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# **PROCESS PRODUCTION COMMUNITY**

The Risograph, Teaching and Learning  
in Higher Education Art and Design

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# Contents

Introduction	p3
The Riso and Studio Culture	p5
The ritual of Riso	p9
The role of the Riso in production	p12
Engagement through peer to peer learning	p18
The Riso as a process for testing	p20
Conclusion	p23
Bibliography	p25
Appendix	
Case Studies	p30
Personal Correspondence interviewee details	p33

# Introduction

I first encountered a Risograph printer when I was asked by Susanna Edwards the Head of Visual Communication at The Sir John Cass School of Art, Architecture and Design, London Metropolitan University (The Cass) to make sure it was delivered in one piece to The Cass Visual Communication studios in 2015. I was intrigued by this machine; its appearance was similar to a photocopier, something I was obsessively using in my own work. I was also curious about Susanna's excitement for having acquired the machine onto the course.

Later I found out that over the last decade, Universities and Art Schools across the UK and the world have been purchasing Risograph Printers to use within their courses. I would like to look at some instances of how they are being used and some of the impacts they may be having in an education setting.

Made in Japan, The Risograph is a brand of digital duplicators developed by the *Riso Kagaku Corporation* in the 1980s.

To introduce the printer, *Creative Bloq* in their article 'Get Started with Riso Printing' described the Risograph as: 'Bridging the gap between a conventional photocopier and laser printer, Risograph printing, aka Riso, is a simple yet brilliant tool for anyone interested in producing high-quality prints on a shoestring budget.'<sup>1</sup>

Moreover, *Hatto Press* one of the first London based Risograph print studios describes it on their website as:

*[its] an environmentally friendly and cost-effective printer, which uses soy-based inks to produce unique outcomes. Each stencil (master) is made from thermal sensitive paper and unlike offset printing it only takes a single print for the screen to be fully inked and ready to print thousands of copies. The Risograph is extremely energy efficient and generates a minimal amount of waste<sup>2</sup>.*

The average new Risograph or Riso for short costs around £3000 with each colour being sold separately at around £800 as a 'colour drum' which is needed print and £80 for two 'ink tubes' which provide ink to the drum and can which can be replaced when the ink runs out. Masters which are used to create the image cost around £120 for a pack of two and can make several hundred masters each.

Once this initial investment is made the cost-effectiveness of the printer is remarkable. Universities are able to charge students a cheap rate to use the printer whilst making a profit which can be used to cover the cost of the printer as well as pay to keep the ink and masters updated and ideally reinvest in more colours drums, therefore, widening the number of colours that the students can print with.

<sup>1</sup> Get Started with Riso, <<https://www.creativebloq.com/print-design/risograph-printing-51411803>> [accessed 21st April 2018]

<sup>2</sup> Introduction, <<http://hatopress.net/printing/>> [accessed 21st April 2018]

Having worked with the Riso at The Cass for three years, I am interested in exploring its appeal and its acquirement by other courses, in particular I will be referring to and comparing The Cass, Winchester School of Art, and The Royal College of Art and the impact it is having on learning and teaching. The areas I will be covering will touch upon: how a community is developed through the ritual of Riso with its haptic process of making. I will also be looking at the spaces Risos are used in and studio culture. Consequently exploring the accessibility of the Riso printer and how this effects students use of the Riso and the space.

In addition, I will be considering if the Riso and its production process are opening up the accessibility of print processes whilst then considering it as a way of engaging students. I will finally be looking at the Riso as a process to use to experiment. Through discussing these areas in relation to educational and psychological theories, I will be hoping to form a greater understanding of the multiple ways the Riso is impacting learning and teaching. I will be looking at several teaching and learning theories including different theory's relating to haptic hands-on learning: the idea of affordance which was developed by American psychologist James Jerome Gibson. Affordance is described as the possibility's, or agency people can get via various ways of interacting with objects.<sup>3</sup>

I will also be looking at Object Literacy (related to Object-Based Learning) which is often used within museums and is a relatively new aspect of pedagogy; this learning draws on Kolbs (1984) cycle of learning and his theory of experiential learning.<sup>4</sup> In object literacy, object is used to describe any item such as a book, artefact, or artwork that can be described as material Culture.<sup>5</sup> Connected to this I will also be looking at the Connected Curriculum which sets out a plan for a more connected approach to higher education. As well as defining the relationship between students' learning and their participation in research, it describes the joined-up areas that can be made between disciplines, years of study and staff and students.<sup>6</sup>

I will be touching on peer to peer learning theory which in its broadest sense means students learning from and with each other in both formal and informal ways. The emphasis is on the learning process, also including the emotional support that learners offer each other, as much as the learning task itself.

Throughout writing this research I have chosen to conduct interviews because of the relatively new nature of the area I am looking at. With the acquirement of Riso printers generally happening over the last decade, I think it is particularly important to give attention to first-hand interviews and oral history I think is particularly important in order to give context to my subject. Throughout my research, I will be using highlights of these interviews to frame the ideas that I will discuss. A full list of my interviewees and their research areas and connections to education and particular institutions will be in my appendix.

3 Ian Nobel and Russell Bestley, *Visual Research Methods in Graphic Design*, 3rd Edn (London: Bloomsbury 2016) Chapter 07: Process and Materials, p172.

4 Kolb D. A. *Experiential learning: Experience as the source of learning and development* (Vol. I). (Englewood Cliffs 1984, NJ: Prentice-Hall.) p38.

5 Helen Chatterjee, Leonie Hannan, *Engaging the Senses: Object-Based Learning in Higher Education*, Part one the Pedagogical value of object-based learning, (Published London Routledge 2016) pl.

6 Connected Curriculum, < <https://www.ucl.ac.uk/teaching-learning/education-initiatives/connected-curriculum> > [accessed 15th May 2018].

# The Riso and Studio Culture

‘Let us strive for, conceive and create the new building of the future that will unite every discipline’<sup>7</sup>

Learning spaces that encourage collaboration and reflect industry style spaces can significantly affect the culture of teaching and the development of creativity and have therefore been at the center of art and design pedagogy for the last century.

Both The Cass, Winchester School of Art and The Royal College of Art have or have had their Riso situated in a defined space close to their studios.

The Riso as a process has the nostalgia and recapturing of a process that reinvigorates the idea of printing in the studio space. In its overview of Riso printing on its website, the self-titled - world's leading non-profit organization dedicated to the dissemination, understanding, and appreciation of artists' books Printed Matter suggests that: ‘The process is deliberate, affordable, and inherently modest, and brings the production back into the artists’ studio and an intimate network of collaborators.’<sup>8</sup>

This suggestion of the Riso bringing production back into the hands of the artist's studio is I believe vital as it supports the idea of why the process has become so popular. It brings creatives and students back into contact with the tactile process of publishing their own work, in their own space. Riso printing, as described by Printed Matter is an intimate way of experiencing print. It is this intimacy that encourages students to work together on a process in the site of their studio, further developing the studio community and peer to peer connections. This enrichment of a shared creative culture was mentioned in my discussion with Francesco Corsini one half of Studio Bergini who run The Royal Duplication Centre who manage the Riso access at the Royal College of Art. Francesco discussed the way the Riso created an atmosphere in the space where students saw them as more than facilitators, but that an organic development of dialogue and support was established.

*A lot of the students would just come to us and talk to us about their projects, then we would suggest the best possible way, how we would bind it, how we would use different paper stocks, it's that in-between where you're not anymore just discovering things on your own, you can go and talk to us.*<sup>9</sup>

However, adding a Riso to the centre of a space or ethos of a project does not from my research simply increase or develop that space into a creative environment,<sup>10</sup> where information is exchanged and ideas developed. Other

7 Walter Gropius, Bauhaus Manifesto, April 1919 <<https://www.bauhaus100.de/en/past/works/education/manifest-und-programm-des-staatlichen-bauhauses/>> [accessed 20th March 2018]

8 Riso-Printing: An Overview, October 2014, <<https://www.printedmatter.org/catalog/tables/579>> [accessed 4th June 2018]

9 Personal Correspondence, Francesco Corsini (Feb 2018)

10 Patience Lueth, Opiyo Lamunu, "The architectural design studio as a learning environment: a qualitative exploration of architecture design student learning experiences in design studios from first- through fourth-year" (2008). Retrospective Theses and Dissertations. 15788. <<http://lib.dr.iastate.edu/rtd/15788>> [accessed 5th April 2018]

aspects are included, for example, that could be termed the ritualistic use of studio space and studio culture. In, *Studio Culture*, Adrien Shaughnessy defines studios as 'a combination of three things: the physical space, the people who occupy that space, and the work they produce.'<sup>11</sup> While this definition is talking more about the studio as an industry design studio, it does outline the factors that I would indicate can be applied to studio culture on art and design courses.

