



PLANET5D INTERVIEW WITH

GALE TATTERSALL

planet5D

ABOUT

this is an archive of a conversation I had with Gale Tattersall ASC a while ago. ([Audio version](#) if you want)

From the beginnings of the HD/SLR revolution, there's some great nuggets from Gale here about the TV show **HOUSE** and using DSLRs.

Gale's bio (from his [website](#))

My childhood and education were split between the outskirts of Liverpool, England, and boarding school in Darjeeling in the Himalayas in India, my father being an engineer at a steel company in Bombay, (Mumbai).

At the age of sixteen, I left home in Liverpool, to make my life in London. The beginnings of my journey to becoming a filmmaker really started as a photographer at the Architectural Association School Of Architecture in London. A visit by Buckminster Fuller, the renowned American architect and philosopher, in the summer of 1967, caused me to pick up a Bolex to document his visit. I became so enchanted by the film making process that I enrolled at the London Film School for the two-year course. At the time of Graduation, I received a grant from the British Film Institute to make a short film called "Value For Money", inspired by a dream, and featuring Quentin Crisp, later to become famous for "The Naked Civil Servant".

The director of the BFI Production Board at the time, Bruce Beresford, was impressed with the photography and asked me to be Camera Operator on his first feature film, "The Adventures Of Barry McKenzie", which he was just leaving to finance in Australia. This, in turn, led to a collaboration with Bruce on many projects as Camera Operator and occasionally as his DP.

More by luck than design, I arrived in Australia at the rebirth of the Australian film industry. Directors such as Bruce Beresford, Peter Weir, George Miller and Fred Schepisi were all starting out. I really cut my teeth as an operator working on many feature films during that period. Returning to England, I teamed up with Bill Douglas, a fellow student from the London Film School, to DP his film "My Ain Folk". This was a 65-minute feature that was made on a tiny budget of \$15,000.00. It earned me the Cork Film Festival, "Director Of Photography Award" in the features category. But it was thin times for a young upstart camera operator/DP to be in London, hoping for a career in features, so I turned my attention to Advertising. Again by chance, the Golden Age of British Commercials was in full swing, directly spawning talents such as: Alan Parker, Adrian Lyne, Ridley Scott, Tony Scott, David Bailey and Hugh Hudson.

I was working and learning from some of the great DP's in London at that time, such as David Watkin, John Alcott, Roger Pratt, Michael Seresin, & Peter Bixiou. "The Emerald Forest" was my last major feature film as camera operator, working with John Boorman, (director), and Phillipe

Rousselot (DP) for eight months in the Amazon.

After 14 years as an operator, I finally made the move to DP on a picture called "LINK" directed by Richard Franklin and produced by Rick McCullum, shooting 2nd unit. Stanley Kubrick asked me to operate on "FULL METAL JACKET", but my mind was already made up to follow my dreams and be a Cinematographer. My next feature assignment was "Comrades", a wonderful film about the "Tolpuddle Martyrs", (which sparked off the Trade Union Movement in England).

The next few years saw me in an intensive period of shooting Commercials and several Features including "VROOM", Beban Kidron's first film; "WILD ORCHID" with Zalman King, "HOMEBOY" with Michael Seresin and eventually "THE COMMITMENTS" with Alan Parker.

I then moved to Hollywood to take over the last half of "THE ADDAMS FAMILY" from Owen Roizman, directed by Barry Sonnenfeld, and produced by Scott Rudin. My career then moved more intensely into Directing and Shooting Commercials for BFCS, a British based company, with a satellite office in Santa Monica, but I then returned to the Features fray to shoot "Hideaway" and "Virtuosity" for Brett Leonard; "Tank Girl" with Rachel Talalay and "Pushing Tin" with Mike Newell starring Billy Bob Thornton, John Cusack and Angelina Jolie; and "The Jack Bull" with John Badham. In addition I shot all 12 episodes of "From The Earth To The Moon" with Tom Hanks and Ron Howard for HBO, for which I was nominated for an Emmy Award. More recently, I shot "13 Ghosts", for Steve Beck, Gil Adler & Joel Silver for Warner Bros., and "Ghost Ship", in Australia, for the same team.

My work includes over 500 Commercials with some of the top directors in the industry, and high profile spots such as First National Bank, Gatorade, Nike and Coca Cola. I also earned a name for myself as one of the most sought after car shooters. For the last few years, and to spend more time with my sons, I took over NBC/Universal's "House", personally shooting over 110 episodes, for which I was nominated in 2007 and again in 2009 for the coveted ASC award. During breaks, I shoot my own films, and commercials... recently shooting the Canon camera campaigns for Canon - Japan... which was shot exclusively on the Canon 5D DSLR... and the technology and learning process, was applied to the season finalé of "House";, which was shot entirely on this platform...

"Photography is my life-blood... from my collection of enormous large format cameras to the latest digital technology, to even my iPhone... the image creating possibilities are infinite..."

Gale Tattersall

planetMitch about

Mitch "planetMitch" Aunger is the creator and mastermind behind planet5D.com — which covers every aspect of HD/SLR cameras (and a whole lot of other cameras as well).

A lover of photography since his early days, he graduated to selling stock photos to make a little bit of spare cash. It wasn't much, but it allowed him to upgrade to better cameras as well as computers, and it wasn't taking money away from feeding his family.

He loves the stories that the still image can tell. In the summer of 2008, he read a story written by Arnold Kim called "I Quit My Job" — Arn is the owner of macrumors.com. He started macrumors in 2000 as a hobby, and by 2008 he was making more money with the site than he was on his day job, so he quit. The surprise to the story is that he was a doctor making more than six figures! Right then and there, planetMitch dreamed about doing the same thing.

September 2008 rolled around, and Canon announced this new version of the incredible 5D — the Canon EOS 5D Mark II. It was the first Canon DSLR to shoot full HD video and the earth moved! (It really was a huge deal in the photography world.) planetMitch knew if there was ever a chance to ride a wave of something he was really passionate about, this was it — and the blog at planet5D.com was born. It is now one of the most popular HD/SLR blogs on the planet, and he is making a full-time living from blogging. He couldn't be happier!

about planet5D

planet5D is in its 5th year!

planet5D started at the same time the Canon EOS 5D Mark II was announced and has, in many ways, been the leader in information and news reporting on the HDSLR revolution.

