

Background

Inge Lotz rented a DVD from a nearby video outlet at 15h07 on 16 March 2005. Shortly thereafter she left for her apartment. She was then killed at any time from between about 16h00 and 18h00. When she wanted to watch the DVD or whether she actually started to watch it left aside, the video case was in her apartment that afternoon, and it was only in her apartment from when she arrived at her apartment.

It is an undisputed fact in evidence that the DVD case was found splayed open on the coffee table next to her body when it was found at around 22h34.

Const Elton Swartz and WO Mariaan Booysens were two of the three-member team who dusted and lifted prints on the crime scene the next morning.

WO Booysens would dust the objects and hand them to Const Swartz, who was working on the kitchen counter, lifting the prints from the objects. WO Booysens would choose and dust objects and decide whether there were possibly good enough prints for lifting before handing the objects to Const Swartz, who lifted and did further documentation.

WO Booysens testified under oath in a court of law that she dusted the mentioned DVD case and observed clear prints on it. There were no other DVD cases around. Const Swartz testified under oath in a court of law that he received this DVD case from WO Booysens. He applied a foline of about 12 cm x 9 cm to the mid-bottom half of the DVD case (on the front side). He lifted, but could not detect any good prints and discarded the foline. He then lifted from the top half – this was the lift that would become known as Folien 1 (picture below).

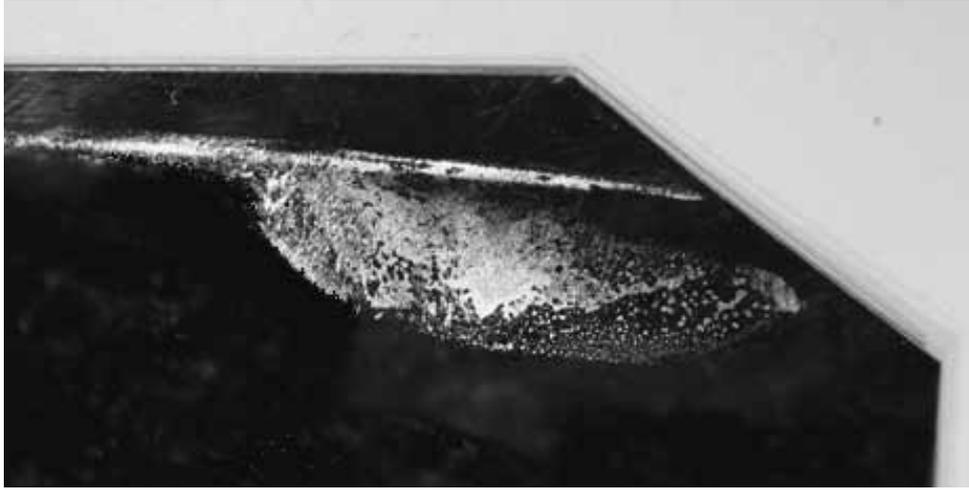
But, the defence for the accused claimed that this lift is actually a lift from a drinking glass, and that the police (i.e. the lifter) intentionally mislabelled a drinking glass lift as a DVD case lift and that he then discarded the DVD lift. This was done in order to frame the accused, Mr Fred van der Vyver, whose prints matched the prints on Folien 1; his exclusion prints were taken 28 days after the murder. This would put him in Inge's apartment after 3pm that afternoon – at a time that he said he was at work. The prints on Folien 1 are Mr van der Vyver's – nobody disputes this, but he says it cannot be from the DVD case – he was not in her apartment at all that afternoon or evening – he could not have touched it, he claims.

One of the defence experts' strong arguments in favour of the glass theory, was that there is a lip print on the lift. This would suggest a lip that was put on the glass by the accused. He could have touched the drinking glass at any time – e.g. the morning before he left for work, and a print on a drinking glass would therefore not necessarily implicate him.



The purpose of this report is mainly to investigate the so called "lip print" in the context of both the sworn testimonies and our personal interviews and consultations with both Booyens and Swartz. They both explained to us how they worked and what they did or did not do. We will let the facts speak for themselves, but it is important to get an idea of the context in which things happened and what the claims of the defence are. Here are some points to consider:

