Visual Plagiarism and a New Framework to Address Localised Opinions and Perceptions in Applied Arts Education

Lisa Winstanley
Nanyang Technological University, Singapore

Gary Hodgkinson
Nanyang Technological University, Singapore

Abstract

While extensive research has been conducted on text-based plagiarism in tertiary education, with corresponding clearly defined rules for avoidance, far less scholarly material exists concerning perceptions of visual plagiarism. Accordingly, this study investigates ethical considerations specific to applied arts education via three information-gathering focus groups and a subsequent online survey. The resulting qualitative data was analysed using Grounded Theory Methods and revealed significant discrepancies in knowledge. From this analysis, four broad experiential themes were identified: Local, Definition, Honesty, and Education (LDHE). Based

on these findings and the underpinning literature, this paper puts forward a conceptual framework for addressing visual plagiarism. The LDHE framework was developed in direct response to the identified experiential themes and their respective concerns, thus providing art and design faculty with a foundational tool to generate and critically analyse pedagogies for preventing visual plagiarism in the context of applied arts tertiary education.

Introduction

Plagiarism is a salient issue in almost every higher education institution, and with education becoming progressively more globalised to accommodate a broadening international cohort, it is now more important than ever that we begin to understand how perceptions of visual plagiarism play a part in academic (dis)honesty. Extensive research has been conducted surrounding the topic of text-based plagiarism in tertiary art and design education, such as Walker (2009); however, far less scholarly material exists concerning the extent of visual plagiarism. Research by Van Heerden (2014) discusses visual plagiarism in a photographic context, yet much of Van Heerden's discussion is framed around visual plagiarism detection using Google's "Search-by" Image function. Accordingly, the present study is one of the first to investigate visual plagiarism within the context of art and design education in Southeast Asia. While it could be viewed that visual plagiarism is a cross-border international concept, this article will also introduce Singaporean nuances that affect fundamental perceptions of image ownership and acknowledgement that may be relevant to scholars worldwide.

Visual plagiarism in the applied arts is defined by this paper as the use of imagery from another source that is then presented as original work without disclosure. While visual plagiarism shares the fundamental principles of text-based plagiarism, this paper has identified three unique challenges that are inherent in the use of visual images. Firstly, art and design education often embraces the copying of creative work as part of a learning process. Okada and Ishibashi (2016) suggest that copying art and design should be regarded as a valid learning tool. Accordingly, unlike text-based copying, a zero-tolerance policy on the replication of images could hinder creative learning.

Secondly, there are no widely accepted protocols to acknowledge visual inspiration in the process of creating visual art and design. Furthermore, these borrowed sources soon become embedded into the creative visual process, further occluding their original source. Thus, with no standardised or practical means to acknowledge visual sources, the ability to identify visual plagiarism can prove very difficult.

Finally, while image search tools such as Google's reverse image search provides a service for the detection of copied images, Google's reverse image search cannot detect an image when it

is used amongst other images. Google can only detect the total similarity to another image, not its contribution to a new image. Furthermore, Google cannot detect the appropriation of a style or design treatment, such as a copied brand identity; for example, Airbnb's 2014 bélo icon bears a striking resemblance to the Japanese brand, Azuma, designed in 1975. Yet a Google reverse image search only recognised the icon as belonging to Airbnb. In such cases, it would be the creative concept that is imitated rather than a direct copy of a specific image. Similar to the limitations of text appropriation, appropriated imagery can remain intact and provide a significant contribution to the final design, and yet its appropriated source remains undetectable.

To further compound the unique nature of visual plagiarism in the arts, the use of existing imagery is essential in the development of many creative processes, and this process can easily conflate the source and the creative evolution from that source. Drenttel (2005) discusses this visual evolution:

> In the world of design and photography, there seems to be an implicit understanding that any original work can and will evolve into the work of others, eventually working its way into our broader visual culture. (para 5)

This evolution of the use of imagery as part of a creative process presents an ambiguity of ownership and leads the research into an examination of the notion of ethical usage. Accordingly, this research investigates the potential considerations of visual plagiarism that are specific to art and design, with a particular focus on pastiche, parody, and homage. This study acquires feedback on how local Singaporean values may influence students' perceptions of what constitutes visual plagiarism and then moves to utilise these perceptions to develop a conceptual framework for addressing visual plagiarism in art and design education.

This data was captured via three initial information-gathering focus groups comprised of students, academic support staff, and faculty, followed by an online survey of 50 undergraduate art and design students. These focus group studies were particularly helpful as they provided key indicators as to where gaps in knowledge lay and offered perspectives from the learner, facilitator, and teacher. The preliminary findings from this research are presented in four key categories.

1. Local context
2. Definition of terms
3. Honesty and integrity
4. Education (students and faculty)

These four categories can be used as pre-emptive pedagogical strategies to ensure that students and faculty follow best practice guidelines to avoid the pitfalls of visual plagiarism. These principles are further discussed, expanded, and developed into a proposed framework (LDHE) for preventing visual plagiarism in the Recommendations section of this paper.

Literature Review

The very definition of visual plagiarism presents significant problems due to its ambiguous boundaries. The use of copied artwork for pastiche, homage, and digital manipulation is regarded as a key teaching tool in students' creative and technical development (Economou, 2011). Consequently, according to Economou (2011) and Garrett and Robinson (2012), existing plagiarism policy documents are not adequate for specific, nuanced issues in arts education. This subsequently leaves faculty to deal with issues at their discretion without specific guidelines in place and often, according to Garrett and Robinson (2012), wrongly expecting students to have sufficient knowledge of Intellectual Property. Thus, inadequate information dissemination, rather than a desire to cheat, could provide an explanation for a significant proportion of visual plagiarism instances.