You can count on us to give you the latest in news, product releases, and gear reviews - and we thank you for being a subscriber and daily reader!

planet5D planets:

There are several sections of planet5D...

- [planet5D blog](#) – our blog of HDSLR news and what is going on behind the scenes
- [planet5D Headline news](#) – shows the top HDSLR blogs and their 5 most recent posts – stop in daily for one stop [Photo/Video news!](#)
- [planet5D forums](#) – chat with folks around the world about HDSLR stuff
- [planet5D videoLog](#) – a place where we feature HDSLR movies and you rate them
- [planet5D Buyer's Guide](#) – support planet5D by buying thru our vendors

Of course, you can always [contact me](#) if you have a question, a hot news item, or just want to say hi! I really enjoy meeting new people and hearing about what makes their lives fun... even if it is just 'virtually.'

GALE TATTERSALL - THE INTERVIEW

Hi everyone. This is planetmitch from planet5D world headquarters. Today, we're talking with Gale Tattersall from "House."

Most of you may know Gale already from some of the other interviews he's been doing lately and some of you know from the big episode of the Fox TV show "House" from last year. The very last episode of the year was done completely on Canon 5D Mark IIs and we're gonna talk a little bit about that when we get started.

Gale: Good morning everybody. Thanks for joining Mitch. It's a pleasure for me to be here and I heard some of these are up till 3AM in the morning so that really goes to show how keen some people are just to be there so I'm all yours guys. Whatever Mitch asks me and whatever you want to join in and talk about, feel free because I love this new technology, the whole 5D nebulization of filmmaking, so here we go.

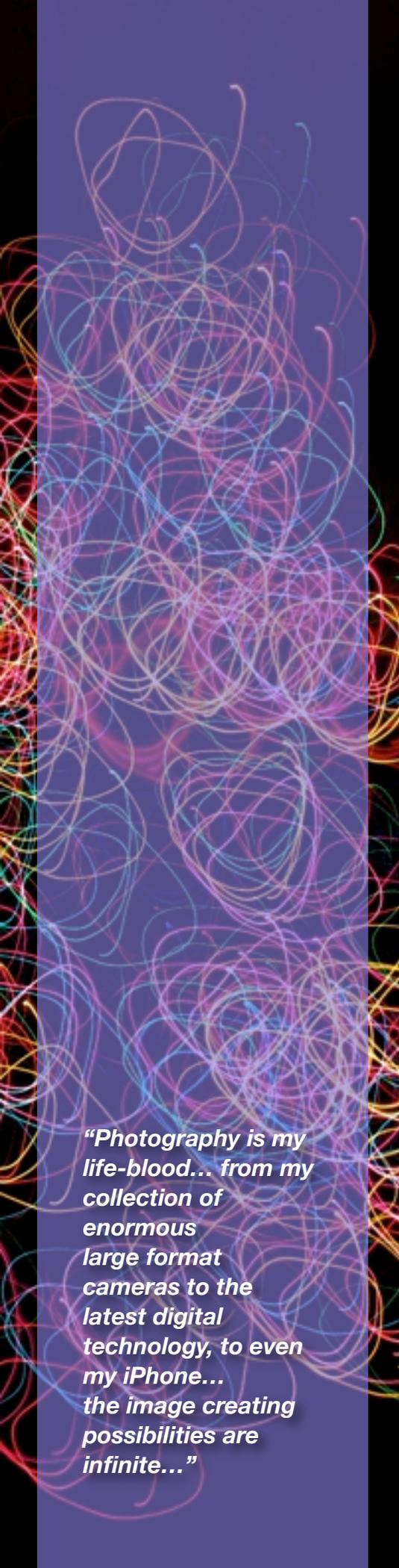
Mitch: Just in case some people haven't heard about your little spiel about the "House" episode, would you briefly give us an idea of why you picked the 5Ds, what they did for you, etc. on the last episode of "House" from last year.

Gale: Right. That would be a pleasure. We had an episode that came up on "House" that basically was about a building that collapsed under a construction crane and all our sets were about 3 ft tall. We mentioned the film took place in a collapsed car park where the ceilings and all collapsed under the weight of the building collapsing. It was a very, very tight quarters to work in. Normally, on a network TV show such as "House", we use arrow flex cameras.

We shoot 35mm film and slightly prior to that, I've done a Canon TV commercial for the Canon Rebel for Japan and they started to play with the Canon 5D and then I saw the work of Vincent Laforet, Rodney Charters and some of the others. I became very, very impressed with the quality of the camera and a lot of very polishing tests. I didn't like the look of the camera that much and the small compact size that we thought, let's just go for it and do the whole episode. It was the first network TV show that was shot in Cali on a Canon 5D Mark II.

Mitch: And it worked pretty well from what most people said. I certainly enjoyed watching the show.

Gale: I think it went very well. I think obviously, there is no perfect camera. We were very careful to avoid some of the pitfalls that you



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can run into with HDSLR cameras but in general, I think it worked extremely well and it's enabled us to get shots and shoot material that would not be possible otherwise.

Mitch: You're still shooting on film for most of the show. Isn't that correct?

Gale: We still play it. We still used the 5D a lot. Every time we work in tight quarters or we shoot entirely in cars, we shoot in 5Ds. Sometimes we use it for effect because if you take away some of the pitfalls of 5D cameras such as the compression, so on and so forth, you can get amazing results. There's one thing in particular that's very, very special about the 5D in its very large sense. You get this beautiful shallow depth of field that you can't even achieve on any form of motion picture camera and that's something that I absolutely love – shallow depth of field because you're effectively shooting on a larger format.

Mitch: What kind of lenses are you using these days?

Gale: I'm a Canon Purist. I believe that one of the most beautiful things about the 5D is it enables anybody with talent, a good script and actors to make their own film so it's kinda important to stick with the way Canon has given it to us and work with the lenses because otherwise it gets expensive. I believe this is a key to be able to make films on a very, very low budget without spending all your money on renting equipment.

Mitch: A minute ago you mentioned that there were some pitfalls you wanted to try to avoid. How did you avoid them?