The students, the quality of the space, and the way that the students are, using the area in the absence of the tutor and developing connections with each other. In addition the work, which could demonstrate the degree to which students are engaged and how they engage with each other's outcomes.

When installing a Riso printer into a space, I would argue there already needs to be quite a strong sense of studio culture within this space, atmosphere whereby individual work is happening in the studios provided and importantly students working there also in the absence of the tutor.

Scholars studying how architecture students use studio space such as B. M Maitland write about studio teaching and suggest that the studio is not just a space named and marked studio.<sup>12</sup>

The way students interacting and use spaces in a self-directed way is an essential factor in understanding how they feel about a space especially when the space is centred around an object or process and when the students are working in a self-directed way. Using the space in this way contributes to a engaged atmosphere allowing students to thrive. Danny Aldred who is the Senior Teaching Fellow, on the Graphic Arts course at Winchester School of Design talked about the way it was brought in to Winchester when they created the Publishing Hub with the Riso within it.

*When we set up the publisher's space, that (sense of a hub) was part of it, it even has the word it's the 'Publishing hub' that was the idea it was about a community of practice, and it was about a community of people that wanted to work together to output work.*<sup>13</sup>

At The Cass, the Riso has been put within a specific space for some sessions. The Cass labeled it the HotHouse, and at Winchester, they have Publishing Lab, and the Royal College has the Royal Duplication Centre, who were a duo who used their own Riso within the Illustration Lab. Now at the Royal College White City campus, the Riso has been aquired and is within the Print Lab. All of these ideas hint at the slightly different approaches to the integration of the Riso into their courses.

In a recent conversation, I had with Susanna Edwards described her idea behind the HotHouse space and having a Riso as part of it.

*I was about looking at innovatory models, where we build initiatives that sit outside the curriculum, so it is not just about ticking off the modules*

<sup>11</sup> Adrien Shaughnessy, *Studio Culture: The Secret Life of the Graphic Design Studio*, (London: Unit Editions, 2009) p12.

<sup>12</sup> Maitland, B.M, *Problem-based Learning for an Architecture Degree*. In: Boud, D. and Feletti, G. (Eds), *The Challenge of Problem-based Learning*. (London: Kogan 1991)

<sup>13</sup> Danny Aldred, *Personal Correspondence*, London (7th March 2018)

*and assessing, putting students through this formula on an undergraduate program. It was about setting up a model that could have an innovative practice that mirrors industry practice, and it was always a philosophy that the Hothouse was an industry-focused initiative and it connects to industry, in relation to mirroring it, so producing collectives, research and commissioned work.<sup>14</sup>*

The Riso is a critical element to facilitate this. However, the HotHouse concept is fluid, and while the Riso has a space, the initial space dedicated to the HotHouse is not big enough to hold over five students.

However, the ability to quickly move the Riso has been seen as one of the ways it assists studio culture, as it is in a small space it has created two studio styles. The first being the smaller group space and the moving of the Riso to a larger studio at will.

At the Cass being able to move the Riso to wherever teaching was happening was a real asset, the feeling of making and the energy of printing could be brought directly into the studios for taught sessions. In my correspondence with Angharad Lewis the Head of Design for Publishing at The Cass, Angharad Lewis commented on the different dynamic having a process in the studio brought.

Sessions, where students worked in small groups to use the riso for specific project development work, were lively learning experiences. The students helped each other to solve problems, spontaneously gave each other informal feedback and could critically reflect, in the moment, as they witnessed each other's ideas coming to life through the Riso.<sup>15</sup>

For The Cass, this flexibility works. Whereas at Winchester the driving force was the vision of the Publishing Lab, which factored the Riso into a specific area with a more explicit mode. It is described on its website as: 'Dedicated publishing space, complete with Risograph, digital printer, and binding equipment.'<sup>16</sup> However, while it was within a titled Publishing Lab, the sense of developing an accessible publishing culture brought with it the empowerment that filtered far out of the Publishing Lab. Danny mentioned its powerful effect in our conversation:

*I definitely feel its empowered their understanding and their confidence with print. It's almost like a step, you work with the Riso, and you feel you get confident with it then you feel like you can work with litho or other forms of print.<sup>17</sup>*

At the Royal College of Art, the Riso is now at their new White City campus; there the Riso is in the Print Lab amongst other digital printers in a space that resembles a print shop space than a studio. In my discussion with Rathna Ramanathan, Head of Programme at The School of Communication we discussed the open nature in which their Riso was integrated into the Visual Communication MA. While it is in this particular space, students were encouraged to appropriate it in their own organic way. For them at masters level the ability for the Riso to be available

<sup>14</sup> Susanna Edwards, Personal Correspondence, London, January 2018

<sup>15</sup> Angharad Lewis, Personal Correspondence (June 8, 2018)

<sup>16</sup> W210 BA (Hons) Graphic Arts (3 years) <[https://www.southampton.ac.uk/wsa/undergraduate/courses/w210\\_ba\\_graphic\\_arts.page](https://www.southampton.ac.uk/wsa/undergraduate/courses/w210_ba_graphic_arts.page)> [Accessed 17 March 2018]

<sup>17</sup> Danny Aldred, Personal Correspondence, London (7th March 2018)

allows students to develop their independent connections. Rathna mentioned:

*Everything doesn't need to be structured and planned. Actually, a lot of it happens between the gaps of a timetable and having a machine situated in a programme in an open studio or a lab allows for people to appropriate it for themselves in their way, as well as within structured learning.<sup>18</sup>*

However, there are other reasons the Riso is in this Royal College Print Lab, it is a dry relatively clean process, which shows other reasons schools are so keen to acquire it. Unlike a traditional print space with health and safety measures and potential toxins, it is a relatively safe process and therefore can be situated in studio spaces, and amongst other resources, unlike many other methods. Indeed, this eco aspect of the process may be something that courses could consider promoting more. In my interview with RCA graduate Laura Calloni, she mentioned this as one of the driving forces behind her embracing the process. 'I also appreciate that Riso is a non-toxic technique using soy-based inks: I believe when you work with prints you have to think of the environment as much as you can.'<sup>19</sup>

<sup>18</sup> Rathna Ramanathan, Personal Correspondence, London, May 2018,

<sup>19</sup> Laura Calloni, Personal Correspondence (2018, June 9)



# The Ritual of Riso

There is more to the Riso than just a cost-effective print process. I would like to consider the use of the Riso as a tool for building community within Art Schools, and one way of this happening is as a way of creating community through the ritual act of making. I would also like to discuss if Riso printing can be seen as a way in which students are ritually using the process to represent trying to recapture 'aura' in design and illustration work. 'Aura' is described by Walter Benjamin as 'that which withers in the age of mechanical reproduction is the aura of the work of art.'<sup>20</sup> It is the essence of a piece of art, its place in time and its authenticity. Moreover, this depreciation in 'aura' is accredited to the development of the reprographic processes of the 19th century which allowed photographs and prints of pieces to be dispersed across the world. I will, however, be arguing that the Riso is a reprographic process that is being used to reinstate 'aura' into work.

