

PenStevens: Making *Tied down*

I have been asked to give a personal account of the process of putting an animation together.

I'm pretty much at the apprentice level as regards this craft. I have actually only made one complete computer animation. It was a student piece, part of the work required for the [Bournemouth Computer Animation MA course](#). It was partly done while on the course and finished up afterwards. Prior to that? Well, bits and pieces. Sketches, half thought out doodlings in Flash, unfinished computer generated (CG) models made out of barely carved primitive shapes.... That kind of thing. I knew I wanted to do more, but I wasn't too focused about quite what I was trying to do and I was trying to fit it in to the edges around my life.

Quitting my job and committing myself to doing the MA animation course kind of legitimised the practice, took animation out of the margins and put it centre stage. What the course did was showed us how to focus our efforts and took us through the production process - devising the story, making storyboards and animatics, then modelling, texturing, lighting, animating, and post-production tweaking.

So that's the context out of which I made my first little movie. So given the time, access to equipment and to some guidance, what did I choose to make?

One of the attractions of animation is that you really can make anything. Absolutely everything is fabricated by you so reality does not have to be a constraint. The possibilities are there, oh yes, but what your imagination is always hemmed in by is the reality of your situation. In this instance, there was the awareness that there was a limited amount of time to get the job done, and also a sad awareness that I was very much still just learning and that some things might not yet be within my capabilities. The advice we were given was to keep it short and if we wanted more length than that allowed then just make an extract of our idea. Otherwise there wouldn't be enough time to polish it. And now, having been through the process, I would say that experience teaches you that in animation, everything takes at least twice as long as you plan for it to.

What I knew is that I wanted to tell a story. One can do many wonderful things with CG but for me its use was as a tool to lay out a narrative. My animation I kept simple by having only one character, but my inclination is towards the intimate anyway. While doing the MA some of us would often go out as a group and go to see special effects-laden blockbusters or wonderful big Pixar productions, and goggle at the spectacle that could be created using the skills we were learning. But I also have a fondness for [Caroline Leaf's](#) 2d animated chamber pieces and am still haunted by the poignancy of Ruth Lingford's woodcut styled [Death and the Mother](#) which I caught on late night TV once years before.

Anyway, my animation is called *Tied down*. It centres on a woman who sits constrained in a darkened room and dreams of being free.

Tied down

story

Briefly, what happens is this: A woman sits on a stool in a dark room. Her hands and feet are bound and she appears distressed. She takes refuge in daydream. Her dream features her younger self set down outdoors and unconfined. Initially she is anxious and confused about where she is, but then she resolves to just enjoy the fact that she is free. As her confidence increases she begins to enjoy the freedom of her body and to

dance and leap about.

In the course of her dance she notices a dandelion seed puff (not sure what one calls these really but you see them floating about all over the place in the summer). She playfully tries to catch it but misses and watches it drift up into the sky. This draws her attention to the sun filled beauty of her surroundings. It is the complete opposite of her dreary existence inside the room, and drinking it in fills her with renewed vigour.

[Click here](#) to see the dandelion puff sequence (please note I have used a much reduced frame rate here to reduce file size for the web, so movement is much more jerky than in the finished piece).

In her dark prison, her ecstatic smile fades as she remembers her true circumstances. As she awakens from her reverie she turns wistfully towards the light streaming through the window, trying to capture her mood of only moments before. But a spider's web is stretched across the pane reinforcing the idea of constraint. Not only that, but a dandelion puff similar to the one that entranced her within her dream is caught fast in its strands. Even the symbols of hope from her dream have been trapped once outside of it. Her head flops down in despair.

I decided against giving any sort of back story to explain why she is in this predicament. I preferred to leave it open to interpretation. I think that the important idea to get across here is that she is constrained. The title of the piece *Tied down* suggests an additional possible reading that she is not simply physically constrained but perhaps psychologically. She is visibly younger in her dream which indicates that her dream is mingled with memory and a remembrance of a time when she felt more vital and less tied down. Her bonds could simply be a metaphor for the constraints placed upon one by the responsibilities and experiences of maturity. Either that or for the loss of physical flexibility that comes with age.

I guess I was aiming for a kind of wistfulness, the sweetness of nostalgia. This became more personal for me when, while working on the animation my Dad became ill and died. Seeing him all incapacitated in a hospital bed, tubes sticking out of him made me think a lot about how life can wear you out, and how sweet life is before that happens. The animation is, incidentally, now dedicated to him.