Gale: We did a massive amount of test. One of the issues that I'm sure a lot of the 5D, 7D, 1D Mark IV users have come upon is this gold bending. It happens because of the H264 compression. We found that by adding film grain that tend to make that go away and it makes it look more cinematic anyway. So that's just one issue.

Other issues, rolling shutter with fast panning shots. Everybody that's used the HD DSLR system knows about this problem so we tended to avoid fast panning shots rather than lining up the shots in constructing the sequence with focus racks in avoiding that kind of issue. But having said that, one of the most interesting things is I think it's very rare if you can think outside the box, you can often use some of these issues to create rather interesting effects.

We've actually used rolling shutter effects to kinda create the feeling of schizophrenia in a patient. You know just by literally doing this and distorting the head of a patient in the hospital and its pitfalls to a certain degree but you just tend to work around them and every single camera has pitfalls. Panaflex cameras are so big and bulky. We would

never have been able to shoot the season finale with them. Our cameras, we would have to pull apart for every single shot every time we move the camera. It would have been very, very difficult.

Mitch: Were the lens baby shots from the episode locked in done with film cameras or the 5D Mark II? If film and you have to do it over again, would you still go with film or the 5Ds?

Gale: That's kind of an interesting question. At that time, we really got into the Canon cameras and we actually shot on film. You're absolutely correct. It was all done with the lensbaby. If we had the choice now, we probably would've used the 5D because of the larger sensor. It would've given us a more profound effect on the edges. Just literally the 16:9 because you know the 5D sensor is much, much larger playing field to play with so the focus fall offs are much more profound.

Mitch: Speaking of using the 5Ds and stuff, someone's curious on what the artists said about the new cameras. Do they wonder why you're shooting with a consumer camera?

Gale: To be quite honest. There's something very, very special. I'm in love with the 5D. I wouldn't really call it a consumer camera. I think it's a fully professional camera. It does something that no other video camera can do. No other video or digital capture camera can do which is creating this incredibly shallow depth of field and it's a look that's very cinematic.

For years we've been shooting with really horrible looking prosumer video cameras (I won't mention any names) but the problem is the sensor is so small. Everything is in focus, from the dust in front of the lens right through to infinity. I think selective focus is one of the great tools in good cinematography.

It was the other reason why we shot the season of "House" using the 5D because we wanted to be inside Hugh Laurie's head. How would you do that? We did it by literally making the focus so shallow, everything else behind him just turned into a marsh so your eyes are set on the actor.

On the TV show such as "House," you could say we're a hospital show. A hospital has to look as a hospital and it has a lot of distracting architectural elements which tend to take your eye and take your eye away from the actor. When you have the ability with the camera such as the 5D to defocus the background, even on a wide angle lens which you could never do on any form of 35mm arrow flex Panavision whatever camera. You set this up with the extra tool in your hands to focus in on the actor and be in his head basically. That's the reason. I don't see it as a consumer camera. I see this as an amazing creative tool that is there for everybody to use and this is so wonderful about it.

Mitch: That's great. What film school did you go to if you did go to one?

Gale: I went to the Film school of Hard Knocks. Apart from that silly joke, I actually went to the London Film School in London for a couple of years. It was so long ago I think color film just came out. So that was the London Film School in London. We actually had some wonderful teachers. I took full advantage of it but that was back in the 70's. So it's quite awhile to go now.

Mitch: So what did you do when you first started in the film business? Were you running coffee and stuff?

Gale: I was actually very, very lucky. I got a very good break and probably a lot of people have heard about a wonderful Australian Film director called Bruce Beresford. He did "Black Robe", "Driving Miss Daisy", a lot of very wonderful films. When I just graduated from film school, I got a grant to make a short film of my own which is absolutely terrible but he liked the photography enough he asked me to be camera operator on a film that he was going to Australia to raise finance.

It was a film such as "Crocodile Dundee" where basically an Australian guy from the country has to deal with city folks and the kind of conflict that causes and this kind was called "The Adventures of Barry McKenzie" and it was shot in London and I was his camera operator. I basically just became a camera operator straight away. I just happened to be in Australia when the rebirth of the Australian film industry was just in full swing with wonderful directors like Peter Weir, Fred Schepisi and many others. So I just happen to be in the right place at the right time.

People always ask me, "How do I get into the business?" "What can I do?"

The only answer is be in the right place at the right time. It's very, very difficult. Nowadays we have wonderful opportunities to show our work like on Vimeo and Youtube. We have our own distribution channels now. It's not too difficult to direct people to your talent.

That's when the 5D comes in again of course. You don't have to go out and rent \$100,000 worth of equipment to show that you're a talented filmmaker.

Mitch: I'm always fascinated about where people come from. You've obviously been in the business for quite a while now and you've learned quite a few things. How long did it take before you really sort of became a director of photography?

Gale: I was a camera operator for 14 years altogether. The reason I became a director of photography was because I did a movie called, "Link" which probably one person in one million would have heard of. It was probably Elizabeth Shue's debut into the film business. That's probably the only remarkable note about it. But we're basically shooting with live animals, with chimpanzees. Working with animals, as everybody knows is very, very difficult. You can't have a crew sitting around eating sandwiches when you're working with animals. They get so distracted and the more limited you can make the crew, the faster and easier you'll make the materials.

It became very, very difficult to actually capture all the shots we needed for the scenes with the entire crew. So the way we ended up doing it was to split off all the shots on the chimpanzees to second unit. Because I've been in the film for a little while, they asked me if I was interested in shooting the second unit. So I had to imitate the lighting of the DP, a very nice fellow called Mike Molloy, and then think about how that would look if it was reversed, in other words, looking at the opposite direction to make it fit in flawlessly with the film.

Having gone through that exercise of imitating somebody else's lighting, thinking how it would look if you look the opposite way and making it all fit flawlessly into the film, it was time for me to move up to being a DP after being an operator for so many years. It was very sad actually because that very, very time I was asked by Stanley Kubrick to be camera operator on "Full Metal Jacket" but my mind was made up and there's always a way. In Murphy's Law, you might be out of work for awfully a long time but you make a change and you have an opportunity, of course ten other opportunities come at the same time so that was a really difficult choice to make.

