6-26-2017

Hidden WKU: Abstract Photography as a Tool for Discovery

Logan Houchens
Western Kentucky University, loganrhouchens@gmail.com

Follow this and additional works at: http://digitalcommons.wku.edu/stu_hon_theses
Part of the Interdisciplinary Arts and Media Commons, and the Photography Commons

Recommended Citation
http://digitalcommons.wku.edu/stu_hon_theses/686

This Thesis is brought to you for free and open access by TopSCHOLAR®. It has been accepted for inclusion in Honors College Capstone Experience/Thesis Projects by an authorized administrator of TopSCHOLAR®. For more information, please contact topscholar@wku.edu.
HIDDEN WKU: ABSTRACT PHOTOGRAPHY AS A TOOL FOR DISCOVERY

A Capstone Project Presented in Partial Fulfillment
of the Requirements for the Degree Bachelor of Mathematical Economics
with Honors College Graduate Distinction at
Western Kentucky University

By
Logan R. Houchens
May 2017

*****

CE/T Committee:
Dr. Ted Hovet, Committee Chair
Dr. Dale Rigby
Siera Bramschreiber
Copyright by
Logan R. Houchens
2017
DEDICATION

I dedicate this thesis to Nellie. I find comfort in the knowledge that you are always there for me, encouraging me to never give up, and always supporting me in the pursuit of my passions. I will never be able to fully reciprocate the kindness, passion, wisdom, and laughter you have bestowed upon me and my life.
ACKNOWLEDGEMENTS

I am grateful to my project supervisor, Dr. Ted Hovet, for his insightful mentorship, valuable time investment, and guidance that all together allowed me to pursue my passion in a format that forced me to grow, learn, and reflect. It was a pleasure working with you.

I am filled with thanks for my supporting friends, Nellie Inskeep, Kain Kotoucek, Megan Farmer, and Alex Houlton, who all gave persistent encouragement to me over the past four years. You all are truly my family, and I’ll never stop thanking each and every one of you for that.

I would like to give my sincerest thanks to Mr. Zack Ryle, my mentor and friend. Your wisdom and kindness is unlike that of anyone else in my life and I will always be grateful that you have shared those parts of yourself with me.

I would like to express my gratitude to the WKU Honors College for encouraging creative works through the Capstone Program. Additionally, I would like to thank all those Honors College faculty and staff who showed nothing but genuine interest and helpfulness in regards to the project. It is not the name Western Kentucky University that makes this University great, it is great because of those faculty and staff that never stop striving to help their students.

I am highly appreciative of the Gatton Academy for giving me opportunities I could never have imagined in order to get me where I am. Also, I would like to thank those involved with the Gatton Academy Graduates Research and Experiential Learning Award for equipment funding and making this project possible.

I would also like to give my thanks to Dr. Audra Jennings and Dr. Brittany Crowley for guiding me through the process and always keeping a passion for helping students pursue their interests whether it be academically, creatively, or professionally.
VITA

EDUCATION

Western Kentucky University, Bowling Green, KY
  B.S. in Mathematical Economics – Mahurin Honors College Graduate
  Honors Capstone: Hidden WKU: Abstract Photography as a Tool for Discovery
  May 2015

The Carol Martin Gatton Academy of Mathematics and Science in Kentucky at Western Kentucky, Bowling Green, KY
  May 2013

South Oldham High School (SOHS), Crestwood, KY
  May 2011

PROFESSIONAL EXPERIENCE

Logan Houchens Photography
  Owner. Photographer
  June 2013-

The Department of Psychology and Computer Science, WKU
  Research Intern
  Aug. 2013-

The Department of Computer Science, WKU
  Lead Research Intern, Research Project Creator
  May 2014-

AWARDS & HONORS

Gatton Academy Alumni Research and Student Learning Activities Grant, WKU, 2016-2017
Gatton Academy Alumni Tier III Scholarship, WKU, 2015-Present
Gatton Academy Alumni Research and Student Learning Activities Grant, WKU, 2015-2016
Summa Cum Laude Valedictorian, SOHS, June 2015
Graduate with Honors, Gatton Academy, May 2015
Confucius Institute Scholar to China, Summer 2015
Gatton Academy Academic Excellence Scholarship, Gatton Academy/WKU, 2013-2015
Gatton Academy Summer Research/Internship Grant, Gatton Academy May 2014

PROFESSIONAL MEMBERSHIPS & AFFILIATIONS

The International Honor Society in Economics - Omicron Delta Epsilon (ODE)
Kentucky Academy of Science (KAS)
Association for Computing Machinery (ACM)
The International Fraternity of Phi Gamma Delta (FIJI)
INTERNATIONAL EXPERIENCE

Confucius Institute, People’s Republic of China, Nanjing, Beijing China
Chinese Language and Cultural Immersion Program  Summer 2015

Gatton Academy, Harlaxton England
English Traditional Literature and Poetry Course through the Gatton Academy  Summer 2014

Gatton Academy, Rome, Florence, Orvietto, Venice, Assisi Italy
Italian Cultural Immersion Study Away Program through the Gatton Academy  Winter 2014

PRESENTATIONS

The Statistical Impact of Substance abuse on Mental Health in the United States. Poster presented at the 2017 Graduating Economics Majors Conference. Bowling Green, KY.

Hidden WKU: Abstract Photography as a Tool for Discovery. Presented at the 2017WKU REACH Student Research Conference. Bowling Green, KY.

Word Usage between Genders in Social Media. Poster presented at the 2015 WKU Student Research Conference. Bowling Green, KY.

The Effects of Overpopulation in China. Poster presented at the 2014 Gatton Academy Student Research Conference. Bowling Green, KY.
CONTENTS

Dedication ................................................................................................................................. v
Acknowledgements ....................................................................................................................... iv
Vita ................................................................................................................................................... v
Abstract ........................................................................................................................................ 1
Introduction ..................................................................................................................................... 2
Photographic Theory & Themes .................................................................................................... 4
Impact & Conclusion ...................................................................................................................... 24
References ...................................................................................................................................... 28
Appendix A: Image Captions ......................................................................................................... 31
Appendix B: Equipment and Software .......................................................................................... 32
Appendix C: Developmental Notes ............................................................................................... 33
ABSTRACT

As Western Kentucky University has become a larger and more professional international school, its outward appearances have been polished to be more attractive. This creative research project focuses on appreciating the stark contrasts, visual characteristics, and beautifully authentic areas of campus that have persisted through this systematic cleaning. The result is a “reverse showcase” of the university, which aims to appreciate what is not normally considered to be attractive or worthy of attention. This project was created through the medium of abstract photography resulting in a collection of images that focus on unusual textures, colors, and shapes. These images will be used to create an expressive art installation showcasing the difference between the old and the new, the dirty and the clean, and ultimately, the beauty on the surface of WKU’s campus and the beauty that must be discovered.

