

1. STATEMENT OF RELEVANCE

Printmaking as an art form has a long and shared history with commercial and industrial printing. Almost everything that we now consider to be “printmaking” was at one time a method of mass production, whether woodblock printing, letterpress and typography, photography and photographic printing or 19th century commercial lithography printed from huge slabs of limestone. (Hults) Printmaking has weathered many storms, and endured many changes brought about by commercial interests with the drive to do things bigger, faster, and with greater automation. In my opinion, the most recent, major diversion or shift between these two ways of producing printed matter began with the integration of computer technology into industrial printing, and, as less and less remains of the relationship between fine art printmaking and current (and evolving) industrial printing trends, a re-evaluation of how printmaking needs to, and can proceed as an art form is in order.

In the past ten years I have witnessed many printmaking artists, both inside and out of academia, pose the question: “what is *digital* printmaking?” and they have sought funding and time to “move printmaking forward”. Unfortunately, the “move forward” has all too often come with clumsy attempts to use computers to make prints — simply because it is new and novel — and sadly, abandoning traditional printmaking entirely.

The thrust of this programme takes a different tack. My interest lies in asking whether (and how) printmaking can do what it has always historically done: survive through reinvention, relevance, and assimilation. My programme proposes that the so-called “next generation of printmaking” should really be a “printmaking renaissance”, re-fashioning printmaking into something that straddles the historic (or *traditional*) processes, the fast-moving commercial printing world, and the overall “de-analoguing” of consumer society in order to be something that is none of the above. This printmaking renaissance can be, paradoxically, what printmaking has always been, and the questions it poses come at a time when its very existence in academic programmes and galleries alike is being irreparably damaged and unilaterally cut.

Thematic/contextual questions raised by this project:

1. Given the rapid evolution of digital imaging as an art form unto itself — as well as the increasingly accepted notion of the non-artist consumer as digital artist/photographer/publisher — how does printmaking continue to function as a relevant studio technique? And how, as a visual artist, do I engage this question?
2. Does understanding and integrating industrial techniques and materials, (past, present and emerging technology) combined with expertise in historic fine art printmaking processes, and a commitment to working in a safe, health-conscious manner, create a hybrid art form that — while not “traditional” as we currently describe it — actually fulfills the definition of “printmaking”, as evidenced by its practical history?
3. How does access to a well-equipped printmaking studio (and the requisite technical expertise to use it) coupled with advanced digital and commercial printing devices and access to industrial technical methods and support affect printmaking as a medium, generally, but also as a subject taught to both undergraduate and graduate students?
4. What can studio printmaking *do*, as a visual medium with a long history of assimilating commercial/industrial technologies, that the move to “strictly digital” art production (and instruction) cannot?

2. SUMMARY OF PROPOSED RESEARCH/CREATION

Programme Objectives - The Big Picture

This research/creation programme has four objectives:

1. To bring fine art printmaking and commercial/industrial printing together through shared techniques and materials allowing each to actively inform the other resulting in a **studio** practice that functions as a true hybrid of the old and the new.
2. Produce a large body of creative visual work demonstrating advances and innovations as a result of this project, to be exhibited widely in Canada and abroad.
3. Investigate and use low or no-toxicity materials and methods so that printmaking can shed its long affiliation with harmful solvents and other chemicals, but without compromising quality.
4. Develop the next generation of printmakers, imparting in them a strong sense of printmaking's past, but also its unlimited potential for the future.

Potential Contribution

Advancement of Knowledge in the Field

Printmaking has a long and shared history with commercial and industrial printing. Almost everything that we might now call “printmaking” was at one time a method of mass production, from woodblock printing and photography to 19th street posters printed from huge slabs of limestone. Today, printmaking finds itself at a cross-roads, one which seemingly demands allegiance to either *tradition* or *progress*. The most exciting possibility however, is that one need not supersede the other in order to survive; quite the contrary, in fact.

Printmaking's success has always relied on technology, skill, forward-thinking approaches and a healthy understanding and respect for the past. With the influence of computer technologies affecting every aspect of my own current printing and teaching practice, and a global focus on health, sustainability and “greener” (ARPRIM) practices, the world of fine art printmaking is extremely well-positioned to make full use of these unrelenting technological advances and ideological imperatives to re-establish itself as relevant and a very contemporary art form. This programme, through an investigative and problematized approach, aims to reinvent printmaking once again, in the spirit in which it has always flourished. I situate my practice as an artist and researcher firmly in this belief.