Mitch: I'll bet. Would you be able to quickly describe what a typical day is (if there is such a thing) on "House" for you.

Gale: First of all, it's brutal. Television is not the glamorous world of Hollywood. Everyone seeing this thing, Hollywood is glamorous and a wonderful job. We run very long days. We often work 14 hours and that's not including lunch. We tend to get later and later during the week because actors turn around which means they come 12 hours after they're finished so we end up shooting what we call "Fratursday" which is starting at lunch time on Friday and like last night, finishing at three in the morning on Saturday. That's why I look a bit tired and haggard today. Please excuse me.

It's basically every single scene that is scheduled for the day is done to the minute. It's important that we stay on our schedule because once you get behind, it's very, very difficult to catch up with lost time. It's

basically run very much to the finest degree to the minute. We pre-light sets as much as we possibly can.

The directors try to give us a heads up of what the following scenes tend to be so that at least we can get a start on the lighting. I generally have to light scenes in twenty minutes and so there is no changing of your mind or going backwards. What you decide to go is what it is. It's very important to make very, very quick decisions. We shoot on average, 7 to 8 pages a day. It's a lot of work and it's a lot of work for the actors. We shoot an episode in 8 or 9 days. It's a very, very tough job but it keeps you on your toes. That's for sure.

Mitch: Especially with those kind of hours. What is your approach when lighting for the 5D specifically? Do you do anything differently with the 5D lighting than you do with your other cameras?

Gale: I do. I tend to try and give it a little more contrast, just a little bit more shape. There's some good and bad about digital cameras and things like the 5D. One of the things that's rather wonderful about it is that it has a tiny bit of lack of definition compared to some of the higher end digital cameras such as the Red, the Genesis or the Arri Alexa. Those cameras can tend to be rather nightmare-ish for skin texture in actresses especially those that are getting into their 40's and things like that. They tend to make very difficult problems for make-up artists.

I actually see the lack of definition in the 5D, 7D and 1D Mark IV as a bonus in that department because they are a slightly softer look than some of the harder and more resolving and high end digital cameras. First of all, I think flat lighting in the digital world, it doesn't really work. You really need to have contrast to bring out the shape of the face. It's terribly important.

Overexposure is a killer because if you get anywhere near clipping, then in the digital world, it really does to you a lot of harm. So clipping is something to be avoided. The dynamic range of digital cameras is not quite as good as film. I would say it's about 10 stops. Some people say you can squeeze more and I believe you can squeeze more if you process it through Adobe Premiere as opposed to Final Cut. Those are the keys to basically not overexposing, creating shape as much as possible. Tight shots tend to work better than wide shots. Wide shots, this would be not a good way to shoot something like "Dances with Wolves" or big landscape picture. It doesn't have the resolving bar but for comedies, dramas, for in-your-face, for action, those sorts of movies, those sort of projects are absolutely perfect.

Mitch: That's an interesting point. I know a lot of landscape photographers that prefer the 7D because it has the crop sensor which kind of lengthens their lenses a little bit. Do you think that would matter

in terms of doing a “Dances with wolves” kind of thing or is it just the digital altogether that’s the problem?

Gale: I think the big issue is it’s a different industry in the stills and the video obviously. Wouldn’t it be wonderful if we could shoot 24p with raw data? We’re not there yet. There’s so much compression going on to enable this tiny little camera to capture 24p or 30p. So that’s where we suffer. What a dream it would be if we could capture raw imagery and with all that data at 24p but I think we’re gonna have to wait a little while for that. I think if you actually manage to run a 5D at that data recording rate, it would probably melt in about 3 seconds.

Mitch: Why did you choose the 50mm/f 1.0 lens for a few of your shots since the 5D Mark II is already very shallow and hard to focus.

Gale: Just for the absolute, extreme shallow depth of field. When you shoot at T1 or F1, you’re in it about 4 feet. You literally have about 1/3 inch in focus. We didn’t use it all that much. We used it just for a few shots in the bathroom at the very end of the show. And also, I promise you it’s not because I hate my focus pullers, my existing camera men. I love them all very dearly but the very thing that I was going for, was the very thing that made their lives hell because when we shoot on normal material, we put marks on the floor and they judge on that.

If an actor literally breathes, the focus moves from there to there, so on and so forth. It is very, very difficult to work with. But it was just for a couple of very specialist, very, very close shots and also finally enough, that lens is a rather beautiful lens that they don’t make it anymore. We probably wouldn’t see a lot of very, very wide aperture lenses anymore because now we’re able to rack the ISO up on cameras. Why bother? Because those lenses with very large optics are incredibly expensive such as the Canon 300 T2 that hasn’t been made for many years. They were made for sports photography back in the day when everyone shot film. They needed the aperture but that’s all gone away now so those big wide lenses if you can find them in a dusty cabinet in your camera stores, wrap them up ‘coz they’re not gonna exist for very long.

Mitch: That’s interesting. I haven’t really thought about that. What is the highest ISO you were comfortable shooting with?

Gale: On the 5D, I tend to go up to 1250. Occasionally, I go to 2500 if we’re shooting something that is very, very low light. You do start to get noise after 1250. There’s a very interesting test that I think everybody with a digital camera should do and that is to test all their ISOs with the lens cap on and shoot 5 or 10 seconds. A lot of the in between ISO settings are almost hypothetical ones and they’re not really workable ISO settings even though they’re on your dial. You can prove this very

easily by putting your lens cap on and going through the whole gamut of ISO settings.

The ISO settings that I've found that worked really, really well are the units 160. Don't ask me why. I'm not a scientist. I'm not a highly technical DP. But 160, 320, 640, 1250 and if you have 2500 of the ISO setting that you should stick with on the 5D. Sometimes, I mentioned I do go to 2500. You start to pick up a little bit of noise but I'm very, very lucky to have a powerful post production house behind me on the house so I can get that taken away by noise reduction and so on and so forth.

Do your own task. Discover the ISO's that work for you. On the 1D Mark IV, I would very happily go to 2500 and even 5000 and then I could have just a little bit of noise reduction applied in post. But the 5D, which is the camera that I love because of the sensor's size I would say 1250's about the size you want to go.