- » There was a DVD case on the scene. Nobody disputes this. It is also seen as an undisputed fact that the DVD case was dusted and that a lift was taken from it. The defence's argument is simply that this DVD lift was discarded intentionally – and that the lifter then took a lift from a tumbler glass and marked it as having been taken from the DVD case.
- » It is also a fact that neither the police's crime scene video nor any police photos show a tumbler on the scene. This purported glass which is supposed to have been the substrate for Folien 1 has never been produced by anyone, ever. There are no reported measurements of any other glasses in the apartment irrespective of the fact that various other glasses of different dimensions were around. The glass that supposedly made Folien 1 would need to have a very specific dimension of 80 mm high. No such glass was ever found or produced. Mr Dixon's report should not even be considered, as he gave no measurements of the four "same height" glasses, and the inference he makes to "the same height" is simply incorrect and untruthful. There were no glasses of 80 mm high in Inge Lotz's apartment. Period. (We have the photos of the glasses.)
- » If the lifter wanted to switch prints (i.e. mark a drinking glass lift as a DVD case lift) he first would have needed to know whose prints were on the drinking glass, if such a glass existed. For that he would need known prints, which he would need to get from somewhere. If he wanted to frame a person he would need to have knowledge about that person and his movements. If he wanted to implicate a person to be on the scene at a specific time, he would need to know how foolproof that person's alibi is. He would have needed to know the significance of the DVD case and that it can place a person on the scene at a specific time when he said he was at work. The fact is that neither Const Swartz nor WO Booyens knew the accused by the time of dusting and lifting. They had no knowledge about him or his movements, and it is safe to say that they could have had no intent to frame somebody that they did not know. They did not even know he existed. Why would they risk life and limb to frame a person they could not have had any gripe with.
- » The accused's prints were taken by the police 28 days after the murder. Before then the police had no known prints that they could use to frame Mr van der Vyver. The police also only became aware of the significance of the DVD after they went to The Video Place (on 13 April 2005) and took a photo of the screen which showed when exactly Inge rented the video.
- » Mr Van der Vyver was by routine questioned by the police the next morning. Some glass theorists – notably Mr Wertheim – argued (such as in the NEIAI Newsletter Winter 2010) that the police planted a glass in the interrogation room and took it to the apartment, and then made the "switch". This would suggest that the police decided to frame the accused only hours after the murder. Not having any clarity on his alibi. Not having checked out his extremely detailed alibi at all. Fact is that there was no connection between the dusting/lifting team and the interrogator, Supt De Beer. Neither Const Swartz nor WO Booyens even know him. They have never met or directly worked together. Both Const Swartz and WO Booyens simply went and did their job, according to both of them.
- » Const Swartz admittedly, and by his own admittance, made one procedural mistake. Although Swartz did label and number each lift at the crime scene he did not immediately copy other necessary information onto the labels, such as the location and type of object that the lift was taken from. These details Swartz recorded in his crime scene notes. Later back in the comfort of his office, while referring to his crime scene notes he completed the labels of each of the 11 lifts he took. Not following procedure to the letter does not by default mean that a mistake occurred nor that evidence fabrication took place.
- » During the trial Swartz did give some conflicting accounts of exactly how he lifted. He was described as a poor witness. He actually admits having been a poor witness. One must remember, he was young and inexperienced. Time ate away memory of exactly how he did what, which is human. He was not prepped by the prosecution. It was his first time on the stand, facing a veracious onslaught by a senior defence team accusing him of criminal conduct – evidence fabrication and perjury. The things on which he stumbled are not make or break things, it was simply used to make him look unsure and dishonest. We are confident that his accounts are in essence true and reliable.



Whether this is a lip print became a contentious issue in the Folien 1 debate.

Admittedly at first glance it can remind one of something like a bottom lip pressed against a flat glass plate. But then the absence of wrinkles and creases is notable. Also the peculiar slope. Why and under what circumstances would someone drink like this? Then the fact that the print just seems to stop suddenly. If the position of the right thumb is considered as being the thumb that held the glass while drinking took place, the "lip" seems to sit on the more unlikely side of the thumb. It should be either in line with the thumb or slightly more to the right of it, not to the left.

Especially interesting, are the conflicting views of the defence experts.

- » Mr Daan Bekker, the first defence expert in favour of the glass theory, said nothing, not a word, about the "lip print".
- » Supt Dixon, just said it is "consistent" with lip prints. No photos of other lip prints or further explanation. Regarding its position, he says something to the effect of: *"In order to replicate the lip print a handling action was performed with glass 1 the lip print was situated above the left fingers, just as on Folien 1"*. Without telling us how he handled the glass, this is an utterly useless and senseless comment.
- » Mr Wertheim also just said it is "consistent" with lip prints on drinking glasses. No photos of other lip prints on glasses. Mr Wertheim actually writes in his report that the print is "parallel" to the rim of the glass. Regarding the absence of creases he says that it is because the lip was "excessively moist". He ascribed the position of the print to the left of the right thumb as consistent and normal.
- » Mr Zeelenberg said that the lip was dry and that the whole glass was condensed – up to the rim. The dry lip was put on the condensed surface. Hence no creases. Mr Zeelenberg said that lip prints will normally be sloped. The incomplete print, according to him, is because when you drink, the glass touches your nose and cannot be emptied, then you have to turn your wrist to compensate for this, hence the incomplete print. He also claimed an unidentified print as a thumb print, in order to put the "lip print" to the right of the right thumb.

Thus Mr Wertheim and Mr Zeelenberg contradict one another on the the wet/dry lip, the angle of the print, as well as on the position of the print. It is further to be noted that neither Mr Wertheim nor Mr Zeelenberg could show one example of a lip print on a drinking glass in their reports. Not one. (Mr Zeelenberg shows one lip print as part of another point in his report – but even that lip print is not sloped.) Mr Zeelenberg's own photos of condensed glasses do not show condensation up to the rim, but only up to the water line. It is also strange that Mr Zeelenberg argues that the condensation obliterated the creases in the lip print but left all other prints unharmed. Condensation is obviously all around the glass and not localised. Be that as it may, there is absolutely no proof on Folien 1 that there was any widespread damp or condensation (which dried) on the substrate at the time of the deposition of the "main prints" or thereafter.

The prosecution said it was possibly a finger in a latex type glove.



Normal surgical glove for illustration purposes only

This plausible possibility was dismissed by the defence experts, without testing its validity. But one can suppose this was the prosecution's fault. For example, Mr Wertheim, a defence expert, said on the stand during the criminal trial that the print may look like a finger in glove print, but that a finger would be too big for the print.