There is an abundance of literature providing potential reasons for text-based plagiarism, listing: poor time management, competitiveness, external factors, personality factors (Devlin and Gray, 2007), efficiency gain, defiance (Park, 2003) peer pressure, financial implications, laziness (Franklyn-Stokes & Newstead, 1995) and attitudes to cheating (Kuehn, Stanwyck, & Holland, 1990). Yet, there is very little literature which reviews if the reasoning behind instances of visual plagiarism emulates these notions or if different circumstances or factors contribute to its exigency.

Research outside of Southeast Asia does indicate that one of the contributing factors towards the occurrence of visual plagiarism in the applied arts could be a lack of awareness (Simon et al., 2014). This reasoning is also supported by Adam, Anderson, and Spronken-Smith (2016), evidencing confusion as a predominant reason behind text-based plagiarism, in that students did not comprehend the concept of plagiarism or its importance in terms of being avoided. Accordingly, this present study considers these phenomena within the context of art and design education and moves to establish perspectives from various stakeholders. Several research projects review the use of visual plagiarism detection software, such as Garrett and Robinson's iTrace pilot (2012) and Bowman's review of Robo Realm's Blob Filter (2008). However, current technology has a fundamental limitation, as it can measure what an image is but not what it means (Bowman, 2008). This suggests that such software is but one component in a wider approach to tackling visual plagiarism.

A focus group conducted by Breen and Maassen (2005) reviewed student perceptions of text-based plagiarism. The data derived from these studies was then used to develop pre-emptive course materials designed to prevent text-based plagiarism. Gullifer and Tyson (2010) build upon this work by conducting a similar study with a larger pool of multidisciplinary students. Their results evidenced six thematic perceptions in relation to text-based plagiarism, listing: "confusion, fear, perceived sanctions, perceived seriousness, academic consequences and resentment" (p.463). While limited to text-based plagiarism, these studies demonstrate how a framework can be developed from solid groundwork and applied to visual plagiarism.

Hare and Choi (2019) suggest an innovative approach using a flipped workshop model to investigate and develop student knowledge of non-text-based attribution and copyright. By testing the students' knowledge prior to a workshop, the researchers captured a before-and-after snapshot of students' knowledge and learning. While their research focuses closely on attribution and copyright, the workshop methods used provide some validity for some of the techniques we have employed in our research. As stated, they encourage further investigation of sourced imagery used in practice: "If this type of project was implemented more broadly within a department, research might investigate whether the number of cases of non-text-based plagiarism are reduced, indicating that the students not only have awareness of the concepts but can practise them" (Hare & Choi, 2019, p.74). Whilst attribution is clearly a key component in preventing visual plagiarism, our own research places attribution and issues of copyright within a wider approach.

Blythman et al. (2007) present a case study documenting the nature of non-text-based appropriation across different institutions and across multiple sub-disciplines of art and design in the UK. Blythman et al. conclude that students need to be aware of specific terminology in relation to visual plagiarism and that these issues should be discussed with students within the classroom. This acknowledges the need for clarity of terms from a student perspective, and the work suggests several sample activities which explore these concepts. Blythman et al. specifically focus on how creative transformation can be applied to transform a sourced image into a new visual representation. In this way, a sourced image is no longer recognisable and becomes a legitimate part of, or inspiration for, a new creative output. This emphasis on the important role of sourced imagery in the creative process and the importance of establishing a framework from a student's perspective is an approach that is integrated and developed in this research.

Method

This project was structured into two phases:

> *Phase 1:* Data gathering and analysis of perspectives from various stakeholders via

three focus group studies. Findings from this phase provided the basis from which a pre-emptive pedagogical framework could be conceived and served as a precursor to Phase 2.

Phase 2: Informed by the findings of Phase 1, an online survey was developed to investigate if the themes uncovered applied across a larger and more diverse sample. The survey was anonymously completed by 50 undergraduate art and design students.

The use of focus groups followed by qualitative surveys is an established framework proposed by O'Brien (1993), whereby the data obtained from the focus groups provides insights into the content of the survey questionnaire, including the phrasing and item development and provides an understanding of the significance of the research project to the study population. By leveraging diverse data-gathering methods, participants were able to express their thoughts through various means (Gordon et al., 2016). As a result, the data should, therefore, be more inclusive, covering a range of perspectives from the diverse study population.

Phase 1: Focus Groups

Design of the focus groups

Focus groups were created following the recommended guidelines for group selection, preparation, and conduct, presented by Bloor et al. (2001). Our research pedagogy prioritised participant engagement, inclusivity, and transparency throughout the process. The research took place at a large research-intensive university in Singapore. Three focus groups were organised: 1: Students, 2: Academic Support Staff, and 3: Art and Design Faculty. A purposive sampling strategy was implemented to ensure that there was enough homogeneity to facilitate discussion and yet retain some diversity for varied opinions to be expressed and debated.

Each focus group was designed to run for 60 minutes or less. There was a short debrief at the end of each group, and participants were asked to complete an anonymous feedback survey of their experience. All feedback was positive, and the focus group sessions were deemed to be of a high standard.

Focus Group 1 comprised seven students from varying disciplines and year levels. Focus Group 2 comprised three academic support staff who were all involved in supporting academic research. Focus Group 3 comprised six faculty representing the disciplines of animation, film, and visual communication. While it is acknowledged that a larger number of participants may have produced more substantiated results, this compact group size allowed efficient management by the small team of researchers and encouraged deeper interactions

that may not have been possible with a larger cohort. Nonetheless, the process was successful in revealing the key insights which were developed into the framework.