Wider Cultural Benefits

Historically, great societies are judged by many things, but chief among them has been their contribution to culture. Canada has a deservedly strong international reputation for forward-thinking printmakers and exciting prints, and one need only read the roster of invited participants to see their names routinely mingle with the best and brightest in exhibitions and competitions around the world. This programme is an investment in protecting this reputation, and in taking creative risks on real innovation and evolution, and leading a printmaking renaissance. Art that fails to question its own existence and break new ground is irrelevant.

It is an important goal of this programme for the creative work produced to be disseminated widely through exhibitions, international printmaking competitions, guest lectures, and visiting artist opportunities at other universities and artist-run centres. The programme will also spawn important curricular changes to printmaking instruction at the University of Regina at the undergraduate and graduate levels.

3. PROJECT DESCRIPTION

Research Plan

Relevance & Originality

Printmaking as an art form has a long and shared history with commercial and industrial printing. Almost everything that we now consider to be “printmaking” was at one time a method of mass production, whether woodblock printing, letterpress and typography, photography and photographic printing or 19th century commercial lithography printed from huge slabs of limestone. (Hults) Printmaking has weathered many storms, and endured many changes brought about by commercial interests with the drive to do things bigger, faster, and with greater automation. In my opinion, the most recent, major diversion or shift between these two ways of producing printed matter began with the integration of computer technology into industrial printing, and, as less and less remains of the relationship between fine art printmaking and current (and evolving) industrial printing trends, a re-evaluation of how printmaking needs to, and can proceed as an art form is in order.

In the past ten or so years, I have witnessed many printmaking artists both inside and outside of academia pose the question: “what is *digital* printmaking?” and they have sought funding and time to “move printmaking forward.” Unfortunately, the “move forward” has all too often come with clumsy attempts to use computers to make prints — simply because it is a new and novel approach — and sadly, abandoning traditional printmaking entirely.

The thrust of this programme takes a different tack. My interest lies in asking whether and how printmaking can do what it has always historically done: survive through reinvention, relevance and assimilation. My programme proposes that the so-called “next generation of printmaking” can be something that straddles the historic (or *traditional*) processes, the fast-moving commercial printing world and the overall “de-analoguing” of consumer society in order to be something that is none of the above. This “new” printmaking can be, paradoxically, what printmaking has always been, and the questions it poses come at a time when its very existence in academic programmes and galleries alike is being irreparably damaged and unilaterally cut.

Approach

This research/creation programme has four “Big Picture” objectives:

1. To bring fine art printmaking and commercial/industrial printing together through shared techniques and materials allowing each to actively inform the other resulting in a **studio practice** that functions as a true hybrid of the old and the new.
2. Produce a large body of creative visual work demonstrating advances and innovations as a result of this project, to be exhibited widely in Canada and abroad.
3. Investigate and use low or no-toxicity materials and methods so that printmaking can shed its long affiliation with harmful solvents and other chemicals, but without compromising quality.
4. Develop the next generation of printmakers, imparting in them a strong sense of printmaking’s past, but also its unlimited potential for the future.

There are five technical objectives for this programme:

1. To integrate industrial print equipment/technology and methodologies (past, present and emerging) with historic printmaking media (lithography, etching, screenprinting, typography and relief).
2. Increase possibilities for photographic and photo-digital resolution and registration in studio printmaking (with a special aim to eliminating standard halftones for mimicking “continuous tone”).
3. Expand the gamut of photo-digital colour available by establishing methods and tactics for the successful integration of these new(er) approaches with more traditional ones.
4. Produce accurate and higher-resolution digitally generated film positives.
5. Operate in a manner that emphasizes “best practice” as it relates to studio health and safety without concessions made to quality or scope of investigations.

Integration - The integration of traditional (historic) studio printmaking methods with current and evolving commercial and industrial techniques and approaches is the main creative thrust for this

programme from a technical point of view. Any and all advances to how and what I print, and subsequently to how I teach printmaking will come from research with the integration of commercial or “non-traditional” approaches within the artistic printmaking studio. “Integration” is the guiding principle; abandoning historic approaches to studio printmaking for new ones will not push the medium further.

Due to their ubiquitous presence in both artistic and industrial worlds, digital and photo-digital applications and methods will be a special focus for useful integration and evolution.

Print Resolution & Registration - Increasing possibilities for photographic and photo-digital resolution and registration in studio printmaking — that is, to reduce the de facto degradation of photographic images when used in artistic printmaking, as well as improving the artist’s ability to make their images line up perfectly and overprint many layers in perfect “register” — is an extremely important aspect of this project. Industrial methods for transferring photographic (and photo-digital) imagery to printing matrices such as silkscreens, lithographic printing plates, etching plates and letterpress (typography) plates will be studied so that high-quality, workable protocols for studio printmaking can be better developed. Additionally, methods and equipment for physically printing in the studio will be tested and perfected so that advances in *how* images are placed on the printing matrix will not be lost when the actual printing takes place.

