CARTAS DA GUERRA
Workflow, cinematography, color grading and photos
Production: O Som e a Fúria
Main Producer(s): Luis Urbano - Sandro Aguilar
Co-producers: Michel Merkt - Georges Schoucair
Director: Ivo M. Ferreira
Production manager: Joaquim Carvalho
Cinematographer: João Ribeiro (AIP)
First AC: Ricardo Simões
Editor: Sandro Aguilar
Set Designer: Nuno Mello
Colorist: Paulo Americo da Silva
VFX Supervisor: Eugenio Marques
Post-production adviser: Paulo Americo da Silva
Shooting locations/countries: Angola - Portugal
Estimated length of the film/run time: 105 mn
Country of origin: Portugal
Presentation by

Joaquim Carvalho - Production manager:
Paulo Americo da Silva - Colorist/Post-production adviser

With the help of:
João Ribeiro - Cinematographer
Ricardo Simões - First AC
3 Parts

Part 1: Sandro Aguilar
A pre-conceived workflow

Part 2: João Ribeiro
The cinematography of Cartas da Guerra

Part 3: Paulo Americo - Extract from his presentation
The point of view & tricks of a colorist

Part 4: Joaquim Carvalho presentation
Photos from the shooting
Part 1: Sandro Aguilar

A pre-conceived workflow

Cost effective workflow tested on short films before using it on Cartas da Guerra. Intensive use all the specificities of the DSLR camera and of the choice to turn to B & W.
**SHOOT**

**FILM**
- Super 8
- Super 16
- 35 mm
- 65 mm
- Imax

**SENSORS**
- Digital Still Camera DSLR
- Standard Definition
- High Definition
  - From EX-3 to CANON C300 MKII, VARICAM 35
  - RED WEAPON, SONY F65, ARRI ALEXA 65
- Digital Cinema

**POST-PRODUCTION**

**CHEMICAL**
- Telesine
- SD Standard Definition
- HD High Definition
- 2K Scan
- 2K DI
- 4K Scan
- 4K DI
- 6K Scan

**DIGITAL**
- Telecine
- SD Standard Definition
- HD High Definition
- 2K DI

**SCREENING**

**35 mm - 70 mm**
- Film Projection

**SD - HD - 2K - 4K**
- Digital Projection

**SD - HD - UHD - 8K**
- Broadcast TV
- DVD - Blu-Ray

**INTERNET PROTOCOL**
- Internet - VOD Mobile

**OTHER SCREENINGS**
- 360° - Hologram
- 3D - AR/VR (Virtual Reality)
What is the final destination?
When the head of department are occupying different locations (some on-set, some off-set - in several countries at the same time, shown in the presentation by different colors) it lead to different strategies of workflows.

Distances between shooting locations and lab and editing room are changing the approach to design a workflow.
Due to the fact that Sandro Aguilar, producer was also the editor who designed the workflow we can consider that these two locations: production & editing have the same color.
Workflow: Cartas da Guerra

Shoot

Sony Alpha 7S
APS-C extraction
MP4 - H264 XAVC-S
HD 1920 x 1080
8-bit 4:2:0
Slog2 - SGamut

Freq: 25p
Spherical 1:1.85
extracted

To achieve this unique look the cinematographer used old Leica photo lenses

The APS-C extraction helped to lower the rolling shutter artefacts

Production

O SOM E A FURIA

Editing

FCP X

Postproduction

BIKINI

Da Vinci 12

VFX

35 mm - 70 mm
Film Projection
SD - HD - 2K - 4K
Digital Projection
SD - HD - UHD - 8K
Broadcast TV
DVD - Blu-Ray

INTERNET PROTOCOL
Internet - VOD
Mobile

OTHER SCREENINGS
360° - Hologram
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Workflow: Cartas da Guerra

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APS-C extraction
MP4 - H264 XAVC-S
HD 1920 x 1080
8-bit 4:2:0
Slog2 - S-Gamut
Freq: 25p
Spherical 1:1.85
extracted

Single Tiff image
Controlled and
pre-graded in
color on PS

Quality Check
made on set by
D.I.T.

Production

O SOM É A FÚRIA

Editing

FCP X

Postproduction

BIKINI

Da Vinci 12

VFX

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Sony Alpha 7S
- APS-C extraction
- MP4 - H264 XAVC-S
- HD 1920 x 1080
- 8-bit 4:2:0
- Slog2 - SGamut

Freq: 25p
Spherical 1:1.85
extented

1 Master + 1 Clone

Production

Editing

Da Vinci 12

Postproduction

BIKINI

VFX

FCP X

35 mm - 70 mm
Film Projection

SD - HD - 2K - 4K
Digital Projection

SD - HD - UHD - 8K
Broadcast TV
DVD - Blu-Ray

INTERNET PROTOCOL
Internet - VOD
Mobile

OTHER SCREENINGS
360° - Hologram
3D - AR/VR
(Virtual Reality)
**Shoot**

*Sony Alpha 7S*
- APS-C extraction
- Single Tiff
- End of shooting
- 1 Master + 1 Clone