In his article for Ceeseffire Magazine, the political theorist Andrew Robinson explores Walter Benjamin's seminal text about reproduction processes and their impact 'Art Aura and Authenticity'. His interest in ritual and making as a way of developing community is intriguing:

*Ritual is not necessarily reactionary. The Communion of ritual practice may be necessary for the formation of non-massified social groups. An example could be the use of puppets in protests.<sup>21</sup>*

One reason it could be suggested the Riso is being acquired is that it is so useful as a print process that forms a ritualistic use and this may be seen as a way to create a community on courses in Art and Design Schools. Considered in courses where campuses are spread such as the Royal Collage of Art the processes that are available and easily accessible could form ritualistic connections for those who are using them. Students using the Riso may be more likely to build a community around it, and it could be argued that a ritual of use had been established tying student groups together as more students are initiated into the method of the Riso. This idea of the ritual initiation into skills is something that Leonard Waks suggests in 'Education as Initiation Revisited: General Rituals and the Passage to Adulthood'. Here he indicates that ritual has always played an essential part in education. "to be able to participate as a social "insider"; initiates share, and care about, the values inherent in the activities."<sup>22</sup> I would suggest using the Riso helps create this 'insider' effect whereby students feel like they are joining a community of process.

<sup>20</sup> Walter Benjamin, (1999a) The Work of Art in the Age of Mechanical Reproduction, in Illuminations (London, Pimlico) p3.

<sup>21</sup> Andrew Robinson, An A to Z of Theory: Walter Benjamin: Art Aura and Authenticity, In Theory, New in Ceeseffire (June 2014)  
<[www.ceeseffiremagazine.co.uk/walter-benjamin-art-aura-authenticity/](http://www.ceeseffiremagazine.co.uk/walter-benjamin-art-aura-authenticity/)>  
Accessed March 18th, 2018]

<sup>22</sup> Leonard Waks, 'Education as Initiation Revisited: General Rituals and the Passage to Adulthood,' Philosophy of Education (2013) p129-132.

This is also supported by ‘*Ritual and Education*’ an article written by R.S Peters in 1996 co-authored with Basil Bernstein and Lionel Elvin, they discuss the function of general rituals in education; ‘The function of general rituals are, to unify the social whole through shared repetition of symbolic behaviours.’<sup>23</sup>

Students share and disseminate info when learning skills and this is something that it could be argued Riso printing and its engagement create. It is this sense of ritual that occurs in both its use and though ‘peer to peer’ interaction using the Riso that it helps create additional community in Art Schools who acquire the Riso.

When I talked to Angharad Lewis, the editor of Grafik and Head of Design For Publishing at The Cass School of Design she mentioned this development of group dynamics through the Riso and peer to peer learning:

*The riso is a great tool to encourage peer-to-peer feedback and learning. Students who have grasped the process and become confident using the Riso can readily induct and guide others, thus reinforcing their own learning and giving them a sense of responsibility, as well as kick-starting peers’ interest in the riso process.*<sup>24</sup>

Therefore, it could be suggested that through this ritual use, students started to associate this piece of kit with an element of social cohesion and an area of print which crosses the boundary into a social and practical learning element and critical print resource, the Riso has become imbued with considerably more significance than first considered. This idea of ritualistic connections created within art schools also can be seen within the descriptions of the Bauhaus art School, the idealism and spirit invested suggested comparisons of it instigating a ritualistic approach by students.<sup>25</sup> When the intellectual Rayner Banham described the Bauhaus at Dessau as a ‘sacred site’<sup>26</sup> it could be suggested that Banham was referring to the ethos of the building, its studios, and community.

Benjamin Walter suggested that in ancient times, artists created ceremonial objects for cult and ritual purposes. ‘Art’ was meant for the spirits and intended for specific places—and these art pieces were instruments of magic, their aura inexorably tied to their ritual functions.<sup>27</sup> Therefore it could be interpreted as a way in which students are using the processes to represent trying to recapture aura in design and illustration work.

It could be argued that it is what makes it authentic that connects it to its ritual use. So how does this affect the idea of the Riso a duplicator that creates copy’s but imbues them with mistakes and imperfections, a process that takes a digital work mixes it with a more DIY aesthetic, does this art still carry some aura and the

23 Bryan Warnick, “Ritual, Imitation, and Education” in R.S. Peters, ‘Journal of Philosophy of Education’ 43, Su. I (2010).

24 Angharad Lewis, Personal Correspondence (June 8, 2018)

25 Dr Janet McKenzie, Bauhaus: (Dec 2007)  
< <http://www.studio-international.co.uk/index.php/bauhaus-1919-1933> >  
[Accessed 20 March 2018]

26 Dr. Janet McKenzie, Bauhaus: (Dec 2007)  
< <http://www.studio-international.co.uk/index.php/bauhaus-1919-1933> >  
[Accessed 20 March 2018]

27 Daniel Naeyegele, Object, Image, Aura-Le Corbusier and the Architecture of Photography (1998)  
< <http://www.harvarddesignmagazine.org/issues/6/object-image-aura> >  
[Accessed 23 March 2018]

does this ritual of adding imperfections during making give it its cult value?

Andrew Robinson discusses while unpicking 'Art Aura and Authenticity,' the ability to distribute and create multiples of your work and how it has a sense of materiality that is a compelling and addictive action. The Riso with its inconsistency's in print, its inability to guarantee a perfect print or a series of identical reproduction means every print in its way could be viewed as an original.<sup>28</sup> 'It is significant that the existence of the work of art with its reference to its aura is never entirely separated from its ritual function.' The Riso prints aura is becoming entwined with the cult status of the printer. The Riso is often mentioned concerning its developed 'cult status' often describes the Riso' and in *Risomania* even the word 'Risomaniacs'<sup>29</sup> is mentioned:

*Risomaniacs are at the forefront of a growing movement that is recuperating older stencil printing techniques and in the process of bringing those technologies to unexpected and exciting new places.*<sup>30</sup>

The new digital age the ritual of hands-on processes has become even more representative of engagement. In my discussion with Teal Triggs, she discussed the space that the Riso sits in and how exciting it is:

*It is an interesting space to be in at the moment- because what I'm seeing is not only looking back at a past which would now be a traditional past in terms of techniques and strategies, but it's being done in conjunction with new technologies.*<sup>31</sup>

If used and thought of as a way to publish and produce a high number of editions of work, then printing using Riso can also represent a committal of an idea to something physical. In this digital age, this even more so embodies the idea of a thoroughly considered concept and object.<sup>32</sup> The process of finalizing and solidifying an idea and what could be considered the aura of a project via Riso printing means it, even more, starts to embody a significant ritual of a process to students. While it may be more of a philosophical argument, the way in which students may connect with the Riso in this ritualistic way an aspect I certainly think should be considered when discussing its impact on students connections with this process.

28 Andrew Robinson, <[www.ceesefiremagazine.co.uk/walter-benjamin-art-aura-authenticity/](http://www.ceesefiremagazine.co.uk/walter-benjamin-art-aura-authenticity/)> [accessed March 18th, 2018]

29 John Z. Komurki, *Risomania* (p14).

30 John Z. Komurki, *Risomania* (p14).

31 Teal Triggs, Personal Correspondence (June 13th, 2018)

32 Liv Taylor, The Propagation Of The Aesthetic In The Digital Age, *Limner Journal* 4 (2016) <[http://limner-journal.eu/New\\_Limner\\_Site/liv-essay\\_full\\_gif.html](http://limner-journal.eu/New_Limner_Site/liv-essay_full_gif.html)> [Accessed 20th March 2018]

# The role of the Riso in production

The critical role of touch permeates the language that we use to describe learning. We often talk about grasping an idea, getting a handle on a problem or being touched by a reading. Many educators believe that hands-on experiences—those that actively involve students in the manipulation of objects are powerful teaching tools.<sup>33</sup>

The Riso as a process supports and enables students to be fully involved in the print process. At Winchester and The Cass, students must supply the paper, change the ink, organize the settings and create the masters. While this may not seem as hands-on as screen-printing, it does engage a distinct level of haptic involvement in creating many editions.

The definition of haptic can be traced back to the Greek words *haptikos*, which means able to touch and *haptesthai*, meaning able to lay hold of. However today the term is widened to encompass the study of touch and the human interaction with the external environment through touch.<sup>34</sup>

[Within teaching and learning theory Haptic Learning] involves active touch: The individual deliberately chooses his or her actions in the exploration and manipulation of an object. In turn, those actions provide information about the properties of the object. The distinction between active and passive touch becomes important when haptics is examined in an educational setting. “Sathian (1998) has suggested that involving students in consciously choosing to investigate the properties of an object is a powerful motivator and increases attention to learning.”<sup>35</sup>

This idea of Haptic Learning is supported by the concept of Object Literacy a theory that explores how students experience and interpret objects and books through hands-on touch and discussion. Object Literacy has been used for a long time within Libraries as a way to introduce students back into interacting with books as objects and facilitating an experience of knowledge that isn't just digital. This way of learning has also been used to expose the idea of why students still need physical library's. The Riso can be viewed as a method that can develop a sense of object literacy,<sup>36</sup> students are continually experiencing the opportunity to quickly and efficiently be able to handle their work and the work of their peers as a physical printed object.