Table 1

Participant Composition

PARTICIPANTS	Total Participants	Discipline
GROUP 1: STUDENTS	7	4 Visual Communication Students 3 Design Art BFA Students
GROUP 2: STAFF	3	1 Librarian 2 Research Support Staff
GROUP 3: FACULTY	6	2 Animation, 3 Film, 1 Visual Communciation Faculty
SURVEY	50	7 Media Art BFA Students 37 Design Art BFA Students 4 Visual Communication Students 2 Interactive Media Students
TOTAL	66	

Questions for the Focus Groups

Following best practices proposed by Krueger & Casey (2001), small discussion groups were formed with independent volunteers from the target groups to test questions that could encourage reflection and elicit considered responses. While some open-endedness was encouraged, the questions also aimed to focus attention on specific considerations that arose from the initial research. Below is the list of questions presented to each focus group. Questions were placed in order of significance, and the focused exercise was introduced directly after the first question.

1. Can you give an example of how, when, and where you experienced visual plagiarism within an art and design context?

2. What does visual plagiarism mean to you? (How do you distinguish the difference between inspiration and copying?)

3. Compared to the rest of the world, where do you think Singapore ranks in terms of academic dishonesty?

4. Are there any instances where you think that recreating the work of others is a valid learning tool?

5. What ways could the university support you (faculty/students/academic support staff) in preventing visual plagiarism?

6. Any other points for discussion

Focus Group Exercise

Participants were asked to view and discuss a series of six image cards and determine whether they constituted visual plagiarism, considering the concepts of homage, pastiche, and parody and the appropriate academic responses to such cases. The Merriam-Webster Dictionary was used to provide verbal definitions of these terms. Each card contained images that could potentially depict visual plagiarism.

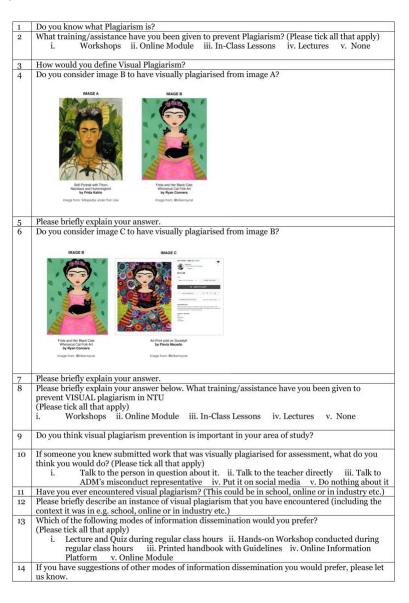*Figure 1.* Exercise Card Example.

Note. Shows an example of the direct copying of original artwork with commercial implications. Reproduced with kind permission from the original artist, Ryan Conners.

Phase 2: Survey

Design

A survey of 14 questions was created, adapted from focus group responses, to investigate students' attitudes, uncover current levels of understanding and establish preferred methods of information dissemination. It was reviewed for clarity by independent volunteers and then distributed to students via email through Google Forms. The survey remained live for a two-week period.

Table 2

Online Survey Questions

1	Do you know what Plagiarism is?
2	What training/assistance have you been given to prevent Plagiarism? (Please tick all that apply) 　i.　　Workshops　ii. Online Module　iii. In-Class Lessons　iv. Lectures　v. None
3	How would you define Visual Plagiarism?
4	Do you consider image B to have visually plagiarised from image A?
5	Please briefly explain your answer.
6	Do you consider image C to have visually plagiarised from image B?
7	Please briefly explain your answer.
8	Please briefly explain your answer below. What training/assistance have you been given to prevent VISUAL plagiarism in NTU (Please tick all that apply) 　i.　　Workshops　ii. Online Module　iii. In-Class Lessons　iv. Lectures　v. None
9	Do you think visual plagiarism prevention is important in your area of study?
10	If someone you knew submitted work that was visually plagiarised for assessment, what do you think you would do? (Please tick all that apply) 　i.　　Talk to the person in question about it.　ii. Talk to the teacher directly　iii. Talk to ADM's misconduct representative　iv. Put it on social media　v. Do nothing about it
11	Have you ever encountered visual plagiarism? (This could be in school, online or in industry etc.)
12	Please briefly describe an instance of visual plagiarism that you have encountered (including the context it was in e.g. school, online or in industry etc.)
13	Which of the following modes of information dissemination would you prefer? (Please tick all that apply) 　i.　　Lecture and Quiz during regular class hours　ii. Hands-on Workshop conducted during regular class hours　iii. Printed handbook with Guidelines　iv. Online Information Platform　v. Online Module
14	If you have suggestions of other modes of information dissemination you would prefer, please let us know.

Survey Participants

Using a typical case, purposive sampling approach, a total of 50 undergraduate responses were recorded. Given that the cohort of the school was approximately 500, the researchers considered 10% of the school population to be sufficient to provide an overview of student perceptions within a qualitative study. The exercise was purposefully created with ambiguous, hypothetical scenarios to cultivate conversation without suggesting direct answers.

Synthesis of Both Phases through Data Analysis

Data Analysis and the Emergence of Four Themes

Figure 2. Word Cloud Compiled from the Survey Responses.

Note. This was used to aid the researchers in establishing codes and generating emerging themes from the data.

The data from all three focus groups and the online survey were analysed using Constructivist, grounded theory methods as defined by Charmaz (2006). The researcher identified emerging themes and patterns which bore commonality across all data sets. This process was repeated several times until no further categories were discovered, ultimately resulting in the identification of 26 heterogeneous categories. This was then followed by an axial coding process which organised the initial open-coded categories into more refined central phenomenon.

Figure 3. Code Cloud Generated from First-Round Open-Coding of Survey Data.

Note. This code cloud subsequently informed themes for the overall data analysis and synthesis of focus group and survey.

The analysis resulted in four thematic categories in relation to the perception and understanding of visual plagiarism:

1. Local normalizations and justifications
2. Situated and ambiguous definitions
3. Honesty
4. Lack of knowledge, fear of plagiarism and need for education.

