

CINEMATOGRAPHA

Alia Syed

Babette Mangolte

Betzy Bromberg

Deborah Stratman

Malena Szlam

Margaret Salmon

Peggy Ahwesh

Rhea Storr

Rose Lowder

Excessio

**Secession
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Rose Lowder
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This publication is made in response to an exhibition I made for Secession, Vienna, in spring 2023.

I use the word *response* as this is an *action book*. A call to action? Maybe. An invitation to action? Yes! But also, an *observation* of action, in this case creative labour and the ways that some women use and think about their tools.

It is a dream book! One that I have longed for and feel extremely lucky to have had the chance to realise.

Why? In my lifetime, cine cameras have been privileged tools and history-writing a privileged occupation. Who decides what is filmed or historicised? And what worldview might it/they serve? This is a big question for this time, *all* times, as we push for greater intersectional visibility and historical recognition of the contributions of those who do not possess, and have never possessed, power.

So then, *Cinematographa* is also a *recognitioning*; one that sets out to archive the analogue technique and experiences of its accomplished contributors. Why analogue cameras and moving-image experimentation on film? Because women artists have always used these cameras, but their technical knowledge and camerawork has rarely been considered.

Why me? Because I love and work with cine cameras and also have technical knowledge and experience to share. The show I made for Secession is called *Monument*. Perhaps this book is a monument too; to the analogue motion picture camera, to sister *cinematographas*.

On these pages, through a fixed set of technical questions and answers, we learn about each woman's camerawork and, often, their creative philosophy and intentions. With the exception of Alia Syed, whom I met in Glasgow for a conversation, all of the women featured were given the same parameters: to reply to the questions that relate to them and to suggest a question, if one comes to mind.

Some of the questions are leading, I know ... Margaret, what do you mean by your worst *mistake*?! Mistake is a complicated word in teaching, and in life, as we all know that mistakes are usually helpful and often innovative. Can the word evolve? I don't know; but I do know that sometimes I screw up, and—well—the film comes out un-usable. This phenomenon is interesting

(if financially painful!) because it indicates a certain risk in working with film, which might make you concentrate and focus in a beneficial way on the task at hand. And talking about what went wrong can be helpful to others.

I'm not going to write a sweeping statement about the women questioned. This is a feminist enquiry and I am a feminist filmmaker, yes; but I've not asked them about politics or about how being a woman, let alone a person of colour, queer, a mother, working class, or any other identity(ies) might have shaped their working lives. My intention here is to listen and learn from their answers about cameras, about working on film, about cinematography and experimentation with analogue processes.

A number of years ago I made a feature-length work on 35mm film. I was nervous about it, as I'd not had much experience with the format. I thought that if I saw images of women working with cameras, I might be able to better visualise myself doing it too. There weren't many available at the time, but what I found gave me courage. Photographs of people at work give power; representations, both documentary and illustrative, can communicate possibility and potentiality for marginalised bodies. Each woman in this collection is seen and considered 'at work', engrossed in doing and making, attached to her camera.

Cultural amnesia and invisibilization are powerful tools in repressive societies; books, archives and written recollections, as ever, can push back against the algorithmic, politicised morphing of experience and collective memory. I'm happy this research is shared both in print and as a free access pdf, as this connects to my own interest in straddling technologies and materials and the denial of a uniform regressive neoliberal logic.

Whichever way you come to this text,
you are very welcome.

Margaret Salmon

Cinematographa required a great deal of goodwill and labour. Helpers, contributors, advocates, guides and loves are listed here, but not all of those who support those supporters.

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Margaret Salmon: Where did you learn how to use an analogue motion picture camera?

Alia Syed: At art school, during my first degree at the University of East London. I really loved the cameras. I thought they were beautiful objects. And I thought, “Oh, I could learn how to use this.”

MS: So it's the camera itself that appealed to you?

AS: Yes, I liked the mechanics of the camera, the logic. I think the one that we would've been shown first would have been a Bolex.

MS: A wind up clockwork?

AS: Yes. We were given rolls of black and white film. We lived on the fifth floor of a flat in South East London. I remember it was snowing, and the snow was ebbing around below. I think that's the first thing I filmed. I was fascinated by the patterns.

I was quite involved in various political movements, like The Miners' Strike, and thought it would be a better medium than painting. But then as soon as I started to use the camera, I became immersed by all of the formal things that were going on.

MS: And did you work on your own mostly with the camera?

AS: There was no need for anyone else.

MS: And did you make any mistakes? Did you have any disasters when you started?

AS: Probably, I wouldn't have thought of them as disasters because it was an experiment. I mean my dad was a physicist.

I remember he showed me how to fix my radio; we took the radio apart and we resoldered all the bits together. I remember looking at the circuits. Or whenever he was doing his car I would be helping him. I think my relationship with mechanics stems from this: I didn't really have any ... what's that word?

MS: Expectations?

AS: Yeah. We were shown how to use the light meter, load the camera, and how to focus. We weren't told to do or not to do anything else, we were given quite a free hand, and there wasn't that expense attached to it, it was free. We could hand develop the film in developing tanks in the dark room. There was also a contact printer, and then they got a processor ...

MS: And what was the culture around learning? Because it was in an art school, was it fairly diverse with a range of different people using it from different backgrounds?

AS: I studied within a fine art context, which meant you learnt “through doing” and finding a personal way through a medium, your concerns, and areas of interest. I'm hesitant to use the term “idea” as this implies a certainty, and often the thing you are interrogating is a feeling. This feeling is at the forefront of the learning process, which is as much about questioning and reflecting on what emerges out of grappling with your medium as it is about analysing. It was not necessarily about objective learning. It's important to feel comfortable with not knowing, which in many ways goes against what we might expect in relation to learning about filmmaking equipment. I think the film department balanced this complexity well on the whole.

I think it's also important that it was a polytechnic in East London, so in many ways it wasn't a first choice college, but it was rich in terms of class diversity, with students from working-class backgrounds. The student body was mainly female and white, and our lecturers were mainly male (all white). Although within the film department there were more women

teaching than in other departments—filmmakers like Jayne Parker and Alison Winkle had a strong presence. It would be true to say that universities feel more diverse in terms of ethnicity these days, but I think privatisation and the commodification of education has come at a huge price, both in terms of knowledge as a commodity and in terms of supplying an education to an international elite. And the global majority is still acutely underrepresented in the workforce of universities. Until there is a fair representation of lecturers from non-white backgrounds teaching curriculums that do not centre on the western canons, our education systems are going to continue to perpetuate colonial myths and western exceptionalism.

MS: And you said that your interest in film also crossed over with your interest in political movements of that time. Did you find you started applying some of those skills to your political activities?

AS: Not really, but politics is also about analysing the world. The questions raised within the film department were political: What does it mean to represent something/somebody? The politics of the department overlapped and informed my own political thinking. I didn't make the work that I thought I was going to make.

MS: Right.

AS: I didn't make a documentary about the miners or about Greenham Common, or any of those things.

MS: Your politics filtered through in a different way.

AS: Yeah.

MS: I'll get back to my questions! In your experience, what would you say is the best analogue, or what would you say is a *good* analogue camera for beginners to learn with?

AS: Well, I think a Bolex is quite good because you can see the mechanics easily and it's easy to load. But the thing I don't like about the Bolex is that it's difficult to see through the viewfinder. You can do lots of things with a Bolex, like stop frame animation. In this mode you can control exposure time; you can rewind the film in the camera so you can superimpose, but it's quite cumbersome. They say it was designed as a handheld camera, but I don't think it's that ergonomic. I like the SR2 also.

MS: Yeah, it balances on your shoulder, unlike the Bolex ...

AS: Yeah, it does. I don't really think there is such a thing as the best camera. I'm more inclined to think what camera is suitable for a specific task, or location.

MS: Yes, that's a good answer. So well, that leads me into the next question. How do you choose the equipment and the format?

AS: Essentially it's usually what is available, what can I lay my hands on. I'll adapt accordingly. There have been situations when I've chosen exactly the wrong camera, and then realised it's not working. But I think after you have chosen your camera, you learn about the possibilities and also the constraints—I think constraint is more interesting.

How do you want to work within those constraints? Between you, the camera and the subject you are filming there is a dialogue; some of your concerns are answered, many are not; some answers come back to you as questions. If that dialogue is something you can take forward, then that's the right camera. The other thing about the Bolex is if you are using the wind up mechanism, the length of each individual shot is only 30 ft, is it?

MS: Yes, it's just like 30 seconds. It imposes a rhythm.

AS: Yeah, it imposes a rhythm that gets carried on into the edit. When I made *Fatima's Letter* I used a wind up camera.

MS: Ah, okay. I was going to ask about *Fatima's Letter*.

AS: In *Fatima's Letter* the length of the shots forms the aesthetic, but I also did quite a lot of reprinting and optical printing. With optical printing you can extend the length of the shot. I used a Bolex to make *Eating Grass*, but then I had a time-lapse motor. I could shoot longer takes. Sorry, what was the question?

MS: Oh, it was, how do you choose your equipment and format? Did you ever work in Super 8 or 35 or 70?

AS: Oh, I didn't like Super 8 because it was too fiddly. I liked the fact that 16mm was big enough to handle and didn't feel too fragile. And I really loved working on a Steenbeck; I've still got my own Steenbeck. But now, because of how everything has progressed, I have a Super 16 Bolex, and I am interested in working in 35mm because of the sound, and also it's cheaper now than printing onto 16mm. I only started to use video very, very late on, only relatively recently. And I never did still photography; I just went straight into 16mm.

MS: There's a kind of purity in that, that's quite nice.

AS: Yeah, I suppose so, I haven't thought about it like that. And I mean I didn't ever feel limited by that medium. I mean there are so many conversations that I still haven't had.

MS: It's a very versatile format.

AS: Yeah, I think so.

MS: Because I think with scans now, sometimes 16mm on a very fine grain film can look like 35mm. But then you can also play with it so that it looks as grainy or as unrefined as Super 8 at times.

AS: Yeah, yeah, yeah. You can go either way with it.

MS: It's very flexible.

AS: Yeah. Yeah.

MS: You mentioned some of the additional gear that you use, like with *Eating Grass* and the time-lapse motor. But in general do you like using a handheld or a tripod?

AS: I prefer handheld. But then if I'm shooting handheld, I find my situation and I make myself as comfortable as possible. I'm usually stationary. I don't wander around with the camera filming on the go!

MS: And do you use a shoulder mount or a pistol grip or something to help? Or do you just hold it?

AS: I just hold it because I'm used to doing that. But then, I mean, I do use a tripod now, but I suppose historically I've just handheld. *Fatima's Letter* was all handheld, *Eating Grass* because its time lapse was on a tripod, and then for *Priya* I worked with Noski Deville. With Noski, working out the shot was a lot to do with the lack of the correct equipment because it was unaffordable. And all of these limitations inform the shot. If we'd had the "correct" gear to suspend the camera from the ceiling, certain things wouldn't have happened. When we suspended the camera from the ceiling, we suspended it with a rope, then we twirled the camera up, and then let the camera go. When the camera reached its lowest point, the weight of the camera made it spring back in the opposite direction.

MS: Oh really? Wow. What camera was that?

AS: Oh, I don't remember what that was.

MS: That's quite a bold move, must have been tied really well!

AS: Yeah, it must have been.

MS: Do you have any photographs of that?

AS: No.

MS: What? No!

AS: I'll have to ask Noski. No, we didn't think of things like that back then, we were just caught up in the activity.

MS: Yeah, amazing ... And how did you set focus for that? Was it just measuring the distance?

AS: Yeah. I don't know how we did it. Because we were working with a dancer we shot a lot of footage. Noski did have a grip, and somebody who now is a camera operator, Emma. But the only thing that I used was this one shot.

MS: Must have been really exciting to see it when it came.

AS: Yeah, yeah. Yeah.

MS: Because nobody was looking through the camera really.

AS: No, no. Nobody was looking through the camera. It was all just set up.

MS: Yes. It was purely mechanical.

AS: Yeah, that's true. I really can't remember. And we haven't had conversations about it since. I don't know that she would remember either.

MS: So do you have Bolex?

AS: Yeah, I've got a Bolex.

MS: ... And it's your preferred camera?

AS: Well, it's not my preferred camera; it's the camera that I've got.

MS: Yes. Yeah.

AS: And I do love it. But I would like to have an Arri SR2 or something, because it's easier to use 400 ft rolls. But I'm used to it. I mean I have a relationship with it, so I shouldn't say bad things about it. Definitely don't ever badmouth your piece of equipment, your camera might sense something's afoot!

MS: Yes! Do you feel a kind of spiritual connection, maybe not spiritual ... but do you find that you have a personal connection to that particular piece of equipment?

AS: Yeah, I think if it is going to work, whatever piece of equipment you are using, you have to develop a relationship with it. Spiritual may be taking it a bit far. But there is a form of care and attentiveness that is really, really important. Which is why it's really important to clean the camera. Actually, you might end up making the camera more dirty—which is one thing that I always tell people—but checking all the springs and taking the pressure plate out, all of those rituals, is time spent communing.

When they showed us the video cameras I couldn't see the mechanics of how they worked, which is one of the reasons why I gravitated towards 16mm. The thing that I hate about digital technology is that everything is hidden.

MS: Yeah.

AS: With digital work often that amount of care isn't taken. I think especially when people are learning, that element of care is really important.

MS: Attention.

AS: Yeah.

MS: Yes, and a sort of proximity.

AS: Yeah.

MS: Are you interested at all in lenses?

AS: Not really.

MS: Is there a kind of focal length that you tend to lean towards?

AS: No. I mean I'm not a cinematographer in that way. But actually, yes, I like short focus. I don't like having a big depth of field. I'm not so interested in panoramic views. If it is a panoramic view, then the notion of how we view, how you are situating the viewer in relation to what they're looking at, needs to be problematised in some way. If you have a short focus it's more about the feeling. It's about how little you can see. The thing I'm least interested in is being able to identify the subject through a direct reference.

MS: And do you have a preference for a particular filming set-up? Do you prefer to work alone or do you like to have someone with you?

AS: Well, so both of my most recent experiences have actually been disasters. One summer, I was staring at some wood pigeons in my garden. They were feeding off a mulberry tree and were so concentrated in this activity that at one point they were hanging upside down. They grazed in this manner for quite some time before losing balance. The following summer, I attempted to film them and camped out in my back garden and waited. When they did eventually come, every time I triggered the Bolex camera the sound made them fly away. I got an extension cable but they still flew away. It was so much of a disaster that I didn't bother to get it processed for a very long time. I have recently been thinking that maybe the right camera is a digital camera, because it's silent. I'm not saying that

I am going to work on it digitally, but definitely what I was doing didn't work at all. And then, the second thing I recently started to use was a large format still camera, a Linhof Technikardan, which I love. Again, it was just plants in my garden. So I hired the camera. I had to get used to the image being upside down ... so many things that I had to familiarise myself with, and I realised I had to work in a different time frame. After each mistake I made, I thought I'm not going to make that mistake again. Eventually I thought, "Right, I've worked out the process and I feel relatively confident." And then I got everything back and only two frames came out! But I suppose I could now direct someone and explain what I am aiming at. I feel that somebody needs to guide me.

