## TWO PART INVENTION

32 PHOTOS

(2003)

For the series WRITTEN PAINTINGS by Martinho Dias
one needs:

1 camera for manual use, but possibly with an adjustable time of exposure (e.g., 4 to 20 seconds).

1 roll of film of 32 photos (min.), low sensitivity (e.g., 100 ASA or less)

2 rectangular pieces of cardboard, postcard-size (10 x 15 $\mathrm{cm})$, one red and one black, no refecting surfaces

1 white wall, at least 3 m high and 4 m of width

Lighting (eventually also damped natural light).

Short description:

Each rectangle will be photographed from 16 different distances with camera in motion and with long-time exposure (photo 1-16 red, photo 17-32 black).

The 32 photos will be directly fixed (unframed)on the exhibition wall, according to the description below.

The 32 photos result in the piece "Two Part Invention"; whose interpreter is the photographer.

Detailed Instruction(Score):

The motif
At first, the red cardboard will be placed in the centre of the white wall, transversely, at the height of eye level (there should be at least 190 cm of white wall to both sides of the cardboard, and 130 cm upwards and downwards)

16 distances
Each card should be photographed 16 times from different distances. Neither zoom nor a distant angle will be used (therefore about 45 mm ). The largest distance will be 2 m , the shortest about 27 cm . The shortest distance should be valued that way, that with unmoved camera and centred cardboard, the cardboard almost corresponds with the outline of the photo: there should remain a few millimetres of a narrow margin (white wall). The largest distance should be chosen so that the motif makes about $1 / 30$ of the outline of the photo; therefore, the cardboard's width would fit in about 5,5 times, horizontally (the height 5,5 times, vertically).
The 16 steps between the most distant and the nearest shot should be chosen so that the difference from one image to the next is possibly of equal significance. Therefore, the first step (the difference in distance from photo 1 to 2 and 17 to 18 , starting with about 2 m ), should be distinctly larger (about one foot-length) than the last one (the difference in distance from photo 15 to 16 and 31 to 32 is still only about 1 cm ). The steps become shorter and shorter.

Focus, diaphragm, time of exposure
The focus should be tuned in a way, so that (with unmoved camera) only the most remote image (1, respectively 17) would be well-focused. The focus will be fixed and remains unaltered.

The diaphragm and time of exposure should be settled according to the disposable light. The time of shutter should be of minimum 4 seconds. Therefore, one needs an indirect, weak and homogeneous light (with no reflections in none of the 16 positions!) and one roll of film less sensitive to light (100 ASA or less). From a centred distance (e.g., 90 cm ), a measurement from a corner of the red card should be made. (it means: that the measuring of light should be made from a middle distance - e.g. 90 cm -
and onto the corner of the red postcard, so to measure the red AND the white.) When a value for the diaphragm and time of shutter has been found, it will not be changed any more (such as the focus), for all 32 photos.

## The agitated camera

During the time of shutter (min. 4 seconds), the camera will be permanently agitated, vertically or horizontally. In the vertical oscillations, the opening of the lens alternates up and down; in the horizontal oscillations, right and left. The centre of the camera remains in the same place. To further explain the kind of movement it could be seen as if the centre of the camera was a hinge: at the vertical movement the camera is "nodding", - by no means the whole camera is moved up and down; at the horizontal movement the camera is to be turned, and not moved to left and right as a whole. (in other words: vertical movement is like "yes"; horizontal movement like "no")

The oscillation degree depends on the distance from the card. In photos 1 and 17, the oscillation will be strong, in photos 16 and 32 , slight. The oscillation movement should be conducted exactly until the corner of the card touches the margin of the photo outline in the display (the upward movement will develop itself until the inferior corner of the card touches the inferior margin of the photo outline; the downward movement reaches the contact of the superior corner of the card with the superior margin of the outline; etc.)

This movement will be performed several times in the available time of shutter: half of the time, it will swing vertically; the second half, horizontally.

The camera should never be stopped, as long as the shutter is open!

When you pull the trigger, the movement has already started!

In both swinging movements, the card should be kept as centred as possible (centred horizontally in vertical
oscillations and vice versa). This movement needs some training, so that the deviation of the horizontal and vertical axis, respectively, is not too evident.

Nevertheless, every photograph should be done by hand and without tripod; inevitable deviations are parts of the composition.

When all the arrangements have been made, the photos will be taken one after the other. After the first sixteen photos the red rectangle will be replaced by the black one and this, without changing the focus (and the other adjustments), will be photographed 16 times equally. We must keep in mind that the 32 photos belong to the same roll film; this way, the change of roll film will not be necessary. No isolated picture should be corrected afterwards; only the set of the 32 photos can be repeated, if the result is not satisfactory.

Development

It is important to notice that in the development of photos (bright!) all of them get the same tone, especially because there is no big difference between the tint of photo 1 and 16 (17 and 32) and also because one does not distinguish the tint of the wall of the 16 red photos from that of the 16 black photos.

## Format

The format of a single photograph in any case keeps the relation 2 (height) for 3 (width). The measure depends on the exhibition room: the ideal was that the 32 photos fulfilled the wall. If the single picture is 30 x 45 cmin size, the general format (- in the respective order; see below) will be of about $400,5 \mathrm{~cm}$ of width and 129 cm of height.

The sequence and place (hanging)

The photos should be placed unframed in the exhibition wall, in the following order (all the rectangles placed transversally, as they were taken):

| 7 | 8 | 9 | 10 | 26 | 25 | 24 | 23 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 6 | 15 | 16 | 11 | 27 | 32 | 31 | 22 |
| 5 | 14 | 13 | 12 | 28 | 29 | 30 | 21 |
| 4 | 3 | 2 | 1 | 17 | 18 | 19 | 20 |

Between each photo is left some free space (wall). The width of that space is $1 / 10$ of the width of each photo (for a measure of 30 x 45 cm , the width of the space is 3 cm ).

Between the left block (red) and the right (black) there is a free and broad gap. The width of that gap is $1 / 2$ of the width of each photo (for a measure of a photograph of 30 x 45 cm , the gap is of $22,5 \mathrm{~cm}$ ).

P.A.,<br>Berlin, 8.7.2003

(english notes edited by Austin Buckett)