We will discuss each category below.

Findings and Discussion

Local Perceptions of What is Normal and Justified

All focus groups highlighted issues of visual plagiarism within a local context. They addressed how high-profile incidents of visual plagiarism in Singapore were portrayed across social media and how this perhaps led to a normalisation or even justification of similar behaviour in an academic setting. All three groups referenced a specific incident where a local photographer plagiarised others' works.

> Group 1: Student
> *(Note: 'he' refers to a famous Singaporean social media influencer whose identity we have anonymised.)*
> He's a famous influencer who takes a lot of photos, …interviewed by the Straits Times, and he's done like workshops and stuff …but then people found out that these photos were plagiarised from other photographers or cropped out images from Shutterstock.

> Group 2: Staff
> I remember there was this instance where an Instagram user used another photo and pretended that it was his own. … It caused quite, quite a big hoohaa.

> Group 3: Faculty
> Just one really egregious example of someone stealing visually, which is a well-known Singaporean film producer … On his (public) Facebook page … he posts photographs – professionally taken photographs that he's stolen from the Internet.

Most participants expressed that they were aware of this specific local incident and conveyed that this behaviour was wrong, yet significantly, they discussed that there seemed to be very little real-world repercussions for such behaviour. There was also significant discussion of visual plagiarism as normative behaviour in the creative industries in Singapore. The following examples demonstrate this discourse, particularly concerning the Singaporean advertising industry.

> Group 3: Faculty
> …In advertising we create a *stealomatic*…stealing other people's ideas and works which then reformulate into a new form. This is considered legitimate in advertising…but it's kind of, quote, as a homage to the original work.

Group 3: Faculty
It's almost a cultural thing - there's a culture of accepting that directors will steal other director's ideas. And that's seen as not plagiarism; it's seen as homage.

Arguably, the acceptance of visual plagiarism in local industry could suggest that a wider cultural context of adopting a heuristic of social proof (everyone is doing it; therefore, it is deemed acceptable behaviour) could lay a precedent for the acceptance of visual plagiarism as normative behaviour within an academic context. This hypothesis is also supported by an instance of visual plagiarism within the researchers' University, whereby a student directly copied artwork for their final year project. When confronted, the student confessed that they had assumed this was acceptable as they had observed others partaking in similar behaviours outside of the scope of academia. There also appears to be some justification for presenting plagiarised work as 'homage,' again setting a precedent for this behaviour as culturally normative.

Cultural norms in Singaporean society may also serve to rationalise visual plagiarism to get ahead. Studies such as Keng et al. (2000) and Wirtz, Keng, and Jiuan (1999), document how Singaporean society places high value on success above, for example, friendship and peace-of-mind. This can also be linked to the impact of *Kiasu*, an indigenous social construct which can be loosely translated to mean: *the fear of losing out to someone else*. According to Hodkinson and Poropat (2014) and O'Leary and Shafi (2006), Kiasu has been linked with negative behaviours, such as the use of deceit and cheating, to gain an advantage over others. This could explain the prevalence of visual plagiarism instances identified on social media, with already successful influencers determined to stay ahead of their competitors. Cheng and Hong (2017) define Kiasu as both a personal value and a cultural norm in Singapore, suggesting that adopting a Kiasu value endorsement is also a predictor of low creativity. Agarwal, Tan, and Poo (2007) suggest that Kiasu stems from the wish to safeguard a competitive edge and inhibits knowledge sharing. This indicates that addressing Kaisuism when developing pre-emptive pedagogies is a necessary step in preventing visual plagiarism specific to this cultural setting.

Participants were asked to discuss how they thought Singapore rated in terms of academic dishonesty, and the responses varied widely across the three groups. The consensus amongst students was that Singapore rated poorly in terms of academic integrity in comparison to other countries. They linked Singapore's small size as a rationale for seeking inspiration from outside sources. There was also significant discussion of Western influences as being predominant sources of inspiration. This indicates that the Singaporean cultural perception of being culturally *mixed* is used somewhat as a justification for crossing the line from inspired by, to copied from. Diversely, staff offered an opposing viewpoint in that it was assumed that

Singaporeans were relatively virtuous and considered other Asian cultures more academically dishonest. Faculty, however, expressed the opinion that visual plagiarism appeared to be pervasive within the local education system and therefore accepted as normative behaviour amongst applied arts students prior to tertiary education.

With such differing opinions, it is obvious that perceptions of plagiarism vary even within the School of Art, Design & Media, let alone the wider University. Accordingly, Western influence, cultural acceptance of academic dishonesty, differing educational standards, and cultural phenomena such as kiasuism all inform how visual plagiarism is perceived in Singapore. The significance of these differing perceptions extends beyond their immediate context, affecting academic integrity, quality of education, and impeding innovation and creativity in professional spheres. Ultimately this could impact the reputation of educational institutions and creative businesses, potentially hindering their ability to attract international students, faculty, and employees.

Situated and Ambiguous Definitions

The findings suggest that successfully defining visual plagiarism is a problematic task. However, students, staff, and faculty agreed defining visual plagiarism was dependent on three factors: context, transformation, and ambiguity.

Context

Context was a keyword present across all data. Decidedly, it is apparent that the context of how visual art was created and for what purpose must be established before it can be interpreted and defined as visual plagiarism. For example, one student participant reported that it was acceptable to create a fine art copy of a photograph, as this was transformative. The participant speculated that the transformation was enough to be considered legitimate, thereby providing a context where copying from an original artwork could be academically and morally acceptable. However, there are real-world instances where similar approaches led to court cases for infringement of copyright. This is indicative that contexts are not always interchangeable, and accordingly, defining appropriate contexts is central to defining visual plagiarism. Furthermore, what may be deemed acceptable in a classroom setting may not be acceptable in a professional context.

