Title: Taking Photos v. Making Photos: Teaching Photography with the View Camera
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Summary: A professor in the Department of Design uses old world tools to introduce his students to the formal, technical, and conceptual challenges of contemporary photography.

Background:

Picture making, as opposed to picture taking, refers to the practice of making photographs with intention and forethought. It is rooted in the notion that a photographer is an active participant in the image-making process rather than a passive witness. This distinction is crucial for students in KU's Photography and Media Design program, as it encourages active and engaged roles as makers and requires a full understanding and mastery of the tools and visual language of photography.

To help students learn the fundamentals of photography and the difference between "taking pictures" and "making pictures," I designed and developed PHMD 201: View Camera, a photography course focused on the view camera, one of the oldest and simplest photography devices. The rudimentary nature of the view camera forces a slowed process of careful consideration, visualization, and clear intention while facilitating a deep understanding of the mechanical and optical principles integral to the medium of photography, all of which lay a solid foundation for developing thoughtful and engaged picture makers.

I offered PHMD 201: Photography I: View Camera in Fall 2013 as a new addition to the photography major. One of the reasons for incorporating it into the curriculum during the sophomore year of the major was to test students technically, mentally, and physically so that they developed the fundamental skills and knowledge needed to become thoughtful photographers as they progressed through the major. During Fall 2013, 13 students took View Camera, and the course met two days a week for three hours. The classroom was an active learning environment where students worked to master the tools of photography, such as the view camera, light meter, photo scanner, and developer.

The course objectives for PHMD 201 are:

1. Understand and apply the mechanics of a view camera in terms of optics, focal plane, and perspective control.
2. Properly expose and optimally process black and white sheet film for digital scanning.
3. Produce quality, mural-sized ink jet prints.
4. Critically discuss and critique view-camera photography in terms of its formal and conceptual merit.
5. Utilize and apply this understanding towards contemporary conceptual, commercial, illustrative, expressive, and other communicative pursuits.

While drafting a total revamp of the Photo Media (PHMD) major curriculum in 2011, my colleague, Travis Shaffer, and I discussed the potential of the view camera as a teaching tool and

agreed to incorporate it into the new curriculum. PHMD 201 was first offered to upper-level Photo Media majors as a special topic in the Fall of 2012 (PHMD 560: Special Topics in Photo Media: View Camera). Offering View Camera as a 500-level course, an optional segment of our students' academic careers, allowed me time to gather documentation and student feedback on the course's strengths before integrating it with the major curriculum, which was the ultimate goal.

Following this successful test section of View Camera (as PHMD 560) in Fall 2012, I offered PHMD 201: Photography I: View Camera the following fall. There was no significant difference between the two courses; PHMD 560 was not adapted to a sophomore student audience. One question I had going into the Fall 2013 offering of PHMD 201 was whether sophomore-level students would perform as well as junior- and senior-level students had in a course that was originally designed for the 500 level.

Implementation:

What makes this course redesign project unique is that PHMD 201 was originally designed as PHMD 560. When the course was relisted as PHMD 201, I didn't redesign it or teach it differently. The sole difference was where students took the course in the larger arch of the major. Following the initial offering of PHMD 560 I was very happy with the course design, because it was clear from my students' photographs and their reflections on the course that they had learned a lot, including how to make great photos.

In order to master the view camera, a photographer must be technically astute and in total control of his or her tools. He or she must understand:

- the reciprocal relationship between time and intensity that results in proper exposure;
- how proper exposure and precise development are crucial for digitizing film;
- how focal length is tied to perspective and vantage point;
- how the plane of critical focus (focal plane) is malleable, specific, and completely under their control through choice of lens, camera-to-subject distance, aperture, and camera movements.

Additionally, students are expected to demonstrate solid and repeatable digital post-production and inkjet printing skills. All of these skills are directly transferable to the greater photography arena. As the student reflections indicated, additional skills developed through use of the view camera include attention to detail, patience, and perseverance.

