



Going live with **Rambert**
Dance Company's
Draw From Within and **Rooms**

Cinematographer **Emma Dalesman** has applied her extensive camera and lighting skills to numerous narrative feature and documentary projects, but rarely in a live multicamera setting. In 2020, she was delighted to be asked by the legendary Rambert Dance Company to be the DoP on its next production, *Draw From Within*, that would be broadcast live. Zerb asked Emma to reflect back on how she adapted to lighting and planning the multicamera coverage in a completely live environment for *Draw From Within* and *Rooms*, Emma's second live collaboration with Rambert, both of which received audience and critical acclaim.

My work to date has been pretty varied when it comes to both scale of the production and size of the crew; it all really depends upon the particular project. I'm very open to adapting for specific jobs and have worked on anything from single camera documentaries and art installations, with just a director, a sound recordist and me, to narrative and commercial work, involving large crews on both camera and lighting. I adapt my shooting style and approach to the individual project and budget, and the same goes for the kit, too; again, I go with whatever kit is right for the job.

Draw From Within

My first project with Rambert came about when, during the first lockdown of 2020, I was contacted by Derek Richards, a freelance broadcast producer who was crewing up for *Draw From Within* (DFW), a new dance performance piece. Knowing that the project's director and choreographer, Wim Vanderkeybus, was also a filmmaker of experimental as well as narrative films, Derek was trying to find the right fit for DFW's DoP.

Meeting of minds

Creative collaboration is central to all my work, by which I mean that the realisation of, as well as contribution to, the director's vision is always key to my role. I try to set out on any project with an open mind (working with artists has really taught me this), getting to know the director and the project as much as possible before planning my approach. For Derek, I think what stood out was that my previous work demonstrated how I was used to collaborating with artists from different disciplines. In fact, I'd only recently shot *Institute* (for the BBC and The Space), which is a 60-minute film adaptation of Gecko Theatre's production, and has a strong element of emotive movement – I think this all helped to illustrate that I might be a good fit for Derek's team.

In this respect, my journey into this project was like any other. We started, along with all the creative collaborators, by exploring the themes, mood and narrative (if any) of the film, to enable us to discover how we could express it all to the audience in the best way possible. Once we'd done that, we could gather the people and tools needed to do the job – but the first step is always to understand what the film needs to be.

Pushing boundaries

Draw From Within was to be my first live multicamera shoot. My previous (very limited) live experience had been of filming bands at gigs, so this was a massive learning curve for me, but I was keen not to let the live aspect quell our ambition. I went into it with no expectations, just a willingness to embrace whatever the project would involve (with some trepidation too, naturally). I knew that Wim and Rambert wanted to really push the boundaries and create something unique, so they were keen to approach this as an experimental dance film rather than to produce conventional televisual coverage of a live performance. In a way, I think my rather limited experience of live broadcast really played nicely into this, as I didn't come with any preconceptions or learned restrictions that I might have carried with me; we were free to plan what we'd like to do and then, if any technical issues came up, we'd either resolve them or adapt where necessary.

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Getting under the skin of the project

Choreographers do expect a strong level of collaboration with the fellow creatives they're working with and Wim was no different – even though he had a lot of film experience himself, he was very open to my input. As I was on board from an early stage, the project evolved quite organically. My first approach was to watch the rehearsals, so that I could get to know Wim and his incredible choreography and observe how the dancers moved as well as the emotion within their movement. From the outset, I was totally blown away by the dancers; they're so dedicated, professional and expressive (and not only through their movement) – I knew they were going to be fantastic on camera.

Initially, I took just my stills camera into the rehearsals, so I could focus on getting to know Wim and the dancers, as well as witnessing the creation process of the piece from the inside. It also meant I was on hand to discuss shooting style and lighting whenever necessary, which was fantastic. Then, with only a couple of weeks of rehearsals left to go, I brought in one of the cameras I was planning to use on the shoot, to do tests, try out different angles, and so on.