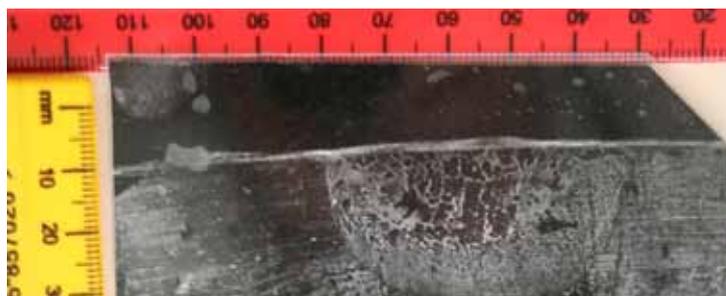
Why did the prosecution not test latex on plastic prints? Why did they not compare the index finger of the duster (WO Booyens) with the print? The person that, if it was finger in glove print, was most possibly the depositor of the print, if a finger was suspected. In an ideal world one would want the defence experts also to have done this, but they may have been reluctant to do so for good reason. They had to know there was a good possibility of it being a finger in glove print. It was probably the prosecution's job. However, they also did not do it.

Hence, we did it.

We tested a wet latex glove (various types) on a DVD case's sleeve.

And also very important, we physically went to the duster (WO Booyens) and photographed and measured her finger. It was not done by anyone in two legal trials in the 8 years since the murder.

We also looked at the biomechanics of drinking actions and looked at various lip prints on glasses. We tested our own. We tested those of friends and family and strangers. And looked random prints up on the internet. We looked at sizes, shapes and positions of lip prints. Wet or dry lip on wet or dry glasses.



We will briefly go through it here and give a short summary afterwards.

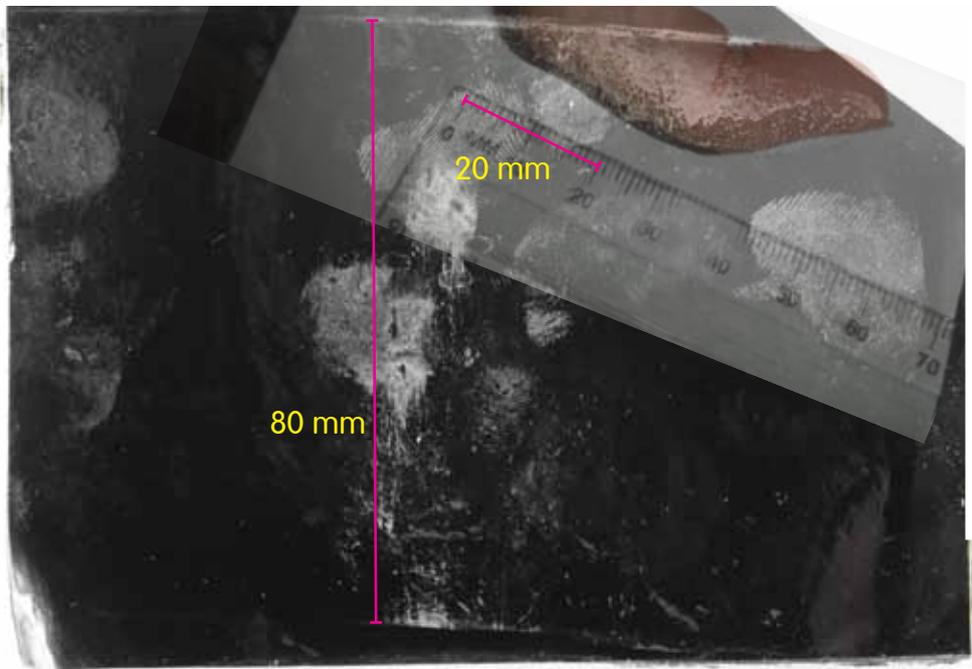
On 25 March 2013 we visited Mariaan Booyens at her work. She has since left the police force and is currently in private practice. We asked her about what happened on the scene and how she dusted. Eventually we asked her if we could take scaled photos of her right index finger in a curled position, as she would have gripped the DVD cover. She gladly provided permission.

What if her finger showed unique correspondence with the mark claimed by the prosecution to be her (or the lifter's) finger? The argument could be that you can place any finger on such a mark. But what if especially the size of it was telling? And that it works in terms of handling considerations. And with the type of print – in terms of texture – that a latex glove would make on a plastic sleeve?

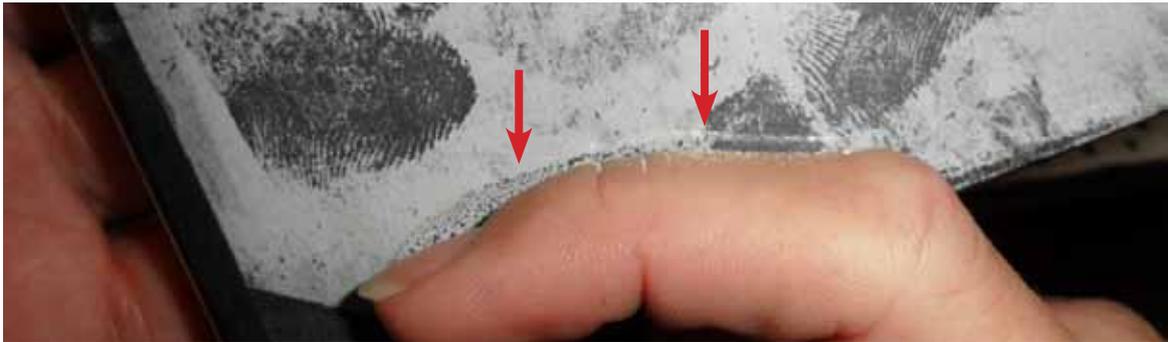
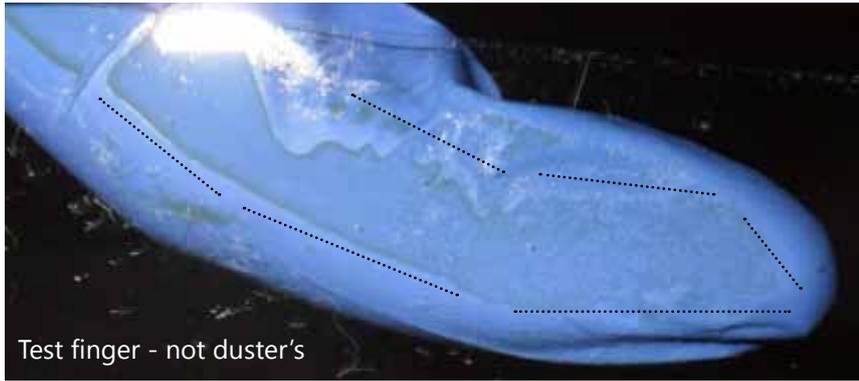
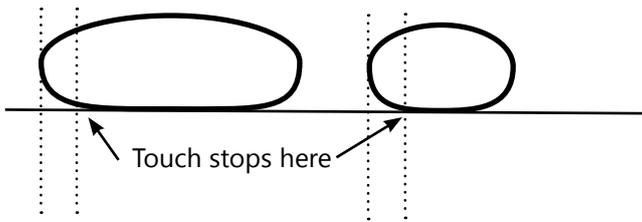