The Perspective Control (Correct for Converging Lines) and Plane of Focus assignments are both about high levels of specific imaging control. For the Perspective Control assignment, students correct for the optical phenomenon that renders parallel lines (in architecture, for example) as convergent when the camera is tilted up or down from center. Students must understand the way in which space is rendered when converted from a three-dimensional space to the two-dimensional plane of photography, and they must understand how to correct for it.

For the Plane of Focus assignment, students are asked to intentionally skew the plane of critical focus (normally, a plane parallel to the plane of the lens and film/image sensor) along a diagonal or even perpendicular plane. An example is swinging critical focus along the entire length of a white picket fence that is receding into space.

Both of these assignments emphasize the idea that pictures are constructed and that all aspects of how a photograph is rendered are the sum result of the photographer's choices. As such, these formal decisions ought to be made with purpose and intent. Though a lot of cameras do not have this level of control, the attention to detail, sensibility, and intentionality carry forward with the photographer.

As students move forward in the course, the assignments become less technical (skill-driven) and more conceptual (idea-driven or theory-driven). The Constructed Narrative assignment, for

example, asks students to skillfully distill a complex narrative into a single, stand-alone image. The photograph must be completely orchestrated by the student, it must utilize the resolving power of the view camera (every detail matters), and it must tell a complex story in a single frame.

It is expected that students progressively apply the technical skills learned in each assignment. For example, from the Perspective Control assignment onward, all photographs must contain square and parallel lines. From the Plane of Focus assignment onward, all photographs must contain specifically placed focal planes as dictated by the image. The visual astuteness developed in early assignments is evident in the later assignments through clean, organized visual space, true and parallel lines, and intentionally placed focus.

A note about rubrics: To accelerate grading and to provide consistent guidelines across assignments, I use the same rubric categories for all assignments in the View Camera course. In other words, my criteria for evaluating photography are consistent across assignments but the weight of each component of the rubric shifts along with the specific criteria for each assignment. The rubric category of Craft is concerned with the physical object and the craftsmanship of the maker. Technology/Tools focuses on application of technology, tools, and software with precision and control. Form is concerned with sensitivity to and consideration of the visual elements. Concept assesses clear, expressive meaning. The Following Directions category is self-explanatory.

Student Work:

The student work featured in this section shows the consistency with which the rubric works across two different assignments while also demonstrating that students from PHMD 201 were capable of meeting the same standards met by students in PHMD 560.

Plane of Focus

For the Plane of Focus assignment, the rubric is weighted as follows: Craft: 10%, Technology/Tools: 40%, Form: 30%, Concept: 10%, and Following Directions: 10%. This assignment, being primarily focused on use of the view camera as a tool, is heavily weighted toward Technology/Tools. As such, in the examples below I primarily discuss and evaluate that component of the rubric.

PHMD 560: Special Topic: View Camera

Exemplary Example
This photograph demonstrates that the student fully understands the assignment, as the focal plane has been tilted from the vertical axis (parallel to the lens plane) to a horizontal axis (perpendicular to the lens plane). In doing so, the entire field is in sharp focus, as are the house and trees in the far distance. This is accomplished even with a relatively wide aperture, which produces a relatively shallow depth-of-field. The resulting photograph leads the viewer through the picture, along the field and to the structures near the back. The student was not awarded Exemplary for Technology/Tools because the resulting plane of focus isn't entirely horizontal, but it is incredibly close.

Below Standards Example
This photograph does not demonstrate understanding of the assignment goals. The focal plane has not been tilted to the horizontal axis nor is it swung to a defined vertical diagonal, but rather the focal plane is cutting through the scene in an arbitrary and imprecise fashion. An acceptable answer would render the entire horizon in sharp focus along the entire length of the trail from near to far.