Transformation

Transformation, to ensure originality, was a defining factor identified by many participants to avoid visual plagiarism, and whilst this may seem rudimentary, in the applied arts, transformation is not always easy to define. How might we provide tools to determine adequate transformation of original sources as a means of preventing visual plagiarism? Several suggestions were made, firstly, building upon other works to ensure that a piece is

transformative and, secondly, investigating broader methods for deriving connections during creative development. This paper suggests that introducing students to wider and more varied methods for generating original artwork would be a significant step in the right direction.

Ambiguity

There was considerable confusion amongst student peer groups as to the definition of visual plagiarism and its significance to academic integrity. A common visual method is the moodboard, a collection of images that indicates a visual atmosphere of a topic. The student participants discussed the ambiguity of using internet images for the moodboard, considering what it meant to generate a moodboard using others' images and how far that concept could be taken.

The notion of ambiguity was also mirrored by faculty perceptions, acknowledging that stylistically similar pieces may not fall into the category of visual plagiarism. The following examples suggest that faculty members generally held the view that a certain level of tolerance is required.

> Group 3: Faculty
> It's a tough one to really go in and say you are guilty of plagiarism there. And that line, I'm not sure how well that's drawn in cinematography.
>
> We have to be quite subtle about this, because if we shut everything down, then we're sort of in a way disconnected from learning stuff that is done in the industry.

This indicates that a universal solution, suitable for all situations, may be not only unrealistic but also detrimental to a creative academic environment. Nevertheless, to provide a workable definition for visual plagiarism, the three factors of context, transformation, and ambiguity have been identified as central principles to be addressed.

Honesty

In terms of honest, creative practice, in general, there was a differentiation made between copying and stealing. The act of copying was often considered part of the creative process, with any visual plagiarism seen as careless and accidental but not deliberate. For example, using images from online sites such as Pinterest and Behance was generally considered acceptable, although, as one student participant stated, "… you don't really realise that you're actually visually plagiarising but not giving credit". Copying, as a means of ideation and moodboarding, was seen as less wrongful than stealing. Whereas stealing, with full awareness of benefitting from the act, was seen as wrongful. One participant discussed an instance of another student being caught in the act of visual plagiarism, condemning the practice of

'stealing,' yet moments later, openly acknowledging their own apparent subterfuge. This contradiction indicates a lack of knowledge or an admission that this behaviour is an acceptable practice. In recognising this contradiction, it becomes clear that boundaries need to be established to avoid such confusion and help determine if visual plagiarism instances are accidental or intended.

The following example discusses a specific incident whereby students publicly berated another student for visually plagiarising in the classroom setting. This contradicts the established belief proposed by Ashworth et al. (1997) that peer loyalty is principally accepted normative behaviour amongst students in relation to plagiarism. This also indicates that establishing clear boundaries could potentially encourage whistleblowing of violations and further discourage instances of visual plagiarism within the student body.

> Group 1: Students
> Because there was once, there was a moment in class where we had somebody copy a poster design, layout, colour, everything. And we called him out right in front of class because we all know that it is a copy. So that's not inspiration; it's completely a copy.

There was some convolution of the terms copying and stealing. Copying often referred to the physical act of appropriating another's work and stealing often referred to the theft of intellectual property. As one faculty participant stated, "… he was copying and thought that was okay because it was a good thing, it made him feel good. He missed the point that he was stealing another person's creativity." This is an important distinction to make, and this distinction could aid in creation of more appropriate policy, accounting for contextual variance and providing a basis from which to define best practices.

Lack of Knowledge, Fear of Plagiarism, and Need for Education
The findings of this study clearly indicate that a lack of knowledge of the many aspects of visual plagiarism is at the heart of much visual plagiaristic behaviour. This reinforces the earlier notion that a pre-emptive educational approach, rather than a punitive approach, would be a more effective response to preventing visual plagiarism. One faculty participant revealed that there was a fear of plagiarism, even without fully understanding what it was: "plagiarism becomes a kind of 'bogeyman,' you know, 'Don't plagiarise!,' but there's very little definition of it, which does create anxiety…but it doesn't always stop people doing it …."

Accordingly, all participants were asked for their opinions on how visual plagiarism could be prevented and how the university could support this. There were several suggestions put forward. Firstly, there was a suggestion for the incorporation of an artist statement to accompany the submission of creative works. By providing a rationale, there would be, by

default, contextualisation of the creative process and subsequent outcomes, which could then be used to establish the originality of the work. Secondly, within this rationale, the artist should disclose any relevant acknowledgements of influences. This proposal could contribute to a viable, preventative pedagogy. All three focus groups agreed on the importance of education to address visual plagiarism, with students specifically suggesting the inclusion of an artist statement to acknowledge the original source.

The staff group suggested allocating more resources to education and highlighting the issue from the top down as an effective way to tackle visual plagiarism, similarly to textual plagiarism. This suggests that a holistic approach is warranted, involving both increasing awareness of the issue and providing resources and support. Furthermore, the staff group's comparison of visual plagiarism to textual plagiarism suggests that they view the two as equally important and deserving of attention. Overall, their suggestion focused on prevention rather than punishment and prioritised education and support for students.

When presented with the notion of providing a plagiarism education resource online, students, staff and faculty all expressed that a more hands-on, active learning strategy would be preferred, and it was proposed that a holistic, preventative framework could have a larger impact on increasing academic integrity than an online platform alone. The responses from participants revealed an eagerness to move forward and some insights into the best format:

> Group 1: Students
> I think the exercise that you just gave us would be good for year ones because then it would establish, and it would provoke a discussion of what is visual plagiarism…
>
> I think give them a project where they purposefully visually plagiarise something and then at the end of it, make them reflect.
>
> Group 2: Staff
> Moving into a pedagogy, it's a mix. Some students learn better face-to-face, some students learn better online. I feel that it should be a hybrid as well, just to cater to both.
>
> Group 3: Faculty
> I mean the discussion we've had today with these pictures are actually very valuable.