A special aim of this trajectory will be to eliminate the widespread reliance on standard halftones to produce photographic images in studio printmaking. Halftones are the small, mechanical “dots” that exist when looking closely at typical commercially printed photographs. (Saciotto) The use of “halftone dots” to mimic a full range of tones (from light to dark) in photographic printing has existed for more than one hundred years. (Lawlor) Its prevalence is due to the relative controllability of print quality at high volumes of printed matters (newspapers, magazines etc) — it tends to print reliably, thereby avoiding major “shifts” in colour appearance between the first impression and, for example, the fifty-thousandth. The very nature of artistic studio printmaking — extremely low print volume when compared to even modest commercial “runs” — is such that better, less coarse and obvious manners of producing photographic images can be used and explored further. The use of halftone technology and related methods have their place, *aesthetically*, within studio printmaking, but the almost sole reliance on them is an artifact of printmaking’s history of adapting from industrial technology, and in this case, failing to look beyond.

Colour - The gamut of colour available in commercial printing is typically limited to the combination of Cyan (blue), Magenta (Pink-red), Yellow and Black inks (known as “CMYK” or “process printing”). (Sericol) Most newspapers and other such publications rely on the fact that when these colours are printed together appropriately, the human brain reads them as “continuous tone” — that is, “full colour”. There are inherent limits to the range of colour achievable when printed using this (extremely prevalent) technology. There is a certain dullness to “full” colour imagery printed in this way, one that is easily detectable when viewing the same, and more vibrant image on a standard computer screen (which uses Red Green and Blue or “RGB” to display colour). Certain industrial leaders in the colour printing world have developed extensions of this CMYK range, adding Orange and Green as in the case of Pantone Co.’s *Hexachrome* software and ink system, or Opalton Co.’s *Opalton* with the addition of Red, Blue and Green. Skilled studio printmaking, coupled with digital technology, is not only capable of integrating such approaches, but going beyond the strict industrial limits and using the artist’s “intervention” at the image preparation (software) stage in combination with a veritable rainbow of printing ink colours in the studio itself to expand the gamut considerably.

Along a similar theoretical tack, (but slightly different from a practical point of view) possibilities involving the investigation of software and printer drivers developed for use by Canon or Epson to run their large-format inkjet printers will be explored in this project. Canon, for example, uses 12 ink colours in their latest series of professional inkjet devices (Cyan, Magenta, Light Cyan, plus 8 more) in order to better replicate on paper — and in some instances, move beyond — the relatively wide range of

colour that can be viewed on a computer or HD TV screen. Again, the strong points of the artistic printmaking studio could be used to investigate how to apply similar methods, and also, move beyond.

High Resolution Films - “Films” are positive transparencies (like photographic negatives, only the reverse) that are used in almost all photographic printmaking processes. (MacDougall) With the advance in inkjet printer technology and size, it is possible to skip the traditional photo darkroom step in producing such films for transfer to silkscreens and lithographic, etching and letterpress plates. The major important improvements in using digitally generated films over traditional ones are time and effort saved, reduction of exposure to toxic chemical darkroom processes, and the ability to design photographic images in software prior to producing the actual films. (Historic darkroom modes of producing films relied on a traditional approach to image capture and making, as well as manual editing that resulted in image degradation).

The notion of using inkjet printers to produce films is not new; however, much of how they have been used in the past 10 years relates to producing a finished “product” (the film) that is analogous to the traditional darkroom-generated version. Following up on the subsection regarding Print Resolution & Registration above, this project will build upon research into how professional inkjet printers can generate films that are not only superior to traditional ones (as it relates to how well they transfer to the printmaking matrices) but are also capable of new levels of detail in studio printmaking. I have initiated this research very recently as a Visiting Artist/Researcher at Sagamie-The National Centre for Research and Production of Contemporary Digital Art in Alma, Québec, but more work is to be done.

Health & Safety - An overarching principle regarding how this research and creative work is conducted relates to using newer methods and materials that emphasize studio health and safety concerns. Equally important will be investigating how more traditional methods in studio printmaking can be augmented to make them safer and more responsible to the artist or art student, as well as to the environment, generally. Not every technique can be replaced in favour of a “greener” one, but the notion of “best practice” as it relates to studio health and safety (without concessions made to quality or scope of investigations) will be at the core of this project.