PHMD 201: Photography I: View Camera

Exemplary Example
This photograph demonstrates that the student fully understands the assignment, as the focal plane has been swung from a plane parallel to the lens plane to one slicing through the scene diagonally (along the receding fence line). This was accomplished with remarkable precision. The entire row of posts is sharp, with the focus quickly going soft to the left and right of the fence line.

Below Standards Example

This photograph does not demonstrate understanding of the assignment goals. The focal plane has not been tilted to the horizontal axis nor is it swung to a defined vertical diagonal, but rather the focal plane is cutting through the scene in an arbitrary and imprecise fashion. An acceptable answer would render the entire wall (top to bottom) in sharp focus along the entire length of the wall from near to far.

Regarding differences and similarities between student work from the two courses, I would say they are visually indistinguishable. It is not overly apparent which photographs are made by the sophomore-level class versus those made by the senior-level class. The assignment sheets and guidelines were essentially the same. This demonstrates that lower-level students are more than capable of producing work of the same technical caliber as the upper-level students.

Constructed Narrative

For the Constructed Narrative assignment, the rubric is weighted as follows: Craft: 10%, Technology/Tools: 20%, Form: 20%, Concept: 40%, and Following Directions: 10%. As mentioned above, Craft is mostly concerned with the physical object and the craftsmanship of the maker. Technology/Tools focuses on application of technology, tools, and software with precision and control. Form is concerned with sensitivity to and consideration of the visual elements. Concept assesses clear, expressive meaning. Following directions is self-explanatory.

Since it is primarily focused on orchestrating a complex "staged" photographic tableau that utilizes the inherent narrative potential of every square inch of the frame, this assignment is heavily weighted toward concept. As such, in the examples below, I primarily discuss and evaluate that component of the rubric.

PHMD 560: Special Topic: View Camera

<u>Exemplary Example</u>
This photograph is successful in terms of the assignment in that the student photographed an event he/she completely orchestrated, exploited the resolving power of the view camera (many small and crucial details throughout), and told a complex story in a single frame. Additionally (as defined in the rubric), the intent is clearly communicated, the idea is original and inventive, and it represents "time well spent" for the maker and the viewer – there is a reward for the viewer's efforts.

<u>Below Standards Example</u>
This photograph is not successful in reaching the goals of the assignment. The student photographed an event he/she orchestrated, but the event is unclear and ambiguous. The picture does not make use of the resolving power of the view camera (there are no crucial details), and there seems to be no complex or distilled story.

PHMD 201: Photography I: View Camera

Exemplary Example
This photograph is successful in terms of the assignment in that the student photographed an event he/she completely orchestrated, exploited the resolving power of the view camera (many small and crucial details throughout), and he/she told a complex story in a single frame. Additionally (as defined in the rubric), the intent is clearly communicated, the idea is original and inventive, and it represents "time well spent" for the maker and the viewer – there is a reward for the viewer's efforts.

Below Standards Example
This photograph is not successful in reaching the goals of the assignment. The student photographed an event he/she orchestrated, but the event is unclear and ambiguous. The picture does not make use of the resolving power of the view camera (there are no crucial details), and there seems to be no complex or distilled story.

Regarding conceptual differences and similarities between the work from the two courses, both have examples of successful work at the same level. As a whole, there may have been fewer Exemplary photographs in the 201 course because younger, less experienced students have less developed photographic concepts. Also, there are more technical problems evident in the work from the 201 course. Again, I chalk this up to inexperience and the notion that, when I required greater conceptual complexity, younger students may have compensated for their greater conceptual effort by slacking on tools, technology, and craft.

Nonetheless, students at both levels performed the required tasks adequately. The beginning students were able to overcome the steep learning curve (complex and heavy tools, chemical development, digital scanning, inkjet printing) and embrace the working method of the view camera on par with the more advanced students from the previous year. However, still new to photography, the lower-level students initially struggled more with camera basics, like exposure and development. At the same time, the rigor of the tool and the coursework enabled them to identify and overcome these early setbacks.