I talked with Teal Triggs the Associate Dean of Visual Communication at The Royal College of Art who is a designer, historian, and writer, we talked about the engaging physicality and materiality of objects printed using the Riso. Teal suggested, ‘There is a materiality that you don't get with any other production process that people want to pick up, hold touch, smell, look at.’<sup>37</sup>

33 James Minogue, “Haptics in Education: Exploring an Untapped Sensory Modality” Review of Educational Research Fall 2006, Vol. 76, No. 3, pp317

34 James Minogue, Haptics in Education, p318

35 Minogue, James. “Haptics in Education, p332

36 Tabitha Tuckett and Elisabeth Lawes, “Object Literacy at University College London Library Services” Art Library's Journal, Volume 42 Issue 2 (2017) 99- 104 (P99)

37 Teal Triggs, Personal Communication (14th June 2018)

The importance of managing objects and books over their digital copies can never be overstated. Object Literacy began to be used in libraries due to the developing awareness that students were increasingly only interact with books and texts digitally. Students were in some cases slowly losing the skills to interpret physical books and printed matter<sup>38</sup>. While it may be argued that this not be accurate in the sense of students choosing to do Art and Design courses, I think this could reflect a privileged concept of every Art and Design student being a deep learner as opposed to a surface learner whom J. Biggs describes as 'Lacking background knowledge and understanding necessary to understand the material.'<sup>39</sup> These can be students who need more attention to actively get to a stage where they consider that they can create physical finished objects or publications. They may be students who have not done a foundation course or those who are not yet engaged in visual culture to an adequate level.

In discussion with Angharad Lewis, at The Cass she mentioned using the Riso as a tool to introduce surface learners into a way of developing their images and building confidence using print:

*Where students (particularly lower levels) have not yet made the developmental leap from sketching and generating one-off images, to processing images in such a way that they can be successful in an applied context, riso can be really useful. It forces students to put their images through a process and to adapt it and work out how it can be multiplied.*<sup>40</sup>

The use of the Riso to offset the creeping in of purely digital interactions is one reason I would argue why Art Schools are purchasing the Riso. By enabling students to work with even more haptic processes the students are inadvertently involved in an aspect of object literacy.

In our conversation about her decisions for acquiring the Riso Susanna Edwards head of Visual Communication at The Cass mentioned the two main elements at the heart of her proposal which featured the development of The HotHouse incubator with the Riso within it. '[its acquirement was] bound in two areas: the promotion of the cluster area and allowing the students to produce print-based publications.'<sup>41</sup> For two years' students created their summer show catalogue using the Riso, these publications and more became part of the archive of pieces made by students that are shown in initial discussions in the induction to the Riso and publishing.

The staff at The Cass consciously keep copies of all work produced by the students to continue to develop this archive. With its accessibility and ease of use, the number of publications and prints created on the Riso by students increases each year, so they are visually and physically more likely to interact with work and published objects. Danny Aldred who is a visual artist and graphic designer teaches on the BA Graphic Arts programme at Winchester School of Art and is undertaking a practice-based PhD with bookroom at UCA Farnham. In our

38 Tabitha Tuckett and Elisabeth Lawes, Object Literacy, Art Libraries Journal Vol42, (2017) pp. 99-106.

39 J. Biggs, Teaching for Quality Learning at University. (SHRE and Open University Press 1999)

40 Angharad Lewis, Personal Correspondence (June 8, 2018)

41 Susanna Edwards, Personal Correspondence, London (January 2018)

discussion, he mentioned this productivity had astounded and impressed the staff at Winchester:

*Its affected the space in the school, because, there's just Riso ink on paper on the walls everywhere, and so the space that we inhabit has changed since we have had the machine, it's cheap [for them to print], the outcome of that is that the space has changed, it is interesting!*<sup>42</sup>

This transformation is also seen at The Cass where students start the term with Riso print workshops, encouraging students to stick up all the results permanently over the walls of the studio to kick-start the culture of displaying work.

In our talk, while he was running a Riso project in Portland, Oswin Ticker guest lecturer at Central St Martins and Associate Lecturer at London College of Communication attributed this level of production directly to the democratization of print via the Riso being accessible in Art Schools. 'It is starting to become more democratized; I don't think it's really about embracing the technology but is more about the accessibility of the technology.'<sup>43</sup>

Archives of print and objects made by students for students to handle and see are made and produced at such a fast rate that students can feel and see many pieces made over a short period. Publications can be created in a swiftly, within an hour students can turn some ideas into their self-published zine, their own object to learn from. For example, at the Cass students in the first year were inducted into the Riso through making an A6 zine from an A3 piece of paper, exploring as a group the layering process by using two colours. After a short period, they had learnt about overlaying colours, prepping artwork for print, a simple way of creating zines and had an outcome to refer to keep.

Angharad Lewis further expanded on this when commenting on the idea of how she approach's its use whilst teaching at The Cass:

*As a 'learning by doing' tool, the Riso can reinforce theoretical principles about design and enable students to commit that learning to memory and to their palette of creative tools by empowering them to take processes into their own hands and feel a sense of independence in their learning, bolstering self-efficacy.*<sup>44</sup>

It is this independence to be able to produce which it seems made the Slade School of Art consider getting a Riso. And therefore to help its students and staff to produce and share their research further. In fact, amazingly this idea was part of UCL's instructional Strategy for 2034.

The Slade had a history of staff and students producing printed materials as research and part of their practice. Also, it seems it has combined this practice as the centre of is an institutional strategy that will be facilitated by having a Riso. The strategy describes the plan as such:

42 Danny Aldred, Personal Correspondence, London (7th March 2018)

43 Oswin Tickler, Personal Correspondence (Jan 2018)

44 Angharad Lewis, Personal Correspondence ( June 8, 2018)

*Our Risograph offered Slade students instant access to a form of print with the accessibility and affordability of the photocopier combined with the sophistication of digital technology. More widely regarding institutional strategy for 2034 one of UCL'S key aims is to enhance teaching and learning via the Connected Curriculum and to 'ensure that all UCL students can learn through participating in research and inquiry at all levels of the programme of Study.'<sup>45</sup>*

This idea of using the Riso as a way to connect and distribute research is evidence of another reason that Riso is being purchased. The idea of the Connected Curriculum as the teaching model is particularly suited for Art Schools such as Slade and The Cass that are part of a broader university community, in The Cass's case London Metropolitan University. The 'Connected Curriculum is 'The core principle, or underlying premise is that students at all levels of the curriculum can benefit in multiple ways by engaging actively in research and enquiry.'<sup>46</sup> By getting students to contribute to the institution's research and its published collections, it engages local and broader communities directly with the findings of their investigations. As a process, it actively creates a unity of teaching and research. Building on the framework on the German Humboldtian teaching theory of the 'unity of teaching and research',<sup>47</sup> this works by the idea of removing the divisions between the practices of research and student education while suggesting that universities should be actively encouraging students to engage with the community and people who are their research and audience.

An example of this from The Cass was Susanna Edwards project brief for The Cass students. This project was based on an outcome using the Riso. Students were looking at the history of Southampton. It included visits, working with historical narratives and importantly collaboration with students based at Southampton Solent. The final work as Riso posters were then collated into a box of posters which were exhibited at Southampton Solent University. The process of using the Riso to facilitate this research and circle of the dialogue with the students at Solent shows the ways the Cass is still testing the various possibilities of Riso. This process of creating multiple physical outcomes that are then situated at events and in communities also shows the way such hands-on methods make students consider their works physical place in the world. Creating a documentary style blog or outputting work directly onto social media may generate the sense of dialogue but it often doesn't engage students in being in the space and amongst the experience of their works audience.