It was indicated by all three groups that the focus group exercise they had all participated in would serve as a good educational resource and that asking students to actively demonstrate plagiarist behaviour in a controlled environment may be a valid pedagogical approach. These

extracts are indicative of the general view that a more holistic pedagogical approach would be preferable, and that online material should be only one component in a larger, active-learning solution.

Recommendations: LDHE Framework for addressing Virtual Plagiarism

By analysing the findings of these focus groups, survey and associated literature, the researchers developed the LDHE (Local, Definition, Honesty, Education) Conceptual Framework for addressing Visual Plagiarism. The framework is based on the outcomes of the analysis as presented in the four categories above, and evaluated through the lens of art and design researchers who are also art and design educators, with the specific intention of providing guidance for other art and design educators in generating pre-emptive teaching and learning materials. Conceptual subcategories were therefore developed via a broadening degree of abstraction, as further data sets were added and analysed using constant comparison to identify interconnections. These subcategories were also considered within the context of existing literature appertaining to both visual and textual plagiarism with a view to refining and delimiting categorisation.

LDHE Framework
for Addressing Visual Plagiarism

LOCAL	
DEVELOP CULTURALLY RELEVANT CONTENT TAKING IN TO CONSIDERATION:	
1. EXTERNAL INFLUENCES	i. Prevalence in Industry & Online
2. KIASU - (FEAR TO LOSE)	i. Cultural value of success ii. Creating a culture of trust
3. BREAKING THE CYCLE	i. From high school to Industry

DEFINITION	
DEVELOP CONTENT WHICH ADDRESSES:	
1. CONTEXT	i. Academic & Industry Variants ii. Valid Learning Tools
2. TRANFORMATION	i. Transformative Techniques ii. Enabling Connection Making
3. AMBIGUITY	i. Identifying Grey Areas

HONESTY	
DEVELOP CONTENT WHICH FACILITATES ACADEMIC INTEGRITY BY:	
1. CLARIFYING TERMS	i. Copying vs. Stealing
2. DETERMINING BOUNDARIES	i. Establish intent
3. FACILITATE WHISTLE BLOWING	i. Clearly define protocols ii. Provide advise on the process

EDUCATION	
DEVELOP CONTENT WHICH CONSIDERS:	
1. LACK OF KNOWLEDGE	i. Due to ambiguity ii. Due to lack of time in class
2. PREVENTATIVE MEASURES	i. Adaptation of focus group tools ii. Creation of a written rationale iii. Detection methods
3. INFORMATION DISSEMINATION	i. Active Learning ii. Holistic Models

Figure 4. Shows the LDHE framework for Addressing Visual Plagiarism.

The LDHE Framework operates as a teaching and advising guide for any level of education. While it uses Singapore-specific terminology in the "Local" category, this can be exchanged with any local terminology, as every society will have its own phenomenon that influences the perception of visual plagiarism. The framework does not provide specific instruction nor a teaching plan; rather, it provides the overall areas of consideration that can be developed into education situations such as lectures, exercises, and discussion. The LDHE framework provides a structure from which the issues can be identified, discussed, and developed, giving both faculty and students the confidence to use images in a responsible and ethical manner.

LOCAL addresses areas of external influences, cultural norms, and the prevalence of visual plagiarism across secondary education, tertiary education, and industry practice and places emphasis on content creation that adopts culturally relevant materials to support visual plagiarism prevention.

DEFINITION proposes that content should be developed that (a) provides guidance on the use of copying/tracing as valid learning tools, (b) provides resources for determining if a creative piece is transformative and empowering new creative connections, and (c) identifies and discusses grey areas to raise awareness and provide a platform for critical debate.

HONESTY proposes content development which addresses semantic differences in terms, authentication of the intent of creative work and the dissemination of clearly defined protocols for whistleblowing.

EDUCATION refers to (a) addressing lack of knowledge, (b) developing preventative tools to facilitate dialogue and prevent fear for plagiarism, (c) considering holistic methods of information dissemination utilising active learning pedagogies.

Implications for Academic Development and Research

To realise the full potential of the LDHE framework in developing pre-emptive materials for preventing visual plagiarism, the following should be considered.

Firstly, the framework is intended as a foundational tool, and accordingly, academics are encouraged to innovate beyond the suggested proposals. Cultural variables must also be acknowledged, and a flexible approach should be considered to provide relevant and appropriate learning experiences. We propose that researchers from differing cultures might consider the following questions to establish how this framework may be transferable to their own local cultural contexts.

Table 3

Example Questions

1. External influences	In what ways does your industry or field of study read and utilise cultural images?
	How do online images impact the process of creating art and design?
2. Fear of losing out	In more individualistic cultures, how might you set achievable personal goals rather than comparing yourself to others?
	In more collectivist cultures, how might you build relationships and communicate openly about your concerns and feelings?
3. Breaking the cycle	How could awareness be raised in your cultural context?
	How can leaders in your creative community be engaged in the discussion?

Note. Questions posed to encourage researchers to explore the LDHE framework through the lens of their own cultural contexts.

Secondly, the LDHE framework is intended to initiate discussion across art and design in higher education institutions, with the view to providing methods for benchmarking current practices and to inform the redesign of art and design courses within academia. We also encourage visual literary and benchmarking to promote discerned perception of images (Freedman, 2019).