Offering the course as an upper-level elective before integrating it into the PHMD major curriculum allowed me to gauge student interest in using a view camera, gave me time to implement the necessary facilities changes, and gave me space to reflect and work through kinks in the course materials and to document outcomes based on student photographs and writing.

Student Reflections

One tool I used to decide whether the PHMD 560 course design should become the new PHMD 201 was reflective writing. Part way through the Fall 2012 semester, as I was becoming more sure that was a good decision, I began to assign discussion board prompts to my students that addressed the following questions:

Reflection 1: What did you know about the view camera when you enrolled in this course? Why, do you think, would we offer a view camera class in this day and age?

PHMD 560 Responses
PHMD 201 Responses

Reflection 2: Has your time with a view camera affected your view of the early practitioners of the photographic medium? How so?

PHMD 560 Responses
PHMD 201 Responses

Reflection 3: (Response to reading—see linked documents.)

PHMD 560 Responses
PHMD 201 Responses

Reflection 4: (Lengthy, multi-part prompt—see linked documents.)

PHMD 560 Responses
PHMD 201 Responses

Reflection 5: How might you distinguish from an insignificant ordinary moment and a significant ordinary moment? What makes the moment worth sharing? What is the value in making photographs with a view camera that don't look like they were made with a view camera?

PHMD 560 Responses
PHMD 201 Responses

Reflection 6: After using a view camera for a semester, what is the single most significant thing (if anything) you will take with you when you leave this class? Has using this tool had a lasting impact on you as a photographer and how?

PHMD 560 Responses
PHMD 201 Responses

These prompts invited students to reflect on why they chose to learn to use the view camera and on what skills/knowledge they gained from it that might be useful, even in an age of digital photography. Student reflections from PHMD 560 were overwhelmingly positive, confirming that teaching View Camera as PHMD 201 was a good decision.

Reflections:

After offering two View Camera sections, one at the 500 level and one at the 200 level, it is evident to me that beginning students can rise to the challenge and master this enduring tool. The students at both levels performed the required tasks adequately. The beginning students were able to overcome the steep learning curve (complex and heavy tools, chemical development, digital scanning, inkjet printing) and embrace the working method of the view camera on par with the more advanced students from the previous year. However, still new to photography, the lower-level students initially struggled more with camera basics, like exposure and development. At the same time, the rigor of the tool and the coursework enabled them to overcome these early setbacks, to the point that they developed an appreciation for the view camera as a historic way of making photos and also as an art form.

One notable difference that stemmed from changing an elective into a required course was a shift in attitude. The students taking the course as an elective did so on their own free will and as a result, seemed more motivated and engaged with the coursework. Conversely, the students that were required to take view camera as part of the curriculum were less motivated and excited about the coursework. Instead of wanting to be there, they had to be there, though they did seem to recognize the ways the view camera helped them learn.

Student reflections suggest that both beginning and upper-level students benefitted from the course and felt it was crucial to their development as a photographer, although the true impact of the view camera was hard to measure quantitatively. One assumption I make in offering this course has always been that what students learn from using the view camera will benefit them in subsequent courses, that they will leave more technically and visually proficient, and that they will demonstrate attention to detail and strong work ethic in their future work.

As I move forward, I do not see the technical component of the course changing much. Based on conversations with my colleague Daniel Coburn, who is teaching our first cohort of view-camera-trained students in PHMD 202: Photography II, these students are demonstrating technical proficiency and formal astuteness, and they are producing well-crafted work using digital cameras.

Where students continue to need development is in their choices of content. Balancing the technical with the conceptual is often a major concern in photography courses. You truly cannot have one without the other, yet when we get preoccupied with one the other often suffers. I will address this in the next iteration of the course by putting increased emphasis on the “concept” portion of the assignment rubric. I will compress the technical assignments and introduce more conceptually heavy assignments—we know how to do it, but why, and what are we doing with it? To address these questions I will introduce class readings and essays, which are typical in most of my other courses.