So this is the animation that I felt I wanted to make at that time, for a number of reasons. I think it's important to find a theme that resonates for you because the animation process is so long and laborious, that you will end up living with it for quite a while. I do hope though that I can come up with a happier, more life-affirming storyline next time.

character

There is only one character - the woman, Tris. I knew that she was going to dance about and so needed to have limbs long enough to make eloquent movements. (Brian Taylor, creator of [Rustboy](#), has talked about how he has had to "cheat" shots with clever camera cropping so that it doesn't show that it's physically impossible for his character to do some of the actions he's required to perform, with his short limbs). At the same time I didn't want her to have some sort of tall, hard, athletic dancer's body. While it is true that an attenuated figure would accentuate the grace of her movements, I actually wanted her to feel much less polished than that. She should be seen to be groping her way through her feelings and movements rather than giving a performance. She is an ordinary woman with a body with all the usual imperfections, and so she is a little dumpy in build, with a not quite flat stomach and a broad bum.

I chose to not make her completely realistic. I gave her a quite large, round head. It is quite often the case that cartoon characters have larger heads than is normal in relation to the size of their bodies. It increases the cuteness factor, because it is nearer the dimensions of a child. I was not particularly concerned with making Tris cute, but I did want her to look vulnerable and a hint of childlikeness would certainly contribute to that. At the same time it was important that she plainly be a mature woman (particularly after all the comments I got on campus about bondage etc when I announced that she would spend the duration tied up) and so I had to play around quite a bit with the modelling, thickening her body until I felt her shape was right.

Her feet I left bare. Although this meant that I had to model them in more detail than I would have if I'd clad them in simple boots, I felt that naked feet would add to her air of vulnerability.

(Of course, another reason for not choosing to depict her in a hyper realistic style is that to do so convincingly is hard. To achieve something of the gorgeous solidity of Liam Kemp's [This Wonderful Life](#) would take no mean skill. One must really know the craft. And the more realistic one tries to be the less forgiving an audience will be of imperfections. A little abstraction provides some protection from expectations.)

facial expression

When designing Tris in my sketchbook, I found that it was when I determined the placement of her eyes on her face that she started to feel like she had a personality. I found that placing her eyes quite low down gave her a very melancholy, lugubrious air, which was just what I was after. I suppose it's because low down eyes make her always look like she's peering upwards from a head bent downwards. Another character I've seen that pulls the same trick is the Fleischer Brothers' [Betty Boop](#) (who's certainly not always sad, but always looks a little vulnerable).

She has quite big eyes. I have read that much of the emotion of the face is conveyed by the eyebrows, but I have nonetheless decided not to give her any. I have tried to keep her face quite simple. In any case, her eyelids are sometimes slanted in an echo of the shapes her eyebrow would have taken. If she were angry, or perhaps furrowing her brow in concentration, her eyelids would slant upwards from the centre. When she is sad they slant downwards. And when she is afraid her eyelids shoot up making her eyes wide. Mostly her expression is sorrowful and the kohl pencil at the corner of her eyes accentuates their downward droop.

To make facial expressions in computer animation what you have to do is re-model copies of the mesh of the head to create a number of extreme face blendshapes which you then morph between. Often you use a combination of them. In these instances the remodelling is mostly around the mouth area, but also involved, where appropriate, puffing out the cheeks and more deeply defining the nasolabial folds (the creases that come out the sides of the nose and go down to the sides of the mouth). I also did some additional shapes that focused on the forehead area. The furrowed brow was probably the most effective.

For the scenes where she appears older I made her nose bigger (nose cartilage just keeps on growing as the years go by) and sagged her neck flesh. I also put crow's feet by her eyes, greyed her hair a little and tried making a more creased face bump texture.

animation

There's not a huge amount of physical animation in the room sequences. She is after all, tied up. The middle sequence however, where she dances, took some planning.

What I did was I tried out some poses in front of the mirror, taped myself doing it with a small video camera and made sketches. This I did, purely because I was the most readily available reference resource for myself. I'm no choreographer and when I had a friend point the camera at me I got quite self-conscious and became rather clumsy. I fared a little better when I employed a tripod but then I kept leaping out of shot. It was all a somewhat faltering process, but ultimately much of the action did get plotted out at this stage. This isn't immediately obvious when one views the animation as the camera angles vary so I thought I would illustrate the relationship by showing some stills here with their corresponding poses from the animatic.

[Click here](#) to see dance animatic

I tried to find poses that would make her look fearful and ill at ease for the first part of the dream. I did some research in front of the mirror but also by reading some books about body language. I had her make several gestures that apparently would've been a dead giveaway about her mood to someone well versed in this. She puts her fingers in her mouth and hides her face behind her hand, tucks one leg behind the other, and hunches her shoulders forward. She also holds herself tightly and rocks, a movement we apparently often make when we crave reassurance. Everything about her is tense.

Then I have her look at her hands and register the fact that she can now move them. Her hands are bent back to expose her naked wrists.

A close-up of her face shows her getting determined to move on and the tightening of her fist shows her stiffening her resolve.

It was hard to decide how her dance should go. I wanted there to be leaping and whirling and big wide expansive movements. She should look confident, her shoulders back, her face wearing cheeky winks and grins.

