

UNDER THE SKIN  
DIR: Jonathan Glazer

Main Sound Credits:  
SFX EDITORS:  
Ed Downham  
Steve Browell  
Simon Carroll  
RE-RECORDING MIXERS:  
Johnnie Burn  
Steve Single  
SUPERVISING SOUND DESIGNER:  
Johnnie Burn  
FACILITY:  
Wave Recording Studios Ltd.

TECHNICAL RECCEY

PRINCIPAL PHOTOGRAPHY

MAIN PICTURE EDIT

SOUND EDIT

SOUND PRE-MIXING

SOUND DEPARTMENT GLASGOW TRIP

ALIEN WORLD RECORDINGS

Sound Design Begins!  
August 2011

COLLATION OF SOUND LIBRARY

AUDITION OF SOUND LIBRARY 2012

PICK UP SHOOT

SECOND PICTURE EDIT

1 Jan 2013 – 12 Jan 2013

First Final Mix

Final Final Mix

## TIMELINE OF EVENTS UNDER THE SKIN SOUND

Hidden Microphone Headphones.



Tech Reccey



Tech Reccey. Jon telling it on beach



Nigel recording everything



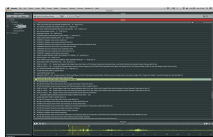
The shoot  
Sep 2011



Early thoughts on sound



Building the library  
April 2012



Steve Browell Eyeing up



bike recording



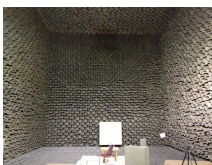
with dad out recording cafe atmos  
1 Jul 2012



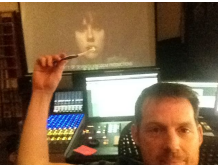
6am off sleeper.



Alien Recording Space  
1 Oct 2012



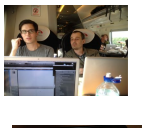
Brushing teeth before sleeping at work



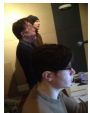
My view for the year



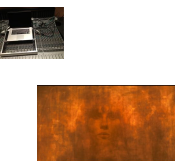
Ed & Steve B



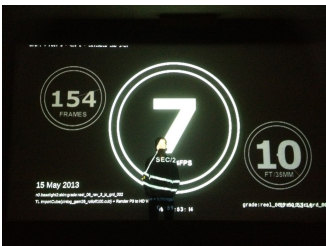
Adam ADR



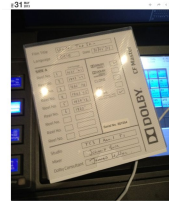
The Mix brain  
22 Mar 2013



Final final Mix Day (also my birthday!)



The Dolby Printmaster. A Years' work Distilled



back home



Venice Premiere  
3 Sep 2013



### Development

.....2011  
UNDER THE SKIN was a film in development for some time. It was to be made by placing Scarlett Johansson in the real world and film her interactions using hidden camera. Scarlett was to play an alien anonymous in human form, and with no green skin on show there'd have to be unusual credibility of the earth to allow her performance to bring out this alien. Jonathan Glazer considered soundscape early on in the process. This advance warning, the challenges of the shoot, and Jon's vision for the film required a different approach to making film sound.

Normally a soundtrack is diligently created in the hasty weeks between picture cut lock, and delivery. Good sound = lots of sound. Restraints of budget and time mean that generic sound effects sit-in place of authentic sound, blunting the depth of a viewers' journey. Additional voice sounds used for non scripted real world elements (like fellow restaurant go-ers or people on streets) are made by 'crowd actors' who are often far from their native tongue in distance and time. For a film without much dialogue, relying on large periods of unscripted observation to present a realistic immersion into a truly non-generic world, this would present a problem. Our solution was: Any sound, voice, vehicles, nature, you name it..... record it all for real in Scotland. We set about understanding techniques. On a commercial shoot in Toronto I tested hidden microphone ideas on a live open set. With a left and a right mic replacing the speakers in a nice pair of headphones, I looked like I was 'just nodding to music' as I stood overly close to someone who was innocently talking in frame. Fast forward a few years and I was standing in a shopping street in Glasgow with a long Burberry umbrella, handle removed and replaced with a Sennheiser 416 directional mic, the wire going up my sleeve, and me faking a yawn stretch to allow a 'directional point' at a passer by whom I would have singled out as nice and noisy. Questionable veracity of sound is not a problem in the bulk of films, but here we needed a different kind of sensitivity, traditional post production process would have been a mistake. Post production sound would have to come and join pre-production.