We acknowledged that the methodology has a possible limitation in that a single researcher performed the analysis and categorisation of themes. Due to the scope of this research, this could not be avoided; however, as suggested in Saldaña (2016) the researcher followed a member-checking strategy with several focus group participants, validating the findings at various stages throughout the coding process.

Conclusion

In this paper, we identify three unique challenges in addressing visual plagiarism: (a) the established practice of copying with art and design as a learning mechanism, (b) the lack of practical means to acknowledge visual sources within artwork, and (c) the difficulties involved in identifying appropriated imagery within an artwork. To begin to understand these challenges from multiple stakeholder perspectives, we review perceptions of visual plagiarism

from art and design students, support staff, and faculty and consolidate the findings with current literature to develop a conceptual framework to address visual plagiarism within art and design tertiary education.

The proposed LDHE framework addresses the challenges identified, alongside further issues uncovered by the four-experiential discourse categories. The framework acknowledges that perceptions of visual plagiarism in Singapore may have a cultural bias, with success and peer loyalty given high value, allowing a higher acceptance of visual plagiarism than may be expected in other societies. It was identified that plagiarism, in general, was considered a somewhat normative behaviour, with instances described as prevalent in secondary education and in industry practice. It was also highlighted that establishing transparency concerning the context of creation was a significant factor in avoiding visual plagiarism. Participants across all data expressed that lack of knowledge was a key issue in contributing to visual plagiarism within the school and that the ambiguous nature of visual plagiarism itself created confusion and scepticism. In recognition of this ambiguity, this paper has aimed to investigate how perceptions of visual plagiarism from various stakeholders could inform a framework for prevention. Accordingly, the LDHE framework provides scope to critically analyse pre-emptive solutions and encourages further research to build upon the concepts set forth.

Acknowledgements

References

Adam, L., Anderson, V., & Spronken-Smith, R. (2016). 'It's not fair': Policy discourses and students' understandings of plagiarism in a New Zealand University. *Higher Education*, *74*(1), 17-32.

Agarwal, N., Tan, K. H., & Poo, D. (2007). Impediments to sharing knowledge outside the school: Lessons learnt from the development of a taxonomic e-learning portal. In *Twenty-Eighth International Conference on Information Systems (ICIS) 2007 Proceedings* (Vol. 81, pp.1-16). AIS Electronic Library (AISeL). https://aisel.aisnet.org/icis2007/81

Ashworth, P., Bannister, P., Thorne, P., & Students on the Qualitative Research Methods

Course Unit (1997). Guilty in Whose Eyes? University Students' Perceptions of Cheating and Plagiarism in Academic Work and Assessment. *Studies in Higher Education*, *22*(2), 187–203. https://doi.org/10.1080/03075079712331381034

Blob Filter. (n.d.). Roborealm.com. http://www.roborealm.com/help/Blob_Filter.php

Bloor, M., Frankland, J., Thomas, M., & Robson, K. (2001). *Focus groups in social research*. SAGE Research Methods. http://methods.sagepub.com/book/focus-groups-in-social-research

Blythman, M., Orr, S., & Mullin, J. (2007). Reaching a consensus: Plagiarism in non-text based media. Retrieved December 2, 2021, from https://cpb-eu-w2.wpmucdn.com/blogs.brighton.ac.uk/dist/7/3977/files/2018/03/Reaching_A_Consensus_Plagiarism_In_Non-T-v0k6k9.pdf.

Bowman, Stephen. A. (2008). The creativity of plagiarism. In *The Third International Plagiarism Conference* (pp. 1–9). Newcastle-Upon-Tyne. https://www.researchgate.net/publication/215531470_The_Creativity_of_Plagiarism

Breen, L. & Maassen, M. (2005). Reducing the incidence of plagiarism in an undergraduate course: The role of education. *Issues In Educational Research*, *15*(1), 1-16. http://www.iier.org.au/iier15/breen.html

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis.* Sage Publications.

Cheng, C. & Hong, Y. (2017). Kiasu and creativity in Singapore: An empirical test of the situated dynamics framework. *Management and Organization Review*, *13*(4), 871-894.

Devlin, M., & Gray, K. (2007). In their own words: A qualitative study of the reasons Australian university students plagiarize. *Higher Education Research & Development*, *26*(2), 181-198. https://doi.org/10.1080/07294360701310805

Drenttel, W. (2005). Bird in hand: When does a copy become plagiarism? *designobserver.com*. Retrieved Sept 30, 2023, from https://designobserver.com/feature/bird-in-hand-when-does-a-copy-become-plagiarism/2837

Economou, I. (2011). The problem with plagiarism. In A. Breytenbach & L. Faber (Eds.), *20/20 Design Vision: Conference Proceedings of The Sixth International DEFSA Conference* (pp.79-86). DEFSA. https://www.defsa.org.za/system/tdf/downloads/2011conference/2011%20DEFSA%20%20Introduction%20pages.pdf?file=1&type=node&id=40&force=

Franklyn-Stokes, A., & Newstead, S. (1995). Undergraduate cheating: Who does what and why? *Studies in Higher Education*, *20*(2), 159-172. https://doi.org/10.1080/03075079512331381673

Freedman, K. (2019). Visual culture and visual literacy. In R. Hickman, J. Baldacchino, K. Freedman, E. Hall, N. Meager (Eds), *The International Encyclopedia of Art and Design Education* (pp. 1-10), Wiley Online Library. https://onlinelibrary.wiley.com/doi/full/10.1002/9781118978061.ead079

Garrett, L. & Robinson, A. (2012). Spot the difference! Plagiarism identification in the visual arts. *Electronic Visualisation and the Arts (EVA 2012)*. https://core.ac.uk/display/9427953

Gordon, D., Meyer, A., & Rose, D. (2016). *Universal design for learning*. CAST Professional Publishing.