Collaboration is also happening at the Cass with the crossover of architecture and critical and contextual study's starting to commission visual communication design students to print using the Riso. It is this ability to enable students to collaborate and connect with students from other courses that make the Riso so attractive as an investment. Interestingly, this opening up of collaboration was mentioned at The Higher Education Academy conference in 2007. The Group for Learning in Art and Design touched upon the need for strategies such as Slades

45 Tuckett and Lawes, Object Literacy pp 99-106.

46 Dilly Fung, A Connected Curriculum for Higher Education. London, (UCL Press 2017)

47 R. D. Anderson, European Universities from the Enlightenment to 1914, (Published in 2004) p6.



that seek to develop more situations that enable Art and Design students to work alongside other academics and students from other areas:

*[We need to] begin to find new ways to be in the vanguard of an education that will channel and exploit the creative potential that is emerging in the spaces between disciplines, and build the kinds of academic links and bridges that will be so vital in tomorrow's world. In short, art and design students need to be given more opportunity to rub academic shoulders with each other and with those from other academic communities.<sup>48</sup>*

It could be that the Riso also develops this creative connection potential with other areas by the practice of affordance and the process of interacting with objects to learn from them. Affordance is a term that was first used by the perception Theorist James J Gibson and is the possibilities, or agency people can get via various ways of interacting with objects. The affordance of an object or environment such as the Riso depends not only on the abilities of the students but also their aims, beliefs, and past experiences - this is then often described as what is called 'an individual or collective worldview.'<sup>49</sup> Therefore, it could be argued that in the setting of higher education the Riso is a process that students can develop affordance of but importantly it could help to increase students affordance of their whole course. By offering up an accessible process such as the Riso with which the student can attain quickly to the same level as the person facilitating the Riso then the student's collective worldview of print could develop to be the same. A collective worldview that print processes are accessible and attainable. This attainability is supported by comments from my interview with Danny Aldred who mentioned the Riso's ability to widen student's horizons in regards to their ability's.

*[it is] a bit of a gateway to moving forwards using tools, I definitely feel its empowered their understanding and their confidence with print. It is almost like a step, you work with the Riso, and you feel you get confident with it then you feel like you can work with litho or other forms of print.<sup>50</sup>*

This is also supported by constructivist learning theory which explains learning as an active, constructive process and not a passive process where the student receives information and internalizes it.<sup>51</sup> While actively being involved in the design, print, binding, and publishing of a project students are increasingly experiencing the process in an accessible and haptic way. Compared to a situation where a student speculatively mocks up a book in Photoshop there is a marked difference in involvement. Angharad Lewis mentioned in her interview the positive experiences her students had and in particular, the development of skills which I would suggest are demonstrable via affordance:

48 David Hayward, The student experience in art and design higher education: drivers for change, Chapter 4: -BAU - WOW!, A model for creative practice, thinking, learning, research and innovation in the 21st century, Questioning current learning cultures in art, design, media, and communication. (2007)

49 Ian Nobel and Russell Bestley, Visual Research Methods in Graphic Design, p172.

50 Danny Aldred, Personal Communication, London (7th March 2018)

51 David L, "Constructivism," in Learning Theories, June 20, 2015, < <https://www.learning-theories.com/constructivism.html>. > [accessed 19th March 2018]



*[this student] really found her nascent skills in project management by organizing a complex print and production job for the summer show catalogue. It was a collaborative project that involved work and contributions from lots of students, but she discovered the skills and confidence to see the big picture and also the details, successfully leading a team of peers and delivering the finished product.<sup>52</sup>*

Such opportunities for the the development of such skills are not limited to projects facilitated by using the Riso, but as a piece of kit it develops comprehensible production. It indeed has provided an effective additional route for students to develop their knowledge and affordance which I believe can be further expanded on in Higher Education.

## Engagement through 'peer to peer' learning using the Riso

In an article by *Printed Matter*, the Riso is mentioned in connection with developing a 'network of collaborators.'<sup>53</sup> In respect to education, the Riso's ability to enable the creation of confidence in peer to peer exchange and the idea of sharing experience and learning is a crucial. Danny Aldred from Winchester discussed their method of using third-year students to induct first years into the Riso and encouraging the students to propose workshops to run with the first years:

*Once we had trained some students using the Riso, we then got those students to then run workshops with other students, so it was this peer to peer model, and that is always good practice I think in higher education practice, where you putting the onus of the delivery of the projects onto the student again and they take ownership of it.*<sup>54</sup>

The students become the experts, and the community of learning is expanded past just those of the tutors as the purveyors of the knowledge.

Angharad Lewis in our discussion mentioned the freedom that the Riso affords through the way students start to work together.' [It can be] emancipatory, providing an accessible way for students to cheaply make, produce, and distribute work, and gain a deep level of independent learning in the process.'<sup>55</sup> Engaging in this way via peer to peer is a theory of learning that is attributed to deep learning and a sense of high-quality social interaction. Students using the Riso in this way also build confidence, this has been attributed to the value of how the Riso builds their collective worldview in relation to affordance theory.

Danny Aldred also mentioned how this peer to peer learning with the Riso further enthused students to grasp for more opportunities to test their leadership and peer exchange skills.'They were really proud and wanted to take independence in learning and running the workshops. And that's nice it is really quite smart, and it's all about the accumulation of experiential learning with the riso.'<sup>56</sup>

In the same way hearing about the process from other students has been seen to help both the learner and the teacher. By learning about Riso via their peers learning experience and stories, the students are hearing the real histories of the process and not just its technical aspects. Tim Golding, the educator, and anthropologist outlines in his book about Making how knowing the story's behind processes and materials adds to the way we engage with them. From his perspective, the properties of materials are not attributes but are in fact histories of experience. Practitioners know them by knowing their stories: of what

53 Riso-Printing: An Overview, October 2014, <<https://www.printedmatter.org/catalog/tables/579> > [accessed 4th May 2018]

54 Danny Aldred, Personal Communication, London (7th March 2018)

55 Angharad Lewis, Personal, Correspondence (June 8, 2018)

56 Danny Aldred, Personal Communication, London (7th March 2018)

they do and what happens to them when treated in particular ways. Such stories are fundamentally resistant to any project of classification and are the type of unpredictable exchanges that can be through peer to peer learning.<sup>57</sup>

Exploring cognitive theory, educational psychologists Alexander and Judy found critical facts that improve the ability of Art and Design Students to learn, which have far-reaching implications for tutors. They outlined that tutors must facilitate learner's development of an awareness of themselves as learners. They suggest that this can be done by implementing strategies that don't always focus on the achievement of the assessment criteria, such as doing peer reviews or self-assessment.<sup>58</sup> By having a Riso I propose that it develops a community around this printer and develops peer to peer learning, it allows the students to have skills that are not accessed in an academic sense but can be demonstrated.<sup>59</sup>

Susanna Edwards who first acquired the Riso at The Cass discussed this idea of developing areas that could sit outside of assessable areas:

*I was about looking at innovatory models, where we build initiatives that sit outside the curriculum, so it's not just about ticking off the modules and assessing, putting students through this formula on an undergraduate program. It was about setting up a model that could have the innovatory practice that mirrors industry practice; it was always a philosophy that The Hothouse was an industry-focused initiative and it connects to industry, in relation to mirroring it, so producing collectives, research and commissioned work.<sup>60</sup>*

The Riso with and outside The Hothouse, therefore, solidifies students understanding of learning in these multiple ways. It is the lines between what is possible, where the student may start to see all the possibility's open to them. As Benjamin Walter suggested 'At any moment, the reader is ready to turn into a writer.'<sup>61</sup>

57 Tim Ingold, Making – Anthropology, Archaeology, Art, and Architecture. (Routledge 2013) p31.

58 I Reece & Walker, S. Teaching, Training, and Learning, (Business Education Publishers Limited, Sunderland 2004)

59 Alexander P. A. & Judy, J. E. in Lefrançois, G. (Psychology for Teaching, Wadsworth, Belmont 2000)

60 Susanna Edwards, Personal Correspondence (Jan 2018)

61 Benjamin Walter, The Work of Art in the Age of Mechanical Reproduction (1936) p11.

## The Riso as a process for testing

While the Riso was designed for its ability to create multiples, it is also being used as more than a tool for publishing but also as a tool for experimentation and testing.