### Pre-Production

June 2011 - October 2011  
My presence on the pre-shoot technical recce was usually met with a friendly 'post-sound, ha ha, what are you doing here?' The tech recce was a week on a bus visiting every location for the film. Gold dust for getting it right. We made test recordings of dialogue & atmospheres, detailed microphone positions for every shot and made a list of wild tracks for every scene. We planned microphones to account for a lack of boom (overhead) microphone due to the covert-ness of the filming. Scarlett would be chatting with the public who would of course not be wearing microphones, and would be rubbish at replacing noisy dialogue afterwards in a studio, therefore how do we record this? was a big part of 'how do we shoot this?' If the sound was no good, the footage & effort in its capture would be wasted. We found hard-grafting production sound mixer Nigel Albermaniche who wanted to get it right (It was crucial to find someone up to the task, although we nearly broke him on set). He and I visited the build of the van which Scarlett would drive at Elstree, to help panic amongst other things about sound proofing and noise from the generator which would run all the film kit in the back where the crew sat. We crafted hidden microphones into props, I replaced my wardrobe with noiseless clothing and cut holes for microphones into lapels, shirt cuffs, and a hat. We had meetings to discuss process including with old friend music producer and supervisor Peter Raeburn to discuss general thoughts and use of any music we might capture on the shoot.

### The Shoot/ Sound Recording

September 2011 - January 2012  
Over the period of the shoot and many further months recording we harvested a rather large bank of sound from Glasgow and wider Scotland. Rigorously planned beforehand, during the shoot we had microphones for dialogue, movement, atmospheres, and for unwitting soon-to-be film stars. In the Nightclub scene for example we had microphones for SJ's dialogue, an 'in-wig' microphone by her ear for what people might shout into it, and also four roving microphones to attempt to capture what that mash of music and voices really feels like. Much thought went in to where to hide microphones. Viewing dailies helped me ensure we would have coverage in our recordings. Being part of the shoot also helped with the legality of covert recording consent - something I would have had great difficulty in organising myself in light of the scale of the task. Beyond the shoot we spent many more weeks recording. My team of Ed Downham, Steve Browell, Simon Carroll and my father Chris Burn spent considerable time trudging quietly around either forest or city in Scotland between August 2011 and the end of 2012. We captured people, roadworks, footsteps, football, buses, drunks, cafes, shopping centres, forests, waterfalls, motorbikes, conversations, life, nature and so on. An audio inventory of Scotland, if you like. I think we became fetishistic - so hung up were we that even late into post, in August 2012 we made a further week long trip to Scotland to seek missing pieces, and again on the pick-up shoot in October 2012.

### Picture Edit

January 2012 - July 2012  
I have known Paul Watts many years, he is a bar-setter in picture editing, but he also makes a very savvy sound editor too. The seeds of the sound design are in the script and his cut. During this main picture edit period I stuck my head in the cutting room now & then, helping out with temp ideas, noisy dialogue, feeding humble opinion on the cut, considering music, and sharing interesting sound file finds. We discussed ways to go with it like making a symphony out of wind - the usual kind of stuff! My team also built the room where Jonathan and I would work when the cut was more gelled. I made a kind of sound design map detailing suggested use of sound. Over months spent archiving, the team at Wave Studios auditioned & catalogued all the sound we had (both production sound and that from our sound team only sorties), creating a library of 2500 hours of raw sound. Then we closed the gaps on redundant sound within, and broke these remaining thousands of hours down into sub 10 minute clips. Next Jonathan and I redacted this, spending weeks auditioning this master library. Jonathan really wanted to hear all of it, just like viewing rushes before commencing a picture cut. Weeks looking at waveforms, highlighting good bits and adding keywords, sectioning the great. What we found was beautifully genuine; wind atmospheres, birdsong, all the Foley we could want, bottles breaking, drunk shouting, fights, hen nights, passion: real tears & laughter, unimaginable honesty, buskers, and hundreds of v brief voice snippets as Glaswegians walked past our kit. We enjoyed incidental knocks and bangs, normal life, the likes of which you ear would normally filter out, and a director would normally never insert to a film. All real all credible. We catalogued by potential use/shot relevance, and also by how it sat in the library; gender, location, Foley type, atmosphere, vehicle type, mood, and so on. This final sifting resulted in a 'AA' library of 50 or so hours, thousands of files, which all fitted our film.

### Sound Edit

June 2012  
August 2012 - March 2013  
Over some months and some long hours we sat in Soho. Jonathan and I used this library to create a warts and all soundtrack that was not just representative (like a documentary) but cinematically rich whilst still honest. We refined our sounds into short component and were now compiling the soundtrack from these pieces. Where normally a film would use a long atmospheric track, we would build it brick by brick from our ingredients. So for example, Scarlett walking through the shopping centre would have perhaps 10 new sounds every second to give the filmic reality; sound for every person/event on screen. The quality and scope of our library let us guide a rigorously chiselled experience. I've never seen nor had the sheer time for such a meticulous approach. We layered it rich enough to show the world naively as fresh ears hear, including extraneous sound that in life both a brain and a normal film would filter out. Knocks and bangs - curated, but left in. The results become alien in genre, and therefore great for that point of view. They also make a good genuine representation of Glasgow, yet stand opposed to sound that usually makes a film. This keen reality being imperative: set her against this super-earthly environment, and have her reaction present the alien. With a brilliant post supervisor in Richard Lloyd, we collaborated with film editor Paul Watts, Mica Levi and Peter Raeburn, and vfx team led by Tom Debenham, with the cut never entirely locking, and no one shy of leaning over the fence. During this time we also had trips to get the odd line of diaogue, like going to NY to pick up S.J.' ADR (we needed a little and she was great). We also had big challenges in getting right the non-human world scenes so they worked with the rest of the film, the alien voids. We had three traditional attempts at Foley, and early on in the process we even made a traditional tracklay & Foley pass of the entire film as one would (we had to hear it!) - but it was not right. Whenever we needed anything be it ADR or footsteps, they had to be real world sound.