Mitch: I did read a very interesting post the other day and I apologize for not remembering who sent it to me. They indicated that the Canon sensors are still native ISO's at 100, 200, 300 and that kind of hundred increment range, 200, 400 'coz there's no 300. But his point is, he believes that the sensor is pulled downwards to get to 160 from 200 and therefore, it pulls a little bit of the noise out. I don't know whether that's true or not. I thought it was a very interesting theory but that was his explanation was for why 160, 340, 320, that those were pulling down from the hundreds and I don't... We'll find out or maybe eventually, whether that's right or not but I just thought that was an interesting point.

Gale: Yeah. I think it is interesting. I think in the end, it's just easy to test it for yourself and look at the material. It can take you all of 10 minutes to test all your ISO's with a lens cap on them. Just take a look and see what you feel but we did so many tests with the 5D that those were the ISO's that we discovered really cleanest.

Mitch: A couple of "House" related questions: How was Hugh Laurie working with? Is he a good guy? Is he tough?

Gale: He's the ultimate professional. I believe he's an incredibly talented actor. I don't know how he does it, to be quite honest to have 8 pages of dialog in your head everyday when you work on "House." He has to learn so much dialogs that's often very technically difficult to remember (medical terms, a lot of stuff related to medical words which are really difficult). On top of that, he concentrates enormously on creating a perfect American accent (unlike mine), to the point when he did his first interview, none of the producers realized that he wasn't American. How he does that is beyond my imagination.

He is incredibly talented. He is absolutely sweet and wonderful actor to work with. He has very, very little tolerance for distractions on the set but that's absolutely correct. That's the way it should be. When the actor's acting and you're shooting, it's their playing field and you can't disturb that and destroy that train of thought because that would be criminal. But in general, he's wonderful to work with, incredibly disciplined and very, very sweet to everybody and certainly no prima donna in any way.

Mitch: My question is, that limp that he has is all fake, right?

Gale: I hope so. He walks perfectly normally. You know, you won't know the amount of business that an actor has to do when you start introducing elements like that. He has the walking cane. It affects the way he opens doors, the way he gets into a car, the way he picks up cups and it takes one hand straight away. Not only that, but he also (from shot to shot to shot), he has to remember exactly where he put his cane and exactly when he picks his coffee cup, exactly when he looks out of the window.

It's all material that will cut together flawlessly and at what point in the dialog he spun his chair. When you get into the actor's world, there is so much to it in terms of making movements, the connections, the continuity of his actions are so perfect that you can edit from one take to another different angle and he does everything at the same time. This is the art of acting plus also completely commencing you that he is "the man."

Mitch: Yeah. I mean, he does.

Gale: He's really unbelievable.

Mitch: I asked my wife. I said, "Does he really limp in real life?" and then she said, "I don't think so." But he's incredibly convincing about it.

So next question, what's a typical crew size when working with the 5D? Do you use the same crew that you use film with? I think the answer is gonna be, "Yes" because it's all the same crew, right?

Gale: Well, it kind of is. When we shot the season finale, we did something rather interesting. We had A and B cameras basically working in the same way which is basically an operator and a fast assisting camera man, otherwise known as a focus puller. All the focus were done with a BarTech remote focus, radio focus and a lot of it was judged by using Marshall monitors because they have a device on the Marshall monitors called "Peaking" and it basically gives you a black and white image and it shows you edge contrast.

They were basically focusing by eye using large monitors to see the overall picture, which as everybody probably knows, the Extended Def. By the time you started recording, you no longer have Hi- Def. So they use a large monitor to get their basic focus. They'd rehearse so then you'd have to anticipate how the actor would move and then use the "edge peaking" to really hone in the focus but it was very, very difficult. Basically, we had our A and B unit set up like that and then I suddenly thought, how interesting it would be to have a third camera that basically was briefed just to young, fine, beautiful shots.

We had this wonderful, Asian camera operator called "Chris Murphy", absolutely fantastic fellow and not very tall and he wore black so he would never appear. Of course, he became known as "Ninja cam." As a lot people now listening to this, if you want to be able to get a signal from your 5D back to video village where your director said, where your script supervisor, writers and your producers who expect to see what you're shooting, you have to link out via monitor. And the monitors that I think are the best in registering are Marshall monitors. You have to have a monitor and you operate from the monitor because of course the picture at the back of the camera disappears once you feed back to video village.

On the other hand, Chris, who did our ninja cam, he was given free rein to note how to be tethered in any way and he used an eye piece at the back of the camera and did his own focus. His brief was to create beautiful shots and capture beautiful material and go do his thing. It worked amazingly well. In the end, this isn't time wise but cut wise, I think 18% of the show was shot by him. He was unplanned. He was just given free rein to just go and shoot beautiful material and it was the incredible experiment that worked really well.

Mitch: Is there a problem with the fact that the SD Output, the 480p comes out, the people that are back in the director, does it bother them that the resolution is so low or is that okay for them?

Gale: Not really because they're really looking more for actor performance than anything else. Quite honestly, they never judge the video output that we give them as anything in terms of photographic quality because it's often too bright or too dark. That isn't a concern. They're just looking for the actor's performance and the script supervisor's making sure that the script should be it too, and so on and so forth. It really is just a viewing aid more than anything else.

Mitch: Okay. Good. In terms of post production, is the 5D painful or has it fit fairly well with your team?

Gale: It's a little bit tricky to work with them both to make it, slip in and fit perfectly and then to cut with film. Just because it is lower resolution, it's not something we have huge problems with. It took a

little while for our colorist to get used to dealing with the material, the compression and the so on and so forth. But the first thing we do of course, is we try to make it look as much as film as possible. We add film grain into it. Just because film grain makes it look more like cinema or in film. I think clean video tends to look just too sharp and too clean on lot of occasion so the film grain really helps in making it look more cinematic.

Mitch: Have you seen the new Sony FS100 that was announced on Thursday, I think?

Gale: I've seen it. I have never had the chance to play with it. It's very, very interesting indeed. I'm hoping to get take a look at that 'coz I'm going to NAB briefly but I've heard a lot of good things about it.

Mitch: Does the RED Epic do the same kind of thing for you?