Above are some of the photos we took. It was immediately evident that her finger matched the print in terms of length. If, even just for the sake of the argument, it was a finger, then the finger was curved – this is clear in the mark. It would not have been a straight finger. We asked her to hold the cover as she would have held it when she dusted. It was a perfect fit. Even if considering the glove. Her method of gripping a thin object is not strange. It is quite natural. You have to hold the object somewhere and somehow. Her method appeared to be valid and natural.

Here is a same scaled overlay of her finger on the print



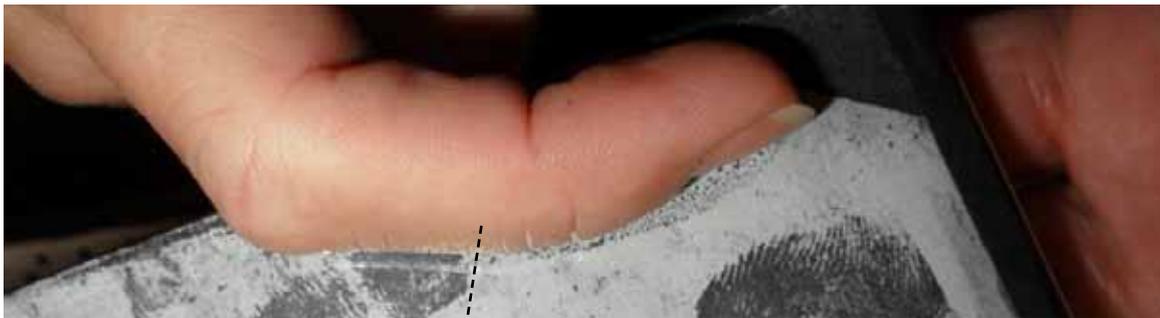
Why the finger would be slightly bigger than the print



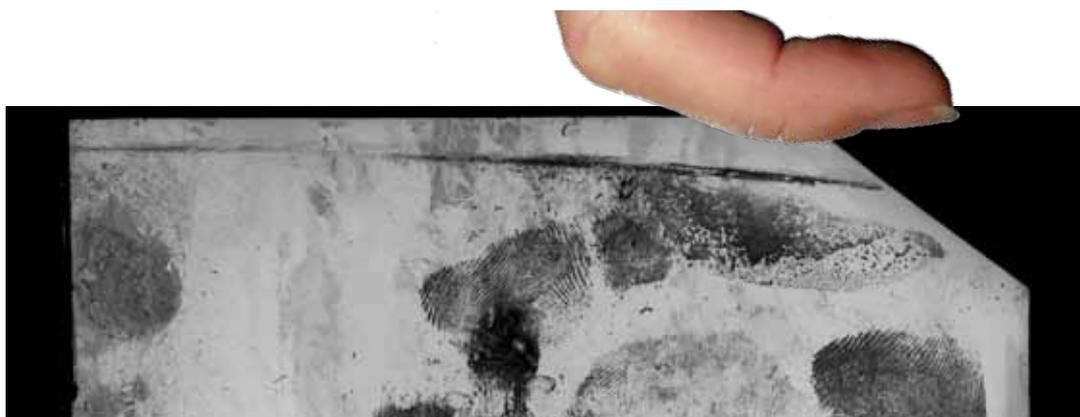
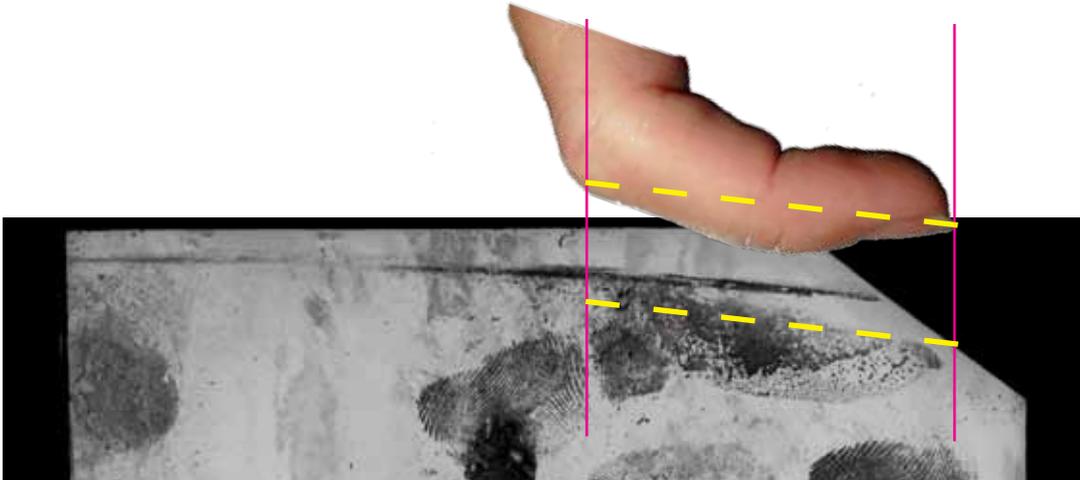
Red arrows show the outline of the print on Folien 1



Account for the fact that the finger should be slightly higher and on the mark. We simply wanted to capture the outline of the mark. It is an excellent fit.