In their research paper 'Social Design and Participatory Research: Transforming The Curriculum In Higher Education' Sónia Matos suggests how greater attention should be paid to developing a collective approach to research and testing, something I think the Riso effectively enables. Sonia suggests:

*Greater emphasis has been directed toward a discussion of the role of participation in the act of design itself without probing the role of participatory design research as a means to engage and transform design students and communities.<sup>62</sup>*

Giving students a print process that has boundaries to experiment with and to push against could be indicated as provided by the Riso: the limits to colour, which are dependent on how many the university has acquired, the process of layering colours and that the models, in this case, The Cass, Winchester and the Royal College of Art all have printers that only print up to A3.

When I talked with Oswin Ticker a designer and Associate Lecturer at Central Saint Martins, and London College of Communication he praised these boundaries as a testament to the Riso's successes in education. 'It does have limitations; it is making [students] strip back some of their ideas, making them think how simply they can put their work together to communicate the idea(s).'<sup>63</sup> I would suggest that its restrictions also create engagement via the Do it Your Self-attitude that the Risos simplicity has developed. Something that may be related to its similarity to the photocopier and the DIY attitude that flourished within the early 70's with the use of cut and paste and the photocopier with zines such as Vaginal Teeth. 'Punk fanzines were black and white collaged images, and hand-and type-written texts [which] contribute to a 'do- it- yourself' aesthetic of which the production values indicate a sense of urgency and immediacy in the conveyance of its message.'<sup>64</sup>

Oswin Tickler in our discussion also touched on the limitations as the driving force for the resurgence in such a DIY attitude to print. '[Students are] embracing and utilizing it's [the risograph's] limitations. What are the limitations and how can we turn these into assets and how can we kind of use them in a positive way.'<sup>65</sup>

62 Sonia Matos, Emma Gieben-Gamal, Proceedings of the NORDES 2017 Conference, Social design and participatory research: Transforming the curriculum in higher education (Published by Edinburgh College of Art 2017) pl.

63 Oswin Tickler, Personal Correspondence (Jan 2018)

64 Triggs Teal, Professional Platforms, London College of Communication -12th Feb 2009 'Do it yourself' Girl Revolution: LadyFest, Performance and Fanzine Culture 2002 < <http://ualresearchonline.arts.ac.uk/7875/1/TT82Bbook.pdf>> [accessed 1st January 2018]

65 Oswin Tickler, Personal Correspondence (Jan 2018)

An early expert in DIY print processes was Sonia Lady Sheridein who was an artist and academic who was one of the first to embrace generative systems such as the first photocopier, Sheridein commented on the research capabilities of the process. For her, the colour photocopier was a perfect research tool, because the way it was used allowed for the:

*Conceptualization of a complex order. Ideas can be generated at a previously impossible speed. To contemplate in solitude without machine interference is one kind of process. Contemplation with the systems is another experience; an experience which is very soothing to the quick mind, for every push of the button brings some fresh insight, some new vision.* <sup>66</sup>

I think it is this idea of ‘contemplation with systems’<sup>67</sup> which allows the Riso also to be such as a useful tool for experimentation and thinking. Its design, immediacy, and accessibility facilitate students the time to contemplate their testing and the process.

In my discussion with Teal Triggs the designer and Associate Dean of the School of Communication at the Royal College of Art she similarly suggested it is this element of the ‘slow down’ <sup>68</sup> that the Riso allows that she believes is important:

*The photocopier or Riso gives us an opportunity to slow down our processes and become more tactile with them as makers, what does it feel to make? Instead of sitting at a digital device and make.*<sup>69</sup>

Royal College of Art graduate Laura Calloni in her interview also mentioned the DIY attitude as a reason behind her embracing of the Riso as a process:

*Although Riso is not comparable to screen printing regarding quality, I didn't mind that prints look a bit like photocopies, the overlapping is never precise, and colours often fade out, because its aesthetics reminds me of the underground culture of zines and self-publishing.*<sup>70</sup>

It appears that despite the ever-expanding finish of digital, students still embrace this non-precise aesthetic. Laura Calloni also highlighted its forgiving nature and ability allow her to create a project that represented the ‘inclusive character of the project’ <sup>71</sup> which was able to process a range of contributions:

*This choice was technically beneficial. Because the book was based on contributions, I ended up with people sending all sort of different material including many bad images to use — and to give them the Riso treatment was*

66 The Hood Museum of Art shows Eighty Works by Artist Sonia Landy Sheridan <<http://artknowledgenews.com/200911039048/2009-11-02-21-40-27-the-hood-museum-of-art-shows-eighty-works-by-artist-sonia-landy-sheridan.html>> [accessed 18th June 2018]

67 The Hood Museum of Art shows Eighty Works <<http://artknowledgenews.com/200911039048/2009-11-02-21-40-27-the-hood-museum-of-art-shows-eighty-works-by-artist-sonia-landy-sheridan.html>> [accessed 18th June 2018]

68 Teal Triggs, Personal Correspondence (14th June 2018)

69 Teal Triggs, Personal Communication (14th June 2018)

70 Laura Calloni, Personal Correspondence (June 9th, 2018)

71 Laura Calloni, Personal Correspondence (June 9th, 2018)

*truly the best solution. Bitmap on colored paper can really save anything!*<sup>72</sup>

As a process for testing the Riso as a process provides students with boundaries that help develop learning as well as the hands on materiality of a slow process which allows them to contemplate their testing and reflect on its merits and applications. By choosing a process that allowed Laura Calloni to accept and communicate many stories, her focus was on the ability to communicate, not style. Oswin Ticker suggested that the Riso can help encourage this approach:

*[the risograph is] not about the work being overly complicated or too slick looking. I think that's the danger on the computer and printing digitally; it becomes all about how slick or how "realistic" it may be. But really it should be about how it communicates.*<sup>73</sup>

<sup>72</sup> Laura Calloni, Personal Correspondence (June 9th, 2018)

<sup>73</sup> Oswin Ticker, Personal Correspondence (Jan 2018)

# Conclusion

The acquirement of Risos by Art and Design schools is I believe having an active and practical impact on student learning and development. The machines ability to contribute to an environment and culture of empowerment through print, process and community is having a positive effect on those who use it and the broader community of education. As Andrew Robinson points out 'technical reproduction can put the copy of the original into situations which would be out of reach for the original itself. Above all, it enables the original to meet to meet the beholder halfway.'<sup>74</sup> Thus via the Riso, students are gaining a multitude of interactions both with the process of learning, the physicality of the print process and by engaging with resulting printed matter.

It allows the democratic possibility of mass-printing at a rate that is more affordable than other processes.<sup>75</sup> Students are less likely to feel singled out by an inability to afford the finish as the Riso provides a method that is largely accessible to all students. By opening up the print and publication production process to students through Riso, the process is being democratized even more and to a much wider audience.

In an interview about Riso in the British Photography Journal, Ben Freeman from Ditto Press the 'go-to indi printer, capitalizing on the self-publishing phenomenon'<sup>76</sup> outlines the idea of how courses are publishing their own work using the Riso as budgets change on art courses and the impact this had in conjunction with the rise of the Riso:

*Students and galleries do not have huge amounts of money to spend on printing collateral anymore. "Enter this print process, where you can print fluorescent pink on beautiful paper for £50, and suddenly everyone wanted to use it because there were no options other than digital which looks kind of soulless."*<sup>77</sup>

Ben Freemans point highlights some of the primary reasons why the Riso has taken off in universities. A piece of kit that is both hands on but brings with it the entrepreneurial opportunities that students need to develop to negotiate our current fast-moving creative climate. While simultaneously offering real print knowledge and processes the Riso also appears fresh and experimental.