Keywords: Abstract Photography, Abstraction, Western Kentucky University, Texture
INTRODUCTION

Western Kentucky University (WKU) in Bowling Green, Kentucky, has grown significantly since its founding in 1906 as one of two teacher training institutions for the state. It has seen wide growth not only in the increase of students and majors, but in the size of its campus as well. As the campus has expanded, some areas have been left unfrequented by students as well as unkempt by the University. These areas of campus are unappreciated and undervalued in public awareness and ignored institutionally. This project takes aim at those areas, through the medium of abstract photography, to reveal the hidden value and authenticity held in those areas.

This project presents and describes documents to give locational, historical, and artistic context for these locations. The combination of this information with images provides a valuable missing metric in favor of a group of places that are often championless, unprotected, and unappreciated. Additionally, it provides WKU and its students with this new information about this campus in an easily accessible, understandable, and enjoyable context by using the medium of photography. Finally, it contributes to the subfield of abstract photography by incorporating a significantly large institution (in area and population), for the first time, into its development as an art form.

I created this project in the fall of 2015 simply by asking the question “How can we look at WKU in a new way?” In finding the answer to this, I had to address it in the context of taking advantage of the artistic and creative capacities of both myself as well as the project mentor, Dr. Ted Hovet. Ultimately, I chose photography as the combined most valuable and effective medium not only for ourselves, but also for the public.
The project began with a general focus on what members of WKU, including ourselves, walk by everyday on campus without worry or consideration. That broad focus provided a framework for discovering images that could be appreciated for their artistic value and could be added to the final collection of images. It was important for these images to be unlike those that may be used for marketing and promotion of campus in that we wanted these images to remain in the context of an untraditional look at campus. Those few images that were added to the final collection, were studied to find common underlying features and attributes (discussed in the next section of the paper) that could help narrow the focus of the project. As such, the focus was directed to a more specific selection of abstraction and abstract photography.

I researched the ideas of abstraction and abstract photography to give a more specific direction to the project. This included art movements, key contributors to abstract photography, and methods of abstraction. This was then applied to our beginning focus of the often unappreciated being our target subjects. Together these ideas make up the final form of the project; a new and innovative interpretation of WKU, specifically in the physical campus, through the medium of abstract photography. The result is a collection of digital images that encapsulate a portion of the plentiful authentic and untraditional beauty offered by areas of campus that one may consider unsightly and less valuable.

The project finds its completion through the summative presentation of those images in two forms; one in the form of a physical art installation available to the WKU population, and one in the form of this document. These presentations of subsets of the project are completed in order to pass on the value discovered throughout this project as well as encourage future exploration on this research topic. Ultimately though, this project concludes with the hope that
the steps taken during its exploration do not fade away, and that the value and authenticity of these areas of campus are not forgotten or ignored by WKU and its students.

PHOTOGRAPHIC THEORY & THEMES

In general, abstract photography does not have a definitive or widely accepted definition. For the purpose of this project, I selected particular styles and theories of abstraction that enhanced my goals, while leaving out others. Entire articles are dedicated to purely defining the idea of abstract photography (Chevalier & Callow, 2011; Ekin, 2017) and as such readers are encouraged to refer elsewhere if still unfamiliar following this definition: For the context of this project, abstract photography is any depicted image of an object or place that does not have an immediate connection with its true form, context, or reality. That image, of course, has been created through the medium of photography. Often viewers of an abstract photograph are inquisitive to where and what the subject of the photo is. Abstract photography may involve making a subject unrecognizable or capturing a photo without a traditional subject. In the complete opposite way, a photographer may include a subject but might distort the subject to appear as an entirely unlike object to make an abstract photo (Chevalier & Callow).

Abstraction then, by definition, clashes with realism and many even consider them to be opposite approaches to depicting a subject. Since the invention of photographs, photographers have debated about the role photography should play in the world and whether it should be done using abstract or realist methods. This debate also expands when the value of abstract and realist photography are each put into question. Addressing this is not the focus of this paper and as such the debate is acknowledged, but will not be elaborated on past this point. Instead, we focus on our subject of abstract photography and ask, “Can we improve upon the perceived value of underappreciated areas of campus through the use of abstraction in photography?”
To begin answering that question, I will present a summary collection of photos from the project. Additionally, I will give historical context, locational information, and artistic analyses of a selection of those images. For photographer and title of work information on the following photographs from this project, as well as historical photos that will be used, see Appendix A. Photographs in this document that do not have a name attached are my own. Similar to Appendix A, for more technical details on the equipment and software used for the collection of these photos see Appendix B, which includes a list of those items.

The following images are presented in groupings based on a discernable common subject, characteristic, or theme.

GRIT

Pictured above on the left is Alvin Langdon Coburn’s “Wier's Close – Edinburgh” from the early 20th century when Pictorialism was flourishing (Romanoff, 2016). He was one of the first Pictorialists in the United States and also contributed as a photographer to the few first
completely abstract photos. Pictorialism was a precursor to abstract photography but both were birthed by the same group of photographers. Pictorialism, Ronner says, was a rebellion against traditional techniques in photography through which the images were defined by a more “otherworldly aesthetic. Its artistic approach to the photographic image was the first of its kind, placing emphasis on composition, color, and the photographer's craft” (2015).