Conceptual Framework

The conceptual framework underlying this research relates to the need for “traditional” studio art disciplines in general to find relevance and *renaissance* in a visual world that values speed and “worth” (though often mistakenly confused with “cost”) but at the same time espouses respect for skill, craftsmanship and details. Printmaking, among its many foibles, has long suffered a self-imposed inferiority complex: it is not “original” enough for some; it falls somewhere between high art and lowly craft; and, its association with commerce and money confuse its value for the average viewer-consumer. I say “self-imposed” because I believe that oil painters, sculptors and most other artistic practitioners cyclically face self-doubt and existentialist crises; however, in the case of printmaking, its very history is shared, and consequently, self definition is particularly difficult.

As new technologies at both consumer and industrial levels have emerged (and continue to do so), printmaking is the only studio practice that sits at a nexus between tradition and *real* evolution. While painting can attempt to utilize digital technology, for example, there will almost certainly always remain a gulf between the two manners of creating visual work. There can be an “oil painting with digital image,” or “digital painting or drawing” (on screen, made with a mouse) but painting can never integrate technology in the way that printmaking has done.

Printmaking can bring together the autographic mark of the artist, with text or photograph, digital image or graphic. (Hults) It can be ridged and topographic, or as flat as the thinnest sheet of paper. It can wrap around a room, sit behind glass or lay in a stack. It is a record. It exists in 4 dimensions.

And given the chance, it reinvents itself.

Nature/Extent of Research Training for Students

The nature of research training for students at both undergraduate and graduate levels will encompass all levels of artistic planning, production and dissemination, from hands-on to conceptual.

Planning

A research/creation programme such as this, requiring a great deal of experimentation, as well as basic installation and set-up of equipment (on an ongoing basis) will be the central to the training of students. Printmaking studios require careful planning for size of equipment, space for movement and workflow, as well as considerations around ventilation, water and electricity. After the initial placement, student assistants using the equipment will be invaluable in discerning whether equipment and special needs are being met. While this may seem rudimentary, the ability to plan and execute a new print studio design, or retrofit an existing one, is crucial should students go on to work in an artist-run printmaking centre, gallery, or set up their own space as individual artists or teachers.

The second aspect of planning will include individual (mini) projects within the larger programme of work and research. Printmaking is a medium that demands attention to detail, specific workflow patterns, and time (to execute particular actions or techniques, as well as waiting for things to dry/set/expose etc). Students invited to participate in this project will be chosen for their proven ability or potential to operate fluidly in a printmaking setting. Printmaking is often characterized by a “hurry up and wait” approach; students will learn to multi-task in the print studio in a very meaningful way, which, once again, will serve them as students and as professional artists.

Production

Although intertwined with the overall planning, artistic production is a key aspect of the training students will receive. This is to be a creative programme using a wide array of materials, equipment and techniques that make up a standard printmaking studio, in addition to the many new methods that will be introduced over the course of the three-year programme. Exposure to this range experience and experimentation will provide ample opportunity to:

1. Observe and work within the context of a professional artist’s project.
2. Develop capacity and skill with these techniques and materials, one at a time.
3. Most importantly, *learn how to learn*; that is, they will develop adaptability within the printmaking studio, learning to ask (me, and eventually, themselves) the right types of questions to push their own understanding and skill forward, and contribute creatively to the project.

Dissemination

Dissemination will be a very important element of training for students involved with this programme in the sense that it is an often-overlooked skill at the undergraduate (and sometimes, graduate) level. Students know that they want to have exhibitions, get grants and sell their work one day, but they need to develop their work and skills while in school, and often neglect this aspect of being an artist. This project will require students to aid in all aspects of dissemination from administrative tasks associated with researching possible sites/opportunities, to documentation of results (creative work and methods), to preparing a piece or entire exhibition for travel and installation. The rather large notion of “dissemination” associated with this programme will provide students with a sort of “mini” internship not unlike working in an artist-run centre, gallery or as a independent artist on their own. The experience they will gain in this aspect of the programme will be invaluable; one need only look at the list of skills and experience required of potential entry-level gallery and curatorial assistants, or associate directors in the cultural sector, to know that an art degree is no longer enough.