Planning for any eventuality

Derek was a great support in planning for the live production (of which he had a lot of experience). He advised me about the potential pitfalls – but always in an encouraging way – and was definitely up for challenges and pushing the boundaries too, helping me to find ways to achieve what we were aiming to do. For example, we wanted to shoot a whole scene in one continuous handheld shot, which meant that, were my camera to go down,



1st AC Claire Fraser and crew in readiness to go live with *Draw From Within* for the first time; on opposite page: the 4m-long 'Dolly Train', that was custom designed for *Rooms*, lined up and ready in front of the central room in its 'daytime' lighting state



JOE RANSOM

Rogan Brown, grip, and Max Leighton operating one of the dolly cameras during rehearsals for *Draw From Within*

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We wanted to really bring the audience into the space with the dancers. Keeping the cameras eye to eye with them allowed the audience to become truly immersed in the performance.

we wouldn't have any safety shots to cut to because all the other cameras had to be completely hidden behind the set so would be unusable. Therefore, we had the MÖVI on standby, ready to step straight in to pick up the action if needed; if that were to happen, I would then direct the operator through the choreographed movements we'd devised. Of course, in such an event, the audience would realise something had gone wrong as the switch wouldn't be seamless, but we'd be back up and running as quickly as possible. I think though that by acknowledging that mishaps might happen and doing our best to plan for that eventuality, we could truly embrace the live experience.

Lighting

Next came a proper test of the lighting – Rambert has a lot of in-house stage lighting fixtures, so I tested them all on camera. I found that the majority of the LED lamps were good for coloured use, but not great for rendering white, as they had either a green or magenta cast. Fortunately, I discovered Rambert also own some ETC Source4 Series 2 fixtures, which are RGBW and produce a white light that looks good on camera. There were about 70 units, with either Fresnel or profile lenses.

Wim was keen to create mood during the rehearsals, so it meant we could experiment with lighting as the creation evolved, which in turn helped to inform us of the plan for the lighting going forwards. Freelance lighting technician and desk op, Jack Ryan, had worked with Rambert a lot, and proved to be a massive asset for me. He helped with the camera lighting tests, from which I formulated a lighting plan

that Jack translated into a plot and onto the grid, bearing in mind power, weight, etc. and adding any rigging that was required.

The freedom to experiment

I really enjoyed the process of experimentation during rehearsals, collaborating with Wim, the results of which I then took and fine-tuned for the production. There had been a lot of lighting already rigged which we could play with, and we also used practical sodium streetlights, par cans, 2Ks and RobeDL7 movers. I must admit, I was a bit cynical about the movers as they couldn't produce 'white' light but, actually, they're amazing to just add little pops of colour or as backlights, and they are so flexible.

It was fun finding ways to incorporate the fabric of the space into the look, too. The dance floor was a light grey colour and I found that bouncing light off areas that were out of vision was a great way to add a different direction of fill light. This was an invaluable technique I used on both productions, but it is rather alien to lighting for live theatre where the whole floor is visible at all times; you wouldn't want the seated audience to have spotlights reflected in empty areas of the stage as it would distract from the performance.

Camera kit

In terms of camera choice, I was keen for the image to look as filmic as possible. For *DFW*, I went with the C300 MK2, Canon cine zooms (CN7x17 (17–120mm), 25–250mm, CN-E15.5–47mm T2.8) and CN-E14mm T3.1 prime, with 1/8 Black Pro Mist (BPM) filters on all cameras. Being live and due to our setup, we didn't have the option to grade the images coming out of the cameras, so they were all set up identically: native 800 ISO, 4300K white balance, 1/50 shutter speed and all lenses set to T4 aperture. I also used 1/8 BPM filters, Cine zoom lenses on the 35mm-sized sensor camera bodies (C300 MkII for *DFW* and ARRI ALEXA Mini for *Rooms*) and I selected a Rec709 LUT out for the feed, so it was key that the lighting was balanced for these looks. We had two wireless cameras, one of which was on the MÖVI, on each production.

We decided to have two cameras on dollies on a track that would be laid to the full width of the studio, one static

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camera, one on a MōVI and one handheld. I provided Derek with my full kit list, which he commissioned GTC sponsor VMI to supply. Initially, I was concerned about the reliability of a gimbal for a live production, as I'd had some bad experiences on previous productions where the gimbals had freaked out and shut down. Luckily, Joe Ransom, our MōVI owner/operator, really put my mind at ease; along with 1st AC Claire Fraser, Joe ensured that the MōVI behaved – and it was fantastic to have the freedom of the camera with the dancers.