The other two photos above, in the middle and on the right, are photos from this project and are pictured alongside Coburn’s image due to their similarity in simple form and diluted composition as well as subject material and color. The middle image is almost entirely the same environment but given newer context than the image from Coburn. The right image although more abstract than the other two expresses its similarities to Coburn’s image defined by the use of high contrast shadows and a very similar dull color. All of the images share a commonality of leading lines as well as abstraction through elimination of detail by using an increased distance from the subject matter. These elements are essential to abstract photography and are all key indicators of its classification. The amalgamation of these elements distorts the image from the actual location itself, which all of these accomplish in varying degrees. These images hold significance in that they provide a different way to look at WKU’s campus; unlike a picture of Cherry Hall’s cupula, these images are not as obviously seen to be from WKU at all.
Pictured above on the left is “Unidentified Staff” by an unknown photographer of individuals painting the outside of the campus building known currently as Florence Schneider Hall. Image 5 is from my project and depicts Douglas-Keen Hall. The resemblance of subject material between the photos can immediately be noticed and, given this information about the origin of Image 4, we can also give a significant specific similarity of WKU to the photos. This is important as it means the value of abstraction on WKU’s campus could be seen by others before so it can then be repeated. Although the image on the left is black and white and has people in it while the project photo does not, it could still be said they have strong similarities of color and subject matter (i.e. windows). Additionally, both find elements of abstraction through the use of pattern and composition as both are framed to incorporate none of its surroundings.

Both photos also incorporate a large degree of minimalism. Minimalism is an artistic style that is defined as having fewer elements to create a piece (Wolf, 2017). They have
embodied this in both images by including very few elements outside of the plain building and windows in patterns. Minimalism is another important element in defining works of abstraction. It embodies the ideas that omitting a part of the information captured by the camera can help make a photo abstract.

**NATURE**

Pictured above is a comparison of two images from the project with one key photo from the abstract movement. Their most obvious commonality of depicting nature is immediately recognizable, and through this shared subject they derive similar pattern and form that comes from the biology of plants, strong colors from the climate, and radiating surrealist aesthetic that may come from the saturation from the sun on the subjects. It is important to note that similarities can also be drawn from my photos above as well as the abstract photo to the field of still-life within the medium of painting. The still-life movement is best exemplified by the simple iconic painting of a bowl of fruit. In these photos as well as still-life paintings we can see the subject being inanimate and commonplace but being manipulated through the medium to conclude as an artistic composition. Finally, it importantly shows a significant difference in post-
processing and editing that has been done between the images from the project versus the comparison images.

The topic of post-processing is not one generally that concerns the field of abstract photography. In fact, it is popular and actually often used to manipulate photographs for abstraction. In this project though, since the idea is to apply abstraction specifically to WKU’s campus in order to contribute, I avoided heavy photo editing in order to keep the context of place. If I did not keep this value of place within the photos, the project would then lose much of its value. Additionally, my photos vary in degrees of abstraction whilst the comparison photos are always key defining images of a multiyear, multinational movement of photographers. Because of these reasons, photos from the project compared to those that exemplify the abstract movement will often tend to have fewer combined numbers of abstract elements than their abstract comparisons. Along those lines, it must then be acknowledged that this project faces its largest challenge as representing the place of WKU through abstraction being perceived as contradictory; but alas the images from the project do combine to make a strong exemplary case against that claim.

PATTERN

Images 9 through 11 incorporate themes of industry, repetitive metallic surfaces, and strong and sharp lines that give them all an abstract nature. Additionally, the pictures share changes of perceived texture of the metallic surfaces they capture. That texture information is lost by, in the case of Image 9, increasing the distance between subject and camera whereas, in the case of Image 10 and 11 the distance between subject and camera is decreased. It is important to note that due to the limitations of equipment for this project, images will focus unevenly in favor of abstraction through a decreased distance instead of through an increased distance.

These images are worthy of mention not only for their abstractive qualities but also for their use of precise framing. To fill the frame with one subject, whether it be small or large, is one element that is usually seen of fine art photography. In fact, the reliance of compositional elements being manipulated any combined carefully is what gives abstract photography most of its argumentative case to be considered fine art. The images above show this very well in their subject and use of texture, pattern, color, and shape.

CYCLICAL

Pictured above Image 12 and 13 both take artistic captures of cyclical structural and geometric patterns of macro level buildings. These pictures, in fact, reaffirm the existence of a
timeline consisting of abstract interpretations where the subject is WKU’s campus as well. Together they contrast slightly but share more than a fair number of descriptive elements. Both use some sort of monochromatic coloration, have distinct circular patterns, have rich and deep geometric contrasts, and leave a very vague idea of recognition to individuals familiar with WKU’s campus. In fact, some individuals might be able to identify Image 12’s subject as the interior of the Diddle Arena and Image 13’s subject as the parking structure known as Parking Structure 1.

Given that these subjects are both areas of campus and both images are abstract together, these photos can combine with the images in the “Building Blocks” section to put abstraction of campus into a valuable historical context. This context is given by both photos drawing from WKU’s campus as the subject over an extended period of time. As such they reflect the change of WKU over time as a small archive-like collection of images. This is important for documenting the changes of campus over time as well as the photographers that are using abstract methods to interpret the campus.

CLOUDS

Image 14. Wolfgang Tillmans

Image 15.
Pictured above are two images depicting interesting cloud formations into an abstract form by eliminating certain key elements and precise framing. The image on the left was photographed by Wolfgang Tillmans, a current leader in the abstract movement, and is actually one of the most popular images by Tillmans. Titled “Lux” it is often included in abstract collections and is considered to be an abstract depiction due to key factors not being included within the image. Those elements or factors of the photo that make the image abstract coincidently coincide perfectly with the image collected during this project and its value as an abstraction.

The elements that define “Lux” as well as Image 15 include the uneven organic shapes, minimized view, rich color sources surrounded by monochromatic white, absence of a distinguishable pattern, lack of any grounded objects, majority prevalence of soft and curved lines, and naturally soft textures (opposed to photographic technique altering the texture to appear as soft). Some of these elements can simply be related back and accredited to the subject material, others can be seen as purposeful and careful composition of the material into an abstract form.

The elements that can simply be attributed to the similar subject material include the uneven organic shapes, a subsection of the color scheme (the monochromatic white), and naturally soft textures of the material. These elements from the subjects provided a simple transition into a piece of photographic abstraction. That transition was comprised of mostly framing the subject. Minimizing the view of the photo while also focusing on and accentuating rich pockets of color, soft and curved lines, and areas without discernable pattern were all techniques used to separate the cloud formations from the location where the photographer was observing. These techniques combined with the naturally more abstract nature of the subject
gives two exemplary images of abstract photography. Additionally, a small note, to many people they may consider a photo of clouds as not being abstract, however, it can easily be defined as such and so cloud photos may possibly be one of the most commonplace depictions of abstract photography especially in social media.