Expected Contribution

Originality

I have come to this creative programme (and the personal methodology that governs my creative practice) through a series of experiences, encounters and discovered interests that make it truly original. Having had the opportunity to study under J.C. Heywood (one of the true innovators in photographic, colour silkscreen printing in Canada) and Otis Tamasauskas (a “Master Printer” in the technical sense, and probably the best known experimental lithographer in Canada), my training in strong traditional printmaking technique and history has been mixed with exposure to forward-thinking approaches to materials and methods. I was given the opportunity to work and experiment with uv silkscreen printing

as well as waterless lithography (two avant-garde methods in the artistic printmaking world) well before I understood their unique possibilities. My subsequent graduate study at Concordia University's well-equipped studios further allowed me to investigate what would later become a central theme in my studio work, and eventually led to this proposal. This long series of experiences combined with the good fortune to have had relatively unimpeded access to so many print technologies (both new and old) and insatiable drive to continue moving my work and my field forward, positions my research and artistic practice at a real threshold. Quite aside from pursuing originality for originality's sake, this project is to be a culmination of my skills, experiences and research that propels the study, practice, and teaching of printmaking toward its 21st century renaissance.

Advancement of Knowledge & Practice

Printmaking has a long and shared history with commercial and industrial printing. Almost everything that we might now call "printmaking" was at one time a method of mass production, from woodblock printing and photography to 19th street posters printed from huge slabs of limestone. Today, printmaking finds itself at a cross-roads, one which seemingly demands allegiance to either *tradition* or *progress*. The most exciting possibility however, is that one need not supersede the other in order to survive; quite the contrary, in fact.

Printmaking's success has always relied on technology, skill, forward-thinking approaches and a healthy understanding and respect for the past. With the influence of computer technologies affecting every aspect of current printing practice, and a global focus on health, sustainability and "greener" practices, the world of fine art printmaking is extremely well-positioned to make full use of these unrelenting technological advances and ideological imperatives to re-establish itself as relevant and a very contemporary art form. This programme, through an investigative and problematized approach, aims to reinvent printmaking once again, in the spirit in which it has always flourished. I situate my practice as an artist and researcher firmly in this belief.

Significance of Research

The significance of this programme's outcomes will have a profound impact on printmaking as a studio practice from an artistic, technical and cultural perspective.

Artistic & Cultural

As an artistic milieu, printmaking has the potential to combine hand-drawn marks, photographic, digital and graphic imagery and text, extremely high-resolution imaging (inkjet printing) and the physicality and ethereal qualities unobtainable by any method that uses any of the above separately. It allows the potential for seamless flow in and out of the artistic studio environment; it is difficult to define because it is capable of borrowing from high-art and low, public visual representation and private artistic contemplation. One of the purposes of visual art, and the one that keeps it relevant today, is that of its ability to reflect (and reflect upon) that which is "contemporary." We are used to seeing photographic imagery everywhere we are: digitally generated motion, graphics, text and sound permeate our existence and yet there is a palpable sense that amongst this spectacle, nothing is real or authentic. I believe that society craves art (be it paintings in a gallery, or songs sung in a bar) because we want to connect with the aura of something personal, and potentially make sense of our world via this interaction. Printmaking's contribution, whether strictly industrial, strictly artistic, or some combination of the two — is that of a bridge between humans as individual thinking/breathing/feeling beings, and the society to which they belong, regardless of social rank or personal choice. Printmaking can be a subversive political leaflet, a rock'n'roll poster or a wedding invitation; a billboard or a fingerprint. It connects us. This programme seeks to further this connection by admitting its relevance.

Technical

The technical contribution includes new techniques, methods and materials in studio printmaking, as well as integration of equipment and software not (usually) found in “traditional” print studios. The technical points to be addressed include:

1. Commercial-format offset printing, Direct-to-Plate lithography (digital processing of lithography printing plates with no intermediary darkroom processing), and associated “pre-press” methods; “on-press” lithographic methods and materials.
2. Low/no-toxicity “solvents” and cleaners.
3. Ultra-Violet light cured, water-based, silkscreen (printing, drawing & digital image “pre-press”).
4. Digitally-generated typesetting and relief printing; associated inks & cleaners.
5. High-resolution digital etching.
6. Digital imaging and inkjet printing (as both separate and integrated techniques).
7. Colour separation and re-constitution methods (manual and software/driver based).

Plans to Communicate and Disseminate Research

It is an important goal of this project that the creative work produced be disseminated widely through exhibitions and international printmaking competitions, guest lectures and visiting artist opportunities, curricular changes to printmaking at the University of Regina and published format.

Exhibitions and international printmaking competitions

Opportunities being investigated: Galerie St. Ambroise Arts Contemporain (Montréal), Seoul Space Biennale, Krakow Biennale, Okanagan Print Triennale, Triennale de Trois-Rivieres, Osaka Triennale.

Guest lectures and visiting artist opportunities

Opportunities being investigated at other universities (NSCAD, Concordia, OCAD, University of Windsor, University of Alberta, Emily Carr Institute), artist-run centres (St Michael’s Printshop, Open Studio, Imago, Atelier Circulaire, Malaspina Printmakers, The Print Studio), and conferences (Southern Graphics, Specialty Graphic and Imaging Association, College Art Association).