Camera crew

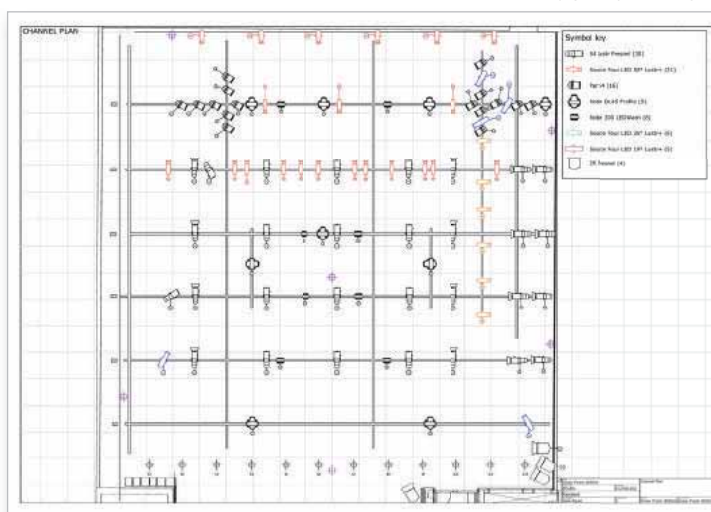
I was well aware that I would need a crew that would embrace what we were aiming to do as well as be up for a challenge. The rest of the crew were: Gabi Norland, Pippa Riddick and Max Leighton as my fellow camera operators (Paria Kamyab later joined us on *Rooms*), key grip Rogan Brown, grip Nick Teulon and trainee/DIT Michael Wornell. I knew Gabi as she is a fellow DoP – with the added benefit that she had experience of live camera operating (she's fantastic). I had worked with Rogan as key grip on *Institute*, so I knew he had a feel for experimental movement, and is also very open to working on interesting new projects with their different challenges; Derek recommended Pippa and also brought on the multicamera broadcast directors, vision mixers and script supervisors for each production.

We brought the crew and kit in a week before we went live, to give us all four days for camera rehearsals, notes and a live dress run (which was also a test streaming, with a limited audience) before finally going live – we had three performances of *Draw From Within* and four of *Rooms*.

Everything coming together

After a few weeks in rehearsals, we were joined by Martin Collins, the camera director. I had spent time filming, searching out the angles that worked best for all the sections of the performance, and assessing how many cameras and what kit we would need. By the time Martin was on the scene, I'd put together a sort of shot list, but it was only once we'd met and he asked me which shot I wanted to be on at every moment of the film I realised how absolutely precise the process needed to be. However, based on the shots I'd planned, we had enough to come up with a camera script together. On our first full run-through, we recorded each camera's output as well as the cut mix. This meant that Wim, Martin and I could then view the cut alongside all the shots on offer and choose which we wanted at each point as well as explore whether anything needed to be adjusted.

JACK RYAN/EMMA DALESMAN

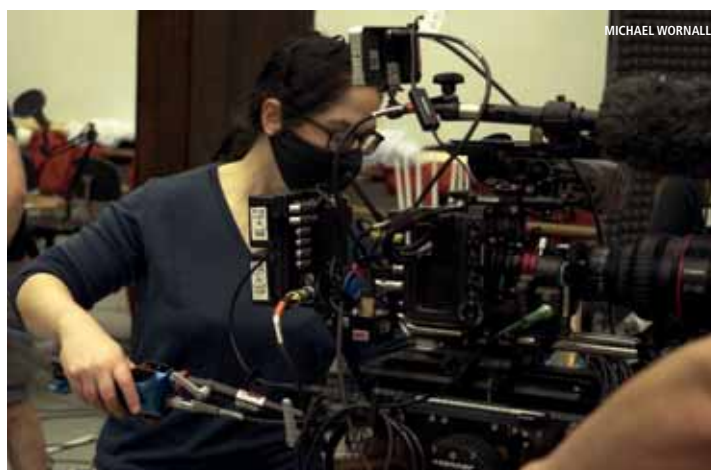


Lighting plot for *Draw From Within* created by Emma and Jack Ryan, her lighting technician

To keep it live, there were some more complicated sections that were totally scripted but others that were a bit more freeform, where the camera operators knew the shot they were to get but the mix could be more fluid. We didn't use tallies or return vision, but the camera crew and gallery team were brilliant and the lines of communication and camera script meant it all came together incredibly well after a few rehearsals.

Drawing the audience in

To ensure that this would feel like a film rather than the recording of a theatre production, we wanted to really bring the audience into the space with the dancers. Keeping the cameras eye to eye with them allowed the audience to become truly immersed in the performance. As well as having the main cameras very close to the action at times, I also incorporated the MōVI gimbal and handheld camera (which I operated) on stage for certain sections. At those points, we had to commit fully to staying on only those cameras (they would have been in everyone else's shots anyway), and full credit to Rambert and the production that they were happy to embrace this strategy. Of course, knowing there'd be no hiding it from the audience if a camera, wireless link or the gimbal were to go down certainly upped the stress levels, but for me, that was partly the point of our going live.