NEGATIVE SPACE

Image 16.  Image 17. Wolfgang Tillmans

In this pair of images the level of abstraction is relatively well matched along with compositional elements that give them a very distinct style. Simple elements are even matched such as the decision to frame their subjects in a vertical frame instead of a horizontal one. Additionally, complex elements and characteristics are also common between the two images such as their shared use of negative space and a purposeful depiction of three-dimensional objects into a very two-dimensional form. That is, negative space being defined as large areas with a lack of a distinguishable object. Negative spaces often can be metaphorically represented
by things like the open sky with no clouds and large areas of a photograph taken up by a pattern less wall. These images have almost shaved down their subjects entirely to their base geometric shapes. In doing so, both images present simple color schemes where a strong background is interrupted by only a few curved shapes. Where they differ is where our image also incorporates sharp lines in our interrupting elements. Both end in very similar abstractions where the subject is broken down to its essential elements. The results are two very similar abstract images.

GEOMETRIC

The above pictures include two originally groundbreaking photos for abstraction in photography (Image 18 and 22) alongside images from the project. Easily seen are the sharp frameworks of lines, metallic and almost mechanical nature of the images. Color is very monochromatic; most are purely black and white or close to such. Geometry seems fluid and sharp in untraditional ways often sticking to a body of the image which loses some information of what the object is. These elements all combine to help define these images as abstract. In fact, Alvin L. Coburn’s Images (18 and 22) helped define the existence of an abstract modernist movement in the art form of photography. They were the first of their kind to gain recognition for creating fine art images without imitating painting (as Pictorialists had adopted) by taking advantage of the medium’s inherent, unique characteristics, especially its ability to achieve definition, even lighting and smooth surfaces (National Gallery of Canada, 2011). In the same way that these photos found significance in their time of publication, they also assist in defining the photos from this project as examples of abstract photography.

PEARCE-FORD TOWER

These images of Pearce-Ford Tower (PFT) serve to further the point made in explanations of the “Cyclical” section and “Building Blocks” section where it is explained that elements of abstraction of WKU’s campus have been seen in the past. Although Image 26 may offer fewer abstract qualities than some, it gives value to the new representations by giving them historical context. This context serves our project by showing the changes of photographic styling in terms of one distinct building of WKU’s campus rather than an area that is less frequented than others. The images also contrast in composition and span a variety of minimized views of PFT that show as we get rid of the negative space (e.g. sky that is surrounding the subject) the composition includes more geometric repetitive pattern. Along with this increase in geometric pattern comes the increase in rigidity of texture. This could be attributed to the fact that the strong lines making up the PFT architecture are becoming a larger and larger portion of the whole image. A common element amongst all three images is a display of a semi-dull color scheme for the building made up of a lackluster red mixed with a neutral grey. That said, different camera settings and developing techniques between the images give the grey a yellowish value to the grey.
These images may, at first glance, appear to be very different, but they do, in fact, share many techniques and elements; the most obvious and readily seen being that they actually depict the same sort of subject. In that way, they both depict abstract images of pipes but both do so in starkly different ways that give the viewer’s initial glance a sense of curiosity. Marjorie Content’s image depicts very much the style for which she is known. Interestingly, she never exhibited her work when she was alive but instead it was appreciated after her death by many critics and collectors (Bunyan, 1931). This work reflects that humbleness she showed during her life, showing a great sense of thought going into the image’s composition. The two images compare and contrast well together, both taking advantage of a vertical framing of their subjects, monochromatic coloring (excluding the background of our image), and sharp curved lines whilst
also remaining geometric with its overall shape. They differ in texture and in theory. Our image gives more organic and gritty texture, whereas Content’s image keeps true more to minimalism and provides a smoother texture of the same sort of subject.

SILHOUETTE

The two images above both draw from purposeful composition to construct images with high contrast between dark and light. In doing so they are losing elements of detail that reveal exactly what the subject is. Both use the absence of color to their artistic advantages without either actually being a black and white image from post-processing or from black and white film. There are differences, however, in the state of their patterns. Both depict organic images straying away from any geometric possibilities, but Tillmans finds a smoother organic depiction. The reason for this can be seen in the examination of the actual subjects in each image. That is, the physical state of matter in the image from the project contrasts with that of Tillmans’. Our photograph depicts the silhouette of a tree on campus against a (mostly) white background and the Tillmans photo depicts ink flowing through water. Then the elements of each subject in the images can be contributed to this, our photo is in a solid state where lines, texture, pattern are
more rigid and concrete. Tillmans’ photo uses a liquid state. The result is one image from one of his most famous series of works, *Freischwimmer* (2004).

**MACRO VS MICRO**

![Image 33. Alvin L. Coburn](image33.jpg)  ![Image 34.](image34.jpg)  ![Image 35.](image35.jpg)

In this section the images’ strongest common element is arguably their structure. Vertical lines are essential to all of the images and their composition. They find their differences most notably in the difference between a macro and micro-level scale of subjects. Coburn (1949, *ArtBlart*) was able to take photos of macro level subjects because of his urban environment; we
must use micro subjects because of our limiting equipment, as well as our location, Bowling Green, Kentucky as it is definitely not an urban center. Instead we must focus on small elements of the urban environment that can be found at WKU in order to create comparable images. Also, it causes an innovative look into the similarities between repetition of rigid pattern in the tree with Coburns image (Image 33). In doing this, we interestingly find we can compare our artistic representations of natural elements to that of artistic representations of man-made elements. Finally, both of our images find their differences to Coburn’s image as they are not as symmetrical, but that occurs because he also used modified lenses and was in a city environment (Wolf, TheArtStory). This limits our ability to simulate certain compositions of subjects that simply are not available to us. Instead, as is done in much of this project, similar elements can be imitated using what subjects we have at hand.
TEXTURES

Image 37. Image 38.


Image 41. Image 42.
Texture is the final section of images that appear to define this project. It includes more original images, and does not include any reference photos for texture because it is the most unique and, arguably then, most important section of photographs from this project. Texture finds itself at the dynamic crossroads of many different abstract ideals and as such they are often very unique combinations of those abstract elements. They still can be described alongside abstract photographs to discern their similar elements, but more importantly they find their value in their uniqueness. Texture is the three-dimensional definition or descriptor of a two-dimensional object (and vice versa). More generally, texture is the feel, appearance, or consistency of a subject as an abstract value. This could be exemplified by describing an image of a knife that is out of focus as soft because the compositional element of subject focus depicted it this way instead of representing it as sharp. Personally, my study of texture has deeply affected my perception in daily life as well as in my photography. Now as I examine any subject its texture is almost always the first thing I notice and it has often made me examine subjects I would not normally pay much attention to. As such, it has become a very integral part of my photography for this project as well as through my own creative pursuits.