**Production**
- O SOM E A FÚRIA
- Decision of turning the film to B&W
- DVD PAL
  - For producers & co-producers
- FCP X

**Postproduction**
- Back up
  - HDD for time reasons
- *BIKINI*
- Fiber channel
  - RAID 50
  - HDD

**Workflow: Cartas da Guerra**
- Da Vinci 12
- VFX
- FCP X
- Selection of media to be sent to Fiber channel RAID 50
- RAID 50 HDD for time reasons
- Decision of turning the film to B&W
- media to be sent to Fiber channel RAID 50

**Digital Projection**
- SD/HD - 2K - 4K
- SD/HD - UHD - 8K

**Film Projection**
- 35 mm - 70 mm

**INTERNET PROTOCOL**
- Internet - VOD
- Mobile

**OTHER SCREENINGS**
- 360° - Hologram
- 3D - AR/VR (Virtual Reality)
**Shoot**

- Sony Alpha 7S
  - APS-C extraction
  - MP4 - H264 XAVC-S
  - HD 1920 x 1080
  - 8-bit 4:2:0
  - Slog2 - SGamut

1 Master + 1 Clone

**Production**

- DVD PAL
  - For producers & co-producers

**Editing - Off line**

- Selection of media to be sent to Fiber channel RAID 50
- XML w/ metadata and TC

**Back up**

- HDD for time reasons

**Postproduction**

- Fiber channel RAID 50 HDD

**Conform**

- Original Files

**Da Vinci 12**

**VFX**

- Color graded reference + Original footage

**Titles**

**Workflow: Cartas da Guerra**

Freq: 25p
- Spherical 1:1.85 extracted

**Controlled and pre-graded in color on PC**

**Internet Protocol**

- Internet - VOD
- Mobile

**Other Screenings**

- 360° - Hologram
- 3D - AR/VR (Virtual Reality)

**Film Projection**

- 35 mm - 70 mm

**Digital Projection**

- SD - HD - 2K - 4K

- SD - HD - UHD - 8K

**Broadcast TV**

- DVD - Blu-Ray

**Postproduction**

**FCP X**

**XML w/ metadata and TC**

**Titles**
Part 2: João Ribeiro (AIP)
The cinematography of Cartas da Guerra
João Ribeiro  Cinematographer:

“This painting is really important When I film in Africa I like to see sea paintings. How the space is represented is quite similar for me. In this one we have a b&w sky, and a colour sea. It’s a little bit "the process of our film"....fade colours to b&w..."
“After reading the script, and after a first approach to the director head, I build an album of visual influences (paintings, photographs, film stills). In Cartas da Guerra the album had:

PAINTINGS:

Romantic painting from the IXX, Francis Bacon, Goya, Constable…“
“PHOTOGRAPHS:

Lorca Di Corcia,
Gregory Crewdson,
Edward Steichen (world war II photos), etc etc.. “
“FILM STILLS from:

Metropolis (Fritz Lang),
Letter never send (Kalatozov),
The cranes are flying (Kalatozov)
Spiritual voices: (Sokurov),
Bigger than life: (Nicholas Ray)
Black narcissus (Jack Cardiff)
The night of the hunter (Stanley Cortez)
Ivan´s childhood (Tarkovsky)
Lord of the flies (Peter Brook)
How green was my valley (John Ford)
Bully (Larry Clark)’
“And:
Murnau,
Strohein,
Griffith,
Jean Epstein,
Bresson (they are my main influence).....

And:
**Russell Metty** in Douglas Sirk films,
and
**Timo Salminen** in Kaurismaki films
(this dop’s in **bold** are in a way my heroes),
Also
**Henri Alekan**, specially on La belle et la bête”
"I always imagine that this film could be understood with your eyes close, just listening to the sound, or with your ears close, just looking at the image"
“The concept for my crew was:

I never say: let’s make a shot

I always say: let’s create a shot”
...AND THE BLACK & WHITE

When we did the tiffs everyday we were colour correcting to monochromatic tones, sometimes we did black & white too, but it was not a shooting decision.
Also with the Sony you can’t do black and white in the camera.

In the editing they try with all the material and it worked perfect.
If I would do something different if I knew it would be like that at the end?
My answer is no, I would do exactly the same light and framing.
I always “see in black and white”, even the view finder is always set like that.
The reason is I do light with contrast, so it was not a problem.

Here the black & white helps to take away some African clichés like warm light, green, etc… etc…. obvious if you do colour in Africa you do not need always to do warm light, but filming Africa in colours you are always doing something that goes with the imaginary of the audience, how they imagine Africa…it’s a continent full of clichés in peoples minds, so if you get away from that clichés you would feel to much aesthetic, maybe with no reason at all….maybe just to do different from other films, and that is a very stupid and irresponsible decision

The black & white gives you a distance, you are again in the field of representation and not filming “reality” it self, it brings some poetry to the images and a certain nostalgic thing, it works better with voice over too.