On-scale overlay of finger in above photo





The duster, WO Mariaan Booyens, although of medium build and length for a lady, has relatively small hands and short fingers.

Below is a finger of Const Swartz, the lifter. He is a below average short man.



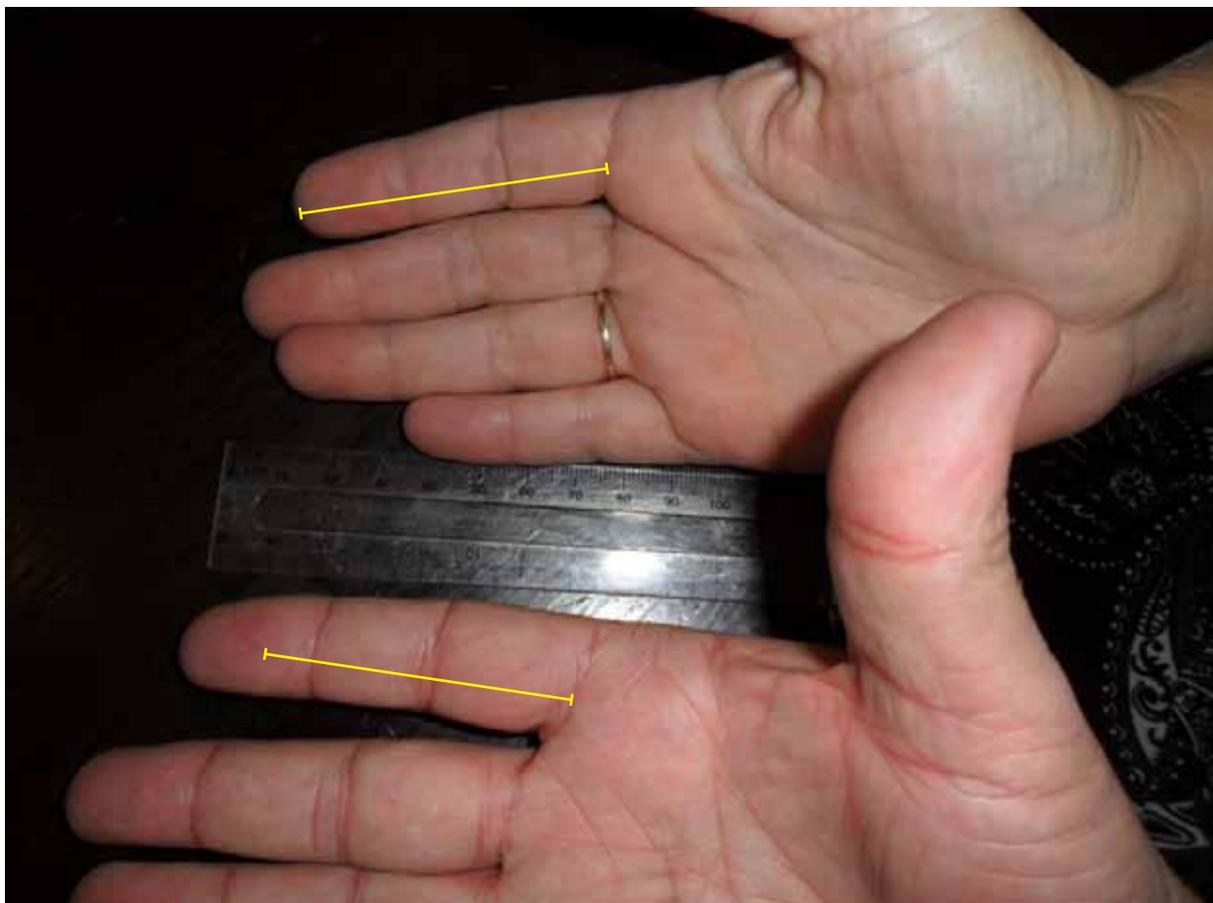


WO Mariaan Booyens' (the duster's) hand compared to a medium sized man's hand.





WO Mariaan Booyens finger size compared to an average male hand (below)





WO Mariaan Booyens' (duster) finger above



Test finger. Way too long. (A just sub-average 1.74 m tall man)

Bottom, finger of very short lady (1.55 m). Finger too long.