### Sound Design

June 2012  
18 October 2012  
The recording, selection and shaping of the soundscape. Whilst there are incidences of interesting uniquely created sound, this film didn't need a bank of faders assigned to whooshes and aural sweeteners, it was more global than that. Sound Design was the look at how the sound was captured, created, and used across the whole film, from development to delivery, and how sound integrated with the other elements to best explore the potential of the directors' vision. There were many challenges; how to keep it all real yet beautiful and filmic, unlike a documentary, creating the sound of the alien environments, steering narrative with our choice of sound and placement, being seamless with the music, impacting the cut, and re-recording what we didn't have. Scarlett has an ability to say a lot without words, and they say power loves a vacuum, which is a bit cocky, but our sound did have responsibility bestowed by a lack of dialogue, so design of sound for narrative became a thing. A bit like entering a quiet room and having your hearing adjust to super-sensitive. The time we spent in the studio wasn't just editing sound to support narrative, it was also time spent deciding why and how we would apply sound to help steer narrative. For example where she sits in the van listening to the radio news item, place the sound so she looks away at the key moment in the news item and she cares less, but have her look toward and it goes in. Much consideration went into use of sound on pretty much every frame. We aimed to look at the world through alien eyes, immerse the viewer in an experience of how it might feel to view Earth for the first time. The shock of unexpected. We chose sounds sparingly, trusting feeling above intellectualisation. Aiming to resist any urge to 'go large', no hoodwinking. The sound design under the black void being an example of this. It got to the point that we would try stuff and if it didn't work the film would just reject it.

### Sound Design (contd.)

Really though the sound design kicked off when Jonathan Glazer and Walter Campbell sat down and first started writing, and Paul Watts kicked it way over the centre line. In music Mica Levi created something amazing, way beyond traditional score - more like a character in itself. Throughout post we developed the sound design alongside this music, with to & fro on ideas and territory, creating an uncommonly combined music and sound design piece. Beyond the recording of the Scotland sound there were many areas of the film that needed their own take. More traditional use of the word sound design. Where we needed non human alien-world sound, we applied the same rigour as before, finding suitably alien space, void of earthly sound-colour, and performed for real within. The alien spaces like the white and black voids simply could not work with anything like a conventional approach. Goodness knows we tried! We went through so many iterations of sound on some scenes I could write a book on each. My team really cared and tried. We knew that what we had to achieve needed to be a bit extra-filmic extra-terrestrial, beyond labels or what had gone before. So we just had to find our way though it, using spaces to record which would not colour the sound in a familiar way and finding unusual recording technique, favouring performance over editing, but combining and blending, thus injecting tone and mood into what would otherwise be just ambience, wind or Foley. Like the dream sequence in the Bothy where the wind actually leads the music in at the right pitch. We used Eq to coax musical pitch where there was none. In the van we aimed to put her in a glass bubble, have her van float around, yet still seem real. The Breakdown of techniques would make for a very interesting read to some.

### Sound Mix

The funny thing is we were pretty much working on the mix from day one. It is the way Jon and I have always worked. Keep the pre-mix really tight all the time because the subtleties of the mix are so key to making an idea work. Unusually, we worked at all times in a near cinema environment from day one of the sound edit, with a large projected image and monitoring set at standard cinema level. We did this because knowing the power of understatement, we didn't want the knife edge between good and bad ideas to stop subtle ideas from making the cut. With a period dedicated to strong input from the talented re-recording mixer Steve Single, this procedure made for an easy transfer to the dubbing stage where we checked and scaled our mix. When the whole thing really came together, the sound & music were nicely aligned in tone, pitch and ideology. We finished the final final mix at the end of May 2013. I had a great business partner at Wave Studios in Warren Hamilton who didn't mind me going AWOL for so long, and a very understanding family. Throughout the entire production there were of course huge and more important challenges going on than the sound but it too needed effort and to quote Jonathan speaking at the North American premiere, '...the sound was always a key component because it is interpretive. It is an immersive opportunity to be able to create a soundscape where the music and the sound are indistinguishable from one another, its a very labour intensive but extremely enjoyable part of the process'. Over 14 months of post production, two years if the shoot is included, and a total project consideration of many years, we took great care in how the sound was made and used. Constantly reviewing decisions, Jonathan even joked to me as we walked out of the premiere in Venice 'I've got some notes on the mix!'. The film is now the film and can go and do what it likes, but those collaborative relationships were the best part for me. We were fortunate that the long time spent made for a tight unit in the sound team and the wider post-team, and in that we were able to deliver Jonathan his vision.