Texture also serves as a descriptor of a photograph and is often misunderstood due to its complex nature. As previously mentioned, texture finds itself as a specific intersection of many different elements of photos. If described correctly texture can serve as total descriptions of images. Such texture serves almost as a “fingerprint” for images where some elements may be described between two photos but multiple defined textures of distinct photos will never be fully the same. Additionally, note that reference images are not included for this section because of this reason; if comparing textures to show their abstract elements is the goal we can just as easily include all photos from the project as we could include outside images.
In order to examine these six images representing texture, it makes more sense to define the more prominent common abstract characteristics between the images instead of examining each image individually. To begin, a strong organic pattern can be seen in Images 37, 39, and 41 whereas Images 38, 40, and 42 have more structurally dominant patterns that ultimately ties them to the characteristics of sharp lines, and an elusive form of geometry. The color scheme selection range from heavily monochromatic to deeply rich levels of color depending on the image being viewed in the “Texture” section. The collection of more dull and monochromatic color schemes is comprised of Images 38, 39, and 42. Opposite to this is the deep rich color within Images 37, 40, and 41 (albeit 41 relies upon a semi-monochromatic color scheme that gives depth to the subject). On that subject, emphasized depth in composition within Images 40 and 41 help to transform the two-dimensional, flat photograph into a more abstract illusion of a three-dimensional subject.

An attempt can be made to organize these images into two general texture forms, smooth and unsmooth (i.e. rough, sharp). In doing so, mostly smooth, dominant texture is observed in Image 37 through a glossy even surface combined with its organic pattern of smooth curved lines. It is also observed in Image 41 through the individual stones evenly and consistently weathered appearance which gives softer curves to the stones than their broken and cracked counterparts in Image 39. In fact, Image 39, 38, and 42 are given the classification of sharp, rough, and unsmooth texture due to their sharp erratic lines and geometric patterns. Image 40 is a good example of why dividing textures into exact categories is ultimately not possible, as there exists counterexamples that will always interrupt the process. In our categorical case, we chose smooth and unsmooth as our categories, but Image 40 enters as a hybrid entry into our cases.
Image 40 relies on obscured foci that creates a soft smoothness in texture to an ultimately sharp, and rough texture. The result is a combination of two opposing textures together in an image of only one subject. It is important then to note that no image is inherently one texture or the other, although one classification may be more prominent than another. For example, Image 39 gives an immediate dominant rough and rigid texture as most of the stones of the subject are cracking and crumbling over time; however, the mortar between the rocks has a consistent smooth texture that frames those crumbling rocks. Similarly, Image 37 gives a dominant smooth texture to the photograph, but upon further examination sharp lines can be seen cutting the image into fourths as a grid.

Finally, the last examination of the images from the “Texture” section provides an element of minified view that is seen in all of the images for the section. In the images, view is minified to fill the frame with a subject with strong texture. In this way, each photograph’s composition is deliberately obscuring the object-photograph relationship. In doing so, we are losing a piece of key information for each subject leading to various levels of abstraction. Together these examined elements help to partially define texture in general as well as put texture into the context of our project.

IMPACT & CONCLUSION

From examining the project’s summative photos alongside historic artwork of famous abstractors like Wolfgang Tillmans and Alvin L. Coburn as well as archived campus photography, the project successfully completed its original goal by creating a new and innovative interpretation of WKU’s campus through the medium of abstract photography. This was accomplished by critically examining and analyzing descriptive characteristics of the
project’s summary photos paired with examples of historical abstraction and archived images from WKU’s history. For more insight into the process of how this was done, refer to Appendix C, which provides the detailed notes – in their original form – that were used in the developmental process of this paper. Through that process we found that my project provides a new collection of abstract photographs that give value and artistic relevance to underappreciated areas of campus whilst also being identifiable in historical and artistic context. The collection gives itself value by being a referenceable image catalog piece of WKU history in relation to modern photographic theory. Finally, it is noteworthy that this project also draws value in changes that will happen past this paper’s publishing in the form of this paper’s defense and public art installment presented on WKU’s campus.

Personally, through this project I have gained a new photographic tool and personal artistic interest with abstraction and abstract photography, that is specifically seen in texture that is now one of the main components I focus on for any photograph I make. Similarly, I have seen my own perception of campus become reinvigorated in my final years on the campus. As a result, I was more appreciative of campus whether it be a freshly cut patch of grass in the Colonnades, the expansion to Snell Hall under construction, or the dilapidated wall under Helm Library. I learned to focus more on appreciating the unappreciated, and recognizing the unnoticed beauty that surrounds us. Finally, I have shared the project in small forums and have found that the general claim that art is a universal art form, often holds true and that artistic exploration holds value even though it may not have an easily determined metric.

In a broader form, as previously mentioned, this is the first abstract profile of WKU and also the first focus on specifically those undervalued areas. In this way, it impacts WKU by advocating for promotional material to take up a more abstract approach in order to use these
authentic areas artistically, rather than “hiding” them through non-inclusion. In doing so, WKU would take artistic strides as an institution, contribute to an evolving art form, and give a more authentic representation of the campus to future students. Additionally, this form of abstract representation could be adopted as a valuable teaching tool for WKU’s renowned photojournalism department to its students and possible important future photographic influencers.

This research, just like any other research, provided information but also leaves more questions. Will the authentic areas we described and captured be more appreciated as a result of this study? Is such a nontraditional art form/idea like abstraction digestible enough for a large general population of students, faculty, and staff? Some of this questioning will be, at least in part, answered as a result of the defense of this paper and the art installation created with these images. The defense will give professional and educational insight into the project’s material and process, while the installation will help give a sense of whether the public can understand and enjoy this untraditional medium.

Ideally this research will encourage continued questioning and exploring of untraditional beauty at WKU. Also, after more development of this idea through multiple projects and said new information (content that is derived by allowing photographers to follow their creative impulses in this area) is available, a possible “marriage” of the two beauties on WKU’s campus should be planned for in the future. Giving traditional and nontraditional beauty a close format in which to be compared and contrasted would not only be valuable for the fields of abstraction and realism but also, it will give valuable insight to the WKU population of artistic interpretation of their campus. More research is also needed as limitations existed for this project’s scope and focus. These limitations include varying degrees of abstraction due to the research question
specifically looking to be applied to WKU, constrained time for exploration, and equipment available due to financial constraints.