MS: Yeah, with large format cameras, there are little things that can go wrong that then have a big impact. Sometimes it's great to have a camera assistant, someone who can load film and you set the frame.

AS: Emma, who helped me on *Wallpaper*, she was very good. I like camera assistants.

MS: Yes. Yeah. The extra set of hands is quite nice.

AS: Especially if they quietly get on with the job, and everything is set up so you don't have to worry about anything. I think that's really important. Now I don't go out on my own. I feel I need to have someone who's supporting me, even if they're not doing anything.

MS: Yeah. Well, just to have someone help carry some of the gear or to watch your back, when you're in the street.

AS: I don't always do my own camerawork, I'll choose people because of what I know about their practice, but also it's about the relationship you have with that person.

MS: Yeah. I think it's also finding a person who has good energy.

AS: Yeah.

MS: It's great if that can be connected with someone who's also really technical, but even just to have good energy and a bit of assistance, it's really ideal.

AS: Yeah, yeah, yeah.

MS: But do you think that, if we use these kinds of industry terms like director, cinematographer or whatever, that you're directing through the camera, through using the camera? Is this different from when you worked with a camera operator and let go of that role?

AS: That's quite a complicated question. I think that if you're working with someone else you have to let them do what they want to a certain extent.

MS: Are you having a dialogue with yourself, as both an artist/director and the cameraperson, when you operate the camera? Or is it just a fluid expressive thing?

AS: I think it's more fluid, and I don't really think about directing because I don't really believe in directing. Not that I don't direct, again, going back to this notion of creating a space and a parameter that you both then operate within, as opposed to, "I want this shot."

MS: Yes.

AS: That for me is when the relationship is good.

MS: So within those parameters. One of them would be the roles you play, if you are using the camera and that's your task.

AS: If I'm working with someone. Like now I'm working with Luke Fowler, a fellow artist. I don't know if he describes himself as a cinematographer, but he obviously knows what he's doing. And so I'll say, "This is interesting, that's beautiful, let's film that." And then he'll film. But I don't look through the camera all of the time, because it is also about him finding the shot as well. Even when I'm filming myself, I don't always like everything I film. When I was working with Nick Gordon Smith on *Meta Incognita Missive II*, we were working in very extreme weather conditions on the Thames Estuary near Foulness Island—the landscape dictated what we could do and what we could not do. I wanted his gaze. I was working with what he saw and then reinterpreting it through the editing process, that's how it became my work. But I am someone who really likes to film my own material, although actually I think most of the time images are very problematic. So I'm an anti-image image person.

MS: Sounds dynamic. Do you have a favourite film stock?

AS: I always use 50D. Kodak 50D, that's my favourite. And then, yeah, 250 is okay. The slower the stock the better.

MS: Yes, so the look of a finer grain detail. And did you have a mentor? Whatever that means! Or was it more about your peers or your own journey?

AS: It's just my own journey. I don't know that I had a mentor. I mean I had good teachers, so I suppose they were my mentors. But not an ongoing relationship, not really, I don't think so.

MS: For beginners or people just approaching working in analogue film, is there any advice or any sort of motto that you apply to your own process that has been useful?

AS: Well I suppose, on the one hand, don't be too precious, but also be attentive. When things don't work out how you want them too, think about why but also concentrate on what has

worked. Because maybe what you thought you wanted is not actually what is needed, maybe what you've got is actually better. I suppose that would be my roundabout motto.

MS: Yeah, it's a good one. Were there other filmmakers that you admired or camera work that you would've seen? In the Film-Makers' Co-op for instance ... there must have been moments of becoming quite excited by seeing the work of others.

AS: There've been many. I saw a lot of films, not only experimental films, but independent films and mainstream films. I don't really distinguish. So wait, to be provocative, one of my favourite films is *Terminator One*. I really like the work of the Taviani Brothers, and I like Mani Kaul who was influenced by the Italian neorealists. I like the way Kaul's realism includes a spiritual/magical landscape, he extends a notion of realism that maybe is not included within the western canon, which sort of contradicts what I say about my focal length and stuff. But I suppose what I appreciate is not necessarily what I do.

MS: Yes, yeah. That's a really valid and interesting point, that you're not necessarily drawn to watching the same films that you're drawn to making, per se.

AS: I actually think that that's quite important, it is about expanding the space. Somebody I used to like a lot is Hal Hartley. I liked the quirkiness of some of the American indie filmmakers. I find that if I'm looking at work that is not so near to me, that engagement articulates what I want to do better. The conversations I have in my head when I'm watching a piece of mainstream work are very different to the ones I have when I am watching experimental work.

MS: But it's not either or.

AS: Yes.

MS: Yes, yeah. It's more of a whole ecology. Yeah, I'm the same. It's good to have different systems, different nutrients coming in.

AS: Yeah. I think so. Yeah. You can't just all have vitamin C.

MS: And you would've. I mean, it seemed like there was also a time in Britain when the potential of that ecology being really supported, activated and distributed, was quite real and exciting.

AS: Historically, the London Film-Makers' Co-op was unique in that artists/filmmakers were prioritised in relation to who was given employment, but also the LFMC distributed our own films. And through that, it created spaces and a wider dialogue resulting in publications like *Undercut*. There is a really good quote, which I will look up, that also goes back to your question about teaching.

"We are in search of the artistic practice which situates itself between art as poetic (the effacement of knowledge) and art as knowledge (the effacement of the poetic). It is this productive tension which we hope to address."
Mission statement, *Undercut* issue 1.

That was the thing about the London Film-Makers' Co-op, there was a group of people who actually gave you quite a hard time. You were engaged in so many debates about how you were to make your film, how we as makers construct meaning. How are we inviting people to look? What is it that's going on in relation between me and the image? I've said this before, it expanded how I was thinking about my work. It made me think about my work in a different way, and that was very important to me.

MS: And it seems so much of that critique and theory of film was also filtered through an attention to process and the mechanics of film itself. Because it was grounded in this base that was a lab.

AS: Yeah, yeah, yeah. The workshop was a laboratory.

MS: In all senses.

AS: Yeah.

MS: And did they have cameras they rented out?

AS: Yeah, so we had cameras that we rented out. We had a couple of Bolexes, and we had an Arri SR2. I really like the Arri BL, because I like the weight of it, which reminds me of the Linhof camera I've been using. It's got a really strong presence, and I love the lenses that you get for that camera. I love the whole clarity of the viewfinder. With cameras like the BL or Linhof, those heavy-duty cameras tell you what to do, how to move, to act in a certain way ... then you'll have an argument with the camera.

MS: Camera wins.

AS: Camera wins. But you are situated by the camera, and I think that's interesting.

MS: I want to ask you also a bit more about *Fatima's Letter*. You were filming with the clockwork Bolex?

AS: Yes.

MS: In various places across London?

AS: Yeah. And, you weren't allowed to use a tripod.

MS: So that was handheld and people would've heard the motor, or was it kind of noisy?

AS: Not really, because it's so noisy.

MS: And how do you feel working on the street? I think there's a particular quality about street filmmaking that's very different from still photography.

AS: When I was filming at New Cross Gate and Whitechapel train station, I knew those locations like the back of my hand. I engaged in those environments until I knew all the ramifications of those spaces: how the light works, what are the rhythms of the people in that space, etc. So it's about getting to know that space before you start filming.

Sometimes it might be good to take a camera with you, but not necessarily. It's important to acquaint yourself with the environment—I sometimes do this by taking lots of sound recordings.

MS: What I'm interested in with street filmmaking is that you can't just click and go, you're spending time.

AS: Yeah. You become part of the architecture of that street, so that people know that, "Oh, Margaret's going to be here at two o'clock every afternoon." And then you become like part of the furniture. So because your presence is there so much, it becomes, or almost becomes neutralised—neutralised is probably the wrong term.

MS: Becomes familiar.

AS: Yes your presence becomes familiar.

MS: Yeah. Yes. I'm always struck by how attractive the Bolex is and how fascinated people are by the camera.

AS: Because people are interested in the camera. Yeah.

MS: Yeah, it becomes a kind of, I don't know, a sort of presence or a gift to everyone.

AS: Yeah, it is, that's a very poignant way of putting it—beautiful.

MS: Thanks! What was your process with shooting that film? Did you shoot and then watch?

AS: Yeah, especially with my early work. So I'd shoot it, process it myself, and then look. It was a very privileged situation to be in, because there are not many places where you can do that now.

MS: Yeah. I think artists are finding different solutions for streamlining their process.

AS: Some people get Russian tanks to develop their things now.

MS: Yeah, there's a huge interest in home processing.

AS: Home processing, I think is actually probably the way to go. But actually I wouldn't do it again in that way. You can't. But I mean I would, I think that that's a really good thing to do. I remember if something was originated on Super 8, we would project the print onto the wall and re-film it either digitally or onto 16mm maybe. There's all these intermediate things that you can do that will help the process—make it more viable financially.

MS: I also like though that space of having time after filming to forget about the filming before.

AS: Yes. No I think that's really important actually, because yeah, with video you film something and then you see it automatically, and maybe that's not the right time to make those decisions. Maybe the immediacy is counterproductive.

MS: I really like that space where I can just switch off one part of my role and approach the next one.

AS: Yeah.

MS: Well, that's almost an hour there, so I'm going to save that. But was there anything else that you'd like to add?

AS: No, that's fine.

Alia Syed was born in Swansea, Wales and she splits her time between London and Glasgow. She has been making experimental films in Britain for over 30 years. Her work has been shown extensively in cinemas and galleries around the world. She is interested in how subjectivities are produced through culture, diaspora and location. Her work interrogates the protean nature of self-narration, enfolding fact and fiction, present and past, how histories are made and unmade.

She was shortlisted for the 2015 Jarman Award. In 2018 she exhibited in *Delirium Equilibrium* at Kiran Nadar Museum of Art, New Delhi. She was Artist in Focus at Courtisane Festival Gent 2019 in Belgium and her latest film *Meta Incognita* was shown as part of *Migrating Worlds: The Art of the Moving Image in Britain* at the Yale Centre for British Art, New Haven, Connecticut from 3rd October to 29th December 2019, and most recently was part of *(Im)material worlds: Tracing creative practice, histories and environmental contexts in artists' moving image from Southeast Asia and UK*. The first monograph devoted to Alia Syed's work, "Alia Syed: Imprints, Documents, Fictions" (ed. María Palacios Cruz), published by Courtisane Festival was launched in 2023 in collaboration with Open City Documentary Festival. www.cahiers.courtisane.be/product/alia-syed-imprints-documents-fictions.



BM shooting CHANTAL AKERMAN in MANGOLTE'S *The Camera: Je, or La Caméra I* © 1976 Epp Kotkas

Where did you learn to use an analogue motion picture camera?

I started to learn how to process Plus X and Tri X film on my own in Spring 1963, as I was preparing myself to go to film school in Fall 1964, but in Fall 1963, I had to pass a written exam to be able to get in.

I was received in second position for the two film schools that existed then, IDHEC and Vaugirard. But at the interview, IDHEC refused me for the Cinematography section telling me that there were no women in the field, but I didn't believe them and went to the other school, *École Nationale de la Photographie et de la Cinématographie*, with also a section for sound recording. My section in cinematography was often working with people from the sound department. I wanted less to learn camera techniques than how to make great images and be original in my composition, and what attracted me were fictional stories, lighting and camera movements.

So I felt that knowing the chemistry used by film labs to process film was very important, and I could do that on my own just by shooting still images, so I bought the cheapest 35mm reflex still camera, made in East Germany at the time, and bought the chemistry made by Kodak at Odeon Photo on the Boulevard Saint-Michel. As a student at the Sorbonne studying Mathematics, I was at ease in a technical field although I was both an avid reader of novels and a film buff, seeing 4 to 6 films every day, mostly in the Latin Quarter and at the French Cinematheque. I went to free lectures discussing films, which happened thanks to the French Government that paid film scholars to do presentations on important films and placing them in their historical contexts. I went there around 1962, and that was also a reason to change my studies from Mathematics to filmmaking between 1962 and 1964.

I could write about film, and what I was seeing in all the

films from the silent era and sound era were dominated by visual images with interesting compositions, which were influenced by 19th and 20th century photography as well as painting. I had been well educated by my parents as an adolescent, going to museums as well as the theater (TNP at the Palais de Chaillot, where I saw the photographs of Agnès Varda in the lobby). I also saw many productions of the Jean-Louis Barrault-Madeleine Renaud Theater Company, and went to Latin Quarter productions of Samuel Beckett, directed by Roger Blin, and *The Maids* by Jean Genet.

That skill of being a darkroom assistant was useful when I got to New York in late 1970s, as there I felt there were plenty of subjects to photograph and working in a darkroom didn't require any English, which I could barely speak when I arrived. So that was useful, as I did make some money processing films and printing images for friends when I had my own lab.

What is the best analogue camera for a beginner to learn with and why?

For me, an Arriflex S in 16mm and in 35mm (made in West Germany). They have a registration pin, so the film is more stable when exposed than whatever you shoot with Éclair 16mm, nicknamed Coutant, which was tested in 1962 by the DP Pierre Lhomme, when he shot *Le Joli Mai* by Chris Marker—a documentary shot in the streets of Paris where people were asked what they thought about happiness in May 1962. I saw the film in the movie theaters in the Latin Quarter in 1963. Later he was the Godfather at our Promotion at the ENPC, section 1964–1966.

When I arrived in Fall 1964 at the ENPC, I discovered that the school had only 35mm cameras for students to use, and those 35mm cameras were old Pathé ones (some from the 1920s or 1930s). But for me, I could not afford to shoot 35mm to make my first-year film, so I bought a 16mm Camera Pathé Webó; although I never thought owning a camera made sense, except maybe as I could then practice shooting a longer film

with more locations, and use duration shots as well as edited sequences. I could afford the film and the processing, and if I shot reversal film, I could see my image, which was great.

How do/did you choose your photochemical equipment/format?

I always felt the best lab was the best choice, even if it cost more than other ones, and I learned how to speak to the lab personnel who were processing my film—I got exposure learning from them.