If we experience to put a good photograph colour film, and see it in black and white it’s still good cinematography, it’s obvious that colour must be worked in a dramatic way, but in black & white you are more depurated and you achieve what you want quicker….it’s always how much black and white you want. In a pure black or in a pure white we are blind, you have to decide where you want to start to make people to see…in the blacks and in the whites…

Most of the films I see today, I notice that dop’s light the space and put the actors inside, they have all freedom of movements. As I told before I think in a reverse way, first actors, then the space, maybe that’s why people like the image of Cartas da Guerra, some say it looks like a classic, some say they are able to see colours, but for me the more important is that people feel the emotion and get touched by the film, the film it self, all the film, and not just the cinematography of it.
"The strong spirit from "Cartas da Guerra" filmt is a spirit that is "kind of lost" and I try always to recover when I work in features ....respect for cinema and for each member of the crew .... But in this case it was really specially!"
JOÃO RIBEIRO:  

“Camera: Sony A7s, (imposed by the production) it was the first time I film with a “photo camera”. I was really scare, so what I pass to my crew was: “we have to do a film where nobody can say we use this type camera”  

“The fact that is not heavy, you have to be very educated with that, and tend not to put it everywhere, but just in the correct place for each shot”
WHAT WAS GOOD

• The latitude

• The sensibility (3200 iso)
WHAT WAS BAD

• Ergonomics

• We took 2 weeks and a half to build the correct model to use… it’s like a technical lego

• The fact that its not heavy, you have to be very educated with that, and try not to put it everywhere, but just in the correct place for each shot
To post-production I share the references with Paulo Americo, (the colorist) what I see in the shooting with my crew, he will see in the post, he’s part of the crew also. We share the references to have a starting point, then it’s his moment, he understand the texture we’re after, and propose, in an artistic way, because I’m not very technical guy….so references help me to communicate with him.

We work together before several times, he knows my mind and style very well, his work is not only to improve the image but also to propose things, if they work in a dramatic way concerning the film we r doing, he has 100% freedom to do it.

“The Chinese say that painting draws on three things: the eye, the heart, and the hand”
David Hokney in True to Life p 190

That’s what filmmaking is for me after all....”
Part 3: Extract of Paulo Americo presentation
The point of view & art of a colorist
• S-Log2: Gamma curve for [S-Log2]. This setting is based on the assumption that the picture will be processed after shooting.

• S-Gamut: Setting based on the assumption that the pictures will be processed after shooting. Used when [Gamma] is set to [S-Log2].

• When using S-Log2 gamma, the noise becomes more noticeable compared to when using other gammas. If the noise still is significant even after processing pictures, it may be improved by shooting with a brighter setting. However, the dynamic range becomes narrower accordingly when you shoot with a brighter setting. We recommend checking the picture in advance by test shooting when using S-log2.

• S-Gamut is a color space unique to Sony that provides a wide color space equivalent to film cameras. However, S-Gamut setting of this camera does not support the whole color space of S-Gamut; it is a setting to realize a color reproduction equivalent to S-Gamut.
DI ON DA VINCI RESOLVE 12

- 105 minutes film
- Conform from Final Cut X generated XML
- 641 clips
- 400 GB of original camera media (1920x1080 H264 mov files)
- 28 VFX clips as DPX image sequences
- Mastering to image sequence TIFF 16 bits 1998x1080 (1.85:1)
DI ON DA VINCI RESOLVE 12

• The work spanned 7 weeks
• 18 working days
• 98 hours of work
• 6h conform
• 72h colour grading
• 15h mastering
• 5h QC
Methodology

From color to black & white
João, the cinematographer, used diagonally a neutral filter on the top right side of the image. Paulo, the colorist, enhanced the effect.
Paulo used “power windows” to help the audience to focus on the convoy.
The driving force of the convoy was selected.
And this part of the image was brightened
What the film may have looked in color …
Methodology

How to deal with a low cost recording format
The 8-bit 4:2:0 h264 recording format is certainly not the best format to deal with the highest aesthetic demands.

However Paulo Americo used the lack of color information as an asset for this black and white film.
Zoom into the image in color
Zoom into the image in black and white without film grain
Zoom into the image in black and white with film grain which literally fill the lack of information in the image (low-level of bit allocation)
Without film grain

Zoom
With film grain

Without film grain

With film grain
Notes:

Production: O SOM E A FÚRIA  
http://osomeafuria.com/

Post production:  
http://www.bikini.co.pt/

Film grain emulation achieved with:  
FilmConvert OFX Plugin  
http://filmconvert.com/plugin/ofx

Fraunhofer Institute  
https://www.fraunhofer.de/en.html

Easy DCP  
https://www.easydcp.com/
Part 4: Joaquim Carvalho presentation

Photos from the shooting
The novel from:

António Lobo Antunes
The military camp in Angola
The military camp in Angola was shot in fact in Angola and in Portugal
Ivo M Ferreira, the director in front of the future village location
The road to the village
Building the military camp
Building the military camp
The family
The Family & Joaquim Carvalho Production manager
The bridge
The bridge was destroyed during the civil war. The production decided to rebuild for the script allowing the village to renew the link with the country.

João’s drawing