from the perspective of the European Fibres Group



Kornelia Nehse

EFG - chairperson





from the perspective of the European Fibres Group

Contents

- **1. Situation in Europe**
- 2. The Role of ENFSI
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from the perspective of the European Fibres Group

ENFSI Members

- 61 member institutes
- 34 countries
- 30 different languages
- different legal systems



Common language **ENGLISH?**

+Associate Members in Working Groups

(Australia, Canada, Europe, Israel, USA)











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Mission Statement

ENFSI has been established with the purpose of sharing knowledge, exchanging experiences and coming to **mutual agreements** in the field of forensic science.





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Aim

ENFSI is recognized as a pre-eminent voice in forensic science worldwide by ensuring the quality of development and delivery of forensic science throughout Europe. It will therefore:

- strengthen and consolidate ENFSI
- expand the membership throughout Europe while maintaining the development and credibility of ENFSI
- establish and maintain a working relationship with other similar organizations
- encourage all ENFSI laboratories to comply with best practice and international standards for quality and competence assurance





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What is the general intention regarding report writing?

- to harmonize the scale of conclusion
- to implement an appoach for evaluation of evidence
- to educate the employees on the subject
- to inspire the employees on the subject





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Structure of reports - EXAMPLE UK

-Qualifications and Experience -Information received -Continuity -Purpose -Technical Issues -Examination and Results -Interpretation -Conclusion **Structure of reports - EXAMPLE D**

-Material received -Material Assessment -Examination Order/Purpose -Methods/Technical Issues -Information received -Examination and Results -Interpretation -Conclusion







- state bare facts?
- interpret analytical results/spectra (discuss error rates etc.)?
- interpret the evidence on a source level?
- interpret the evidence on the activity level?







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Facts

interpretation

Conclusion

Reporting (written, oral) with transparency



Statens kriminaltekniska laboratorium - SKL SKL / Evidentiary value project





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Harmonise	the scal	e of cond	lusion

- general scale introduced 2004-10-01

Verbal expression	Level
extremely support	Level +4
strongly support	Level +3
support	Level +2
weakly support	Level +1
support neithernor	Level 0
weakly support <u>not</u>	Level -1
support <u>not</u>	Level -2
strongly support <u>not</u>	Level -3
extremely strongly support <u>not</u>	Level -4



Statens kriminaltekniska laboratorium - SKL

SKL / Evidentiary value project



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The Likelihood Approach

also called

The logical approach

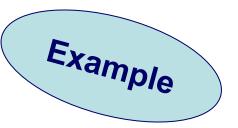
Based on Bayes rule





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The victim was attacked by an offender from behind

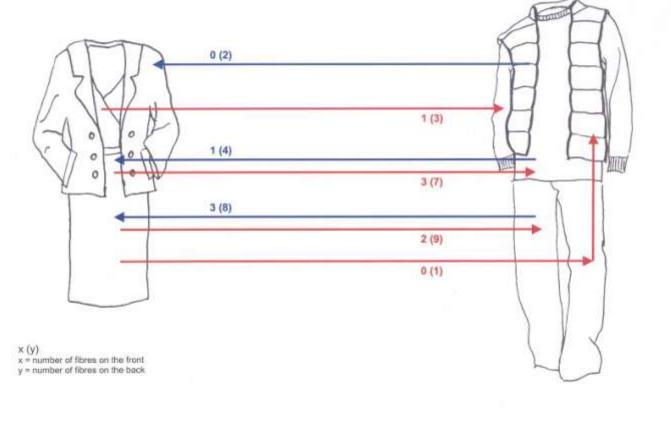
Trace Evidence Symposium, Kansas City, 2011 – Kornelia Nehse, Forensic Science Institute, LKA Berlin, Germanyc





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Fibre transfer



() numbers in brackets indicate the findings on the back side of the garments







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Victim's fibres on suspects clothes

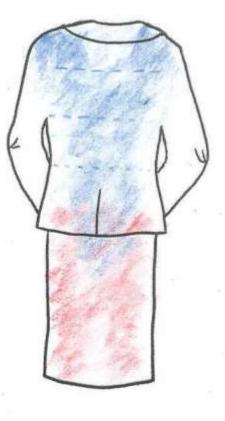


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Expected Fibre Distribution





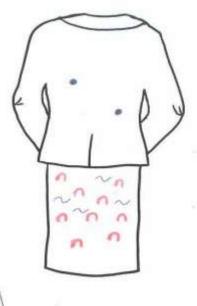




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Found

Fibre Distribution



Suspect's fibres on victims clothes





... "all the responsibility of medicine, the intricacy of the law and the universality of science. In as much as it carries higher penalties for error than other professions, it is not a matter to take lightly, nor to trust to luck"

Paul L. KIRK





What do we expect the expert to do?