During the summer of 1965, in the vacation time between our first and second year at the ENPC film school, I spent 6 weeks as an intern in every department at LTC. It was the best lab back then, doing all the most important films produced in France, and a good deal of some other European countries as well (co-production between France and Italy, or France/UK and Italy, were current and could be processed in France rather than in Italy). For my own film I could only afford 16mm, but I knew if I was good in 16mm, then I really would have an easier time with 35mm—because of the negative image in 35mm being 4 times bigger than in 16mm—so I tried to master what I could afford (which was only 16mm).

Is there a grip item that you find/found very helpful to have? (Pistol grip, etc.)

I systematically rent everything needed to have as much choice as possible in terms of tripods, like High-hats, Baby legs, and standard legs with the best fluid head tripod for the camera I am using, and if I can be in an indoor location, I also rent an Elemack or a dolly. You cannot use a dolly outdoors; that implies legitimate production, and without attracting police attention regarding filming permits and insurance for your shoot in the US, which I could not always afford, so on the streets of New York I often shot handheld like an amateur.

I love handheld work, as you can improvise more easily.

In general, I do not use anything other than my arm muscles, but it depends on the camera. With the Coutant I always rented a body brace, but the Arriflex S has a handle grip that you use with your right hand, and you can use your index finger to focus, as I often work alone without an AC and just an untrained friend as PA to help secure the equipment. I can shoot on my own, with my right hand controlling the focus and my left hand on the bottom of the camera, so it is actually the best system when you are in a vehicle in motion, seated in front of the wind shield, which I used a lot in those 1970s films I shot on New York streets.

Do/did you have a favorite camera?

The Series Arriflexes, both 16mm and 35mm sync sound, are my favorite cameras because of the registration pin. I like the quality of the Zeiss lenses I worked with on these cameras, and for me lenses are more important than cameras in securing a good image. I favor prime lenses. I shoot about 85 to 90% of all shots with prime lenses and the rest with a zoom. Best zooms, again, were Zeiss, and I could only afford them in the 1980s.

There are always some needs for a zoom telephoto high end, specifically if you are outdoors and have vista shots to do.

Do/did you have a favorite lens?

I am traditional and use a normal lens, the one that gives about what your eyes see in terms of perspective, with the 50mm named “normal lens.” And I prefer the 85mm for portraits. I am very much influenced by Robert Bresson’s strategy of thinking about editing while shooting, and needing a reason to do a cut and a shift of angle inside a scene.

Although, I love Stanley Kubrick’s films, and he is a frequent user of wide-angle lenses—it’s connected with the panoramic format that Kubrick used in many of his films, starting with *The Killing*. I don’t use many wide-angle lenses but I could do it at some point for a specific reason.

What is/was your preferred crew set-up (or no set-up!)?

I have mostly shot with a skeleton crew on my own films (being economical as a producer-director of my films that I always shoot and edit myself), but enjoy working with a large crew which I have done mostly as a director of photography.

I only shot two of my films totally on my own, with no crew, shooting film emulsions: the first one was in 1979 and is *There? Where?* The film makes fun of the maze of freeways in California, with me learning how to drive, so I needed somebody to drive me while I was shooting handheld, seated in the car and focusing on where a driver looks when he has to turn, or change lanes, which I was learning at the time. As usual, I edit what I shoot knowing which sound I am going to use and write the voice-overs, finishing the rough cut of my film, which was 10 minutes. The second film was also shot in California, not far from where I was ten years before, but then I knew a lot more about the landscape all over the US, and knowing what you can shoot is so important in filming a good documentary situation about real estate construction in California.

The second film was *Visible Cities*, for which all the footage was shot during weekends over two winters, so some of the construction work started in 1990 on the locations was completed and for sale by 1991. In 1990 I had huge debts and couldn't even afford an assistant. But shooting with an Arriflex S, I managed well with just a tripod for the first winter, just looking at the topology of the land (a radius of about 2 ½ miles only). I spent the time seeing how I could have tracking shots done with a car, as indeed Southern California is a car culture. So the second winter I hired a car driver to do my tracking shots, which I had rehearsed with my own car, and could film my tracking shot seated on the dashboard and able to turn 90 degrees while shooting, to go from one side of the road to the other. After spending time editing my MOS footage, I finally hired a great musician that was also a sound recordist. We went to the locations where I had shot during the winter, with two actresses

who were looking at the landscape, heard and then seen in the last scene, which I shot with an Arriflex SR 16mm. This allowed me to shoot sync sound in this last scene of the film. So I only had a mini crew at the end of filming, with one sound recordist with boom, my two actresses and me.

I always use a good sound recordist, although I know how to record sound and could record ambient sounds on my own, but I bought good microphones only when I started to shoot video. And the only film where I did everything on my own as far as recording is concerned, image and sound (including ambient sound), in three different countries, was *Les Modèles de Pickpocket*. I worked alone on the part I shot in France and in Austria, where the household I was shooting at spoke French, English and German, and I understand some German but can't speak it well. However for shooting in Mexico City, I wanted to take buses and public transportation, and visit the famous market, so I hired a Spanish to English translator.

I must say the fact I was alone without a crew for that film, devoted to the memories of the cast of Robert Bresson directing them in his film *Pickpocket* in summer 1959, was a real advantage because I was more intimate with the people I was listening to, as I avoided asking questions. So my presence was not felt in the final edit of the film, which is what I wanted.

Do/did you have any ongoing relationships with focus pullers or ACs?

I have had very important relationships with the camera assistants whom I have often trained from scratch. My first AC was Elliot Kaplan, who I met in 1973, and was my assistant till 1976 when he went to work for Merce Cunningham—for whom he shot and directed several of Cunningham's early films, after his first media specialist Charles Atlas had left the company to go to Europe.

My second and most important AC was Mark Daniels, who was just a grip on a film I shot for Richard Foreman titled *Strong Medicine*, shot in 1980 in Super 16mm, to then be blown up to a

35mm release print. So I learned a lot about timing and working with the lab to make a great 35mm dupe negative.

I made several close friends during that long shoot (about 8 to 10 weeks I think). It was during the summer of 1978 in New York, in a hotel that was closed and in which Richard could build several sets, in various places throughout the hotel, while we were shooting in another dressed location.

The main location was in a huge ballroom, which took a week to equip, with lights on the ceiling that were transformed with a grid, which made my life a lot easier as so many scenes were shot in that main location. I adored that shoot, as there were so many of the best theater actors of the very inventive New York theater scene of the late 1960s–1970s. I knew most of them having photographed some in their productions.

The production became well known and I was contacted to join the NY Union of Cinematographers as a DP, but I wanted to move to more full-time filmmaking and less DP work. So although I enjoyed the work of lighting great actor's faces and the adventure of a large crew, I felt directing was more my calling and something I wanted to do at least for a while. My bare-bones shooting strategies to do it all myself was not compatible with being in a union that imposes rules, and forces you to take work you do not want.

Do/did you load your own film?

How does/did this influence your process?

I can do everything on any camera, or after new training if the camera is unknown to me, so I love to learn on new machines, but as stated before, for me the work is composition and contrast, and matching lights in a scene. So I am particularly protective of my series of light meters (incident light reading with Spectra and spot metering for checking distances), and I use contrast filters to train my eyes to see what a black and white film will record. I also have two contrast filters for color negative film during the day and at night.

I must say my technical skills are essential to my process,

as I think about what I can do, what I have not yet done, and deciding what to do next, as at heart I am an experimentalist.

What film stock do/did you use the most?

The first two films I shot for Yvonne Rainer as a DP, in the US, were shot in 16mm Reversal Plus X, and Tri X Reversal as inter-titles had to be added after editing. But for all my films, I have only shot with B&W and color negative film.

I must say I shot Chantal Akerman's *La Chambre* on Kodachrome, which was reversal color film, and I am sorry I didn't shoot more in Kodachrome. The fact Kodak scrapped their production of Kodachrome is beyond me, as it was a great stock with very durable color and no fading (unlike negative color film by Kodak that was developed later).

Do/did you own your own film camera?

What model/format is/was it?

I had bought a 16mm film camera in film school, but the camera was stolen in a Paris movie theater in 1965 when I was still in film school. I didn't purchase another 16mm camera (a Beaulieu) until 1975, because I was going on an extensive trip by bus to see the American West, and I was interested in shooting some moving images but also had my Nikon still cameras with me and some lenses.

I always rented cameras for specific shoots, because just buying an Arriflex S made no sense—if I had to shoot sync sound I needed something else. A 16mm sync sound, with not always good lenses, cost at least \$60,000 in early 1972. And I had been in New York for almost two years and felt New York had to be filmed.

I felt that I could take so many shots in one weekend for one day's rental, using a camera fit for the shoot I was making, then shooting Friday night till Monday morning when I had to return the equipment (after shooting at least 30 minutes of footage). As I planned my shoots very carefully, I could get at least

10 to 15 minutes of edited material for a long weekend job, and I was interested in doing feature work, so shooting in short bursts suited me. It meant I could better prepare all my shots with a minimal crew, sometimes an AC and sometimes just a production assistant with no training.

I had time to dress my set, which I often borrowed from friends who were leaving for a week on business or on vacation, and let me use their place for free.

What is the best mistake you made whilst shooting on an analogue camera?

I am sure I made many mistakes in so many years of practice, but I don't dwell on it except to learn to not repeat them. I am an optimist, and I think learning to forgive yourself, as well as others, is the best recipe to be happier in an activity that is highly stressful, if you constantly think you don't add up. But I always feel that I will manage in spite of problems.

What is your favorite special effect that an analogue camera can do?

One of the reasons I like the Arriflex S camera is that you can shoot both forward and reverse, either with an exposure, or just not exposing anything in reverse motion until you are ready to shoot forward again on the same roll or magazine. You can expose twice on the same piece of film, and with some timing and footage counter precision, you can film a protagonist falling asleep, then half waking up and moving away from his body while still asleep.

I love those effects, although I never used them in any of my films, for the odd quality of evoking something magical in a simple scene. You get inspired by looking at Georges Méliès' early films, where he uses multiple exposures with his head ending up as notes on a partition. Obviously Méliès was shooting in 35mm so he could stop the camera, after putting his head in a black bag, to make his head disappear; and the

throwing of his head on a partition was done in the second shot that he could repeat. So I was explaining all this to my students and they loved it.

But now, having discovered digital video first, students have a hard time understanding the materiality of film emulsions. The movie labs' rules and their variable services, and even shipping, is unknown to most students as the only thing they know is ordering from Amazon.

How do/did you meter light on a shoot? What is your preferred light meter?

I use Spectra for incident light reading, which I use to decide my f-stop. I take notes of my light meter readings when I shoot a scene, in case the next day, after looking at the rushes, we have to go back to the previous set to reshoot a take that is needed. I can then match my contrast and f-stop with my notes from the day before. Never trust a continuity person—who understands prop placement and actor's positions but certainly not much about lights.

I also use a 1 degree spot meter, mostly used at a distance during the day and also at night.

Do/did you ever use filters? If so, for what?

I always try to find color filters when I shoot black and white film, as it is so important to use these filters to separate various colors that reproduce, like red and green for instance that are often transformed in the same medium gray (although the two colors are so different).

I also use Polaroid filters and neutral density as well as color correction filters.

On occasion, I rent fog filters or other specialist filters like star filters.

Tripod—friend or foe?

I always rent all the different sizes of legs for the best fluid head, but I also shoot handheld. With a background of buildings with many vertical lines, shooting handheld is tricky and only possible if your camera also moves with a tracking shot, so I often shot handheld from a car.

Do/did you have a mentor or teacher in cinematography that influenced your development?

Yes and I was lucky. I met this mentor because he gave me a first prize for a film that I had shot with two other students, in my second year at school. He was head of the jury in Greece, and the film was made by two Greeks and myself. Bizarrely, he was living very near me, so I knocked on his door to see if he would talk to me. He invited me in and trained me as an assistant editor, which he needed then, so I learned a lot about editing just after finishing film school, and not getting to be hired as an AC.

His name was Marcel Hanoun, and he was a filmmaker who also shot his own movies and produced his narrative films with a small crew, like the one you have for a documentary (4 to 5 people maximum). He knew that I wanted to become a cinematographer, and he trained me as an AC and to do the lights when he was rehearsing with actors. So I learned a lot because the crew was so small. In 1968, the opportunity to make movies gave me a job as an assistant on four of his feature films. The first one took a week to shoot for a 90-minute film. I felt that we could manage by being organized. The principal actor was Michael Lonsdale, mostly a theater actor back then but I had seen him in Marguerite Duras' *Détruire, dit-elle*, a film about psychoanalysis that was very interesting.

What useful insight did you learn in your technical training?

I learned that lenses are more important than cameras, and same for microphones—their placement in relation to the sound source is more important than the recorder.

I must say I was always good at geometry, and the visualization of space is very important to understand when shooting.

How do/did you approach the camerawork? Do/did you prefer to operate it yourself or do you have others operate it?

I much prefer to operate the camera, as well as lighting the set, but in Europe, unions don't allow you to be both DP and camera operator. For me, it's much better if I combine the two positions, because I understand better the connections between lights and camera movements, and the two activities have to be synchronized.

Whose camerawork do you admire?

I admire mostly filmmakers like Ridley Scott and Gus Van Sant, as well as John Ford, and in France in the past Jean Renoir, Max Ophüls, and now Jacques Audiard. But I am very tuned to classical cinema and also inspired by experimental filmmakers like Maya Deren (*Meshes in the Afternoon*, and her dance films), Michael Snow (*Wavelength*) and Buster Keaton. I am very stunned by silent cinema that is so visually rich. I feel F. W. Murnau and G. W. Pabst were extraordinary in their choice of cinematographers, like Karl Freund, and Jean Vigo with *À propos de Nice*, *Zéro de conduite* and *L'Atalante* with his cameraman Boris Kaufman, the brother of another great cameraman/filmmaker Dziga Vertov (*Man with a Movie Camera*).

The list is just too long. I have a particular fondness for the dolly shots in Vincente Minnelli's films, Georges Cukor's films, and the clarity of John Ford's simplicity and directness.

What is your advice to beginner filmmakers working in analogue in the 21st century?

Watch as many films as you can find in the cinematheque or film library, and absorb the films from as many countries as possible. The language of the analogue filmmaker is very important to learn to shoot better with digital equipment, and film and video have now converged in their grammar and techniques. Write a great script and know that each cut between two shots in the same scene is never without a reason, so imagine the angles that will be needed for each scene in advance.

Filmmaking has been the international medium since its birth in 1895, and it's a way to understand and access different cultures and different ways of being.