Curricular changes to printmaking at the University of Regina

Undergraduate (introductory to advanced) and graduate level printmaking curricula are undergoing major changes at the time of this writing. SSHRC support will permit further (and more advanced) changes to take place due to the addition of new equipment and materials, as well as student training.

Published format

Submission(s) to Leonardo: Journal of the International Society for the Arts, Science & Technology and other similar publications online or in hard-copy will be explored, in addition to a project-dedicated website which will serve both as gallery for ongoing and completed creative works, as well as technical clearing house for new and exciting techniques and approaches.

The project will also dovetail with a book project I have begun planning. Tentatively titled “Why Print?,” active and ground-breaking printmakers in Canada (initially) will be invited to answer the question: “Why Print?.” The book will feature their replies and important or representational examples of their work. While this publication is not tied explicitly to the SSHRC programme, it is doubtless that the research and creative work will influence its evolution.

Contribution to Enrichment of Canadian and/or International Culture

Historically, great societies are judged by many things, but chief among them has been their contribution to culture. Canada has a deservedly strong international reputation for forward-thinking printmakers and exciting prints, and one need only read the roster of invited participants to see their names routinely mingle with the best and brightest in exhibitions around the world. This programme is an investment in protecting this reputation, and in taking creative risks on real innovation and evolution, and leading a printmaking renaissance.

Art that fails to question its own existence and break new ground is irrelevant.

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6. TRAINING

Year One

Undergraduate student

The role of the undergraduate student will be one of general support for the project. He/she will aid in the physical set-up of new equipment and re-arrangement of studio space and layout. The student will aid in testing the equipment, acting as my assistant to carry out investigations in software, hardware and in the printing studio. Although they will not be allowed to use the new equipment without supervision, the student will certainly benefit from use and exposure to very new approaches.

Graduate Student

At this time, the Printmaking programme at the University is undergoing a major transition with my appointment to Tenure-Track Assistant Professor. There are currently no graduate students focusing on Printmaking; hence my use of undergraduates only in Year One. With SSHRC funding, attracting graduate students to my programme for Year Two will be an important priority.

Year Two

Undergraduate students (2)

The students' role in Year Two will be similar to that of Year One, with the exception that the "original student" from Year One will shift slightly to act as a technician for the equipment with which they are now familiar. While I will maintain the overall responsibility for equipment and materials, the Year One Student will act as a first line of defence for "their" equipment. The benefits of this kind of experience and expertise development for the student are obvious: they will become well prepared for attending graduate school, and their knowledge will greatly affect other students in the Printmaking area, as the latter learn and develop.

Graduate Student

The role of the graduate student will be critical to the success of the project due to their pre-existing level of training prior to the more advanced training and experimentation they will need to undergo to engage with this project. The graduate student will be given administrative responsibilities related to equipment and materials, as well as a role in investigating dissemination and communication opportunities for the ongoing results of the research programme. The most important role of the graduate student, in that this is a creative undertaking, will be to assist with production of my own creative work as well as carry on his/her own, within the context of this evolving project's possibilities (ie. new equipment and materials that would otherwise be out of their reach as a student will be available to them).

The benefit to the graduate student is also quite obvious, since I am committed to training a "next generation" printmaker/academic.

Year Three

Undergraduate Students

The function of the students in Year Three will be the same as Year One, creating a continuity that will be absolutely crucial given the amount of equipment encompassed in the project by this point. At this point I will be disseminating some of our results locally by way of undergraduate curricular changes and expect that new and qualified students will emerge to help with this project.

Graduate Student

The graduate student will also maintain many of the duties for which they were hired in Year Two, but again, it is the expectation that their time will be spent aiding in my own creative work, as well as conducting research towards their MFA thesis and exhibition. This element is supremely important. Contemporary approaches to artistic production (particularly in Printmaking) rarely occur in a vacuum, and the very nature of Printmaking itself is one of shared resources and community.