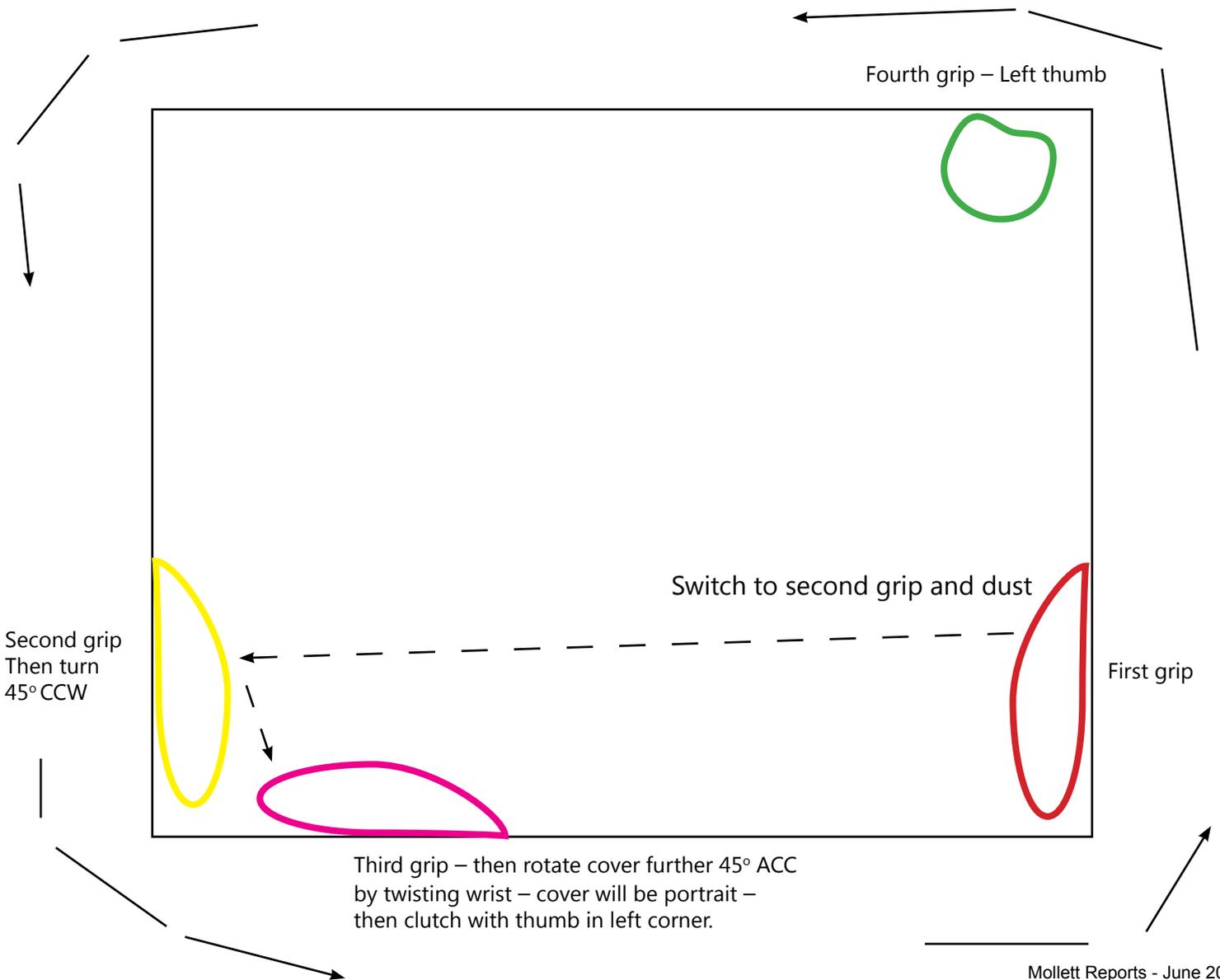
The duster has particularly short fingers for her build. It is not any person's finger that will fit on that mark. Not only does a finger fit the mark, but the finger of the person who had to handle the cover at some time on the 17th.

Handling considerations: The duster, as told by herself, would clip the DVD cover in the one hand (say right hand) and then switch hands and clip it with the left hand and dust. And would further rotate the case until all areas were dusted.



Now grip with left fingers while dusting. In this way the duster would rotate the cover – gripping it at the corners alternatively with both hands' index and middle fingers, ensuring all areas are dusted. Also the areas where the previous grip was.

The print as a right index print is consistent with reasonable handling considerations – and as the duster described she worked.



The "lip print" on Folien 1 is a latex on plastic print made by a finger in a forensic glove. The finger part was wet for some reason, most possibly due to sweat. There was also a tall glass with fluid in on the scene. This may also be the source of the wetness. ("Wet" does not mean dripping wet, but simply a thin layer of fluid on the rubber)