MICHAEL WORNELL

Emma framing up during rehearsals for *Rooms*



EMMA DALESMAN

Rehearsals for *Rooms*

The live experience

It was certainly interesting going into *DFW*, especially coming from my non-live background, as I had to quickly grasp all the unique complexities involved in live broadcasts, such as the need to get everything as precise as possible, and working to camera scripts. A part of me started to question why we had chosen to go down the live route; however, it all became crystal clear why during our first broadcast: the energy in the studio was electric! You could just feel the difference, it was palpable amongst the dancers. Obviously for them, live performance is the norm but usually it would be in the presence of a physical audience. For this, everyone including the crew was in this together and there was the wonderful knowledge, albeit slightly scary, that the audience was actually watching along at the time.

Along with my responsibility for the production in the wider sense, once the performances themselves were underway, I switched to operating my camera. In *DFW*, there was an 11-minute section that involved my being handheld in amongst the dancers, with only my coverage being used (although the MōVI was standing by just in case my signal went down) – it was so intense and wonderful. Although I had choreographed the camera moves very carefully, I'd also tried to mix it up a bit as it was still meant to feel spontaneous, which it was. On the test broadcast, all was going to plan, until I managed to get caught up behind a dancer with nowhere to go. As a result, we just had a shot of a bum for 3 seconds! Of course, having that hiccup on the dry run was very useful, as it gave me time to revise my move and avoid any such mishaps during the real broadcasts – thank goodness – although Nick who was spotting me was definitely kept guessing!

Rooms

As my second production with Rambert, *Rooms* was very different. The basis of our set construction was three compartments which, throughout the 1-hour duration of the production, the stage crew would constantly be transforming each one into 36 alternative rooms and scenes. More than 10 scenes would be played out in each 4mx3m compartment, but with every room having its own unique costumes, dressing, props, etc.

Lighting the rooms

It was a real puzzle to plan the lighting to be so flexible in the relatively small spaces; as it involved a set build, no lighting was already in place. I wanted it to feel as filmic as possible, but had to bear in mind that large props would be moved in and out for each scene change, and it was really tight on time, with some scenes changing every minute. The dancers also had to get in and out to change costumes at the same time, so it was obvious I couldn't put anything on the floor or hang anything low over the set.

I gathered lighting references I thought were relevant for all the different scenes and discussed them with Jo Strømgren, *Rooms'* choreographer-director. It was vital that every room would be easily distinguishable from the others because the piece is essentially a glance into each of our protagonists' lives, so each room had to have its own specific feel – I just needed to figure out how to achieve this.

The soft option

Getting light in from the front and side that wasn't topky was going to be tricky, so I came up with a plan to rig light panels in the front corners of each room. ETC supplied six Fos4 Lustr PL8 panel lights, which gave me a very flexible soft side/front



Working out transitions during rehearsals for *Rooms*

light in each room. The colours on the PL8 are fantastic (as is the white) and I could seamlessly add them into each scene, regardless of whether the other lights were LED or tungsten. They looked great on the dancers and it was fantastic to be able to use a bit of softer light where it really mattered, which isn't very common in stage lighting.

Plotting and cueing the lighting

The rigging had to be done before the set went in, so had to be very precise; although we could focus lights from the Tallescope ladder, it would be very hard to move them once the set was in place. To try and get ahead of the game on this, Jack and I devised a lighting plot together, which he gave me as a capture.se file so I could use the software at home to fine-tune positions and play with colour and feel.

Having Jack with me on both productions was amazing as he was a godsend, continually coming up with solutions for any problems we encountered – and he was so quick at programming. We pre-rigged and worked out the cues together, then he continued to finesse them throughout the camera rehearsal. There were 96 cues in the hour-long production, so it took a fair bit of working out. He also kept a constant eye on the monitors, watching out for any tweaks that needed to be made.



I wanted to really engage and enthrall the audience – and, from the reactions we got, I think we achieved that... The energy of the performance and the crew was so different being live – I totally got it, and the audience clearly did too, which is what really mattered.