Babette Mangolte, (American, born in France) is an experimental filmmaker/photographer, who came to New York in the early 1970s where she documented the city's performing arts scene, and developed a photographic and cinematic language based on the subjectivity of the camera, the viewer's key role, and the human body's relationship to space. Her films, installations and photographs have been shown in major shows since the 21st century and her work is in the collections of several museums. Sternberg Press published a book of her writings about practice and technology shifts in filmmaking and photography, edited by Luca Lo Pinto in 2018. For further info check her website: www.babette-mangolte.org.



Where did you learn to use an analogue motion picture camera?

My mother had 2 old Argus cameras, I think they were both from her father. One was a 35mm still camera. This was my first camera and the start of my photographic journey. The second camera was a Regular 8 Argus motion picture camera, which I still have and occasionally still shoot. I began to shoot Super 8 in college. I don't recall the make of the Super 8 camera, but I used to process some of the film in a red bucket in our basement. It would get tangled, and I would have to hang it from wall to wall and back again a few times to dry. I remember trying to process film in my dorm room but it was way too toxic. A few months later, I began to shoot with a 16mm Bolex. As I made my first 16mm film, *Petit Mal*, I realized that I could shoot Regular 8mm film and get a 4-screen image that I could cut into my 16mm film. At that time, Walgreens pharmacy used to process Regular 8 and Super 8 Kodachrome for a very cheap price, so it was an easy stock to shoot and the reds of the Kodachrome stock were luscious. If I requested that the film not be slit down the center, as was the standard developing procedure for Regular 8mm, I could retain its 16mm width and have a 4-screen 16mm image—albeit with 4 sprocket holes instead of 1. I also hand-processed a lot of the Regular 8 that I shot in that same red bucket. The 4-screen image appears a few times in both my films *Petit Mal* and *Divinity Gratis*. In *Divinity Gratis*, I use both the positive Kodachrome image as well as its negative. It's fun to shoot with Regular 8 because you have to hold the camera upside down for the second half of the roll, in order to get both sides of the 4-screen reading properly. There's something exciting about shooting a camera upside down.

Here's a technical note, if needed: when used as intended, one loads the Regular 8 camera and first exposes one side of the film. Once shot, the film canister is flipped over and

reloaded into the camera to expose the opposite side of the film roll. When processed, the lab slits the roll down its center in order to obtain the standard Regular 8 projection width.

What is the best analogue camera for a beginner to learn with and why?

My students enjoy learning and shooting with a 16mm reflex Bolex, because it doesn't need a battery and it can shoot single frame. It's very versatile and solid, and fairly easy to use.

How do/did you choose your photochemical equipment/format?

My foundation was in 35mm still photography. I fell in love with photography in high school. I was a close friend of the headmaster's daughter and she was able to get the key to the photography lab. We would work during weekends and into the wee hours of the night developing and printing photographs. It was pure magic to develop rolls, put them into the enlarger and then watch as they magically came to life while agitating the (photographic) paper in the developing tray. 35mm still photography was the only still format I learned or knew at that time. As for 16mm, it was and still is the only moving image format that makes sense to me. Although I liked shooting Super 8, I grew beyond it and wanted more precision and a more stable medium. There were too many accordion-shaped mishaps in the Super 8 projector. 16mm suited me then and still does now. I would love to shoot 35mm moving image, but the cameras are too heavy and too expensive, as is the amount of film necessary to shoot, especially for the longer films that I am now interested in making. With a feature-length film in 35mm, I couldn't afford it and I wouldn't even be able to carry my own film print—too heavy and too many reels! Nor would I be able to project it in my living room. But that said, I would still like to make at least one 35mm print from a digital version of my next film; the idea is irresistible for both image and especially for sound.

Is there a grip item that you find/found very helpful to have? (Pistol grip, etc.)

No, all of my earlier films are handheld and I never used any type of pistol grip or shoulder grip, even though I have both. I always found them uncomfortable and unnecessary.

Do/did you have a favorite camera?

My camera preference is the 16mm Arri S. I own both Arriflexes and Bolexes. The Bolex is great for traveling or easy single framing, but it's too boxy for me and its viewfinder optics are just terrible. Not enough light gets to the eyepiece. My camera of choice has always been the Arri S since the first time I shot with it back in 1978. It's a curvy, sensual camera. I can move well and shoot well with it. I like the thumb grip. When shooting handheld, I can either hold it to my eye, or I can close its eyepiece door and shoot with it as an extension of my body. Importantly, the pin registration is essential for the type of image I want to capture.

Do/did you have a favorite lens?

For a long time my favorite lens was an old beat-up 10mm that came with the first 16mm camera I ever bought: an old Bolex Rex-3 in its original carrying case. When I bought the camera, it came with this one lens, the 10mm. I could barely afford the camera, so there was no way I could afford to buy an additional lens for it. The 10mm was perfect for me because I like to be very close to my subject, and the shorter lens would minimize any shakiness in my handheld camerawork. I still love that 10mm lens. Over time it began to vignette in an uneven way—the upper right and lower right corners have a curved shadow edge, which I find to be quite beautiful. I think I bought that camera and lens in 1979, and by 1990 the lens was vignetting. By then, I had already purchased my first Arri S and quite a number of lenses for both it and my old Bolex, so I had many

choices, and I could use the beat-up 10mm when I wanted a vignetted image.

What is/was your preferred crew set-up (or no set-up!)?

No crew. When I'm in a public space I usually ask a friend to assist me, because I become engrossed in shooting and forget to pay attention to where I am. So it's good to have an assistant in that circumstance, someone who is keeping an eye out both for safety and practical reasons. I tend to stop paying attention to anything except what I'm seeing through the lens. I was once shooting in the Painted Desert in Arizona on a filming road trip for my film *Divinity Gratis*. About 45 minutes after we left the area where we had been shooting, I realized I had left my light meter sitting on a rock in the middle of nowhere. We drove back and retraced our steps and, amazingly, found the light meter still sitting on the rock. I was with a close friend, but apparently neither of us was paying close enough attention.

Do/did you have any ongoing relationships with focus pullers or ACs?

No.

Do/did you load your own film? How does/did this influence your process?

Yes, I load my own film. I shoot 100' loads, which in the 16mm world is 2 minutes and 47 seconds' worth of screen time. It's very important that I don't shoot 400-footers because it's necessary, in spite of being sometimes disruptive, for me to stop and think about what and how I've been shooting my subject matter. It's an essential pause for me to reload and think about what was strong about the previous shots and what was not, and while reloading, I contemplate how I want to proceed.

What film stock do/did you use the most?

For my current film, and for the three previous, I shoot 50D as much as possible. As the sun goes down, I switch to 250D in order to extend my shooting time. If I'm shooting interiors, I'll try to shoot with 200T if I have enough light, and if not, I'll shoot 500T instead. The lower ASA stocks have sharper resolution, less grain and a better color palette. I used to shoot both B/W and color for my earlier films, first using reversal stocks and then switching to negative in the mid-1980s. But by the late 1990s, I decided to make my life (and A & B rolling and the laboratory answer printing process) easier by shooting only color negative camera stocks. *Body Politic* and *Divinity Gratis*, both shot on negative stocks, had to have A, B, C & D rolls in order to accommodate both B/W and color. By the time I finished *Divinity Gratis*, I didn't want to deal with that complicated and expensive process anymore, so from then on I've just stuck with color negative. Kodak color negative stocks are beautiful; I have no complaints.

Do/did you own your own film camera? What model/format is/was it?

I own many cameras, but all are either a Bolex or Arri S. I would have loved to buy an Arri SR I or II or III, but during the years when I considered it, they were cost prohibitive, and I don't think I want to invest in another analogue camera at this point in time. (Nor have I yet invested in a digital camera.)

What is the best mistake you made whilst shooting on an analogue camera?

It's not quite a mistake, but a most unintended and lucky circumstance happened while I was shooting out in Death Valley during the dead of winter for my film *Divinity Gratis*. It was very, very cold. As I was shooting, I could hear my camera progressively slowing down. In time, it had seriously slowed down, like

maybe shooting 2 or 4 or 6 frames per second instead of 24. It was clear that the freezing temperature was affecting the lubricant in my camera and its frame rate as a result. As I realized that my image was going to be entirely overexposed due to the slow frame rate, I remembered that I had a few 100' rolls of color negative print stock with an ASA of 2. I switched out the roll and shot the print stock instead. We were in a narrow canyon whose rock walls were shiny from flash floods that had (occasionally) roared through. I closed the eyepiece and held the camera away from my body, low and close to the ground, and I moved through the canyon slowly and deliberately, close to the rock walls. I didn't really know what it would look like, obviously it would be fast motion, but it seemed like a way to make the most out of a temporarily ill-functioning camera—due to environmental factors out of my control. Once processed, the footage was gorgeous, with strange movements and the incredible cobalt blue/cyan low-latitude range that is characteristic of 7384 print stock when shot as camera original. Nowadays, I would not put newly manufactured color negative print stock through my camera because current print stocks are ESTAR-based. I will only shoot acetate stocks through my camera because ESTAR, which is a plastic and just about unbreakable, could destroy my camera mechanism were I to have a camera jam.

What is the worst mistake you made whilst shooting on an analogue camera?

It happens on every film. I switch stocks and forget to change the ASA on my light meter and either over or underexpose the film. And I feel like an idiot every time. If underexposed, I'll sometimes shoot a second image over it for double exposure. Or if it's a roll that has a shot I really need and can't reshoot, I'll try to push or pull at the lab to correct my error. But most of the time, the lab correction adds grain if pushed or gives me milky blacks if pulled. At this point I'd have to be pretty desperate to try to have the lab save a roll.

What is your favorite special effect that an analogue camera can do?

Oh, any and all. I guess my favorite is double exposure since it's always mysterious and full of surprises.

How do/did you meter light on a shoot?

What is your preferred light meter?

I still use an old analogue Sekonic light meter. They're dependable and cheap. I teach my students to deeply consider exposure and ASA. I advise them to pay attention to the amount of light falling on their subject, and to think about the ASA and characteristics of the film stock they are shooting. What aspect of the frame is most important? I strongly believe that one shouldn't be dependent on a light meter, but rather use it as affirmation of one's own understanding about film stock and its sensitivity to light. When I began to shoot still photography with the 35mm Argus way back when, I had no light meter. That was the start of my thinking deeply about light sensitivity and emulsion response. It's about looking and learning to see with a photographic sensibility, building a knowledgeable and visual understanding about the meaning of light, the subtleties of darkness, and the amazing range of gray tones and color tones in the analogue film medium.

Do/did you ever use filters? If so, for what?

I love filters, but if one is using them for effect. I think you have to be cautious and use them carefully. In *Divinity Gratis*, I used an R29, which is the pure red separation filter, for a moving shot of dunes while driving in White Sands National Park in New Mexico. It's a favorite shot, but I was using a gelatin R29 and it had a slight dent in it, which never fails to annoy me when I see it. But I love its saturated pure red color. I also shot with quite a number of filters for both *Marasmus* and *Az Iz*. As is usually the case, we didn't have the right size filters to fit on the lens,

while we were shooting with filters for *Marasmus*; so instead we taped the gelatin filters directly onto my lens, something I hate to do because it can leave gunk and sticky residue on the lens. Well it happened to be windy, and since we weren't too keen on using an abundance of tape, we only taped the filter to the very top of the lens. The wind, amazingly, lifted and lowered the filter so that the image would gently shift from a pure filter color to the scene's accurate color (no filter). In the last sequence of *Marasmus*, there are close-ups of the film's two characters. In a number of these shots, you can see the color filters lifting and falling, creating a veil of shifting color. Because the effect was so lovely, I used the filters loosely taped to the lens again in *Az Iz*. It looks quite different because for *Az Iz* I was shooting a color negative print stock, which had a very narrow latitude. As a result, only certain very saturated filter colors would get the print stock response to budge. My favorite filter used in that sequence was a pure magenta filter that made the image look fuchsia in parts.

I realize now that I mostly use filters for color effect. I rarely use correction filters. But I do use neutral-density filters very often when I'm shooting with an intervalometer. Since my interest in the intervalometer has more to do with blurs and longtime exposures, the neutral density filters are necessary to compensate for the long amounts of time that the shutter is held open.

Viewers often think that my films include optical printer work. I have never worked on an optical printer for my personal filmmaking. Because I was a cameraperson and supervisor for optical effects on major motion pictures, I never had any desire to include this technique in my own work. All of the footage in my films are camera original, footage that I shot through my camera, with only one exception: the title shot for *Ciao Bella*, which was shot in combination on an animation stand and an optical printer.

Tripod—friend or foe?

I began shooting in 1976 and I never used a tripod until 20

years later. The only reason I had to start using a tripod was because I began to shoot with a macro lens, so every breath and any bit of movement became exaggerated. It took me a long time to acquire the movement and breathing skills to use a tripod well, and to give a sense of natural handheld movement while using a tripod. This was my main challenge when I shot *A Darkness Swallowed*.

Although I never used a tripod for my earlier films, I did often shoot with a monopod. My husband made a beautiful wooden monopod for me that provided image stability, but still allowed for some amount of subtle movement. In my work, I've always felt that it is important for a viewer to sense the eye of the filmmaker, to see as though through the filmmaker's eye.

Do/did you have a mentor or teacher in cinematography that influenced your development?

Oh, there were/are quite a few. When I was a graduate student, Brian Bailey, a superb still photographer, oversaw the film cage and taught me more about cinematography and 16mm cameras than just about anyone else along the way. I was also lucky to have been taught by Kris Malkiewicz, who wrote the very essential book *Cinematography*—a book any analogue student should read and keep as reference. And then there was John Frady, a fellow grad student, who is/was an incredible cinematographer. He taught me how to close the eyepiece and move with the camera as an extension of my body.

What useful insight did you learn in your technical training?

There are too many to list. I'm always learning additional skills while shooting my own films. With each film I became more and more adept. With each film comes a larger and more complex challenge—such is the nature of analogue filmmaking. But I think I learned even more by working in optical effects in the Hollywood film industry. Although I never included optical

printing in my own practice, I handled 35mm film daily, set up many shots, and experimented with film in exciting and creative ways. I attained a deep understanding of light and emulsion, and of its inherent characteristics and infinite possibilities.

How do/did you approach the camerawork? Do/did you prefer to operate it yourself or do you have others operate it?

I do all of my own cinematography unless there is a specific reason why I cannot or if I need an additional camera for coverage. For example, when I shot the Tom Waits music video for his song *Temptation*, I knew I needed double coverage. So I was able to hire Beth Block, an experimental film and digital artist who, for me, is the most perfect person you'd ever want on a shoot—technically adept, observant, a great cinematographer and someone who comes with a box filled with every tool or item you might ever need for a film shoot. Between the two of us, we were able to get all of the shots that were needed. Beth also shot the sync family scene in *Body Politic*. I asked her to be the cinematographer for that scene because I needed to put all of my attention towards being a part of the barbecue, putting everyone at ease and subtly directing the conversation. But shooting is really a passion for me. Looking through the eyepiece and discovering a new world is key.

