

Directed by Academy Award winner Fernando Trueba, and star designer Javier Mariscal, the feature film *Chico & Rita* combines live action and 2D in Toon Boom Harmony in seven studios linked together by HoBSoft.

"Chico & Rita" brings us to Cuba after WW2 in 1948: Chico is a young talented pianist and eager for recognition, Rita a young singer whose voice is extraordinary. Both of them will experience a tumultuous love story in front of a jazz backdrop in Havana in which booming music and passion are inextricably linked to each other. For this movie, HoBSoft and Toon Boom have developed a very strong tool for multi studio productions, allowing to automate most of the major steps of a production pipeline.

The genesis: a jazz love story

Fernando Trueba and Javier Mariscal are united by many elements, but if something takes precedence over the rest, it is the great passion they share for the music and culture of Cuba. "Chico & Rita" arises from this passion and from their delight in working together.

Together with Ignacio Martínez de Pisón, Trueba has written, a beautiful love story. The movie could have been realised with real actors, but by bringing it to the screen using animation, the story benefits from Mariscal's unique aesthetics and the poetry of this medium.

Mariscal's new creation of the exuberant Havana of the late 40's is full of light and colour. He puts it into contrast with winter land New York, and the decadence of places such as Las Vegas, Paris and Beverly Hills.

From live action to 2D animation

For Trueba, directing an animated film was totally new. With Mariscal, the production was split into 2 main parts. The entire movie was first filmed with live action actors. The sets included dummy objects and tracker marks for camera tracking. The live action shots were edited in Final Cut Pro and became the live action version of the animatic.

Approximately 2 frames of every second of live action were traced in TV-Paint and used as the drawn version of the animatic. The traced frames were printed on paper, pegged and sent through a classical 2D hand drawn production pipeline with rough animation, key animation, clean up, ink & paint and compositing. The live action shots were used to create backgrounds in either 2D, 2½D or 3D [where 2½D refers to 2D elements positioned in a 3D universe]. All 2D animation and colouring were realised in Toon Boom Harmony.



7 studios, 26 workflows

Chico & Rita is approximately 80 min long. The production took place in 18 months in 7 studios around the world. Kepa Dañobeitia Alemany, Estudio Mariscal's production manager says: "We were around 200 people working between Spain – Estudio Mariscal in Barcelona and Animagic in Madrid -, LightStar Studios in Brazil, Magic Light Pictures on the Isle of Man, HolyCow Animation in Philippines, Jet Media in Latvia, and Kecskemét Film in Hungary."



Brian Turner Ottosen (left), Managing Director of HoBSoft, explains: "We have visited all the studios and integrated HoBSoft servers, file servers and Toon Boom Harmony servers."

Although the artists were working in 7

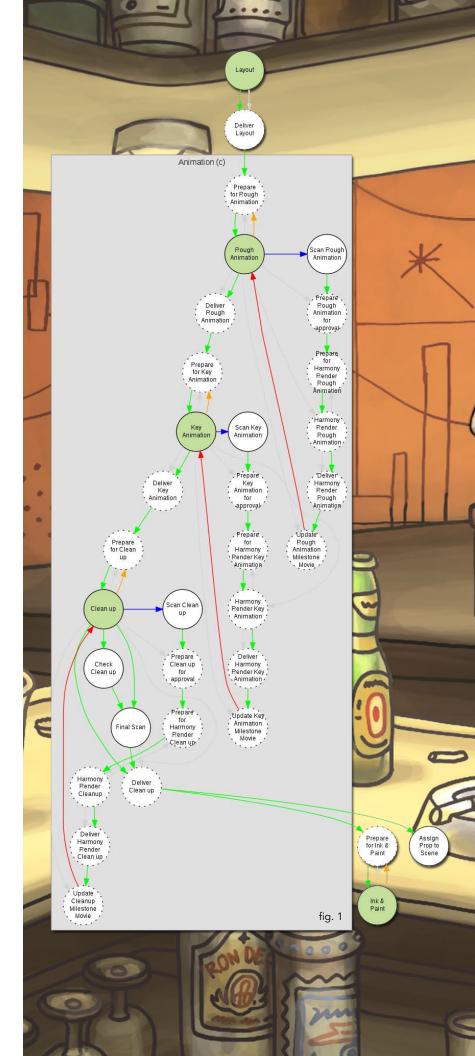
different studios, they were all experiencing it as if they worked together on one central server on their local network.

Production Manager explains: "I had 3 key elements to control and to provide to different studios. First of all, we designed, with HoBSoft, very fixed file structures that we shared with the studios. It was really important to share the same file structures. Then, we used the same animation software, Toon Boom Harmony, to be able to emulate the same process in the different studios. And, last but not the less important, we had HoBSoft help us, not only to exchange in a very automatic and simple way the footage between the studios but also to be able to control, in a very easy way, the style of every single scene at any time of the process."