Finding the right cameras – VMI saves the day

Fortunately, when I came to test for *Rooms*, I had a Canon C300 MK2 available from the outset and was able to see early on that one of the surfaces of the set walls, which was made of woven straw, was causing moiré issues. I experimented with various diffusions, and we even tried painting a section of it in an attempt to make the surface less contrasty, all of which helped a little but unfortunately it didn't fully fix the problem. On top of this, I was concerned that the compression involved in the broadcast would make things even worse. Thank goodness, Derek agreed I could try out an ARRI AMIRA because, as I'd hoped, it could render the textured wall without any issues. The downside to this was that, just as we were getting underway with *Rooms*, the previously lockdown-stricken film industry really picked up again, making it tricky to get hold of any AMIRAs. I knew we'd need at least one MINI for use on the MōVI but, in the end, VMI pulled out all the stops and managed to provide us with five ALEXA MINIs.

All aboard the Dolly Train

We had one camera on a tripod that could roam, another on the MōVI (operated again by Joe with 1st AC Jason Henwood) and, to deal with covering the swift scene changes between each room, Jo had proposed that we have a 'mega dolly', the full 4-metre width of each room, with three cameras on it and this would then travel between the rooms. And so my key grip, James Powell, and his team designed and constructed our 'Dolly Train' out of two PeeWees and a flat bed that were then rigged together with scaffolding. Ingeniously, he put the whole thing on skate wheels to make it smoother and more fluid to move.

Whilst prepping for *Rooms*, I'd heard rumours about there being a lack of dollies in the country. Apparently (and this might be hearsay), as all PeeWee dollies are only loaned to

EMMA DALESMAN



Cast and crew are set and ready, minutes before going live for the first time on *Rooms*

hire houses, when production stopped due to the pandemic, a lot of the PeeWees were returned to Chapman who own them. Combined with the effects of Brexit, this then led to there being a shortage in the country – but, luckily, once again, VMI managed to get hold of a couple for us.

The Dolly Train was a genius idea that worked really well. It meant that, even on the move, Jo could cut between cameras, which would always be in the right place at the right time, particularly thanks to James, who had an impeccable sense of timing and pulled this off brilliantly.

Changing rooms

The scenes in *Rooms* varied massively, flipping between straight narrative and full-on dance, with the camera operating and the edit/mix style changing from minute to minute to reflect the different genres. Actually, the narrative drama scenes were the trickiest to do in a live situation, as I wanted the cutting to be as drama-like as possible. For me, that was one of the many aspects that highlighted the difference between recorded and live camerawork: the pace of single camera drama can be built in the edit, whereas in live multicamera, it's built in camera, so reframing of shots on the fly relies on synchronicity between camera and vision mixer.

I think the experience gained on *DFW*, both in terms of live broadcast and cued lighting, definitely helped the approach for *Rooms*. Especially when it came to the lighting, it meant I was able to really push to achieve what I wanted on that production, which was a bigger technical feat from a lighting perspective. On the flipside though, I only operated camera for a couple of shots on *Rooms* and I did miss the buzz of the greater amount of camerawork on *DFW*.

I don't know if I had any expectations going in – I just knew that with both projects I wanted them to be unique, bold and for the cinematography to complement and add to the atmosphere, the choreography and the wonderful dancers. Most importantly, I wanted to really engage and enthrall the audience – and, from the reactions we got, I think we achieved that. On the way home after the first live show, it

was amazing to read the audience reaction live on Twitter and Instagram. The energy of the performance and the crew was so different being live – I totally got it, and the audience clearly did too, which is what really mattered.

Reflecting back on my personal journey with this all, being that close to the dancers and the process of creation of a production has been wonderful. I'd totally do more of this type of work, I really enjoyed the experience and learnt so much.

FACT FILE

Emma Dalesman is a freelance cinematographer, having graduated with an MA in Cinematography from the National Film & Television School. She has shot a range of projects encompassing fiction, broadcast and feature documentaries, art films and commercials. Her narrative work has been broadcast on the BBC and shown in competition at numerous international film festivals, including Krakow, Rotterdam and the BFI London Film Festival. Her promo work has won a UK Music Video Award. She regularly collaborates with artists, including for the Venice Biennale and on work nominated for the Turner prize. Her work with artists has exhibited internationally and in the UK, including shows at the Imperial War Museum and the Tate. She is represented by Lucy Price at Loop Talent.

To find out more about Emma and for her contact details: website: www.emmdalesman.com; Instagram: @edalesman

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