Whose camerawork do you admire?

Agnès Godard who shot a number of Claire Denis' films including *Beau Travail* and *L'Intrus*. Saodat Ismailova, whose films I've recently seen for the first time—beautiful cinematography. I admire Lois Patiño's cinematography, especially in his film *Lúa vermella*. And of course the stunning cinematic images in Andrei Tarkovsky's films. Such emotionally complex and visually arresting shots, and sequences of shots, especially in *Mirror* and *Nostalghia*.

But honestly, most of my image inspiration comes from still

photographers. Most recently, I've been studying the beautiful blurs and rhythmic motions in Ming Smith's portraits of jazz musicians. Such stunning images.

What is your advice to beginner filmmakers working in analogue in the 21st century?

I have two main bits of advice for young filmmakers working in analogue. First, in spite of the cost, you only get good at shooting 16mm with lots of practice. So shoot lots of film. Don't be stingy, make mistakes, go with your instinct and develop your eye's sensitivity.

And second, analogue cameras are quite heavy. Lift weights, go to the gym, build up your biceps, and learn how to breathe evenly and intentionally. You need muscle strength to schlep equipment and to work well with cameras. Your breath needs to be in sync with your shooting so that you can move smoothly and think clearly.

American avant-garde filmmaker Betzy Bromberg has been making experimental 16mm films since the mid-seventies. She recently had an in-depth survey of her films in the UK co-presented by Tate Modern and the Open City Documentary Film Festival (2022). Betzy Bromberg's films have been shown extensively in museums, cultural venues and festivals within the United States and abroad. While Ms. Bromberg's early work explores feminist and socio-political themes using raw collage editing, provocative imagery and evocative soundtracks, her later work explores the transcendent possibilities of light and sound, creating resplendent landscapes of the interior. "All of Bromberg's films are from that same 'extremely personal place.' They stand out because they are about merging experience with the very act of filmmaking, and about staging the process of knowing who you are in the very work that you create. [Bromberg] somehow lets her filmmaking and ideas become embodied in the film itself; they are folded together in a remarkable synergy that could almost be construed as some sort of philosophical system for being in the world." (Holly Willis). Ms. Bromberg worked as a camerawoman and supervisor in the Hollywood special effects industry for over twenty years, prior to being a faculty member and former Director of the Program in Film and Video at California Institute of the Arts.



Where did you learn to use an analogue motion picture camera?

I learned on my father's Super 8 camera in high school. Later I learned 16mm in college. I was a projectionist for many years, screening primarily 35mm on dual changeover systems. Learning projectors should be a required companion to learning cameras.

What is the best analogue camera for a beginner to learn with and why?

The best camera to learn with is the camera you have access to. You can learn another one later.

If you have access to a lot of cameras, then the Bolex isn't a bad place to start. It's not very ergonomic, but it's very flexible in terms of exposure modulation, superimpositions, hand cranking, fades, etc. Also, cameras with spring motors are great if you're going to be remote without good power access. You can shoot off-grid!

How do/did you choose your photochemical equipment/format?

I shoot equally with digital and celluloid. I don't privilege one over the other. Their distinct tools and tool-speeds result in different sorts of films. I like digital for its fleetness, for the ease of sketching, for its relative affordability, for the alien vacuumed-up non-atmospheric liquidity of the image. I like that when I use digital gear I'm more typically ignored.

I like celluloid for the swarm of the grain, which produces an entity that breathes, our eyes are magnetized by all that micro-movement. I like that it's an art of subtraction and shadow and gaps. The shutter's equal delivery of blackness for every moment of light, the shadow puppetry of the material in the

gate, the stone-carving essence of light etching emulsion-suspended minerals. I like working with mechanical systems. I like touching time-holding strips.

I don't process my own film, though. I did early on, but I get very bad allergic reactions to photographic chemicals, so I send everything to labs. I've enjoyed working with optical printers and contact printers, though I've not used them recently. I also use an Oxberry animation stand for titles, intertitles and graphics. I have access to this gear through the university where I teach and through other institutions and collectives.

In terms of format, I'm personally partial to the 1.33:1 / 1.37:1 aspect ratio, so happy to use that when possible. I like shooting landscapes where the horizontal isn't over-privileged. There's nothing cooler and more provocative than a Western shot in 1.33 (hello Kelly Reichardt!). These days I use 1.78:1 when I'm shooting HD. If content arose for which a strong argument could be made (to myself by myself) for a wider aspect ratio (2.35:1, 1.85:1, 1.78:1, etc.), then I'd give it a try.

Is there a grip item that you find/found very helpful to have? (Pistol grip, etc.)

Cuticle stick, black gaffer tape, changing bag, sharpie and canned air.

Do/did you have a favorite camera?

Aaton XTR.

Do/did you have a favorite lens?

Not really. Sometimes I like a zoom, but primes can be so gorgeous.

**What is/was your preferred crew set-up
(or no set-up!)?**

A sound recordist and myself.

**Do/did you have any ongoing relationships
with focus pullers or ACs?**

Nope.

Do/did you load your own film?

Yes.

How does/did this influence your process?

Depends on the camera. If it's a 400' magazine camera, I try to have two different stocks loaded in the mags not currently on the camera. Loading in the field can be stressful, but I do it when I have to. If it's a Bolex or some other daylight spool camera, then I'm fine to load on-site, or wherever. I'm quite fast. I tend to have 2-3 stocks handy for different situations.

What film stock do/did you use the most?

50ASA daylight balanced negatives. I also love hi-con and optical sound stocks but used for image.

**Do/did you own your own film camera?
What model/format is/was it?**

Sometimes. I've had a number of non-reflex Bolexes over the years. I love the non-reflexes. They're very hardy and you never accidentally forget to close your f-stop back down after looking through the lens, because you don't look through the lens! I also own a CP-16. I've shot a lot with borrowed Arris. But my favorite to shoot with is the Aaton. It's so well balanced and

ergonomic and the magazines are a breeze. I don't own one. Maybe someday. I've had a few Super 8 cameras, though I don't own one currently. And I used to have a Regular 8 that I shot with non-split eons ago.

**What is the best/worst mistake you made whilst
shooting on an analogue camera?**

I'm drawing a blank on both of these, probably because mistakes are so common for me that I barely register them ...

**What is your favorite special effect that an
analogue camera can do?**

It's not really a special effect, but it's what makes film look so great: the rotating shutter of the camera/projector, filling cinemas with gaps of not-image.

**How do/did you meter light on a shoot?
What is your preferred light meter?**

I tend to use incident metering. I have a Sekonic. It's outlived a few pets. I keep thinking I should get a spot meter but never do.

Do/did you ever use filters? If so, for what?

Yes. I use ND filters, color correction filters for light balance (80A & 85), red filters for B&W stock and polarizing filters.

Tripod—friend or foe?

Depends on the project. I have many tripods. Big ones, little ones, collapsible ones, light ones, robust ones. But I do a lot of handheld work too.

Do/did you have a mentor or teacher in cinematography that influenced your development?

Not really. I mean, I took cinematography classes, but I think the thing that influenced me most was just watching films and learning from my rushes.

What useful insight did you learn in your technical training?

Clean your gate.

**How do/did you approach the camerawork?
Do/did you prefer to operate it yourself or do you have others operate it?**

I prefer to shoot myself. But I am open to working with other operators, especially when the film's choreography is complex, or when I need more than one camera.

Whose camerawork do you admire?

Chick Strand, Betzy Bromberg, Barbara Hammer, Ana Vaz, Ben Rivers, Bani Khoshnoudi, Jessica Sarah Rinland, Luke Fowler, Fern Silva, Sharon Lockhart, Fox Maxy, Charlotte Pryce and Jonathan Schwartz.

What is your advice to beginner filmmakers working in analogue in the 21st century?

Choose the tools that speak to you. And if not, then the ones that you can access. There's no right camera, or medium.

Artist filmmaker Deborah Stratman makes work that frames and questions issues of power, control and belief, exploring how places, the past and society intertwine. She regards sound as the ultimate multi-tool and time to be supernatural. Her projects have addressed freedom, surveillance, public speech, sinkholes, levitation, Orthoptera, raptors, comets, evolution, extinction, polytemporality, exodus, sisterhood and faith. She lives in Chicago where she teaches at the University of Illinois.



Where did you learn to use an analogue motion picture camera?

In Santiago, Chile, with a Canon A1 35mm still camera that my father brought me from Montreal. I taught myself how to use it and how to expose film. My first travels with the camera and friends were to the north. I was 18-19 years old when I travelled from the Amazon rainforest in Bolivia to the Sacred Valley in Peru's Andean highlands.

Once I was back home, I began art school at the *Universidad de Artes y Ciencias Sociales Arcis* in Santiago. Though my artistic practice was leaning towards installation art, sculpture and printmaking, I continued to use my camera. I learned pinhole photography and black & white film processing, and I was mesmerized by how chemistry and light could alter the expected "traditional" result and create an image that changes in time. In my last years, I began experimenting with the mechanism of the camera and with my zoom lenses and using slide film, which is 35mm reversal colour Ektachrome. I didn't know what the results would look like and loved the surprise of waiting for the processed film. This was the beginning of a particular interest in still and moving image-making, with film techniques I continue to explore. These images, and filmstrips, also invited me to explore the 35mm projection system, which led me to a couple of installation works using 35mm custom-made transparent projectors and film loops set up in the space, *Milimetraje* (2004) and *Una esfera cuyo centro está en todas partes* (2005).

I moved to Montreal in 2005, and in 2006 I began an MFA in Studio Arts in Film Production at Concordia University. It was there that I had my first proper introduction to experimental cinema. I encountered the Double Negative Collective through Daichi Saïto, who was a fellow student in the same year as me. It was this group of artists-filmmakers that together forged a

unique energy in Montreal in experimental cinema, both production and dissemination. When I first heard about Double Negative, Guy Sherwin was in town, and was invited by the collective to present his work in Montreal. It was a great way to have an introduction to the universe of moving image art, with original formats being projected and with the artist present. Soon after I became a member of the collective, it was at Double Negative's studio where I learned how to use Super 8 and 16mm cameras and film projectors, optical and contact printers, and hand-processing techniques. Throughout the years it's been a mixture of self-teaching, DIY, collaboration and support from fellow members that were essential.

What is the best analogue camera for a beginner to learn with and why?

I recommend starting with a Super 8 Nizo, my preference is 801 Macro, but any will do. The camera and the film cartridges are not too expensive. It's a beautiful and simple camera, with manual and automatic exposure control so you can focus your attention on filming and learning the skills for observation and light perception first, if using the automatic option. Then you can learn about exposure and expand to other possibilities of image-making. The camera has some settings that make it fun to experiment with and do some effects, such as dissolves, fade in and out, frame-by-frame photography and time lapse. My favourite one is using the "Extended exposure" that allows for long exposures, but warning: if it is set without noticing it and you film during the day, you will overexpose your film. That's how I found out about it, it happened to me while travelling in Buenos Aires, *no hay mal que por bien no venga ... every cloud has a silver lining ...*

How do/did you choose your photochemical equipment/format?

I am fascinated by how analogue film techniques, cinematic

language, and chemical processes express the environmental imprints of time and space, through photosensitive grains of silver halides that, when exposed to light, react. The impermanent state of a latent image becomes physically present and later transformed into projected light. It is a phenomenon. Then the equipment used, whether for filming, processing, and printing or projecting, is fundamental because they determine an important part of the creative process, the experience and perception, and the possibilities you want to work with.

Is there a grip item that you find/found very helpful to have? (Pistol grip, etc.)

I never had or worked using a pistol grip, but I have with a tripod and handheld camera. I find my Bolex more comfortable to hold when it still has the tripod's quick release plate attached.

Do/did you have a favourite camera?

I have a special connection to each camera that has become a life companion: a 35mm Canon A1, a Super 8 Nizo 801 Macro, and my 16mm Bolex H16 SBM.

Do/did you have a favourite lens?

I use a set of two zoom lenses with the recent addition of the Kern Vario-Switar 12.5-100mm f/2 with Aspheron 6.5mm. I love the design of this lens and how solid it is to work with a Bolex with a bayonet mount.

What is/was your preferred crew set-up (or no set-up!)?

Filming needs to be performed by myself because it allows concentration, a meditative state that expands imagination and intuition in the present moment. This flow can also become a time/space for ideas formulated previously. I do not work with

a script or with a traditional film crew.

Despite working by myself, I enjoy travelling for film shoots with friends, family and colleagues. Some of my favourite companions include Javiera, Tiziana, Marta, Nino, Nasrin, Oona, Daichi, John and Adam. Most of my recent work has involved travelling distances, hiking and walking in nature, so having the support and assistance of someone has become important and necessary for me. The production and preparation have evolved into more complex logistical planning, and doing it all by myself has become impossible and overwhelming.

Do/did you have any ongoing relationships with focus pullers or ACs?

No. The technical and artistic approaches would not work with having an AC. I embrace out-of-focus as much as focus.

Do/did you load your own film? How does/did this influence your process?

I load the film myself, 100 ft spools each time, and the Bolex is a spring wound 16mm camera. Sometimes during the process of filming, I unload the film even before finishing it, as part of creative decisions to use other rolls that I prepared for other sequences or places.

What film stock do/did you use the most?

I have been working with Ektachrome colour reversal film since I started 35mm photography. For me, Ektachrome is a medium in itself with distinct poetics inherent to its materiality. Ektachrome has vivid colours, and a more interesting grain structure, and it has a narrower exposure latitude. Since my practice is built around experiment and risk, the unforgiving nature of Ektachrome is important. When I was creating frameless images, horizontal to the sprocket holes on 35mm filmstrips using the camera, I remember using either Kodak or Fuji. Later I used

Kodak 7280 Ektachrome 74T Super 8 and 7285 Ektachrome 100D 16mm. In 2013 Kodak stopped the manufacturing of Ektachrome film. After that, I managed with what I was able to purchase at the time and tried some 50D, with not much excitement because the technical and creative workflow was different in a way that did not work for me. Kodak brought the manufacturing back in 2019, as a new version 7294, which had some slight changes due to some ingredients not being produced anymore.

The first time I hand-processed colour reversal film was with a Kodak Film Processing E6 Kit. Learning how to process it, and experiencing the steps from filming to developing and projecting, was a trail that definitively strengthened my connection to analogue cinema. Sadly, the E6 kit was taken off the market by Kodak in 2014. However, there are current options such as the TETENAL Colortec E6 Chemical Kit and Arista Rapid E-6 Slide Developing Kit.