→state that there is a disagreement between location of findings and the victims' stated case history which needs further discussion





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What happened from "Crime Scene" to Laboratory?

































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The Likelihood Approach

Based on Bayes theory.

Evaluation is done in the **framework of the case** circumstances

At least **two propositions** (hypotheses) should be addressed, often the prosecution versus the defence.

The role of the forensic expert is to express **the probability of the findings according to a given hypothesis** and NOT the probability of the hypothesis according to the actual findings (transposed conditional, "prosecutors fallacy")



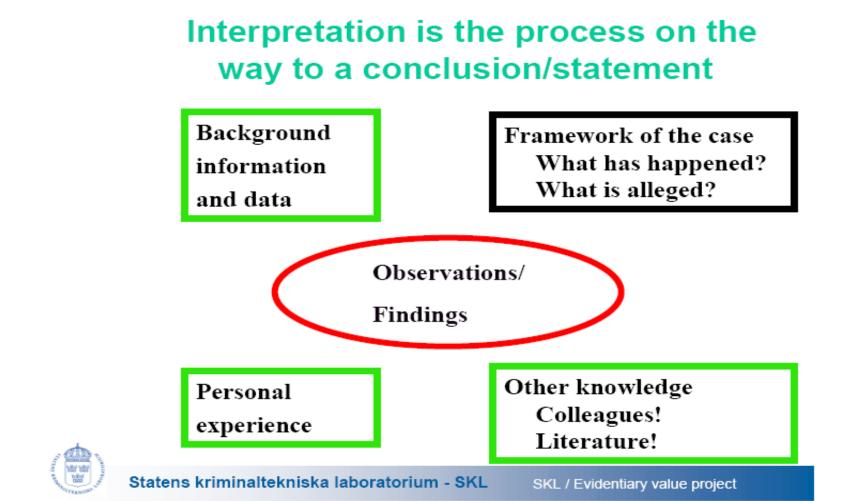
Statens kriminaltekniska laboratorium - SKL

Results EFG Collaborative Exercise - No. 16 2009

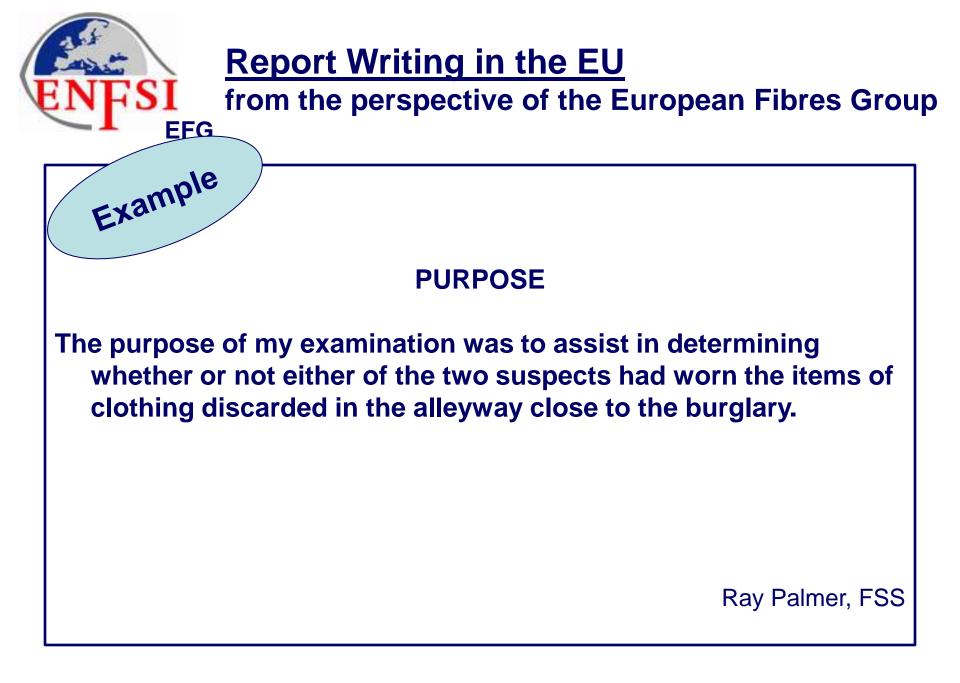
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INTERPRETATION