The hope of this project is not only to explore a subject that has been left relatively untouched, but also to give artistic representation its due diligence. Often times I find myself wishing that projects such as this were more prominent in my academic career. There are always lessons to learn from artistic methods in even the most scientifically stringent and factually tied subjects. To begin exploring ideas and curiosities outside one’s expertise is the first step to gaining new insight and information in one’s own life. I think this was best said by Leonardo da Vinci, “Principles for the Development of a Complete Mind: Study the science of art. Study the art of science. Develop your senses- especially learn how to see. Realize that everything connects to everything else.” (Vinci).
REFERENCES


Coburn, Alvin L. “Wier's Close – Edinburgh.” *Experience the World in All Its Manifestations, Tendresse*, https://s-media-cache-ak0.pinimg.com/736x/6c/5b/5d/6c5b5d1bd78d0af3973ff4571d298361.jpg.


Reynolds, Les. “Pearce-Ford Tower,” *KenCat Online Collections, Kentucky Museum Library Special Collections*, UA1C2.58.2, F1338-2, WKU Archives, Bowling Green, KY.


APPENDIX A: IMAGE CAPTIONS

Image 1. Image by Alvin Langdon Coburn, “Wier's Close – Edinburgh”

Image 4. Image by Unknown, “Unidentified Staff”

Image 7. Image by Wolfgang Tillmans, “View from above”

Image 9. Image by Alvin Langdon Coburn, “Station Roofs”

Image 12. Image by Unknown, “Diddle Arena Interior”


Image 17. Image by Wolfgang Tillmans, “Venus Transit”

Image 18. Image by Alvin Langdon Coburn, “Vortograph”

Image 22. Image by Alvin Langdon Coburn, “Vortograph”

Image 25. Image by Wolfgang Tillmans, “Lignine Duress”


Image 32. Image by Wolfgang Tillmans, untitled

Image 33. Image by Alvin Langdon Coburn, “Vortograph”

If the image number is not mentioned above, it is an original work from this project and information is as follows:

APPENDIX B: EQUIPMENT AND SOFTWARE

EQUIPMENT

Equipment 1. Canon 5D Mark III.

Equipment 2. Sigma 24-70mm f/2.8 IF EX DG HSM AF Standard Zoom Lens for Canon Digital SLR Cameras.

Equipment 3. Canon EF 50mm f/1.8 STM


Equipment 4. Sunpak Quantaray QSX 9502TM Deluxe Tripod

SOFTWARE

Software 1. Adobe Photoshop Lightroom.

Software 2. Apple Photos (iPhotos circa 2016)
APPENDIX C: DEVELOPMENTAL NOTES

Note: At the request of the Committee Chair these notes are included to give insight into the thought process and procedure that goes into the documentation of a creative project. It is included to hopefully give insights about how this project was developed and what information was used to develop the final product you see today.

For Defense:
90 minutes in the Defense Room of HCIC on 4/26 @ 4 pm.
  • Divide the talk into two main sections
    1. Defense Room talk
    2. Installation talk
  • Most of this time will be comprised of questions

For Paper (Ted Talk + Formal Paper Hybrid):

<table>
<thead>
<tr>
<th>Section of Paper</th>
<th>Perspective of Writing</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Generally, 3rd person</td>
<td></td>
</tr>
<tr>
<td>Story</td>
<td>1st person</td>
<td></td>
</tr>
<tr>
<td>Project Overview</td>
<td>Both</td>
<td></td>
</tr>
<tr>
<td>Theory</td>
<td>3rd person</td>
<td></td>
</tr>
<tr>
<td>Themes</td>
<td>Both</td>
<td></td>
</tr>
<tr>
<td>Impact</td>
<td>Both</td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td>Generally, 3rd person but also clear voice</td>
<td></td>
</tr>
</tbody>
</table>

Primary Sources:
A primary source provides direct or firsthand evidence about an event, object, person, or work of art. Primary sources include historical and legal documents, eyewitness accounts, results of experiments, statistical data, pieces of creative writing, audio and video recordings, speeches, and art objects. Interviews

Secondary Sources:
Secondary sources describe, discuss, interpret, comment upon, analyze, evaluate, summarize, and process primary sources.

Visual materials such as maps, photographs, prints, graphic arts, and original art forms can provide insights into how people viewed and/or were viewed the world in which they existed. Manuscripts and archives are primary sources, including business and personal correspondence, diaries and journals, legal and financial documents, photographs, maps, architectural drawings,
objects, oral histories, computer tapes, and video and audio cassettes. Some archival materials are published and available in print or online.

**ALVIN LANGDON COBURN**
- American/British photographer, member of London’s Vorticist group
- Vorticist group defined by refuting the idea that was antithetical to abstraction because it helplessly captures accurate photos of scenes in the real world
- Coburn devised a lens attachment made up of three mirrors, clamped together in a triangle
- poet and Vorticist Ezra Pound coined the term “vortographs” to describe Coburn’s experiments
- Pound went on to criticize these images as lesser expressions than Vorticism paintings, Coburn’s work would remain influential
- Beginning 20th century American photographers loved pictorialism

**WOLFGANG TILLMANS (16 Aug. 1968 – Present)**
http://www.phaidon.com/agenda/art/articles/2014/may/08/ten-questions-for-wolfgang-tillmans/
- German, very important, current contemporary photography influencer
- Emerged in 1990s
- Documented youth, club, and LGBTQ culture
- Expanded to include diaristic photography, large-scale abstraction, and commissioned magazine work.
- “I want the pictures to be working in both directions,” the artist has said. “I accept that they speak about me, and yet at the same time, I want and expect them to function in terms of the viewer and their experience.”
- Captures landscapes, still lifes, portraits etc.,
- Almost obsessive need to self-document, not unlike the work of Nan Goldin and Conceptual artist Mike Kelley.
- Early part of his career in London and currently
- Graduated from the Bournemouth and Poole College of Art and Design
- 2000, Turner Prize, first time photographer and a non-British artist
- Currently lives and works in London.