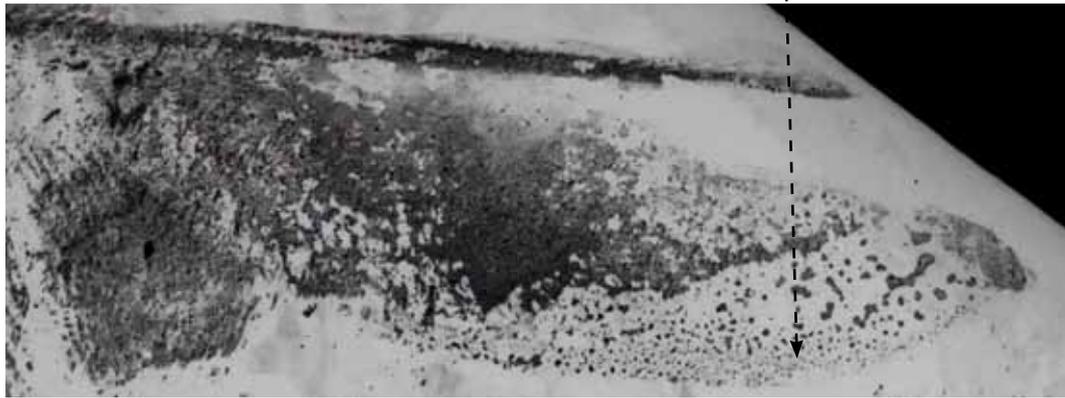


Water based black ink print from glove on plastic sleeve

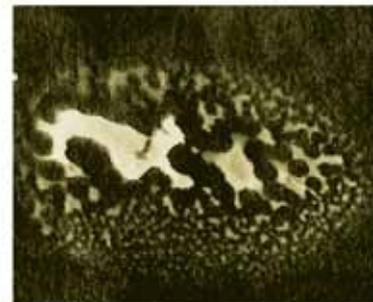
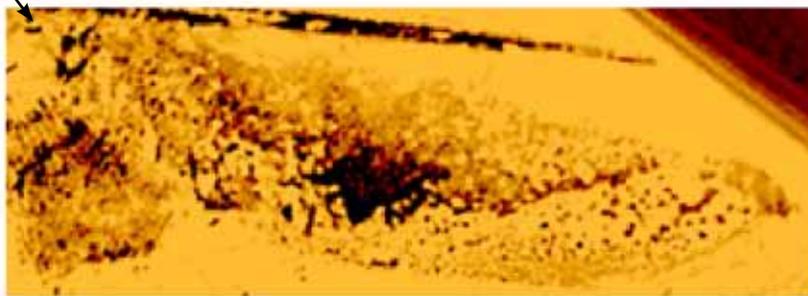
Note similarity in tips

(Water based black ink was simply used to show contrast better. Water yeilds same result)

Note the same texture



Folien 1 print



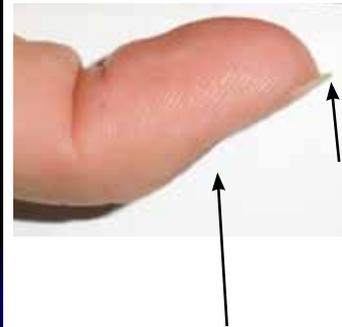
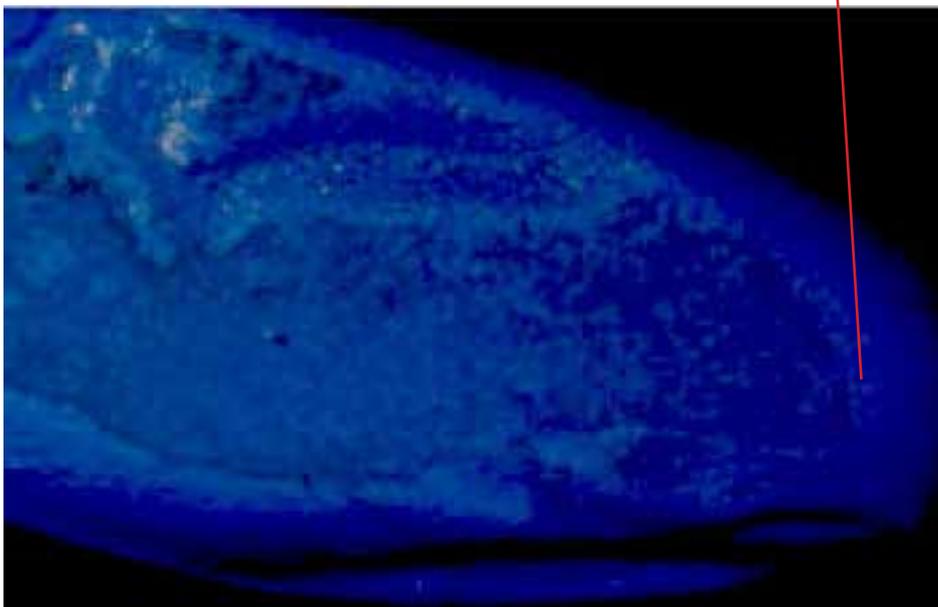
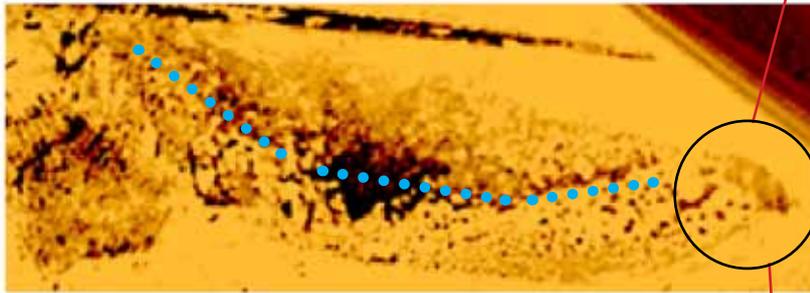
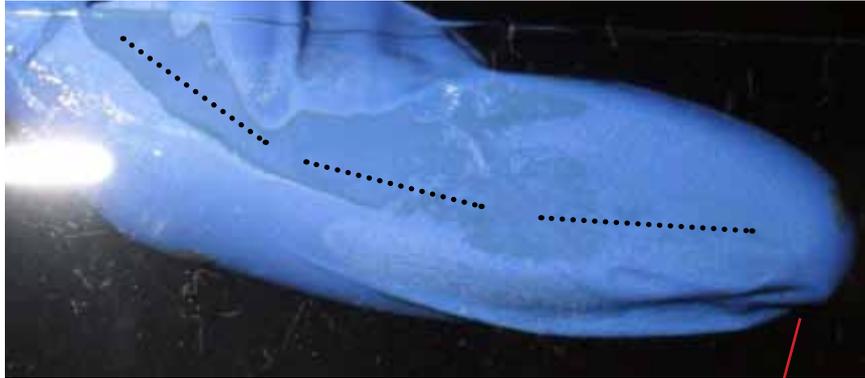
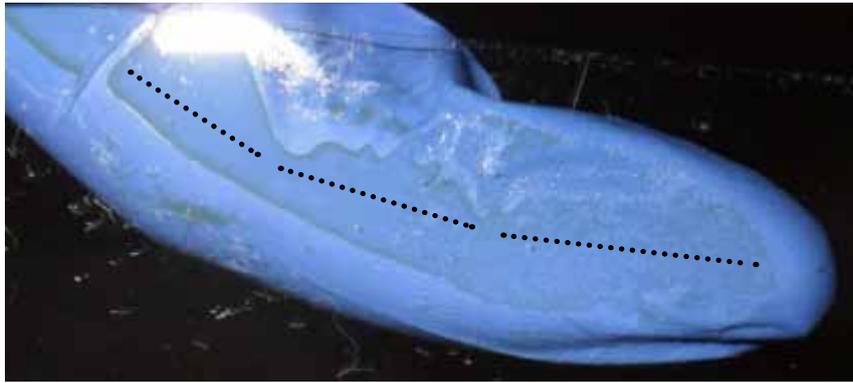
Wet latex on DVD sleeve