In order to assess the significance of the findings in this case, I have considered two proposals:

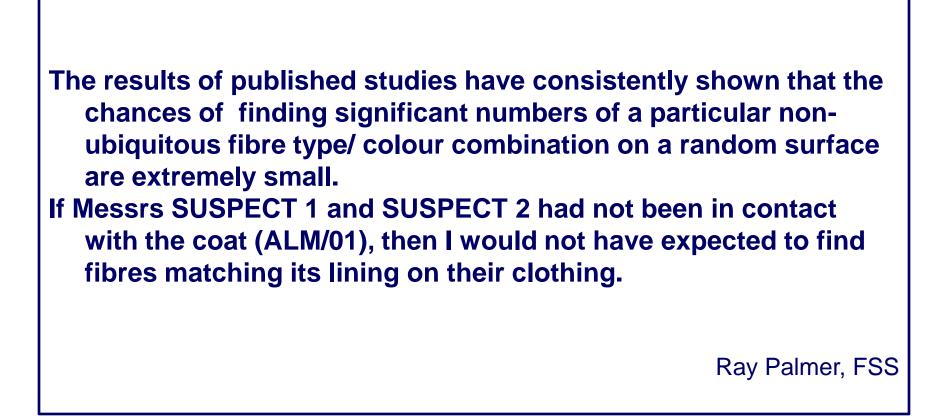
Messrs SUSPECT 1 and SUSPECT 2 had been in recent contact with the coat (ALM/01)

Messrs SUSPECT 1 and SUSPECT 2 had not been in recent contact with the coat (ALM/01) and the findings are coincidental.

Ray Palmer, FSS











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Published studies have also shown that the majority of fibres transferred to a garment will be lost in the first 2 hours following contact.

The results of the fibre analysis relating to Mr SUSPECT 1 are what would be expected from a prolonged and relatively forceful contact with the lining of the coat (ALM/01) such as if he had worn the garment.

I therefore consider there to be greater support for the first proposal than the second.

Ray Palmer, FSS





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CONCLUSION

In my opinion, the results of the examination in this case provide;

Strong support for the view that Suspect 1 had been in recent contact with the coat (ALM/01)

Strong support for the view that Suspect 2 had recently worn the coat (ALM/01).

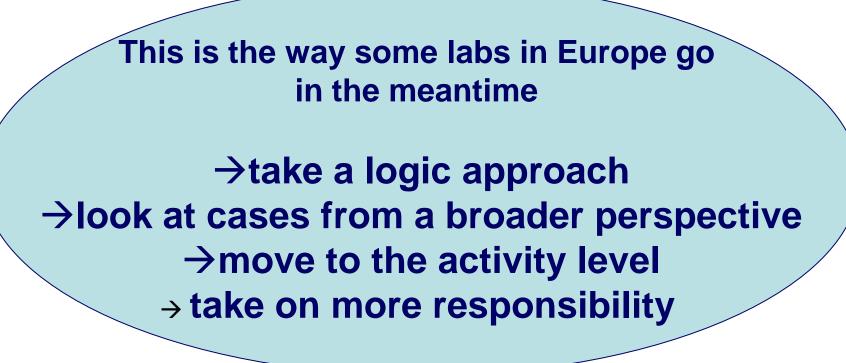
Ray Palmer, FSS





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Paul L. KIRK





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Thank you for your attention

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EAFS 2012

The Hague, Netherlands



August 20 - 24, 2012 NEW DATE

http://www.eafs2012.eu/upload/0-announcement.pdf