Gale: Again, I have never had the chance to play with the Epic yet. Once we are into our season, we have very, very little time for testing. The testing is something that we tend to do during our hiatuses. I think some of our hiatus starts in the middle of April so that's when I go and have a look at all the other systems and things like that.

Mitch: While we're speaking of these other cameras, what do you think the future direction sort of is? Are the video cameras gonna get smaller like the Sony FS100 that just came out? Do you have any kind of feeling where those things are going?

Gale: Well, first of all, the issues with things like the 5D is that, they're really not designed as film cameras so in order to use them as film cameras and not just hold them like this, of course, so many third party companies have come out with accessories to make them more user-friendly, to rest the camera on your shoulder, to balance it, to be able to see a monitor off to one side or an eye piece such as the Cineroid, that eye piece which I think is great.

There's a lot of adaptation that's going on so I think, it's quite likely that Canon has been smart in terms of not announcing things before they're absolutely, and completely ready and confident in their product as opposed to some company that announced things and half a year later, it finally turns up.

I think we will see Canon coming up with larger sensor video cameras. I think that's inevitable.

I think the only kinds of improvement that we're hoping to see are things like more user-friendly lenses for cinematic graphic use for the focus pullers so that range of movement between minimum focus and infinity is more than three inches because that makes it more difficult

to work with and hopefully we're also going to see a way to take material directly from the sensor as opposed to going through all the H264 compression system.

Mitch: If Canon put a raw video on there like the RED is, would that be something you'd want to see? Would raw video like the RED has to be something that you think an HDSLR should have or like you said earlier, kinda melt the center?

Gale: I think it's incredibly difficult. The amount of energy that goes into something like a RED camera, the technology that's in there, the sensors run very, very hot. I think, a tiny bit of improvement in being able to take directly from the sensor would be enough to still enable people to make movies that are able to be seen on a large screen on a movie theater. I think that's what fascinates me so much about the 5D and this system. It's democratization of the filmmaking process. That's where we need to be.

There's no point in putting a solid gold roof rack, for example in a Volkswagen. That's why I believe in using the Canon lenses because they make so many lenses, they can afford to make them at a very cost-effective price. And then, learn to live with the limitations because you can make it work and then, you can make your material for a third of the price of them using full scale professional digital capture cameras. That's the bonus of the HDSLR system but certainly there are improvements that need not be too difficult to enable it just to get that a little bit better.

Mitch: Right. Let's dive in for a minute in terms of HDSLR. I understand you're teaching classes, your HDSLR master classes that we featured a couple of times on the blog, how well are those things going? Is there a lot of demand for those? Talk about that for a minute please.

Gale: It varies. Sometimes, I think sometimes we have very full classes. January was pretty quiet because I think everyone had fried their credit cards every Christmas. Basically, we run into every month at some three Sundays every month. Once I go into hiatus, I'm probably going to be doing intensive classes to literally three days. I think it's basically to pass on everything that I've learned about the 5Ds to people that want to be their independent filmmakers.

Basically, it's the most hands on class that Canon video is happening at the moment. Students have cameras in their hands within minutes of arriving because it's an awful lot of so-called workshops. It's rather than taking driving lessons by sitting in the passenger seat and having the instructor tell you how he's driving. I can just tell war stories from the past and show clips and an awful lot of workshops like that. Our workshop is incredibly hands on. People learn by doing and get used to the equipment. They learn how to use the glidecams.

They understand the false color system on the Marshall monitors. They start to work with the focus and all the different rigs from Redrock, basically everything there is to know to actually enable you to be very, very competent in using the camera and how to go out and practice. In the end, it's like everything. If you practice the focus, you become very good at it. Just like greatest skateboarders become great skateboarders because they don't read about it or watch it. They actually go out and do it and it's all about that.

Mitch: A lot of people really want to know more about lighting. There are a couple of questions whether you prefer available light. The biggest question on many people's minds is, do you light differently for the 5D or do you prefer available light because the sensor works so well in terms of the ISO. What are your feelings on that?

Gale: I find it very hard to leave available light untouched because I think awful lot about lighting and photography and the way in which you structure and the scene is about emphasis. It's about where you direct viewer's eye at a particular time in that particular moment. You do this by selective focus, framing, by lens choice, how physical you want to be with the actor or your character.

You do it by lighting, like when I go to the movies, I see so many films where I feel the lighting (I'm sorry to say this) is rather poor. Use these selective tools to basically emphasize what you want people to look at at that moment in the movie or in that scene.

There's always work to be done. This is cinematography. First of all, the dynamic range of life, of God's light is so enormous that there's no way that you can capture everything from the deepest shadow to the brightest highlight that exists. There is no media that will do that.

So your first job is to be selective about your framing. The second job is learning how to compress that massive, dynamic range so that it'll fit on your data capture device, whatever that might be, whether it be film, digital or whatever. Emphasis to what you want to look at at that particular time.

I can't even remember the last time I shot available light without some kind of modification.

We shoot "House" in L.A. L.A. has just about the worst light in the world. Most of the time it's a clear blue sky without even a single cloud and the contrast in summer is so intense. The light is so very, very ugly.

I'm not sure if people realize why Hollywood became Hollywood. It was because in the golden days of Chaplin and those sorts of movies, film stop was incredibly slow and they used to use build sets by

building an open box with no ceiling and putting a seal on top. They wanted a place that had sunshine 368 days of the year so it seemed a natural place to do that. The walls were painted so that they were graduated so that they look fairly uniform. Of course with the seal at the top with the sunshine pouring on it, they would shoot for the arrows that the sun was overhead.

They make the movies like that because the film was so slow. In other words, they were ISO/ASA. It was so insensitive that they needed massive amount of light. And then of course, some idiot decided to put roofs on studios.

We stopped making films like that so we've actually ended up with the most nasty light in the world in the center of the film industry. It's just so ironic. Before I came in the US, (which I loved by the way because I really hate the rain of Europe) I used to live in London but the light was so much more easy to deal with because it's Northern hemisphere.

Of course, it's more north, the sun angles never get extreme as they do here in L.A. and you often have beautiful hazy cloudy days. It's rare to see a day where there isn't a cloud in the sky. That provides a lot of fill light and is much more natural instead of cosmetic kind of lighting. Your dynamic range on the HD/SLR camera is important and you really do have to take care of that because it's very easy to clip if you're not aware of that.