**Do/did you own your own film camera?
What model/format is/was it?**

For many years I borrowed 16mm Bolex cameras from Double Negative, sometimes it was a REX-4 or a REX-5. My very first piece of equipment was a spot meter, and of course I had been wanting to own a camera, but I didn't have any money. I had asked Jean-Louis Seguin, a dear specialist in motion picture equipment, to let me know if he ever came across a Bolex SBM bayonet. In 2018 he finally found one, but at the time it felt like it was a lot of money. However, some visiting friends from New York, Miro and Poli, insisted that no matter what I had to get it, so I did! It felt like a risk, but now looking back it feels assertive as a solo artist.

**What is the best mistake you made whilst
shooting on an analogue camera?**

There are no real mistakes in how to approach image-making, it is a process, a getting-to-know-each-other, and a fluctuation

of intentions. In this flux, you can be surprised by certain results that were not originally planned. It is this exploration, working with the precarity and limitations of a medium, that it can bring and be our master. What I enjoy about analogue is the quality of imminence and latency, the back-and-forth state between being visible and invisible. It is diving into our imagination, with no necessary script to follow, no drawing to perform but the construction and revelation of sequential imageries.

**What is the worst mistake you made whilst
shooting on an analogue camera?**

More than mistakes, I think there are anecdotes. Sometimes certain places or actions are not meant to be captured photo-chemically or to be projected. Yes this can bring frustration or a sense of loss, but it is life. It is a fundamental part to learn from. We resist it, dislike it, but then something else emerges, and incredibly it can be more attuned to the intention, or new and refreshing. It is not easy to let go and trust, but I remind myself of the flow and it gets worse if I fight against it.

**What is your favourite special effect that an analogue
camera can do?**

The experimentation I developed with the 35mm still camera and the understanding of a frame were the foundations for my work in moving image-making. The possibility of having multiple times and atmospheres within a single image, and then also in relation to a concatenation of images, becomes a spectrum that fascinates me. It is a source of infinitude: diversity of time lapses, frame-by-frame photography, and multiple and long exposures ...

**How do/did you meter light on a shoot?
What is your preferred light meter?**

I use a spot meter, Soligor II, and don't really use a light meter

though I carry one as a backup. The spot meter allows us to travel through the air and see the environment in its range of light and shadow, as a rainbow.

Do/did you ever use filters? If so, for what?

I use polarizing filters to saturate colours and sometimes eliminate glare or play with reflections. The neutral density filters can have different purposes but, in the basics, they allow better exposure control in daylight situations that are too bright, by cutting down light into the camera. This will give more colour and details. All these filters can also be used for experimentation when exposing your film.

Tripod—friend or foe?

A sister.

Do/did you have a mentor or teacher in cinematography that influenced your development?

I didn't have cinematography classes, however when I think of people who I knew personally and who influenced the development of my practice, I think of Marielle Nitoslawska, Carolee Schneemann and François Morelli in Canada, and Mario Soro and Willy Thayer in Chile.

What useful insight did you learn in your technical training?

Since I didn't have formal technical training, my experience has been mostly hands-on.

How do/did you approach the camerawork?

Do/did you prefer to operate it yourself or do you have others operate it?

I always handle the camera. For me, it is like someone writing or painting. I would not be able to direct someone and expect that the creative-technical process and its results are coming from me. Instead, I would contemplate it as a collaboration.

Whose camerawork do you admire?

Some of the artists who own the process of filming, either through their distinct cinematographic handling of the camera or singular in-camera editing techniques, include Rose Lowder, Chick Strand, Paul Clipson, Marie Menken, Helga Fanderl, Robert Todd, Jodie Mack, Alexandre Larose, Daïchi Saïto and Jeanne Liotta.

What is your advice to beginner filmmakers working in analogue in the 21st century?

Use your intuition, borrow a camera, use an expired film roll and use a new one, learn to use a light meter and spot meter, if possible, also learn how to hand-process, learn appropriate techniques for equipment maintenance, learn the uniqueness of analogue and digital, and learn how to use a film projector. Oh and if presenting your work digitally, learn about video compression.

Malena Szlam is a Chilean artist filmmaker based in Tiohtià:ke/Montreal. Her films, performances and installations examine the relations between cinematic practice, embodiment, temporality and perception. Engaging the affective dimensions of analogue processes, Szlam's work gives material form to kinetic and lyrical approximations of the natural world. Most recently, her work leans toward geology and earth sciences, in volcanology and the earth's crust.

Szlam's work has been showcased at leading festivals including *Wavelengths* at Toronto International Film Festival (TIFF), New Directors/New Films Festival, MoMA, Media City Film Festival, International Film Festival Rotterdam, Edinburgh International Festival, and CPH:DOX. Her film *ALTIPLANO* received numerous awards, including 25 FPS's Grand Prix, Melbourne International Film Festival's Best Experimental Short Film, and TIFF's Canada's Top Ten 2018. International group exhibitions include *Time Machine*, Palazzo del Governatore (Italy); *Expanded Plus: Utopian Phantom*, Factory of Contemporary Arts Palbok (South Korea); and *The Moon: From Inner Worlds to Outer Space*, Louisiana Museum of Modern Art (Denmark).



Where did you learn to use an analogue motion picture camera?

I studied photography at the School of Visual Arts in NYC back in the 90s and worked through school doing all sorts of jobs around the city. I was really lucky to be hired as a Teaching Assistant in the Continuing Education Department at the New School for Social Research—just across town from where I lived in the East Village on 12th Street. The small darkroom where night classes were held was once used by Berenice Abbott when she taught there! It was an exciting time and I learnt as I worked ... One of the perks of employment at the New School was a free class every semester. I opted for film theory and practice courses, and became interested in the Media Studies Department's filmmaking facilities. Soon I was working there in the equipment cage, handing out film cameras and gear to students; this is when I took my first 16mm class and shot the film *P.S.* (1998/2001) over one weekend during the class, using a clockwork Bolex.

Later I carried the footage overseas when I studied photography at the Royal College of Art in London, and exhibited a final edit of *P.S.* for my first MA interim show. I was accepted as a large format photographer but ended up making mainly 16mm films there. Another student introduced me to digital editing on Final Cut Pro and I shot films using what was left of their disbanded film course's equipment. I still work in this way; shooting on film and editing from scans/telecine.

What is the best analogue camera for a beginner to learn with and why?

The reflex Bolex is great to start with; it's equally difficult and easy. Many of the basic models are small, compact and the mechanics are partially visible and fairly robust.

However, if you're just starting out with photochemical materials, I'd suggest learning to expose film with a still camera first. The principles of exposing film, reading light, etc. are much the same between still and moving images, and still photography is a great medium to hone your skills—you have 36 chances to get an exposure right. You can bracket your shots and see what the change in aperture and exposure can do.

Often when I'm researching a new film project, I'll use my 35mm Nikon as a way of seeing the place I'm working in on film ... how it looks on different stocks, etc. It's a brilliant initiator.

How do/did you choose your photochemical equipment/format?

I film on 16mm, 35mm, digital and recently Betamax, so there are a few options when I start a project. I've been working in 35mm on quite a few films recently and get excited by exploring what the medium can do, so I try to work on this when possible, if budget allows. When I first started, I had this idea of pushing the material to be lighter, freer, as with 16mm. I also like the idea of working with communities in this medium, filming in places that were never "seen" on 35mm—the care and effort this format requires is a technical manifestation of my commitment to the people I'm working with. I film on the Arri IIC mostly and it has been a wonderful development. It probably goes back to my large format camera days, working on 10×8 and even an 11×14 camera, and looking to explore mechanical/optical scale.

I don't shoot much; often when I work there's very little that doesn't get used (hopefully!), and working on 35mm has an economy to it—the risk is higher as the cost is higher—so my focus needs to be sharp and I need to be fully invested in what I'm filming. I like working this way, at this point in my practice.

I've not experimented with hand processing yet, but am curious about it, and think it will come in time. I'm so impressed with filmmakers who use alternative materials for processing ... seaweed, caffanol, etc. The results are beautiful and intelligent.

Is there a grip item that you find/found very helpful to have? (Pistol grip, etc.)

On the Arri IIC I use a shoulder brace/mount, which is so helpful and also works on a Bolex. The other day I forgot it for an interview I was filming and regretted it! The camera is heavy and this bit of grip helps redistribute some of that weight, which is very welcome after a few minutes handheld with a full magazine of film. I have a pistol grip for the Bolex that is useful too.

Do/did you have a favourite camera?

Oooh no, I couldn't say. I love them all, and each one has so much to offer.

Do/did you have a favourite lens?

When I have the budget to rent equipment, I like to work on Cooke S2 and S4 lenses. The S2s are beautiful and give a "classic" look. I also like the Schneider lenses I have for my Arri IIC and the Switars for the Bolex. The Switar lenses are fast and sharp.

I once was shown the lens storeroom at Panavision in London and realised that a lens is an archive of all the films they were shot on. Extraordinary! Could you seek out the lens(es) that made the film you love most? Yes. Choosing a lens, whatever the cost, is one of the most important decisions you'll make when shooting film—how fast it is, what focal length, the quality of the glass, its sharpness, temperature and idiosyncrasies.

What is/was your preferred crew set-up (or no set-up!)?

If I have a few bags of gear then I like to have someone come to help carry things and support the work—this could be changing lenses, reading the light as I film or holding the camera in between shots, etc. ... I've been lucky to work with a few different

assistants in this way, very low-key and friendly. On a larger shoot I work with 2 or 3 people. I sometimes film alone and have done so exclusively for about 15 years. The decision has to do with how bulky the equipment is, what the budget of the project is and how much help I need to achieve the right quality of film. Sometimes the situation is delicate and requires less people; in *Two* (2019) I filmed couples making love and worked on my own.

Do/did you have any ongoing relationships with focus pullers or ACs?

Yes, I've worked with a few focus pullers/1st ACs on shoots and find working with them pleasurable and fascinating. At first, I think this was on the film *Eglantine* (2015), I felt quite intimidated—I was just an artist working with cameras (and a woman) and they were "professional" and skilled. But over the years this has become less of a hurdle and I find a specialist crew really helpful on bigger shoots. I have found focus pullers who I really respect and like to work with—accomplished technicians who are open and interested in artists' film. I appreciate having their presence on set. Because filming is spending time ... with someone, someplace ... and relationships are important to the work that you do—with your camera, your subject, your material and the people that you work with.

Blocking out (or not ...) a handheld sequence and then shooting it, there have been times that I've felt so in sync with a focus puller it was like we were physically connected. It can be a beautiful way to work collaboratively, and I'm always impressed by the intuitive skill a focus puller brings to their job.

Do/did you load your own film? How does/did this influence your process?

I load film most of the time, unless I'm working on a larger shoot. I like loading film, having to step away from the "work" and stop and think, collect myself, while my hands feel in the dark

changing tent. That pause is very important. You might miss something happening, but most of the time it's beneficial and creates space for reflection and pace.

What film stock do/did you use the most?

I work on colour and B&W and with a range of ISOs. The options these days are not extensive however, for 35mm in particular. Back in the 00s I loved Fuji Vivid stock; I shot Ursula Mayer's film *Gonda* on that, with a set of Super Baltar lenses and it was gorgeous.

I started out in the 90s working on 16mm Kodak reversal stock and found the grain was more refined and clearer, and the colours luminous, though the exposure latitude was limited. I'd like to shoot on the newly rereleased Ektachrome stock, as I've not used it for years and reversal is so special. It's great that Kodak has brought it back, if only for 16mm.

Nowadays I only shoot on Kodak stock and like to use Kodak 50D, though in Scotland that's not always the right choice! Recently I made a film, *Boy (winter)* on Kodak 35mm B&W Double-X and really love the look of it. I'll work on the Double-X again.

Do/did you own your own film camera? What model/format is/was it?

My first camera was a clockwork Bolex H16, which eventually broke but only after years and years of filming. It was replaced, after many attempts at getting it repaired, with a Bolex Super EBM 16mm.

A few years ago, I received a one-year Paul Hamlyn Award (during the pandemic) and used some of that money to buy the Arri IIC and an Arri 435. The artist Lucy Skaer gave me some of her old 35mm equipment, including lenses that I rehoused, as a donation to my feminist film production company—Housework Films—which still to this day I cannot believe. Thank you Lucy!! Now I have a full 35mm set-up, as well as 16mm. I also have a

Braun Super 8mm camera.

It's liberating to own your own equipment, especially if you do not live in a place with extensive film resources. There are no 35mm cameras in Scotland that I know of, and every time I worked, I had to pay to get equipment shipped from London or drive down and collect it myself. When I bought my 35mm cameras I thought, how many women own this equipment? I feel very lucky.

What is the best mistake you made whilst shooting on an analogue camera?

On my first film, *P.S.* (1998/2001), I was filming at night with a hand torch and by accident left the film plate open when loading the stock. The camera must not have been properly closed, as with the Bolex the door won't lock without it being locked in place ... but it was at night during fireworks and so there was no light leak. The result was wonderful—the person lit by the hand torch and the fireworks were rendered on the film as moving, dragging, orbs/strips of illumination ... I was thrilled. It was then I realised that on film mistakes can be gifts.

What is the worst mistake you made whilst shooting on an analogue camera?

Hmmm, it wasn't my mistake, but it was a mysterious mistake that took ages for me to understand. Filming for another artist as a cinematographer, I was using 100 ft daylight loads on location. These had been broken down by a lab from 400 ft rolls, in order to save a bit of money. The rushes started coming back, as this was a shoot over a few weeks, and some of them had huge bits of emulsion "hair" dancing across the image. I kept checking my film gate, blowing air, using my finger, anything to make sure that the gate was clear for each shot; I checked the gears, the way I loaded ... But whatever I did, every other roll the camera body would be full of these hairs and those rushes came back ruined. Finally, I opened a roll of unexposed

film in the light, and as the film unwound it was full of the emulsion hairs! They had been made by the person at the lab winding the 100 ft spools in the dark, not knowing that the film was being scraped and ruined. It was a big relief for me, but an unfortunate obstacle for the film. In the end the lab offered to digitally remove some of the “hairs.”

What is your favourite special effect that an analogue camera can do?

Double exposure, split screen, time-lapse, stop motion ... and solarization (in processing).

**How do/did you meter light on a shoot?
What is your preferred light meter?**

I use a Sekonic Flashmate. I bought my first one in the 90s and then bought another about 10 years ago (after I lost the first). You can use it for stills (shutter speed) and moving image (frames per second, fps), so it's ideal.

I usually overexpose on negative stock and will often register the ISO a bit slower than what I have ... just a trick in case someone else reads the light and I'm busy, or I forget to overexpose, in order to make sure that I capture the shadow.

