyson, 2010) that underpin the use of ready-made images in

children's digital art-making. The reasons children in this study had for including images in their digital art ranged from experimentation to aesthetics and from conversation-starting to storytelling. This resonates with the variety of purposes that have been shown to underpin children's art-making more generally (Malin, 2013; Kolbe, 2005). Thus, the use of ready-made images does not necessarily constrain or invigorate children's art-making, but instead constitutes a means through which children can have a variety of art-making experiences. The question remains however, whether some of these experiences should be valued more than others from an early years educational perspective. Of the episodes presented in this paper, those that demonstrate a playful and exploratory attitude towards the inclusion of ready-made images are more valuable if we are eager for children to challenge and extend the facilities of available media in the ways outlined by Heydon (2011). Thus, although Mischa's digital art was favoured by her teachers over the artwork of other children, it actually demonstrated the smallest degree of flexibility or 'mash-up' (Lamb, 2007) in its image use. Valuing playfulness is particularly important in the context of emerging digital environments which are often seen as impinging upon play rather than as a resource through which play can occur (Singh & Gupta, 2011; Edwards, 2013).

Supporting children to be playful in their use of ready-made images relies on adults accepting the 'multiple pathways' that children can take when making art (Duncum, 1999; Louis, 2013). As suggested by the teachers' admiration of Mischa's digital artwork (figure 6), early years education tends to posit visual realism as the desirable and singular endpoint of art education (Soundy &

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Drucker, 2010). McRae (2011) discusses a tendency of early years teachers to assume and celebrate 'a coherent and unifying representational thread that gives the work meaning' (p. 103). If the playful use of images in digital art is to be facilitated, adults need to respond to art-making which does not have a solely representational purpose. Different concepts and theories, such as Foucault's notion of heteretopia (as in McRae, 2011) or Deleuzian concepts of the imaginary (as in Knight, 2013), can be invoked in order to challenge the idea that there is necessarily a formal and representational centre to children's art-making. However, we can also challenge this line of thinking through actual episodes of children's art-making which do not have a representational purpose but constitute rich, purposeful and exciting experiences nonetheless.

Adults do not only need to accept the diversity of purpose that children bring to art-making, they need to respond to it. Effective pedagogic interactions surrounding children's digital art-making, and their image use in particular, will rely on careful observation and listening practices (Eckhoff, 2013). Going further, Beudert (2008) has suggested that visual collage can be an exciting starting point for pedagogic interactions that enable children and young people to critically reflect on the visual culture that surrounds them. As children use ready-made images in digital art-making, teachers can engage them in conversations about what these images are, where they come from and who they were made by.

Conclusions

The debate as to whether ready-made images constrain or invigorate children's art-making is enriched through careful observations of how children actually use ready-made images. Five episodes of children's digital art-making showed a range of 'child agendas' at work including: making aesthetic choices, experimentation, initiating conversation, storytelling, and as part of coherent representation. These findings have implications for early years art education. They suggest a need for practitioners to be aware of and to respond to the 'multiple pathways' (Duncum, 1999) that children follow as they make art and as they use ready-made images. The findings highlight how much practitioners will miss in the context of children's art-making if they emphasise visual realism at the expense of engaging with children's 'remix' and 'mash-up' practices. Training must help teachers to explore this multiplicity and to engage with the exciting potentials of non-representational art-making.

Further research is needed to explore how ready-made images might enable children to develop their critical awareness of popular visual culture. This paper has argued that ready-made digital materials can be a way for children to engage with popular visual culture without having to buy material goods. However, little is known about how such images might reinforce popular culture, fuel consumerism and strengthen cultural stereotypes. Studies are needed that analyse the nature of the relationship between the imagery available in digital environments and the wider culture in which children live and consume. For example, how do the images of characters available in a programme like *tuxpaint* relate to gender

stereotyping in wider society? A multimodal discourse analysis of digital art-making environments would help to answer such questions.

Future research could also take a longitudinal approach to understand how children's use and manipulation of ready-made images changes over time. Related to this, more fine-grained analyses of observations are required to understand whether children's visual acts of 'remix' and 'mash-up' do relate to more deeply subversive practices, and if so, how. It is not clear whether re-making the visual world through 'remix' of visual images would offer children a chance to challenge elements of the social, non-digital world that surrounds them.

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