Mitch: You know that's very interesting. If you could build your own camera, what would your ideal camera be?

Gale: Well, that's a complex question. I suppose, first thing would be able to have a large sensor. The second thing, that it would be compact.

It would be uncompressed and raw data so it would give you the ability to manipulate your image much more in post later.

As much people I'm sure know, when you shoot H264, a lot of information tends to get baked into the data so you have limited amount of wiggle room to correct color and things like that in post later. If you could shoot raw on large sensor, some kind of assistance with autofocus could be of value but that could be a tricky one because autofocus is not a human brain and it doesn't really know where to look.

But there might be a way of the focus puller deciding where the focus should be by using a cursor on the image to decide where the focus should be at any particular point in time rather than just letting robotic system the camera is running in.

I love fast lenses because of the shallow depth of field. One of the things that I've been talking to Canon about in becoming an EOL (Explorer of Light) is seeing if we could get the sensor to bring down the lowest end of the ISO scale. I'd love to see an 80, 40, 20 and a 10 just for the pure reason that you can use fairly open stops shooting out in bright areas because I really don't like to put glass on lenses.

I don't like to use ND filters because if you get a hard reflection of a car windshield or a piece of chrome on a car, it'll immediately hit the front element of the lens and reflect back on the filter so you get these double little flare or hot spots which really drive me nuts. I want to shoot without filters.

So that would be the four things I would say that I would like to see in a video camera but in a HDSLR or whatever you want to call it, a digital capture camera. I think the Epic, (I had not have enough time to play with it) I'm dying to take a look at that camera. I think it is very interesting. It doesn't do half the things I would like to see.

Mitch: You know that's a fascinating thing that I hadn't really thought about in terms of a lower ISO than 100 and interesting point. If you were a film student right now, would the 5D change how you approach pursuing your career?

Gale: It certainly would because I would be out every time I'm making my own movie which when I was a film school student, I would never had the possibility of doing that. I would never had the finance, I would beg, borrow and steal props, help and actors.

It all starts with a script. There's no amount of beautiful photography that will save a poor script and you know very well, if someone mentions the photography and the first two paragraphs of the film review, it's going to be an absolutely awful film because the photography should be great but it shouldn't be noticed. It should be with the arc of the film. I would say that if I was a film student right now, I would be making my movie, you have ten fantastic ways to be able to show people your work which I never had.

First of all, I couldn't have made the film. Secondly, I wouldn't have a way to get it out. Now with Vimeo and all of these distribution channels, I think it's unbelievable how the world has changed. If I went to film school, that's what I would do.

Mitch: Do you shoot stuff outside of "House?" If you have spare moments, are you using the 5D? If so, what are you shooting?

Gale: We started our workshops in November. So I actually have no time to shoot anything of my own material but when we do our workshops, the final project that all the students and instructors get

involved in is shooting a music video because it's there to show people how to put together a project and everybody takes part in that. We end up shooting music videos because it would be such a waste to take all the talent of the new students and instructors and just write some silly script in every project that just went nowhere.

We wanted to figure a system that would enable us to create an asset for somebody that would give us their time. The music video idea seemed to work best. That's what we've been doing basically. We already have one of them up connected to our website (<http://www.hddslrworkshops.com>) So you didn't see one of the videos we made with the wonderful, talented singer called, Andre Bell. That's what we tend to do.

When I go on a hiatus, however it's another story and very shortly on my personal DP website which is simple (<http://www.galetattersall.com>). I'll be posting a few independent films that I made during the last hiatus. Absolutely, I love to shoot different material to get my head clear of working on a TV show that basically is all consuming and it's important to do a lot of different work as much as you can. I'm hoping, during a hiatus, to do a low budget independent movie which I might run a workshop on top of just so people could see the whole process of making a film. The project of the workshop would be of course is a making of a movie of the film and also provide the stills and to fit in that way.

Mitch: Speaking of music videos, are you going to be the DP on Hugh Laurie's next music video since he has an album out.

Gale: Probably not because he has his completely separate team for dealing with all his music and so I don't get involved in that side of it. That's his own private world and very separate to "House."

Mitch: I'm shocked. You people really have lives out of a TV show?

Gale: We try to. We're allowed.

Mitch: A couple of questions about bodies. When you shoot with 5Ds, do you tend to use more than one body?

Gale: Yes, we do. If we're doing a sequence that's just 5D, we usually shoot at least three cameras at the same time. We do have several bodies and they're often set up in different modes. We might have one on a glidecam ready to go. We might have one set up to work just on the fluid head or a monopod or something like that because they are very economic for us on the Canon budget that we have on the "House."

It's very easy to have multiple bodies and it makes sense because the actual cost of film production on a network TV show is extremely high. I believe it can be something like \$600/minute if you divide the budget into the actual "House" we shoot. That goes to show that every minute of delay and the actual not shooting is incredibly expensive.

Mitch: Have you guys had any trouble with overheating on the 5Ds while shooting?

Gale: Never have. The 12-minute cut off thing is something that's very irritating but we just hit the button and we just keep running and never had any overheating issues whatsoever, absolutely none at all.

Mitch: Okay. Did the actors react differently when they're acting in front of HDSLR?

Gale: That's a really interesting question. When we did the season finale, initially, they thought they were suddenly surrounded by a bunch of paparazzi and subconsciously it made them feel a little bit uncomfortable but it took a day for them to get over. Once they were confident with the results, they embraced it because it's much less of a large, bulky object.

You can often get 3 cameras into a tighter space which means that you don't have to take away half the set that's part of the actor's environment. It makes a large difference. With our big movie cameras and all these, we often remove walls so they end up in a space that doesn't feel like a real room. They have to learn their acting process to make believe a lot of stuff that suddenly vanish for another shot. With the 5D, you have to do much less construction or deconstruction to get your shot.

Mitch: I guess the same question would be, how did the camera guys and the focus pullers today have trouble adjusting? Or are they okay with the new cameras?