Similar textures can be produced with wet latex on glass or shiny surfaces. But not by lip (skin) on glass, wet or dry.

The notable tip of the print is the duster's fingernail pushing out the glove somewhat.

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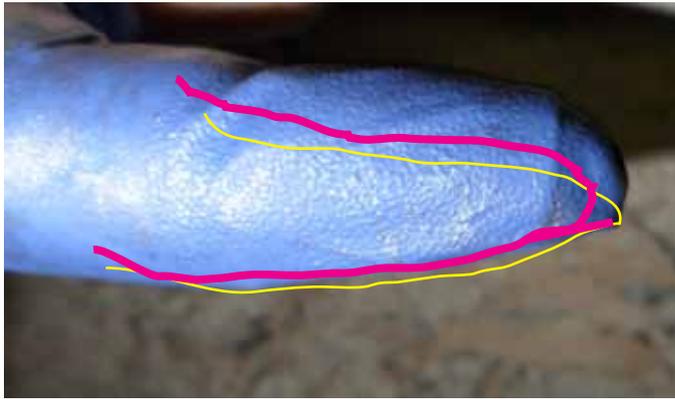


This is the actual finger of the duster. A lady who normally wears long nails. Nails push glove out and is responsible for the tip of the mark.

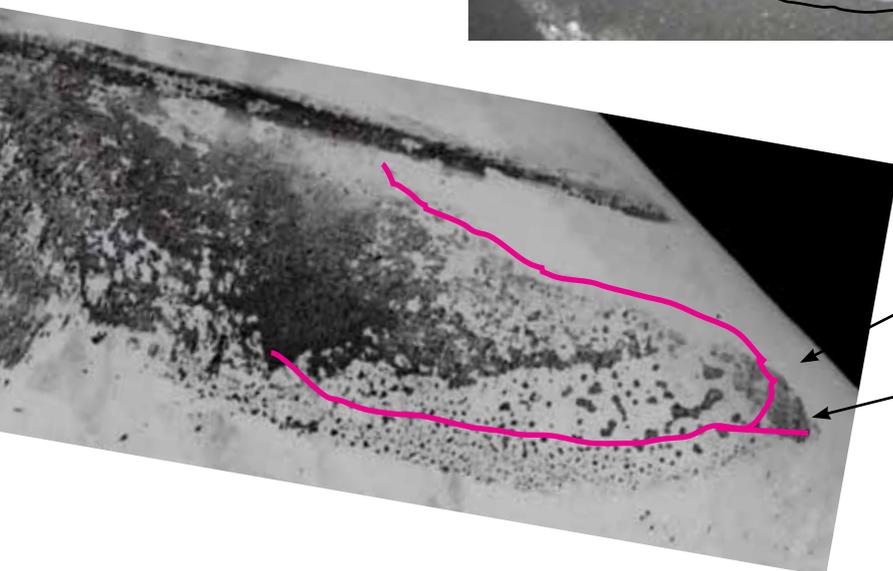
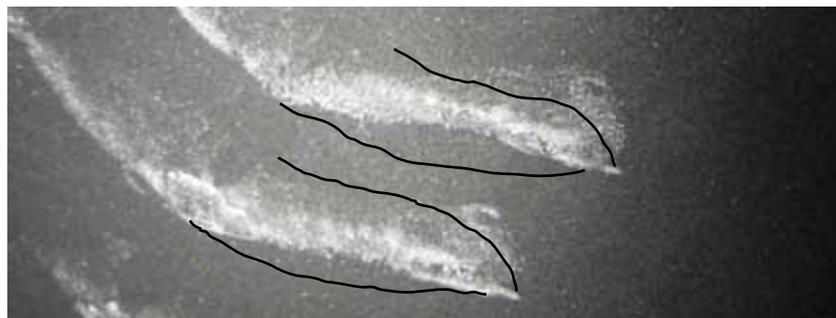
WO Booyens said that it was unlikely that she touched her face (e.g. brow sweat to accumulate sweat on the glove) but she mentioned that it was a warm day and that it was very sweaty inside the gloves. It may, in our opinion, be that she unconsciously and without realising, rubbed one finger slightly in under the other hand's glove close to the wrist area (which may have been wet from sweat) e.g. to scratch an itch, push a watch strap up, etc. People do things like this without thinking about it or remembering it afterwards. There was also a drinking glass with fluid which they handled on the scene, which could have provided the moisture.



Fitting a nail about the same length as WO Booyens'



Exactly how the nail will record or play a role in the formation of this tip is not an exact science, as there are variables involved, such as how the glove reacted on contact – and how it behaved around the nail. However, the protrusion is not negatable. We must remember that the duster has very thin and short fingers. The glove could play around on the finger and surface a bit more.



Why would a lip print stop here?

What in a lip would make this?

Why would a lip print be sloped by about 10 degrees?