The feet swivelling move always raised a laugh when I showed people the animatic. I found it a difficult move to achieve convincingly though. It helped when I lent more weight over the toes and then over the heels as she swivelled but I remain not completely satisfied with it.

Her leap is one of her most extravagant moves and so I do also try to squash her right down before she takes off for contrast, and then I hold her in the air for an extra beat.

Animation is one of those skills that can really only be improved with much practice, so I'm not overly embarrassed that I've so far only managed to create quite clunky movements. Like I said, this is my apprentice work.

lighting and sets and colour

The structure of *Tied down* is pretty simple. It is composed of contrasts - reality, dream sequence, reality, working together with darkness, light, darkness.

reality

In the beginning and end sections she is in a room. It's quite starkly furnished - just the stool she sits on and bare floorboards. Everything is quite muted in tone - not quite sepia tinted, but, after a little judicious tweaking in Shake (compositing software), leaning in that direction. Sepia tinting can perhaps evoke a feeling of age - like faded old black and white photos. It can accentuate the fact that in these scenes she is a bit older.

This stands in contrast to the central dream sequence which is more colourful. She is younger there and I'm told that our eyes see everything more brightly coloured when we're younger, that it is with age that our visual palette dulls. In *The Wizard of Oz* -

probably one of the most famous "...and it was all a dream" movies - only the dream is in colour. Reality is in black and white. Reality is drab in comparison.

The lighting is used to underline what's going on. Inside the room is dark. There is a shaft of volumetric light which indicates freedom beyond the window. Admittedly, that is something of a cliché - can you think of a prison movie that doesn't have the obligatory shafts-of-tantalising-light-through-barred-window shot? Still, that means that I'm borrowing from an established visual vocabulary here and when, towards the end, Tris stares forlornly at the window, what she is feeling should be readily understood.

dream

The section within her daydream is more brightly coloured than the room sequences. There is a shot of the sun shining early on (which is actually just a white sphere with a glow applied) and its brightness should be reinforced by the next shot where it causes the bewildered Tris to squint.

Initially, when she is anxious everything is tinged with grey to match her mood, but once she gets going it should all become quite sunny.

I took a while deliberating over how the dream landscape should appear. At first I thought I would just have a blank white space, but pretty soon I felt the ground needed some sort of tooth to it or it could look terrible and plasticky - a common pitfall with careless CG work. In any case I decided that I really did quite want to put in the motif about the dandelion seed puff. This meant I needed to have a meadow landscape dotted with the flowers that could plausibly have produced it. Then, after catching at it, it would be there for her gaze to light upon and ideally should be pleasant and bucolic enough to inspire her enthusiasm.

I suppose that something else could've stood as a symbol of freedom - the traditional bird perhaps or a butterfly, but it would've been harder to have the motif then recur within the room setting. They would have required much more modelling and animation effort as well. The dandelion puff is just particle hair animated along a path, a relatively simple process.

From this point on I try to stress how wonderful she feels to be outside and carefree so I can get a really poignant contrast when she's wrenched back to awareness. I deliberately over saturate the last part of the dream section and push up the gamma levels to really just flood the terrain with colour.

back to life, back to reality

Back in the room it is dark once more, except for the shafts of light that stream through the window. In any case, the plunging downwards of her mood corresponds to the dark.

[Click here to see a clip of the end sequence.](#)

End musings

Tied down was made using the software Softimage XSI and Shake. I also went on to make up the music that plays over it. It's only a minute and a half but it is equal to a year of my life. It is far from perfect, but it is mine. For me, perhaps that is part of the appeal of making an animation - the selfish delight in making a thing that is wholly your own. It is film-making without actors - you make your own, and you are director, cinematographer and editor too.

I have found that I feel a certain glow when someone identifies the character with me. A friend watched it and said when Tris first starts to dance she is somehow reminded of the way that I myself move. I imagine it's the bum wiggle. But I found myself briefly wanting to rework the rest of her dance to also be more blatantly imbued with my style.

I had to remind myself that this was not the point. This character is not me and her story is not mine, only my creation. Besides it was not a particularly significant observation. All her choreography was after all put together by me messing about in front of mirror or video camera.

Before you start to fear for the state of my megalomaniac ego, I should just add that now *Tied down* is finished with, my time is spent more mundanely, in my entry-level job, trying to make a living in the industry, pretty much just pressing buttons for the moment. These days it's all about working on other people's visions. But give me a few years, a more practiced hand, the jingle of enough rent in my pocket and the leisure to think through some new ideas, and I daresay I'll make the time to try and get creative again. There's just something so very satisfying about getting your own work done, from start to finish, that I know I'll surely want to revisit the experience.

To see more stills from the animation you can visit my website [Tied down](#). There will also be downloadable compressed versions of the whole animation placed there shortly.