**MARJORIE CONTENT (1895-1984)**
- American Photographer, Modernist society and art
- Rarely published work, never exhibited
- Works are now collected by collectors and art historians, and Subject of several solo exhibitions
- Metropolitan Museum of Art and the Chrysler Museum of Art
- Subject of several solo exhibitions
- Anecdotally:
- Marjorie Content (1895-1984) was a modest and unpretentious photographer who kept her work largely to herself, never published or exhibited.
- Overshadowed by such close friends as Georgia O’Keefe and Alfred Stieglitz
- Muse and source of encouragement for others
- Discovery of quality and extent of her works gave her recognition after her lifetime.
- Her pictures portray a variety of images including:
  - New York’s frenetic cityscape distilled to essential patterns and rhythms;
• the Southwestern light and heat along with the strength and dignity of the Taos pueblo culture;
• cigarettes and other everyday items arranged in jewel-like compositions.

**SUMMARIES:**

**TEXTURE:**
The feel, appearance, or consistency of a surface or a substance. Textures themselves are patterns, works of art, intentional or otherwise, they surround us.

Bring up the topic of texture last. That is because for most all describing abstract photography and the project we can reference other people and how this relates. For textures it is automatically different. In general, abstract photography that focuses on texture must include either very small distances or very large distances between the lens and the subject being photographed.

**PICTORIALISM**
Photograph invented in 1839
Fine art? Then argued into 20th century
Around 1890 (kodaks popular),
Pictorialists:
soft focus and painstakingly wrought prints
emulate contemporary prints and drawings
chose subjects that underscored the ethereal effects

At that point this was clashing with the general popular celebrate precise and distinctly photographic qualities as virtues.

America and across Atlantic, transition from Pictorialism to modernism, while occasionally blurring the distinction was happening.
Exhibition prints: precious platinum or palladium, or matte surfaces (mimicked those)


**VORTOGRAPH**
intricate patterns of light and line
cascading tiers of crystalline shapes
kaleidoscopic contraption
Pictorialist aesthetic:
pastoral landscapes, foggy street scenes, idealized portraits of women and children, soft focus and gentle lighting, romantic moodiness, achieve painterly effects.

Around the mid-teens, artists such as Stieglitz, Paul Strand and Walker Evans came to reject the notion of photography imitating painting, and instead sought to take advantage of the medium’s inherent, unique characteristics, especially its ability to achieve sharp definition, even lighting
and smooth surfaces. The result was ground-breaking modernist work such as Stieglitz’s Equivalent series, Alvin Langdon Coburn’s Vortograph and Charles Sheeler’s Side of White Barn.

**Rethinking Curating Quotes:**

“Curating is a mode, not a simple question of display…. Curating is always authorial in some way…. At its heart curating for me is not about the display of a work (be that in a gallery, or on the Internet), it is about the development of critical meaning in partnership and discussion with artists and publics.” – Barnaby Drabble

“Museums are inherently conservative. At the same time, they are compelled to be speculative, looking for point of rupture in their collection, in their understanding of what constitutes ‘important art.’” – Matthew Fuller

“The best way to capture the attention of the audience is by showing hospitality, by creating playful and interesting spaces of engagement.” – Josephine Bosma

“Curating … is a political act – many of the decisions made … are a declaration of the curator’s intentions, a message. A way of saying something, sculpting something using context as a palette … [and making] a clear statement.” – Marc Garrett
Citation and Reference info:

**MLA:**

**Citing Images in MLA from Websites**
Creator’s Last name, First name. “Title of the digital image.” *Title of the website*, First name Last name of any contributors, Version (if applicable), Number (if applicable), Publisher, Publication date, URL.

**Structure of a citation for a digital image found on a database in MLA:**
Creator’s last name, first name. “Title of the image.” *Title of the journal or container that the image was found on*, First name Last name of any other contributors responsible for the image, Version of the image (if applicable), Any numbers associated with the image (such as a volume and issue number, if applicable), Publisher, Publication date, Location. *Title of the database or second container*, URL or DOI number.

**Ted Talk Citations in MLA:**
Examples:
- Source: http://libanswers.dominican.edu/a.php?qid=150378

https://bc.instructure.com/courses/1145567/pages/how-to-cite-a-ted-talk

**APA:**

Citing a general WEBSITE in **APA**

**WKU ARCHIVES PHOTO (COLLONADES): WAITING ON PHOTO**


**Probably won’t use this reference:**


**References from the Archive (COMPLETE):**


**Citation for ALVIN LANGDON COBURN (COMPLETED):**

**METAL SCALES**


**MACRO VS MICRO**


**VORTOGRAPHS**


GRIT AND GARAGES
Coburn, Alvin L. “Wier's Close – Edinburgh.”  *Experience the World in All Its Manifestations, Tendresse*, Jan. 2013, https://s-media-cache-ak0.pinimg.com/736x/6c/5b/5d/6c5b5d1bd78d0af3973ff4571d298361.jpg.

**Citation for MARJORIE CONTENT (COMPLETED):**
Marjorie Content (American, 1895-1984)
Steamship Pipes, Paris
Winter 1931


**Citation for WOLFGANG TILLMANS (COMPLETED):**
*Lignine Duress*, Galerie Chantal Crousel, 18 Apr - 23 May 2015

PRESENTATION


NEGATIVE SPACE


CLOUDS
Wolfgang Tillmans
Freischwimmer 93
2004
© Wolfgang Tillmans. Courtesy Galerie Buchholz, Cologne/Berlin

SILHOUETTES

Citation for Rethinking Curating (COMPLETE):

If you want to learn more about Alvin Coburn:
https://www.moma.org/artists/1164?locale=en


Representing place within the university whilst also trying to use abstraction is almost contradictory

Those Historical Influencers then need to be connected with our project as they are brought up. So,

- Wolfgang Tillmans (clean and clear abstractor traditionally) – use the clouds, negative space, presentation, and silhouettes examples.
- Alvin Langdon Coburn (Pictorialism ~ abstraction) – use metal scales and garage/grit examples.
- Marjorie Content (Steamship Pipes aka very simple photo) – use pipe example.

Go into the characteristics of abstract photos in influencers examples then mix with photos from the project as well as WKU history and Photo Theory. (PFT, Industrial/mechanical, plain/grid/generic, and colonnade examples)

Close examination of a small selection with a large variety of the photos. (That will hopefully be accomplished by now and with only one thing left

Varying degrees of abstraction

Then, Texture. does not have references because it is unique like a fingerprint.
Note: Keep discussion focusing in on micro and macro in waves
Art is a universal art form; photography is included in this and its popularity can be seen everywhere through social media platforms building themselves around it.
Impact & Conclusion
I got a new way of looking at the world after textures project focus

Appreciate the smaller unnoticed beauty around us. Conclusion to the project itself.