The exciting part of this is that this is a relatively new piece of kit in some university's and there is an opportunity to test and develop how it is used in learning. However, writing in Eye Magazine about the change in attitudes toward arts education Steve Rigley argues about how university's need the independence and time to create working educational spaces,

74 Andrew Robinson, An A to Z of Theory [www.ceesefiremagazine.co.uk/walter-benjamin-art-aura-authenticity/](http://www.ceesefiremagazine.co.uk/walter-benjamin-art-aura-authenticity/) (accessed March 18th, 2018)

75 Riso-Printing: An Overview, October 2014, <https://www.printedmatter.org/catalog/tables/579> (accessed 6th April 2018)

76 Diane Smyth, "Never the Same," Intelligence, British Journal of Photography (July 2014)

77 Smyth, p79.

Under the constant threat of litigation, how easily can genuine academic rigor be applied within a culture increasingly fixated upon league tables, surveys, and RateMyProfessor.com? To apply the principles of the supermarket is to undermine the time and trust necessary to build any genuinely successful teaching environment.<sup>78</sup>

If the Riso can enable and open up new ways of learning, will the art schools be given the space and time to test the ways to use it? Within education can the Riso be allowed the space to show its full possibilities in teaching and learning? When staff are increasingly burdened with bureaucracy and may be unable to develop such exciting areas of development that need such vision.

I hope that Art and Design courses can test and explore ways of developing and using the Riso. This piece of kit may give the opportunity to demonstrate the creativity that Art Schools can achieve when they have the freedom to develop ideas which are as Angharad Lewis described “empowering [students] to take processes into their own hands”.<sup>79</sup> I believe there are also further areas to explore concerning how empowering the Riso can be, in both in education and outside of it. For example, where graduates and creatives are increasingly using Risos at the centre of community's, studios and collectives to further expand the accessibility that the Risograph affords in publishing out into the public domain. The Riso impact is exciting and far-reaching and looks to continue to develop empowerment and creativity.

78 Steve Rigley, Eye Magazine ‘Education: Buying Time’, Issue 79 (2011) p98-99.

79 Angharad Lewis, Personal Correspondence (June 8, 2018)



# Bibliography

## Printed Sources

Anderson, R. D. 'European Universities from the Enlightenment to 1914' Art Library's Journal, Volume 42, Issue 2 (April 2017) pp 99-106.

Alexander P. A. & Judy, J. E. in Lefrançois, G. *Psychology for Teaching*, Wadsworth, Belmont (2000)

Bauer, C; Viola, K.; Strauss, C. *Management skills for artists: 'Learning by Doing'?* *International journal of cultural policy*. 17 (5), (2011), p626-644.

Biggs, J, 'Teaching for Quality Learning at University'. SHRE and Open University Press (1999)

Chatterjee, Helen and Hannan, Leonie, *Engaging the Senses: Object-Based Learning in Higher Education, Part one the Pedagogical value of object-based learning*, Published London Routledge (2016) pl.

Cooper A Peter, 'Paradigm Shifts in Designed instruction: From Behaviorism to Cognitive Constructivism' *Educational Theory* Vol 33 No 5 ( 1993) p12 – 19.

Eikhof, D.R.; Haunschild, A. 'For art's sake! Artistic and economic logics in creative production. *Journal of Organizational Behavior*'. 28(5), ( 2007) p523-538.

Freire, P. *Pedagogy of the Oppressed*. New Revise. London: Penguin Books. (1996).

Fung, Dilly, *A Connected Curriculum for Higher Education*. London, UCL Press (2017).

Findeli, A, 'Rethinking Design Education for the 21st Century: Theoretical, Methodological, and Ethical Discussion', *Design Issues* 17(1), (2001) pp. 5-17.

Hayward, David. *The student experience in art and design higher education: drivers for change'. Chapter 4: -BAU - WOW! A model for creative practice, thinking, learning, research and innovation in the 21st century, Questioning current learning cultures in art, design, media, and communication.* (2007)

Ingold, Tim, *Making – Anthropology, Archaeology, Art, and Architecture*. Routledge (2013) p31.

Jamieson, P.J.; Fisher, K.; Gildng, T.; Taylor, P.G. & Trevitt, A.C.F. 'Place and space in the design of new learning environments' *higher education research and development*' 19 (2), (2000) pp.221-237.

Keeton, M. T, Sheckley, B. G., & Griggs, J. K. *Efficiency and effectiveness in higher education*. Dubuque, IA: Kendall/ Hunt Publishing Company. (2002).

Kimbell, L, 'Rethinking Design Thinking: Part I', *Design and Culture*, 3(3), Llewellyn, A. and Hogan, K. (2000) pp. 285-306.

Kolb D. A. *Experiential learning: Experience as the source of learning and development* (Vol. I). Englewood Cliffs, NJ: Prentice-Hall. (1984) p38.

Kolb, Alice and Kolb, David, *Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education*, *Academy of Management Learning &*

*Education*, Vol. 4, No. 2 (2005), pp. 193-212.

Komurki, John. *Risomania, The new spirit of Printing 2nd Edn, Chapter I: The Risograph*, Published by Niggli (2018) p14.

McRae, Andrew, 'Leading Statements', *THE Journal*, N2345 ( Feb 2018)

Mann, S. J. 'Alternative Perspectives on the Student Experience: Alienation and engagement.', *Studies in Higher Education*, 26(1), (2001) pp. 7-19.

Maitland, B.M, 'Problem-based Learning for an Architecture Degree'. In: Boud, D. and Feletti, G. (Eds), *The Challenge of Problem-based Learning*. London: Kogan (1991)

Matos, Sonia and Gieben-Gamal, Emma, *Proceedings of the NORDES 2017 Conference, Social design and participatory research: Transforming the Curriculum in Higher Education*, Published by Edinburgh Collage of Art (2017) p1.

Minogue, James. 'Haptics in Education: Exploring an Untapped Sensory Modality' Review of Educational Research Fall, Vol. 76, No. 3 (2006), p317.

Moussouri, Theano, *A context for the development of learning outcomes in museums*, Libraries and Archives Resource, (2002)

Nobel, Ian and Bestley, Russell Bestley, *Visual Research Methods in Graphic Design*, 3rd Edn, London: Bloomsbury 2016 Chapter 07: Process and Materials, (2016) p172.

Olsen, B, *In Defense of things*. Plymouth, UK: Altamira Press (2010).

Reece, I & Walker, S. *Teaching, Training and Learning*, Business Education Publishers Limited, Sunderland (2004)

Rigley, Steve, *Eye Magazine* 'Education: Buying Time', Issue 79 (2011) p98-99.

Shaughnessy, Adrien *Studio Culture: The Secret Life of the Graphic Design Studio*, London: Unit Editions, (2009) p12.

Snaith, Sarah, 'Technical Challenge' *Eye Magazine* No95 Vol24 (Jan 2018) p18-19.

Stones CM, Cassidy T 'Seeing and discovering: how do student designers reinterpret sketches and digital marks during graphic design ideation?', *Design Studies*. (2010) 31.5: p439-460.

Triggs, T 'Collaborative Learning: the social in social design', in *Developing Citizen Designers*. Bloomsbury Academic. (2016)

Tuckett, Tabitha and Lawes, Elisabeth, 'Object Literacy at University College London Library Services' *Art Library's Journal*, Volume 42 Issue 2 (2017) p99- 104.

Wadsworth, B. *Piaget's theory of cognitive and affective development*. New York: Longman (1989)

Walters, Benjamin, *The Work of Art in the Age of Mechanical Reproduction*, in *Illuminations* (London, Pimlico (1935) p3.

Waks, Leonard, *Education as Initiation Revisited: 'General Rituals and the Passage to Adulthood'*, *Philosophy of Education* (2013) p129-132.

Warnick, Bryan, "Ritual, Imitation, and Education in R.S. Peters," *Journal of Philosophy of Education*, Issue 43, (2010)

### Online sources

'Connected Curriculum', <<https://www.ucl.ac.uk/teaching-learning/education-initiatives/connected-curriculum>> [Accessed 15th May 2018]

Dawood, Sarah, *Why are fewer students taking on art and design at university?* (Feb 2017) <<https://www.designweek.co.uk/issues/6-12-february-2017/why-are-less-students-taking-on-art-design-at-university/>> [Accessed Jan 2018]

David L, "Constructivism," in *Learning Theories*, June 20, 2015  
<<https://www.learning-theories.com/constructivism.html>>  
[Accessed 19th March 2018]

*Get Started with Riso*  
<<https://www.creativebloq.com/print-design/risograph-printing-51411803>>  
[Accessed 21st April 2018].