When filming I'll take an incident reading of the highlight and shadow, and then make a judgement about where in the middle to film at. When I'm working indoors with ambient light it's mainly wide open and hoping for the best.

Do/did you ever use filters? If so, for what?

No, never! I once had to use NDs for reasons beyond my control. I had 500T stock to film in bright sunlight ... and they did help then. I like leaving the glass alone and working with the inherent qualities it has, without another layer of material. I'll usually use colour bars, or something white, to help with grading in post and any necessary shift in colour due to the stock.

Tripod—friend or foe?

It's helpful to use the tripod at times, and I like panning and zooming with a long lens, but ... I love handheld work—to move with the camera and work intuitively, as a form of choreography. I can sculpt and shape the image in time and space, or better yet, interact with the people in the frame, and respond to their actions, as a kind of collaborative dance. Jean Rouch wrote about the “cine-trance” and it's always resonated; for me, a “cine-trance” is being in sync with the life force of the world around you, as you film, and handheld work allows for this.

Do/Did you have a mentor or teacher in cinematography that influenced your development?

I've longed for a mentor, especially a woman who works with cameras, but haven't really had that experience yet. I have had assistance and support from teachers, friends and technicians though. I learnt a lot from focus pullers and 1st ACs on the bigger shoots over the years. There have been some amazing photography teachers, but the most influential was my Junior High School Photo Club teacher, Mr. Rubin, who introduced me to 35mm cameras (the Pentax K1000) and had so much enthusiasm for photography! He taught me about depth of field and said I had a “good eye.” From then on, I was really into photography and teachers in High School later encouraged me to take photos for the school newspaper, yearbook, etc. I'd walk around High School with my camera, taking portraits, documenting clubs and was always working, improving. Looking back, it was these teachers who helped me build the confidence to believe in my ability, to use the camera with a sense of purpose and care.

Later, I learnt so much from the female photographers I assisted in NYC when I was studying ... there was a high-end wedding photographer, an events photographer, a large format studio photographer ... This was all work that required fast thinking and technical knowledge. The events and weddings

were intense, and these women expected me to be responsive and agile. It was brilliant training and helped me build resilience for the demands of filming on location and being a director/cinematographer.

What useful insight did you learn in your technical training?

Stay calm and hold your focus, even when things feel tricky or like they are going wrong.

The beauty of technical work is that the process is a ritual—once you understand the technique and feel secure, you can let go and be a part of the process more fully and intuitively. If you make a mistake, that is valuable, that is enriching. Perfection is a construct; find what you want to do and learn how to do it. And sometimes what you made is not what you wanted; if that upsets you, step away ... in time you might see that it is better and closer to the truth of the thing you're after. Mistakes can be mirrors; they show us our flaws and vulnerabilities as makers, which can be hard to face. After all ... filmmaking is kind of absurd! We're not out there saving lives or growing food, but what we make can be nourishing and life-changing.

How do/did you approach the camerawork?

Do/did you prefer to operate it yourself or do you have others operate it?

I always operate myself, in fact I'm quite possessive of the camera. Filming intuitively, directing through the lens, is essential to the work that I make right now. As I age ... this might change, I'm not sure what the future holds.

Whose camerawork do you admire?

All of the women in this book!

Wolf Koenig was an early influence; his work with Jean Rouch and Edgar Morin on *Chronicle of a Summer* stands out,

as well as the directing and camerawork of Charles Burnett. Of course, Agnès Varda and the monumental Barbara Hammer (!!!!). Babette Mangolte's work has meant a lot to me, as well as William Greaves. I also love the early work of Ricky Leacock and especially Al Maysles, who I met once when I was a camera assistant on a Canadian documentary about cinéma vérité. I shyly asked each filmmaker interviewed if they ever choose not to film something, out of sensitivity to their subject, and Al Maysles was the only filmmaker to say yes ... and told me a story about working on *Salesman* and choosing not to film a moment of vulnerability. I think his camera work has a temperature to it ... it's warm.

I'm really excited when I see subjective, intuitive camerawork, and I'm always looking for role models, inspiration. It's also about the person though—who they are in the world, what their work is trying to do, their politics and how they apply their talents and privileges.

What is your advice to beginner filmmakers working in analogue in the 21st century?

Working on film isn't easy or fast, especially when you start out. Love the process and be committed to it; cultivate patience and connect to your tools and materials. Do more than less, at first, and don't give up if you fail. Apply ethics to your process; read critical theory about representation and how images live in the world and in the consciousness of your audience; remember that not everything needs to be filmed, be selective. As a filmmaker you are a contributor to our collective visual culture, what you make matters. Be a kind co-worker and if you feel overwhelmed or overworked, take a break. Stay fit and healthy; don't forget to laugh and relax. Seek out good people to work with, and when you find them, be grateful.

Margaret Salmon (born 1975, New York) lives and works in Glasgow. Concerned with a shifting constellation of relations, such as those between camera and subject, human and animal, or autobiography and ethnography, Margaret Salmon's work often examines the gendered, emotive dynamics of social interactions and representational forms. Solo exhibitions of her work have been held at institutions including Secession, Vienna (2023); DCA (2018/19); Tramway, Glasgow (2018); Staatsgalerie Stuttgart (2015); Contemporary Art Museum St. Louis, USA (2011); Witte de With Centre for Contemporary Art, Rotterdam (2007); Whitechapel Gallery, London (2007); and Collective Gallery, Edinburgh (2006). Her work has been featured in film festivals and major international survey exhibitions, including the British Art Show 9 (2021/22), Glasgow International (2021), Berlin Biennale (2010), Venice Biennale (2007), and the London Film Festival (2018, 2016, and 2014). Salmon won the inaugural Max Mara Art Prize for Women in 2006, and the 2021 Paul Hamlyn Foundation Awards for Artists. She is a Lecturer at The Glasgow School of Art.



Where did you learn to use an analogue motion picture camera?

When I moved back to Pittsburgh in 1979/80, I was lucky to fall in with a great experimental film community. I bought 2 matching Super 8 sound cameras from a journalist who had just returned from Poland—he had done a story on the Solidarity Movement—and had no further need for them. I really took to shooting Super 8 at that time and recording sound with a small clip-on lavalier that attached to the camera with a long cable. There was a funny suburban Cineclub that met in a church basement and I often went to their meetings. They screened Super 8 reduction prints of big movies like *El Cid* and shared info about anamorphic Super 8 and various modifications you could do to projectors, but my primary group circulated around the Pittsburgh Filmmakers where I was employed as the film programmer.

What is the best analogue camera for a beginner to learn with and why?

Any Super 8 could jump start the learning process, but for 16mm I would say a Scoopic or a Krasnogorsk, since they are "automatic" like a Super 8 camera and easy to get good results. A Bolex has more functions, by far the most versatile choice, but has a steeper learning curve.

How do/did you choose your photochemical equipment/format?

Over the years, I bought tons of S8 Kodachrome film stock, often at a discount as it fell out of date and popularity. I worked with it until the day Kodak stopped supplying the chemistry for processing it.

Dwayne's Photo in Kansas was famous for being the last lab to process Kodachrome. I shot 10 rolls of the sky and sent them to Dwayne's in honor of their last processing run in late 2010. I have never looked at those rolls—they are still in the little boxes from the lab—and I do like the idea of preserving them as fetish objects. I hand processed many B&W and Ektachrome stocks, for the sheer artistic beauty and unpredictable results. I would go for tactile non-standard results that were painterly and directly addressed the nature of the emulsion.

Do/did you have a favorite camera?

The Super 8 Elmos I had in the 1980s were great. They recorded magnetic sound on film and had mic inputs, and took a 200 ft cartridge for 12 minutes of recording time ... and had an intervalometer.

Do/did you have a favorite lens?

I had a beautiful old Zeiss 10-49 zoom lens that I used on my 16mm cameras.

What is/was your preferred crew set-up (or no set-up!)?

Ha ha! No crew and no set-up!

What film stock do/did you use the most?

I shot 4X on a number of films, including *The Deadman*.

**Do/did you own your own film camera?
What model/format is/was it?**

Super 8 Elmo, Super 8 Nizo, Super 8 Fuji, 8mm Kodak Brownie, 16mm Bolex and 16mm Scoopic.

What is the best mistake you made whilst shooting on an analogue camera?

I shot a scene in 16mm color film for MM Serra's film *Soi Meme*, and when hand processing it, I exposed it to light at the wrong time. I thought I had ruined it, but it came out solarized and quite magical. I also hand processed much of the Super8 in *Martina's Playhouse*, and again, messed it up, but it was lucky to have a happy accident.

What is the worst mistake you made whilst shooting on an analogue camera?

At a family reunion in the 1980s, I was shooting a centennial celebration in Bluff City, Kansas and my S8 camera jammed during the big ceremony at the cemetery, with the 21-gun salute to the Vets, the speeches and the laying of wreaths on graves, etc. That one was the worst, even more than the time I dropped my camera out of an airplane.

Do/did you have a mentor or teacher in cinematography that influenced your development?

Tony Conrad was my teacher, offering his students a broad sense of purpose and freedom of expression.

What useful insight did you learn in your technical training?

Technology is easier to access and to interpret for the artist once it is obsolete and of lesser economic value in mainstream culture.

How do/did you approach the camerawork?

Do/did you prefer to operate it yourself or do you have others operate it?

I needed the discovery process of looking through the camera

to get anything truly interesting.

Whose camerawork do you admire?

Ulrike Ottinger, Deborah Stratman, Robert Fenz, Ben Russell, Agnès Godard and Kirsten Johnson.

What is your advice to beginner filmmakers working in analogue in the 21st century?

Patience.

Love of experimentation.

Working playfully with materials.

Stand by personal subjectivity.

Do not be swayed by trendiness.

Peggy Ahwesh is a Brooklyn-based artist whose work poses an inquiry into feminism, cultural identity, alternative technologies and film genre. Ahwesh began with Super 8, attracted to the medium's punk aesthetic and evocation of home movies. A true bricoleur, her tools include narrative and documentary modes, improvised performance, Super 8 film, found footage, digital animation and Pixelvision. Ahwesh was featured in the Whitney Biennial (1991, 1995, and 2002), and retrospectives: *the third body*, BFI, London (2013); *Girls Beware!*, Whitney Museum, New York (1997); *Laugh My Darling*, Guggenheim, Bilbao (2009); and *Peggy's Playhouse*, Yerba Buena Center, San Francisco (1999). A survey exhibition, *Vision Machines*, was presented at Spike Island, England (2021) and Kunsthall Stavanger, Norway (2022). Professor Emeritus at Bard College, Ahwesh taught filmmaking and media history in the Film & Electronic Arts Program, The Bard Prison Initiative and Al-Quds Bard College, West Bank, Palestine. She is represented by Microscope Gallery, New York.



Where did you learn to use an analogue motion picture camera?

Institutions have played a large part in my learning of analogue. I started experimenting with Super 8mm for my undergraduate degree and I learnt to shoot 16mm on a Bolex as part of my master's degree. Throughout that time, I was also experimenting with still cameras, which helped a lot with metering and focus. I enjoy going on photography walks around my neighbourhood with a Canon AE-1 35mm still camera. Around studying, I spent a significant amount of time at artist-run film lab *no.w.here* and learnt a lot from James Holcombe. Now I learn a lot from film community groups online, I've never stopped learning really.

What is the best analogue camera for a beginner to learn with and why?

I think Super 8mm is a good entry point—you can pick up a camera relatively cheaply and spend some time with it, learning the in-camera features. Depending on your knowledge of cameras already, you can get a basic Super 8 camera, which is effectively point and shoot and has built-in light metering, or something with a few more features where you can manually adjust aperture, perform zooms etc. If you know you are going to go on to shoot 16mm in the future anyway, I'd skip right to 16mm. If you can hire a 16mm camera cheaply, then the difference in shooting costs are currently not that significant.

How do/did you choose your photochemical equipment/format?

I work on 16mm film because I like the production models it facilitates. Historically, it was conceived as an amateur medium, but Rune Ericson—a Swedish cinematographer—widened the

camera gate on his 16mm camera to create Super 16mm. It was an important innovation because you can blow up Super 16mm for 35mm cinema projection. Small crews could opt for Super 16mm to shoot feature films because it was less expensive. I like Super 16mm because it's close to a widescreen aspect ratio (16:9) and I want my films to be in dialogue with digital media, rather than be purist about using analogue film. Super 16mm is not as expensive as 35mm, and the appearance of 16mm cameras means that they blend into situations where being a small-camera-amateur-user might seem less threatening. I save larger Super 16mm cameras for studio situations, where sync sound is needed or for long takes.

Is there a grip item that you find/found very helpful to have? (Pistol grip, etc.)

I own a Krasnogorsk-3, which I like to operate with the pistol grip and shoulder brace. 16mm already has a shaky quality to it, because of the fact that it's recording the literal movement of photochemical film past a gate that is exposing the film to light. Even on a tripod there's still a little shake. I'm drawn to handheld shots but I always feel slightly disappointed when the shakiness is too extreme or distracting. With smaller 16mm cameras, like the K-3 or a Bolex, it's good to have that extra level of stability but ultimately the quality of the shot is dependent on your ability as a camera operator.

Do/did you have a favourite camera?

I'm keen on the Krasnogorsk-3, even though my own has been riddled with problems with the shutter and light leaks (a common occurrence for these cameras). It feels robust and sturdy. The viewfinder is very large (it can be difficult to find a 16mm Bolex with a large viewfinder). The Meteor 5-1 17-69mm lens has a maximum aperture of F1.9 so it's helpful for low light situations. I don't tend to do a lot of in-camera edits—I usually do cross dissolves, double exposures, colour changes, etc.,

digitally, so that they can be easily undone if they don't fit. The K-3 only has the option to change the number of frames per second, so it makes things a lot simpler!

Do/did you have a favourite lens?

I've recently been trying out my Mamiya still camera lenses on 16mm camera bodies (via an M42 thread adapter). For medium format still photographs, I really like these lenses and they're not as expensive as some cine lenses. Generally, I like to use zoom lenses. I am often documenting people or an event and need to quickly shift to different focal lengths. I like my Angénieux 15-150mm lens because it's C mount—so it fits on a few different 16mm cameras.

What is/was your preferred crew set-up (or no set-up!)?

I prefer to work with only a few people who I know well. I don't want the way that I engage with the crew to be extractive, so I try to be clear about the terms of our engagement and how the work can be mutually beneficial for all of us. If I am not documenting people or using sync sound, I enjoy using a small camera alone. I work through a series of failures and experiments. Often my work is told from situated points of view, which suits the idea of the camera taking up one position and navigating its environment from there. (The point of view from which my film is being told is quite often my own.)

Do/did you have any ongoing relationships with focus pullers or ACs?