Gale: If anybody ever says that focusing on the RED is difficult, they should try focusing on the 5D. It really is very, very difficult and especially if you're a purist and you like to use the Canon lenses. There are other companies that make lenses for the 5Ds such as Zeiss, the Zeiss Compact Primes. Leitz I think have a set of lenses out there. It basically destroys the whole point of this camera which is a camera that's economically buyable. As soon as you take a \$2,500 camera and then you add \$60,000 worth of lenses, what's the point?

Mitch: Somebody wants you to go to the United Kingdom to do your HDSLR classes.

Gale: I would love to but my time is absolutely crazy. It's something that could well happen in the future because at the moment, we've just been literally operating in LA because that's where we shoot "House." Giving up even one day of my weekend is exhausting indeed so it's kinda pretty tough. But it's a possibility. The trouble is that it would tend to be less hands on. The whole beauty of doing the workshops in my own studio is that everybody gets to handle a camera. So shipping that kind of equipment around and having the all facilities to actually make it hands on is very, very difficult.

Mitch: Along the lines of your crazy hours and your schedule, someone asked, "With all the crazy hours and years of working on TV, is it hard for you to keep from getting burned out or losing interest?"

Gale: It's sometimes difficult to bring enthusiasm into a scene on "House" for example. For example, one set that we use more than anything else is the outer office in Dr. House's department. We must've shot in there 5000 times. It's difficult to know what to do to make it look different because we've tried everything. With his question of being burnt out, I think the scripts and the acting always generate so much creativity. It's always interesting and it's always fun.

What's difficult is just trying to think outside the box, to think of something different to do from time to time. Sometimes, we do exactly the same lighting as we've done in the previous scenes especially if we're up against schedule. It's tough if you want to be a filmmaker and you want to make your mark. It's a tough world. There isn't time to sit around and think about it and dream. You have to just go and do it.

Mitch: What kind of rigs are you guys using for your hand held work?

Gale: I use Redrock Micro for all our basic handheld work. This is in terms of the 5D. When we do handheld in terms of ArriCam LT which stands for Lite or lightweight, there's a whole bunch of arrow flex for that but in terms of the 5D, we use the Redrock system that basically, I can't remember what it's called. It's got the double rails, it holds a matte box. It enables you to either put the radio focus controls on, it has a Marshall monitor and all the Cineroid eye piece that can be adjusted. The camera sits back here. The monitor's out in front of you, all the eye pieces on your actual eyes so the camera's alongside your face.

We use Anton Bauer batteries on the back to balance it so basically all the weight is transferred to your shoulder rather than holding the camera out in front of yourself. I should know this but I just can't think of the particular Redrock Micro but you can have a look at all their rigs online. It's a great company and very cost effective. We always come back to that again.

There's a lot of people making third party material for the DSLR world and a lot of it in my mind is so overpriced that it basically defeats the point of it. If it works, you can keep the cost and go the cheapest way you can with the working system. The camera costs \$2,500 but within minutes you get to spend \$20,000 on accessorizing it. So what's the point of that?

Mitch: Excellent point. And we of course love Redrock and Zacuto and all those guys because they're advertising on planet5D. After 7 or 9 days of shooting, how long does it usually take for a final version for a show?

Gale: It varies. At the beginning of the season, we have quite a good amount of time before the final version of the show is ready to go on air. As we get towards the end of the season, it gets squeezed and squeezed and squeezed. It's very often just something that ends up being a 10-day turnaround. Finally, towards the end of the season, it does vary but it gets tighter and tighter and tighter as we go towards the end of the season.

Mitch: I can imagine that does. Is there anyone in the world that you would love to work with that you haven't yet?

Gale: Oh my goodness. There are so many great directors and so many great actors. That's such a big question. I suppose I always regret not working with Stanley Kubrick. That's what I was talking with you about before. He was such a fanatically perfectionist filmmaker. He was sort of one grandmaster chess player. His mind worked like that. I suppose regretting not working with him is one thing. I always wonder whether I should've just done that film.

There are a lot of wonderful DPs whose work I admire and I would love to see them work. I've got a really, really bad memory for names (One of my weaknesses). There are so many great actors, so many great directors making wonderful stuff.

I would love to work with David Finch. His material is amazing. I love working with the director that we have a nice show, Greg Yaitanes, our executive producer and director of the season finale. He's a wonderful director to work with. He's very concise. He was brave enough to allow us to shoot with the Canon 5D. I'm pretty happy.

Mitch: Let's see if we can knock out a couple of quickies.

Gale: Believe it or not Mitch, today I have to go and pre-light on "House."

Mitch: On a Saturday. What is your favorite episode on "House" that you've worked on and why?

Gale: I think it probably would be the season finale because I think until that point, not many people took the DSLR revolution very seriously.

The fact that NBC Universal, which stand behind us shooting an entire network show on literally a \$2500 camera, it was incredibly challenging. The things that we could do with it were amazing.

In terms of my own learning curve and what I think it did in the independent filmmaking community, I think that was probably my most satisfying episode without a doubt. It basically puts the DSLR on the map the worldwide way.

People don't probably realize but "House" is shown in 68 countries and it's seen by 80 billion people each week so that's the incredible way to basically show that the camera is capable of doing what it did.

Mitch: To extend that just a hair, how is it spreading in Hollywood? Are other DPs starting to use the 5Ds? I know of several shows. What's your take on how the industry's handling it?

Gale: I think a lot of people and a lot of shows now have the camera tool kit as a device that they use for car shoots, for inside shots, for quick grab shots, when they want to do something using shallow depth of field capabilities so it's something that's in everybody's tool, not everybody but an awful lot of people.

Some reality shows I believe shoot entirely with 5Ds and 7Ds so it's something that has changed enormously. It has made a big change and it's becoming more and more popular. I can't remember the statistics I had from Canon, how many 5Ds they sell to shows and things like that. It is pretty profound.

Mitch: I want to thank you so much for taking so much time out of your very, very busy schedule to visit not only me but all of the people in the chat room. It's just a phenomenal opportunity to have, to be able to speak to somebody of your caliber.

Gale: Thank you so much Mitch. I'm so sorry I have to leave you. I'd love to stay and chat longer. It's just one of those days where I have to go to work. We'll do a whole shoot on Monday and such is live. I'm sorry I couldn't stay much longer but it's a pleasure being on the show. I hope it's an inspiration to people to go and make their own films and try and chase their dreams because that's terribly important.