Gullifer, J. & Tyson, G. (2010). Exploring university students' perceptions of plagiarism: A focus group study. *Studies in Higher Education*, *35*(4), pp.463-481. https://www.tandfonline.com/doi/abs/10.1080/03075070903096508?journalCode=cshe20

Hare, J., & Choi, K. (2019). Attribution and plagiarism in the creative arts: A flipped information literacy workshop for postgraduate students. *Journal of Information Literacy*, *13*(1), 62-75. https://doi.org/10.11645/13.1.2640

Hodkinson, C. & Poropat, A. (2014). Chinese students' participation: The effect of cultural factors. *Education + Training*, *56*(5), 430-446.

Joyce, M., & Lundberg, A. (2013). Copying to learn: Mimesis, plagiarism and 21st century English language education. In *2nd International Higher Education Teaching and Learning Conference*. https://researchonline.jcu.edu.au/30601/

Keng, K., Jung, K., Jiuan, T. & Wirtz, J. (2000). *Social Indicators Research*, *49*(3), 317-333.

Krueger, R. A., & Casey, M. A. (2001). Designing and conducting focus group interviews. In J. N. Maack, R. A. Krueger, S. Kirsch, J. C. Donner, & M. A. Casey (Eds.), *Social Analysis: Selected Tools and Techniques* (Vol. 36, pp. 4–23). Social Development Department The World Bank. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=338b3fad4ac64a28e1b05e7899cd977acebd91f4#page=10

Kuehn, P., Stanwyck, D., & Holland, C. (1990). Attitudes toward "cheating" behaviors in the ESL Classroom. *TESOL Quarterly*, *24*(2), 313. https://doi.org/10.2307/3586911

McCabe, D. (2005). Cheating among college and university students: A North American

perspective. *International Journal for Educational Integrity*, *1*(1). https://www.ojs.unisa.edu.au/index.php/IJEI/article/view/14/9

O'Brien, K. (1993). Improving survey questionnaires through focus groups. In D. L. Morgan (Ed.), *Successful Focus Groups: Advancing the State of the Art* (Ser. SAGE Focus Editions, pp. 106–117). SAGE Publications, Inc. https://doi.org/10.4135/9781483349008.n7

Okada, T. & Ishibashi, K. (2016). Imitation, inspiration, and creation: Cognitive process of creative drawing by copying others' artworks. *Cognitive Science*, *41*(7), 1804-1837. https://onlinelibrary.wiley.com/doi/full/10.1111/cogs.12442

O'Leary, C. & Shafi, M. (2006). The ethics of final year accountancy students: An international comparison. *Malaysian Accounting Review*, *5*(1), 139-157. https://eprints.qut.edu.au/7132/1/7132.pdf

Park, C. (2003). In other (people's) words: Plagiarism by university students–literature and lessons. *Assessment & Evaluation in Higher Education*, *28*(5), 471-488. https://doi.org/10.1080/02602930301677

Porter, M., Blythman, M., Blythman, M., & Porter, M. (2008). Visual plagiarism: Perspectives from two institutions. In *Third International Plagiarism Conference*. https://nrl.northumbria.ac.uk/id/eprint/12610/

Saldaña, J. (2016). *The coding manual for qualitative researchers*. Sage.

Simon, Cook, B., Minichiello, M., & Lawrence, C. (2014). Academic integrity: Differences between design assessments and essays. In Y. Lim , K. Niedderer , J. Redström , E. Stolterman , & A. Valtonen (Eds.), *Design's Big Debates: DRS International Conference 2014* (Vol. 1, pp. 1260–1273). Design Research Society. https://dl.designresearchsociety.org/cgi/viewcontent.cgi?article=2028&context=drs-conference-papers

Van Heerden, L. (2014). *Detecting internet visual plagiarism in higher education photography with Google^{TM} Search by Image: Proposed upload methods and system evaluation* [Masters Thesis, Central University of Technology]. http://ir.cut.ac.za/handle/11462/249

Walker, B. (2009). New twists on an old problem: Preventing plagiarism and enforcing academic integrity in an art and design school. *Art Documentation: Journal of the Art Libraries Society of North America*, *28*(1), pp.48-51.

Wirtz, J., Keng, K. & Jiuan, T. (1999). Values, attitudes and aspirations of Singaporeans — summary findings from a large-scale lifestyle study. *der markt*, *38*(1), 21-48.

About the Authors

Lisa Winstanley is an Assistant Professor in the School of Art Design & Media at Nanyang Technological University in Singapore. With 20 years of commercial experience and over a decade of international research and teaching, she explores ethical and collaborative design practices and pedagogies. Lisa's scholarly research explores the intersections of ethical and collaborative design practices and pedagogies through the lens of designing for [positive] change. Specifically, she investigates pedagogical approaches to address visual plagiarism in art and design. Creative Integrity is at the core of her work, which she explores through an examination of its multifaceted and nuanced dimensions, drawing on interdisciplinary collaboration, pedagogical approaches, and artistic exploration. Ultimately, her aim is to support design communities by promoting integrous creative practices and encouraging the adoption of an ethical mindset in the production and consumption of art and design.

Gray Hodgkinson is an Association Professor at the School of Art, Design and Media at the Nanyang Technological University (NTU) Singapore. He holds a Master of Design from Massey University, Wellington, New Zealand. Gray is a digital media artist, designer and researcher with specific interests in visual research methods, animation narrative, and digital game design. Gray has been developing and leading media education for over 20 years, 16 of those at Massey University, New Zealand, and now since 2017, at NTU, Singapore. His recent animated movie "Colour Me Free" has screened in 34 international film festivals, receiving 14 awards. He has produced over 36 academic publications and has presented in Australia, Germany, Canada, the U.K., Japan, Taiwan, Singapore and South Korea.