Samara Addai is a trusted cinematographer who also makes films in her own right. We met properly for the first time working for a filmmaking co-operative in London, *not nowhere*, which is led by Black creatives and creatives of colour. Aside from developing the film lab at *not nowhere*, we were responsible for the

cinematography for filmmaker Larry Achiampong's *Wayfinder*, a beautiful and poignant film about Black Britishness shot throughout England. We also both worked on Nadeem Din Gabisi's *Mass*, an afrofuturistic sonic exploration of Black life in the city outside of the "Sanctuary." It's so important to have a cinematographer who is sensitive to or can identify with the themes in the film. A lot of my work is about Black culture or Caribbean diaspora cultures. Working with Samara is great, we know how to move around one another, each other's preferences and styles. Samara brings lots of experience from large-scale productions which tend to be much more regimented.

Do/did you load your own film? How does/did this influence your process?

I most often do load my film! I am constantly thinking about the things that I still want to capture and the amount of film remaining. Being responsible for the good care of the film makes you understand how precious it is, and forces you to be exacting about the things that you want to shoot. I find myself making value judgements or edits before the film is even shot. It's a completely different way of working to digital or smartphone culture. I've heard Kevin Jerome Everson talk similarly about filmmaking on 16mm—thinking in terms of duration and the actions that you need to capture on screen.

What film stock do/did you use the most?

Most often I use Kodak Vision 3 250D. I like the slightly warmish colour when it's used inside and I don't mind the added grain over using 200T. My all-time favourite would be Ektachrome, but it's more expensive than negative film stocks, and you have to be very confident in the exposure because it's reversal film. A lot of the time I just don't have enough light available to justify using Ektachrome. I wish I'd had the chance to shoot some Fuji motion picture film stock before it was discontinued. I've heard that it renders greens a little differently to Kodak stock.

**Do/did you own your own film camera?
What model/format is/was it?**

I bought an Éclair NPR converted to Super 16mm during the pandemic. I can't find anyone that converts Éclair cameras anymore but luckily it was already converted when I bought it. It's a bit heavier than an Aaton or cameras in the Arri SR series (but it was a lot cheaper). I like owning a camera because then I know its particular quirks—this comes in handy when troubleshooting.

**What is the best mistake you made whilst
shooting on an analogue camera?**

Not a mistake exactly but I did a studio shoot with a dancer for a film I made called *Junkanoo Talk*. It's about a carnival-like celebration in the Bahamas and I was interested in portraying the image of Junkanoo as someone in the diaspora. I ended up just using the light leaked images at the beginning and end of the roll of film, for the most part. It's a kind of refusal, a mediated image. The audience never really gets a full image of Junkanoo.

**What is the worst mistake you made whilst
shooting on an analogue camera?**

Forgetting when I have old film still in the camera and how much I've shot. Always label your camera!

**What is your favourite special effect that an analogue
camera can do?**

Combining a fade in/out with a double exposure to create a cross dissolve. This can be done using a Bolex. It creates a look that only a film camera can create. You could do two, three, maybe four exposures over the top of one another so that the images are burnt into each other. I often try to replicate this

look digitally by changing opacity, but it's not the same.

**How do/did you meter light on a shoot?
What is your preferred light meter?**

I prefer to use a Sekonic digital light meter and to take multiple incident readings. If I am alone and it's not a particularly tricky scene to expose, then I will use a light meter app on my phone. Beforehand, I test the app alongside an actual light meter to gauge how accurate it will be when I'm "in the field."

Do/did you ever use filters? If so, for what?

I use a colour temperature filter with tungsten balanced film, usually a Tiffen 85B filter. Lighter skin tones tend to come out a little reddish with this method. I've just bought a black pro-mist filter, which is good for bringing down highlights. This is useful for photographing darker skin, but I haven't had a chance to use it yet!

Tripod—friend or foe?

It depends! I prefer not to use a tripod. I am often making films in which I want to acknowledge that there is a subject who is telling the story, or guiding us through the film. Handheld shots help to convey that point of view. I like how considered tripod shots can look—if I was just creating one image then I'd use the tripod all the time. However, I use movement in a lot of my shots, whether that's a change of focus, exposure or the camera physically moves. I make films around diaspora, wandering and freedom of movement, and I want to question how certain ways of moving convey power or control. I hope this translates into the aesthetics of my films, moving the camera as a way to convey the cultural, political or racial position of the subject.

Do/did you have a mentor or teacher in cinematography that influenced your development?

I learnt so much as co-director of the artist film co-operative *not nowhere*. I learnt the most from learning to teach other people about analogue cameras—when their learning depends on the strength of yours! I learnt a lot from James Holcombe who ran the previous iteration of *not nowhere's* lab (no.w.here lab). A good portion of the equipment at *not nowhere* traces its way back to the London Film-Makers' Co-operative. The premise of working in this way is that analogue equipment should be accessible to everyone, and you learn, use and teach others in the co-operative. I'm trying to say that a lot of people influenced my development, and I'm interested in teaching models that don't create hierarchies or an aura around certain teachers. A lot of things I learnt by trial and error.

What useful insight did you learn in your technical training?

It's safer to overexpose than underexpose! Underexposure results in a grainy, thin negative. Although, analogue film has a high dynamic range and some things can be resurrected digitally. Analogue film looks beautiful when properly exposed and colour graded.

How do/did you approach the camerawork?

Do/did you prefer to operate it yourself or do you have others operate it?

I prefer to operate some but not all the shots myself. Usually I operate the camera when I have a specific framing or long duration in mind, or when I want to use the camera as a way to interact with the subject of the film. There are also times when using a more skilled camera operator is better, or when not operating the camera makes a positive change in my relationship to the subjects of the film. I don't usually use a video tap as

sometimes I find it to be a distraction, with the focus drawn to the image rather than the crew's relationship to the subjects/environment. In these situations, when I am not in control of the camera, I have to trust my camera operator!

Whose camerawork do you admire?

Ephraim Asili, Cauleen Smith, Garrett Bradley, Ayo Akingbade, Onyeka Igwe and Simon Liu.

What is your advice to beginner filmmakers working in analogue in the 21st century?

You can start with only a small amount of film—use it as a constraint, which will help you decide the parameters of your film. When shooting analogue film, you'll never be certain of what you've shot until you see the film developed, so be prepared for the images to be something other than what you imagined. Find ways to work with the errors that you make. Combine analogue with digital, with archive footage, with video. You don't have to work in one medium.

Do you feel there is a gender, race and class bias in who has access to analogue skills and technology today?

Yes! My own ability to work with analogue film, in such an experimental way, stems from the fact that I've been through an undergraduate and master's degree in visual arts disciplines. That's not possible for everyone. The cost of education is prohibitive for some people and the cost of motion picture film is also rising fast. I try to suggest that filmmakers who want to use analogue film start by working in groups and learn how to develop black and white film themselves, in order to save money and learn faster, collectively. Even looking back historically at the London Film-Makers' Co-op (I'm thinking about artists like Alia Syed), women were able to make films about stories personal to them by learning a lot of the processes themselves in

artist-run labs. They would otherwise have to hand those processes over to someone more specialised (invariably a white man). It's important to have people around you who understand or are sensitive to your ways of working, learning, or the themes of your work. The above reasons for biases across race, gender and class often intersect. The fact that there are fewer Black filmmakers in the industry makes it harder for Black filmmakers in general to get a foot in the door. I think it's important to consider who you are surrounding yourself with when you make a film and the way that your production model will affect the final outcome.

Can you speak a bit about your method and camerawork; maybe for *Through a Shimmering Prism, We Made a Way*?

Through a Shimmering Prism, We Made a Way is shot on B&W Super 8mm film. I made this film between the Bahamas and the UK during the pandemic. I used Super 8mm because it was easy to move around and travel with such a small camera, and I didn't attract much attention. I walked the Notting Hill Carnival route in London when it was empty, as well as important sites of Black history in London. In Nassau I did the same but traversed the route of Junkanoo on Bay Street in the car. Usually a bustling place for market stalls and tourism, Bay Street was empty except for a few police. I wanted to convey a kind of uncontrollable movement with the camera, and we are so often searching around the image, zooming in, looking at reflective surfaces or moving cars and buses. I also wanted to dislocate modern understandings of these places, tied to the idea of progression, industry and luxury. Using black and white film dislocated the modern buildings in the film from their time period. I intended to disorientate the viewer with familiar yet unhomey images.

Rhea Storr is an artist filmmaker who explores the representation of Black and mixed-race cultures. Her work explores masquerade as a site of protest, Black rural life and the politics of performance versus spectatorship. She is the winner of the Aesthetica Art Prize 2020 and the inaugural Louis Le Prince Experimental Film Prize. Recent screenings/exhibitions include CPH:DOX, New York Film Festival, London Film Festival, European Media Art Festival, Hamburg International Short Film Festival, Kassel Doc Fest, Berwick Film and Media Art Festival, Lisson Gallery, Artist Film International Fotomuseum Winterthur and Museum of African American History and Culture, Washington, D.C. She is undertaking a PhD researching Black Aesthetics and analogue filmmaking. She is a former co-director of *not nowhere*, London, an artist filmmakers' co-operative led by BIPOC creatives.



Rose Lowder

Where did you learn to use an analogue motion picture camera?

I learnt to use a 16mm film camera, which I found secondhand, all by myself.

What is the best analogue camera for a beginner to learn with and why?

I tried a friend's "automatic" Beaulieu 16mm camera but much prefer the Swiss Bolex camera. It is not at all automatic, you have to choose what you want to do but the camera gives you many more possibilities regardless of the kind of film you want to make. Professional camera people also judged that the image produced by the Bolex cameras is as good as any of the larger professional cameras.

How do/did you choose your photochemical equipment/format?

In my case, I worked as an editor for ten years in the film industry on both 16mm and 35mm. 35mm is considerably more expensive and the camera is very heavy.

Is there a grip item that you find/found very helpful to have? (Pistol grip, etc.)

I don't have any grip items.

Do/did you have a favorite camera?

My Bolex cameras have always been my favorites.

Do/did you have a favorite lens?

I have several lenses. My first one was given to me by a school next door. It says on it: Cosmicar Television Zoom. It is far from being a great lens but I used its imperfections for my first films. I have since acquired a secondhand a Kern Vario-Switar 1:2 f=12, 5-100mm Multicoated and have been given a little Berthiot Hyper Cinor.

What is/was your preferred crew set-up (or no set-up!)?

I have no crew set-up.

Do/did you have any ongoing relationships with focus pullers or ACs?

I have no relationship with focus pullers.

**Do/did you load your own film?
How does/did this influence your process?**

I always load the camera myself.

What film stock do/did you use the most?

I have used all sorts of stocks over the years as they change all the time. One of my first films uses B/W negative 7231, B/W 7222 negative, 7224 B/W negative, and ENC 7247 color negative. 7224 B/W negative is supposed to be used in very bad light. I used it in bright sunlight, as I knew that in that case it would produce visual grains on the screen. In using different film stocks to film the same water wheel, one created a different picture of the subject each time. Since then I have used all sorts of daylight color negative: 7201, 7202, 7203 as well as the 7231 B/W.

**Do/did you own your own film camera?
What model/format is/was it?**

I own three 16mm Bolex cameras, all bought secondhand: a hand wound one, 208 597 (1964), and two battery run ones, an H 16mm EL 312 231 (1987) and an H 16mm EL 313 142 (1998).

**What is the best/worst mistake you made whilst
shooting on an analogue camera?**

One makes mistakes all the time. One very useful one was when I was filming a scene in two periods. The Bolex camera allows you to go forward and then backwards to refilm images that were not filmed the first time. Filming the second time, I realized that I had not adjusted the light correctly. So I went back and added some light while filming the same scene a third time. This mistake made me realize that I could film anywhere on the filmstrip at any time. You didn't need to film the images in the order they appear on the screen.

**What is your favorite special effect that an
analogue camera can do?**

I don't have a favorite special effect that my cameras could do.

**How do/did you meter light on a shoot?
What is your preferred light meter?**

I don't have a light meter. I don't know how to use one. Normally I look at the scene in relation to the film stock in the camera and judge what I should do. The battery-run Bolex cameras have a magnificent light meter inside the camera just under the lower frame. It is an excellent guide but I rarely do what it says you should, because I judge I could do something a little different.

Do/did you ever use filters? If so, for what?

I used filters when the film stock required you to film in daylight. I also once used a red filter when filming in B/W to accentuate the contrasts.

Tripod—friend or foe?

I sometimes use a tripod, sometimes not, depending on the project.

**Do/did you have a mentor or teacher in cinematography
that influenced your development?**

I have never followed a single class in cinematography.

**What useful insight did you learn in
your technical training?**

I have never had any technical training.

**How do/did you approach the camerawork?
Do/did you prefer to operate it yourself or do you have
others operate it?**

I always work alone without any help from others.

Whose camerawork do you admire?

If I had to give you a list of interesting camerawork, I would have to spend a week going through all the thousands of films I have seen since I started making films in the 1970s. In that case I would not be able to send you all these answers to your other questions.

**What is your advice to beginner filmmakers
working in analogue in the 21st century?**

For someone beginning to work in analogue film, I would

suggest: find a camera, ask for help from other filmmakers when necessary, look at the films you think might be interesting, try to think what you want to achieve, then it's trial and error, and above all a lot of work.

To what extent does technique play a role, and how, in what you want to do (or to achieve)?

Technique is a mechanical skill in art. But as William Henry Fox Talbot wrote in *The Pencil of Nature*, London, 1844, "The camera records anything and with the same impartiality films a chimney or a dustman as if it were Apollo of Belvedere." So you have to choose how to use technique to express what you want to say. As Toni Morrison said on the radio (France Culture, *À voix nue*, 15th of November 2006), "All is not useful. So you have to choose what is useful." Moreover, in an interview of Thelonious Monk on the radio (France Musique, 13th of September 2011), it was a question of the punctuating silences in his music, which made you hear more than what was played. Also therefore, the visual images of a film should allow you to see more than what was filmed. In other words, how can you use technique to say what you want to say?

Rose Lowder, born 22nd of December 1941 in Miraflores, Lima, Peru, has had a long training as an artist in Lima and in London. She worked for a decade as an artist while being an editor in the film industry, which led to several years of research on perception in relation to the cinematographic process. This in turn led to a doctorate "The experimental film as an instrument for visual research" and another decade of filmmaking while teaching film theory, history, aesthetics and practice at the University of Paris 1 (Sorbonne). Underlying this activity is a search for making films, which develops cinematographic possibilities while treating the complexity of the environment and circumstances of contemporary society.

This book is published on the occasion of the exhibition Margaret Salmon. Monument at the Secession, April 28–June 18, 2023.

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