Gropius, Walter, *Bauhaus Manifesto*, April 1919 <<https://www.bauhaus100.de/en/past/works/education/manifest-und-programm-des-staatlichen-bauhauses/>>  
[Accessed 20th March 2018]

'Introduction', <<http://hatopress.net/printing/>> [Accessed 21st April 2018]

Lueth, Patience, Opiyo, Lamunu, 'The architectural design studio as a learning environment: a qualitative exploration of architecture design student learning experiences in design studios from first- through fourth-year' (2008). Retrospective Theses and Dissertations. 15788. <<http://lib.dr.iastate.edu/rtd/15788>>  
[Accessed 5th April 2018]

Naegele, Daniel, Object, Image, *Aura - Le Corbusier and the Architecture of Photography* (1998) <<http://www.harvarddesignmagazine.org/issues/6/object-image-aura>> [Accessed 23 March 2018]

McKenzie, Janet, *Bauhaus: 1919-1933* (Dec 2007)  
<<http://www.studio-international.co.uk/index.php/bauhaus-1919-1933>>  
[accessed 20 March 2018].

Taylor, Liv. *The Propagation of The Aesthetic in The Digital Age*, Limner Journal 4 (2016) <[http://limner-journal.eu/New\\_Limner\\_Site/liv-essay\\_full\\_gif.html](http://limner-journal.eu/New_Limner_Site/liv-essay_full_gif.html)>  
[Accessed 20th March 2018].

Triggs, Teal, Professional Platforms, London College of Communication, 12th Feb 2009 'Do it yourself' *Girl Revolution: LadyFest, Performance and Fanzine Culture*, 2002 <<http://ualresearchonline.arts.ac.uk/7875/1/TT%2Bbook.pdf>>  
[Accessed 1st January 2018].

*Riso-Printing: An Overview*, October 2014, <https://www.printedmatter.org/catalog/tables/579> [Accessed 4th May 2018].

Robinson, Andrew, 'An A to Z of Theory: Walter Benjamin: Art Aura and Authenticity, In Theory', New in Ceasefire (June 2014) <[www.ceasefiremagazine.co.uk/walter-benjamin-art-aura-authenticity/](http://www.ceasefiremagazine.co.uk/walter-benjamin-art-aura-authenticity/)> [Accessed March 18th, 2018].

'The future of universities, The Digital Degree' (Jun 27th 2014)  
<<http://www.economist.com/news/briefing/21605899-staid-higher-education-business-about-experience-welcome-earthquake-digital>> [Accessed Jan 2018].

*The Hood Museum of Art shows Eighty Works by Artist Sonia Landy Sheridan*  
 <<http://artknowledge.com/200911039048/2009-11-02-21-40-27-the-hood-museum-of-art-shows-eighty-works-by-artist-sonia-landy-sheridan.html>>  
 [Accessed 18th June 2018].

*W210 BA (Hons) Graphic Arts (3 years)*  
 <[https://www.southampton.ac.uk/wsa/undergraduate/courses/w210\\_ba\\_graphic\\_arts.page](https://www.southampton.ac.uk/wsa/undergraduate/courses/w210_ba_graphic_arts.page)> [Accessed 17 March 2018].

# APPENDIX

## CASE STUDIES

### **The Sir John Cass School of Art, Architecture and Design at London Metropolitan University**

The Visual Communication Course, Ba Illustration and Animation, Ba Graphic Design and Ba Design for Publishing at The Sir John Cass School of Art, Architecture and Design at London Metropolitan University, purchased its one drum Riso in 2015 with four colours. It was acquired by Head of Cass Visual Communication Susanna Edwards who is a researcher, consultant, art director, designer, design-writer and educator. Susanna joined The Cass in 2014, and the acquirement of the Riso was part of her strategy for developing and improving the Visual Communication course. The Cass has its Riso at the centre of an incubator called The HotHouse; the Riso can print and publish in-house and further develop another possibility's that can support the Visual Communication course including promotional material. The Riso has a small space where the Riso is stored, and students can print in this space. However, it does not contain computers and is basic space with shelves a desk and the Riso. Alumni who are resident illustrators or designers have managed the use of the Riso and managed its upkeep and availability to students. Some work placements also sit within The HotHouse concept, students in their third year are invited to work in-house in The HotHouse as their work placement which is required for their Work Ready 2 Module. In these work placements, students work on publications, events, and research happening at the Cass and creating promotional material. In 2017/18 it was a design duo Regular Practis ewho managed The Hothouse work placements.

# The Royal College of Art

The Royal College of Art's Visual Communication course has had its Riso since 2016, and it was acquired by the head of Visual Communication Rathna Ramanathan the Head of Programme for Visual Communication. The Riso is managed by The Royal Duplication Society who are graduates of University of the Arts, St Martins. They who also run a Design Studio called Studio Bergini. The two-drum Riso is currently situated in the Print Lab on the same floor as the first-year studios at The White City Campus, and they have four colours. It was previously based in the Illustration Lab at the Kensington campus before the Visual Communication course moved to its new campus at White City. This is important as it is based where the Visual Communication course is based and not in Print-Making which is based at the Battersea Campus.

# Winchester School of Art , University of Southampton

The Graphic Arts BA at Winchester School of Art, University of Southampton have had their Riso since 2013. Students on this course choose from four specialist pathways – graphic design, illustration, motion design or photography. Their one drum Riso was acquired as an additional piece of print kit based in their dedicated Publishing Space. Which is described on their website as 'complete with Risograph digital printer and binding equipment'.<sup>80</sup> They have six colours and are looking to buy more I would suggest their course represents a course putting publishing at the heart of its context for using Riso, supported by its use through peer to peer learning. The Riso was acquired by Danny Aldred Senior Teaching Fellow and is undertaking a practice-based PhD with bookRoom at UCA Farnham.

80 W210 BA (Hons) Graphic Arts (3 years)  
 <[https://www.southampton.ac.uk/wsa/undergraduate/courses/w210\\_ba\\_graphic\\_arts.page](https://www.southampton.ac.uk/wsa/undergraduate/courses/w210_ba_graphic_arts.page)> [Accessed 17 March 2018]



# Personal Correspondence

## interviewee details

### **Laura Calloni**

Laura Calloni is a graduate of Visual Communication at the Royal College of Art, her final project was a Riso Printed book titled *Brexit Recipes* which was a project that combined food culture and politics while reframing narratives of migration to the United Kingdom. Laura describes herself as an interdisciplinary designer with a focus on editorial and print design, moving image and illustration.

### **Francesco Corsini**

Francesco Corsini is a graduate from Central St Martins, who along side Kristian Hjorth Berge run the design practice Studio Bergini. In 2016 both Francesco and Kristian joined as guest technical staff at the Royal College of Art in and they run The Royal Duplication Centre which is the Risograph workshop situated at the Royal College of Art.

### **Danny Aldred**

Danny Aldred is a Senior Teaching Fellow ,Graphic Arts, He teaches on the BA Graphic Arts programme at Winchester School of Art, University of Southampton. He works as a graphic designer and visual artist and is undertaking a practice-based PhD with bookroom at UCA Farnham. Publishing as creative practice and artist book projects are the focus of his practise and research.

### **Angharad Lewis**

Angharad Lewis an editor, writer and author. At The Sir John Cass School of Art, Architecture and Design at London Metropolitan University (The Cass). Angharad is the Course Leader for the Design for Publishing BA which is within Visual Communication, in addition she lectures on the Graphic Design BA, Illustration and Animation BA. The fields of design, culture and publishing are her specialisms.

### **Dr Rathna Ramanathan**

Dr Rathna Ramanathan is the Head of Programme for Visual Communication at the Royal Collage of Art. Working as an international graphic design

practitioner and researcher she is well known for her expertise in typography, intercultural communication design as well as experimental publishing practices.

**Professor Teal Triggs**

Professor Teal Triggs is Associate Dean of The School of Communication at the Royal College of Art and is Professor of Graphic Design. In her practise she is a historian, educator and writer whose research focuses mainly on graphic design history, design research methods, feminism and self-publishing.

**Oswin Tickler**

Oswin Tickler is the founder of the studio Smallfury, and is formerly Head of Design at the Labour Party. In addition to working freelance, he is an Associate Lecturer at Central Saint Martins, and London College of Communication.