7. PREVIOUS AND ONGOING RESEARCH RESULTS

Grants/Research Funding

a) **President's Fund/SSHRC General Research Fund 2008-2010**

University of Regina

\$5000 – Status: ongoing

Ultra-violet cured, water-based screenprinting: high resolution digital integration and expanded colour spaces in a lower-toxicity studio printmaking context

This project is a partial continuation of entry c) & d) below, as well as redirection of research that was underway prior to accepting a position with the University of Regina in 2007. On a much smaller scale than this SSHRC proposal, and with the support of the U of R, I have begun to assemble the equipment and materials I need to further explore the use of water-based (low/no toxicity), u.v. curable printing inks for silkscreen printing. This project is scheduled to go on until at least 2010, but has been designed to grow into a much larger, and much broader investigation, subject to SSHRC funding.

b) **Saskatchewan Arts Board Travel Grant 2008**

\$500 – Status: Complete

Invited Artist/Researcher to Sagamie-The National Centre for Research and Production of Contemporary Digital Art (Alma, Québec) 2008

This grant was obtained in order to facilitate a trip to Sagamie, in central Québec. The visiting artist residency permitted me an uninterrupted period to work closely with a dedicated digital printing and imaging technician in order to develop methodologies for separating colour photographic images digitally, and reconstitute them so that they can be used in my research with high-resolution, colour, u.v. silkscreen printing.

c) **President's Fund/SSHRC General Research Fund 2007-2008**

University of Regina

\$5000 – Status: Complete

High Resolution Photo-Digital Integration and Expanded Colour Spaces in Hybrid Fine Art-Commercial Printing, within a Lower - Toxicity, Studio Printmaking Context (Stage 1)

This funding permitted the initial redevelopment of the printmaking studio at the University of Regina, through purchasing of basic but professional imaging equipment to produce photo-digital etchings and materials to lower the use of toxic items in a traditional print environment. Due to the amount of equipment, materials and improvements necessary to fully redevelop this studio so that it can be used for my research, as well as for updated curriculum, this project was only “Stage 1” of a much larger endeavour that is being continued in entry a) above, and potentially in the proposed SSHRC funded project.

d) **Faculty of Fine Arts Research Fund 2007-2008**

University of Regina

\$2500 – Status: Complete

High Resolution Photo-Digital Integration and Expanded Colour Spaces in Hybrid Fine Art-Commercial Printing, within a Lower - Toxicity, Studio Printmaking Context (Stage 1)

This funding came at approximately the same time as entry c) above, but it served to obtain a medium format professional inkjet printer and special inks and media. The printer purchased with these funds allowed my research into new modes of photo-etching to take place because I

was/am able to produce extremely high- quality, mid-sized photographic transparencies for exposure to etching plates, which was at the heart of this stage of the overall project.

Recent Invited/Competitive Artist Residencies

e) **Invited Artist/Researcher** 2008

Sagamie-The National Centre for Research and Production of Contemporary Digital Art (Alma, Québec)

\$400 + in kind testing materials and technician – Status: Complete

Centre Sagamie is the only Canadian artist-run centre dedicated to investigations in digital art. They receive funding at the local, regional, provincial and federal levels, as well as sponsorship by Canon and other imaging organizations.

This competitive, juried visiting artist residency permitted me an uninterrupted period to work closely with a dedicated digital printing and imaging technician in order to develop methodologies for separating colour photographic images digitally, and reconstitute them so that they can be used in my research with high-resolution, colour, u.v. silkscreen printing.

f) **Visiting Artist Residency** 2008

Open Studio Printmaking Centre (Toronto, Ontario)

Materials stipend, studio fees and access, dedicated technician and solo exhibition (w/ professional fees paid) and publication – Status: Complete

Open Studio is one of the leading artist-run printmaking centres in Canada, with a world-wide reputation. They receive funding at the local, regional, provincial and federal levels, as well as through several important private sponsorships.

This competitive, juried visiting artist residency permitted me a month in Toronto, with access to a well-equipped printmaking studio and technical support. While at Open Studio, I produced work in multi-layer, photo-digital etching using a variety of new or non-traditional approaches and materials. The work that I produced while in residence at Open Studio tied in with the some of the funding and equipment I received from entries c) & d) above. It was an excellent opportunity to adapt my own methods and manners to a new and different (and slightly less progressive) studio than my own.

8. BUDGET JUSTIFICATION

Personnel costs

Year 1 - \$5000 - One undergraduate student will be hired to aid in initial set-up and launch of the project. The University of Regina has a MFA programme in Visual Art, however, there are no students currently enrolled as Printmakers, hence the need for undergraduate support only in Year One. It is an intention of this project to attract graduate students to the Printmaking area in subsequent years.

The undergraduate student hired during year one will act as a general studio and research assistant aiding in physical set-up of space and new equipment, as well as testing of said equipment. The nature of Printmaking is such that it often requires more than one individual to work together to achieve even basic results.

The benefit to the student will be important, in that they will have the opportunity to see first hand how a professional printmaking facility is restructured and expanded, plus actually test and use the equipment.