Besides the server installations HoBSoft had ensured that every studio complied with the production's security strategy in terms of firewalls etc.

HoBSoft also conducted the necessary training in each studio to make the local artist capable of working with the production standards in terms of where to save files and in which format.

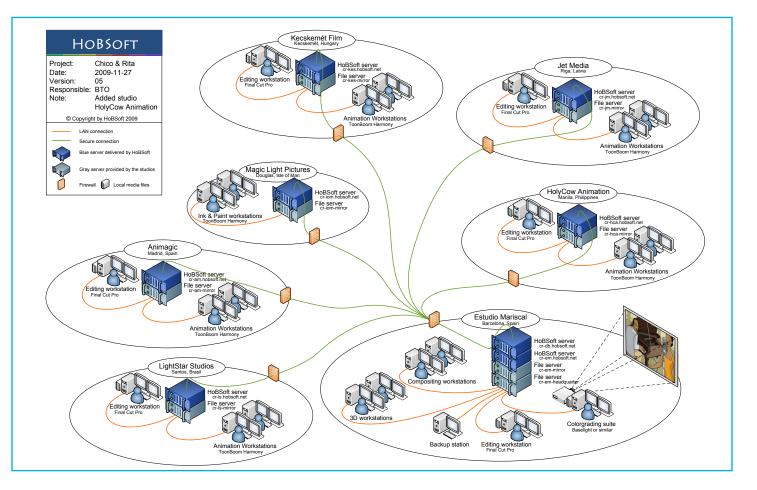
HoBSoft automatically rendered and transferred the necessary movies and setups to the director and various supervisors in the main studio in Barcelona, Spain.



Part of the automated updates was made in order to update Final Cut Pro in several studios with new footage every time a scene was updated in any one of the studios.

"The production of Chico & Rita was rather complex," explains Brian Ottosen. "We integrated 26 workflows in the system with a total of 178 different task types." At a first glance, the workflow looks complicated but, as shown in the graphic [fig. 1], one should look at the 3 main tasks of Rough Animation, Key Animation and Clean up (shown in green).

"Most of the remaining tasks were supporting tasks of the main tasks and they were almost all automated."

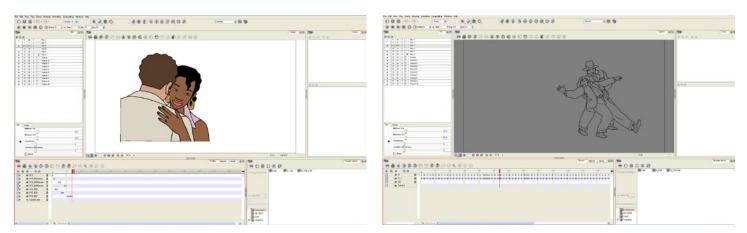


Toon Boom automation from scene builder to rendering

The animation team in Estudio Mariscal decided to realise all the 2D hand drawn animation on paper and scan it into Toon Boom Harmony. Brian Ottosen says: "We therefore integrated Toon Boom Harmony tightly with the HoBSoft Automation system in order to streamline the workflow." The Toon Boom integration is now part of HoBSoft's toolset for future clients.

The elements integrated in the pipeline are all about automation: scene builder; import and export of Toon Boom packages from the Toon Boom Harmony server and rendering of Toon Boom scenes. Marlyn Montano, Managing Director from Holy Cow! Animation in Manila, summarized: "Around 40 to 50 people worked on this film but I needed only one person to manage all the assets in HoBSoft", meaning its ease of use, especially because of automation." Regarding the scene builder, HoBSoft created all the Toon Boom Harmony scenes on "Chico & Rita" automatically. Hans-Christian Jehg, HoBSoft's head of development, explains: "Every time the system prepares data for a task it checks if the "resources" already exist. If not, it will create them. Some resources are simply an empty folder, but for a Toon Boom Harmony resource, our system will create a Toon Boom Harmony package with sound and lipsync etc."

This automated construction allowed teams to gain time for automatic processing of setups. It also enabled teams working in the 7 studios, speaking 5 different languages to easily collaborate on the same setups. Last but not least, it gave the capability to computerize several weeks of tedious work, which is crucial in terms of time saving.





HoBSoft's automated Toon Boom scene builder is highly customizable. This is what HoBSoft implemented for "Chico & Rita":

- Correct naming
- Correct duration
- Predefined output nodes for automatic rendering of 8 different milestone movies
- Import of dialogue audio and waveform
- Import of music audio and waveform
- Import of FX audio and waveform
- Import of lipsync from SyncMagic into two columns, of dialog and syllables, per character who speaks in the scene

Furthermore, the HoBSoft Automation system ensured that the scenes the artist had to work on were present on their local Harmony server just when they needed it: no FTP or manual export and import was necessary.

Rendering was a crucial step in the production process. Thanks to the HoBSoft-Harmony integration, this was facilitated, because when working with the "duet," there "was no need to render images or videos for approval - the system automatically took care of this," explains Hans-Christian Jehg.