Installation and defense is the final part. How I have changed (change of mindset and I can graduate and go out into the world with that). Fantastic appreciation of campus as well as the world I get to explore throughout my life. Include talking about photojournalism majors

The conclusion restates the problem the paper addresses and can offer areas for further research.

LIMITATIONS
Organic pattern: 37, 39, 41
Structural pattern: 38, 40, 42
Tied to dominant sharp and geometric lines because of pattern: 38, 40, 42
Rich color: 37, 40, and 41 (albeit semi-monochromatic color is relied upon to give the subjects, the rocks, deep shadows that frame each one)
More dull monochromatic color schemes: 38, 39, 42
Emphasized depth in composition within images 40, 41 in order to transform two-dimensional, flat photograph into an abstract illusion of a three-dimensional subject.
Smooth texture: 37, 41
Sharp and rough texture: 38, 39, 42
Both: 40 due to the obscured foci it creates a soft smoothness in texture to an ultimately sharp, and rough texture. The result is a combination of two opposing textures together in an image of only one subject. It is important to note that no image is inherently one texture or the other, although one classification may be more prominent than another. For example, Image 39 gives an immediate dominant rough and rigid texture as most of the stones of the subject are cracking and crumbling over time, however, the mortar between the rocks has a consistent smooth texture that frames those crumbling rocks. Similarly, Image 37 gives a dominant smooth texture to the photograph, but upon further examination sharp lines can be seen cutting the image into fourths as a grid.
In all the view is minified to fill the frame with a subject with strong texture, in each photographs composition like this they are each deliberately obscuring the object-photograph relationship.

**Descriptors:** elusive, abstract, particular, creative, thorough, inextricably, tied, specific, carefully, extensive, concrete, two-dimensional, three-dimensional, flat, abstraction, additional, close, increasingly, strong, monochromatic, expected, deliberate, rotational, separate, rich, geometric, surreal, recognizable, graphical, fundamental, dominant, impressionistic, black, avant-garde

(The **avant-garde** (from French, "advance guard" or "vanguard", literally "foreguard") are people or works that are experimental, radical, or unorthodox, with respect to art, culture, and society.)

**Things:** nature, misconceptions, perspective, framework, thought process, impulses, forever, instances, information, object-photograph relationship, subject and image, aerial photography, world, process, details, creation, production, structure, movement, shapes, qualities, distinction, elements, manner, arc, edges
Verbs: perpetuate, eliminated, leaving, deemphasize, facilitate, process, accentuates, emerge, alter, radiate, puncture

content of lines, shapes, patterns, texture, color, rhythm, and structure. strong lines, texture, color, shape, or form, skin texture, color, depth, form, line, texture, color, shape, patterns, rhythm, concrete, subject, composition, strong lines, texture, color, shape, or form,

Interruptions: albeit

“Abstraction does not eliminate. You eliminate with composition”

black and white, leaving the color information behind, = layer of abstraction view is minified

Abstraction by Isolation, or Elimination

Breakdown into (basics of): color, patterns, and lines.

content of lines, shapes, patterns, texture, color, rhythm, and structure. strong lines, texture, color, shape, or form, skin texture, color, depth, form, line, texture, color, shape, patterns, rhythm, concrete, subject, composition, strong lines, texture, color, shape, or form,

Abstraction by Decreasing the Distance
Abstraction by Increasing the Distance

Abstraction by Alteration
Keep these links as they go to content I use:

- **Introduction to Abstract Photography Article**
  https://petapixel.com/2017/03/20/introduction-abstract-photography/
  - Citation:

- **What is Abstract Photography? Article**
  - Citation:

- **Pictorialism: The Movement that Birthed Modern Photography Article**
  - Citation:

- **How Ansel Adams Wrote Pictorialism Out of Photography History Article**
  https://petapixel.com/2016/09/22/ansel-adams-wrote-pictorialism-photography-history/
  - Citation:

Implications of the study:

- the questions that have been resolved – a new and innovative interpretation of WKU, specifically in the physical campus, through the medium of abstract photography. Hypotheses verification (explained, supported and defended with results).
- any useful teaching/learning implications the paper may indicate –
  a. how I personally changed: appreciation of campus, new perspective of things after texture
  b. More generally; appreciate the smaller unnoticed beauty around us.
  c. Art is a universal art form; photography is included in this and its popularity can be seen everywhere through social media platforms building themselves around it.
- Innovations & contribution of the study to new developments –
  a. first large scale abstract profile of the university
  b. first large scale focus on these undervalued areas
c. Push for WKU to take up a more abstract approach in order to use these authentic areas artistically rather than just not including them in promotional material “hiding”
d. Include talking about photojournalism majors,

the questions that have been raised, and notes – will the authentic areas we described and captured be more appreciated as a result of this study? Is such a nontraditional artform/idea like abstraction digestible enough for a large population of students?

Hypotheses verification (explained, supported and defended with results)
• the suggestions for further research –
  a. continued questioning and exploring of untraditional beauty at wku
  b. a possible “marriage” of the two beauties somehow
• conflicting results, unexpected findings and discrepancies/comparison with other research
  a. varying degrees of abstraction
• a brief statement on the limitations of the project –
  a. time
  b. equipment
  c. the research question at hand in itself is constricting

Conclusion to the project itself
• Art Installment
• This paper

EXAMPLE HUMANITIES CONCLUSION:
From examining Drown’s, Allen’s, and Crozier and Henderson’s handbooks in light of nineteenth century agricultural history, I can say that science and education seem to have had a strong influence on how and why these handbooks were written. The authors’ ethos is created by how they align themselves as farmers with science and education either by supporting or by criticizing them. Regardless of their stance, the authors needed to create an ethos to gain an audience, and they did this by including tables of information, illustrations of animals and buildings, reasons for educational reform, and pieces of advice to young farmers in their texts. It would be interesting to see if other farming handbooks of the same century also convey a similar ethos concerning science and education in agriculture. Recovering more handbooks in this way could lead to a better,
more complete understanding of farming education, science’s role in farming and education, and perhaps even an understanding of the rhetoric of farming handbooks in the nineteenth century.