Year 2 - \$22000 - Two undergraduate students and one graduate student will be hired to aid in expansion of the project. By this point, the undergraduate student from Year One will hopefully be in a position to act as a technician for much of the equipment that was set-up during that time. As such, the student will be responsible for maintenance, testing and trouble-shooting. With the experience and expertise they have gained, their presence will also be needed in advanced use of equipment in their own studio work, strengthening their portfolio and future artistic practice.

The second undergraduate will perform a similar technician role on equipment arriving in Year Two, with similar benefits.

The graduate student will work more closely with me on advanced and experimental use of equipment and facilities. The student will also be permitted and encouraged to produce their own studio work using these new ideas and approaches. The graduate student will also perform certain administrative duties associated with the project but their primary function will be creative.

Year 3 - \$22000 - Similar to Year Two, but with added emphasis on assisting my own experimentations with printing & software, administration and communication of my results/creative work. If a 2nd graduate student is enrolled in the Printmaking area, a re-evaluation of undergraduate personnel may take place.

Travel costs

Year One - \$2000 - Travel in Year One will be limited to 3 trips within Canada. Regina is a small centre, and manufacturers of specialized inks, commercial printing professionals, and technical resources in Toronto and Montréal will need to be visited in order to facilitate the early stages of the project.

Year Two - \$2000 - Travel will be comparable to Year One (on-site research, development and consultation)

Year Three - \$11500 - It is expected that by year three some or most travel will be required for dissemination and communication of results. The Southern Graphic Conference in the U.S. as well as potential invitations to present the work abroad will be examined thoroughly for this year. At least one travel opportunity for a graduate student to assist and/or communicate results will be a priority in year three.

Other expenses

Year One - \$6000 - Technical services - Consultation and services for inks, software and printing methodologies from professionals visited, related to the travel costs stated above.

Supplies - Printing inks, papers, digital printing media and ink, general printmaking studio supplies (photographic printing plates, photographic emulsions, solvents, cleaners, ultra-violet exposure bulbs, press parts)

Year Two - \$12000 - Technical services – Similar to Year One; expanded to account for more equipment and new investigations arising from that year's results.

Supplies – Similar to Year One; expanded.

Year Three - \$13800 - Overall continuation of technical needs and slight increase in supplies to account for the amount of creative work being done.

Non-disposable equipment

Year One - Computer hardware - \$18000 - 1 PowerMac computer with upgraded memory, processor and hard drive; imaging software; dual displays; sundry cables & attachments. 1 Power Book Mac laptop with above, plus additional external dual displays. Epson Expression series 10000XL scanner. Canon EOS 5D Mark II digital camera.

Up-to-date and powerful devices are crucial to the acquiring and processing of large digital files. The PowerMac will be housed in the studio at the University of Regina, along with the scanner. The camera and laptop will be used for fieldwork. Note: Mac computers are the standard in graphic and creative industries, with many software packages necessary to this programme being “native” to the Mac operating system. Despite their relative expense compared to PCs, they are necessary.

Other - \$22000 – TMI Jaguar automatic screenprinting press (+ electrical alterations/connection at the U of R); Xante digital lithographic plate-maker, Canon XH A1 video camera; sundry work and storage tables and print studio furniture; flat paper storage drawers.

Year Two - Computer hardware - \$19000 - Canon ImageProGraf large format inkjet printer for production of photo and graphic imagery. iMac 24” computer with software to run the Canon printer. Note: The Canon ImageProGraf was tested among 4 other devices during my visiting artist residency at Sagamie in August of this year. It yielded prints and transparencies that were a great deal better than similarly priced Epsoms, and slightly cheaper HP devices.

Other - \$21000 - Manual offset proofing press + handling and calibration, and printing rollers. This press will be very important for bridging traditional and digital lithography.

Year Three - Computer hardware - \$5400 - 1 Canon digital projector for interactive print-based work and presentations. iMac computer for print studio users' use and general printmaking curriculum improvement.

Other - \$9000 – Anderson & Vreeland photopolymer plate processing machine for producing digitally generated relief (letterpress) plates; Vandercook typography press (used) + moveable type; printing rollers and requisite furniture for new items. As year three will focus on disseminating ongoing results, relief and typographic printing as well as photopolymer platemaking will serve both for the needs of the programme of creative research, and also as a means of dissemination itself.

10. ADDITIONAL DOCUMENTATION

A CD with recent visual work, a catalogue essay, and exhibition invitations are attached to this package. They are listed in the Support Material section (pgs. 10 and 10.1) of the SSHRC application document, in addition to a “slide list” for the CD.

NEW SCHOLAR CLASSIFICATION REQUEST

I am currently in the first year of a Tenure-Track appointment at the University of Regina and have never applied to this SSHRC programme. I would like to be considered under the “New Scholar” classification.