The artist simply connected new animation columns to a predefined output node, saved and closed the scene and told HoBSoft that the work was done. HoBSoft exported and transported the Harmony package to the rendering studio, imported the package and rendered the relevant output node.





AUTOMATION IS ROI (for Return On Investment)

HoBSoft and Toon Boom have developed a very strong tool for multi studio productions, illustrated in this feature film. HoBSoft has broken the production down into 100.000 tasks such as animation, inbetween and cleanup, which are all manual, but also rendering, transferring and quality control, which are automatically taken care of by the HoBSoft system.

The production was done by 200 artists who worked in 7 studios for about one year and a half.

As Inga Praulina, Jet Media studio based in Riga says: "It's very good for such a big project to be able to see everything which has been done by other teams, in one single platform."

When rendering was done, the movies, which were also available in the web interface in the HoBSoft system, were updated, editing was updated in several studios, the master was updated and finally the Harmony packages were transported to and imported on the Harmony server in the studios where the Director needed to do his approval. Simple but efficient!

When editing becomes simple

While all previous productions, on which HoBSoft had been working on, were edited in Avid, "Chico & Rita" was edited in Apple's Final Cut Pro. "It was therefore important to find out whether HoBSoft's automated updating of the editing timeline in several studios could be done in any similar way with Final Cut Pro", explains Brian Ottosen.

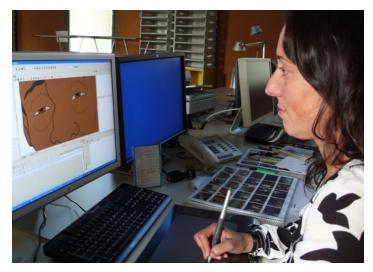


Hoping that Final Cut Pro was better suited than Avid, especially regarding the link between its media files and the source image files, HoBSoft's team had to admit their disappointment. "There is no link between its QuickTime media files and the image source files whatsoever." Nevertheless, the good news was that it was relatively easy to create and overwrite Final Cut Pro's QuickTime files with third party software. So HoBSoft developed a solution dedicated to this special case. All in all, HoBSoft tracked the link between the media files and the animation world by the use of its reliable file structure naming. Whenever milestone frames were updated, HoBSoft automatically updated the Final Cut Pro media files in a repository. Thus, the repository was synchronised with the various studios for every change. Any Final Cut Pro operator in any studio could request an update of his media files via HoBSoft's web interface which normally would finish within a few minutes.

Brian Ottosen explains: "The synchronisation of the remote studios were filtered so they didn't contain more than what they actually needed. This was done as a security measure to prevent any subcontracting studio from having the movie available in its entirety."

For Chico & Rita multiple editing tracks were used

"Chico & Rita" is the first production for which HoBSoft's new concept with multiple editing tracks was used. For this feature film, four tracks existed: "Live action," "Animatic," "Ready," and "Approved." The concept is more than simple: every time a mile stone movie was updated, the corresponding tracks were updated as well.



Nuri Puig, I&P Director, Chico & Rita

Concretely, if an animator wanted feedback regarding the key animation he was working on, he marked the task "Ready." This in turn told the system to update the "Key Animation Milestone" and use it to update the "Ready" track. If the director approved it, the system also updated the "Approved" track.

"This concept means that you always have four tracks with different advantages available in your timeline," highlights Brian Ottosen. "When you for example are approving you will be looking at the "Ready" track showing the latest work-in-progress version of the scenes. But for clients, financers or similar you will be looking at the "Approved" track, showing the latest approved version of each scene."





More than positive feedbacks

Every person involved in "Chico & Rita" production says the same thing: Working with Toon Boom and HoBSoft is so efficient. For Jean Cullen de Moura, from Brazilian LightStar Studios, "It was quite unique as a process but with such asset management tool as HoBSoft we easily provided scenes to other studios in a very efficient way, forgetting we were working in so many different countries all around the word." And she adds, beyond the technique. "You know that, when you buy Toon Boom and HoBSoft, you have more than software in a box. It was like if they're holding your hand to help you to go further."

Same tune for Inga Praulina, Jet Media studio based in Riga, known for its excellence in animation. "HoBSoft helps us to work as if we were in the same room. It's impossible to say now "Oh, I didn't see your comment." Everything is available in the same working environment, available in one click.

Focusing on creativity

The perfect and seamless integration of HoBSoft and Toon Boom Harmony allowed several hundreds of artists, located all around the world, to create a wonderful feature film, linking music and animation in a vortex of beauty.

Because it is so easy to send scenes back and forth, the scenes seem to be exchanged more times between artists and directors which greatly improves the quality.

Estudio Mariscal's production manager concludes: "It was a huge saving in terms of productivity for us, and also for all the studios, because we were free to focus on our real source of added value: creativity." Need we to say more? •

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