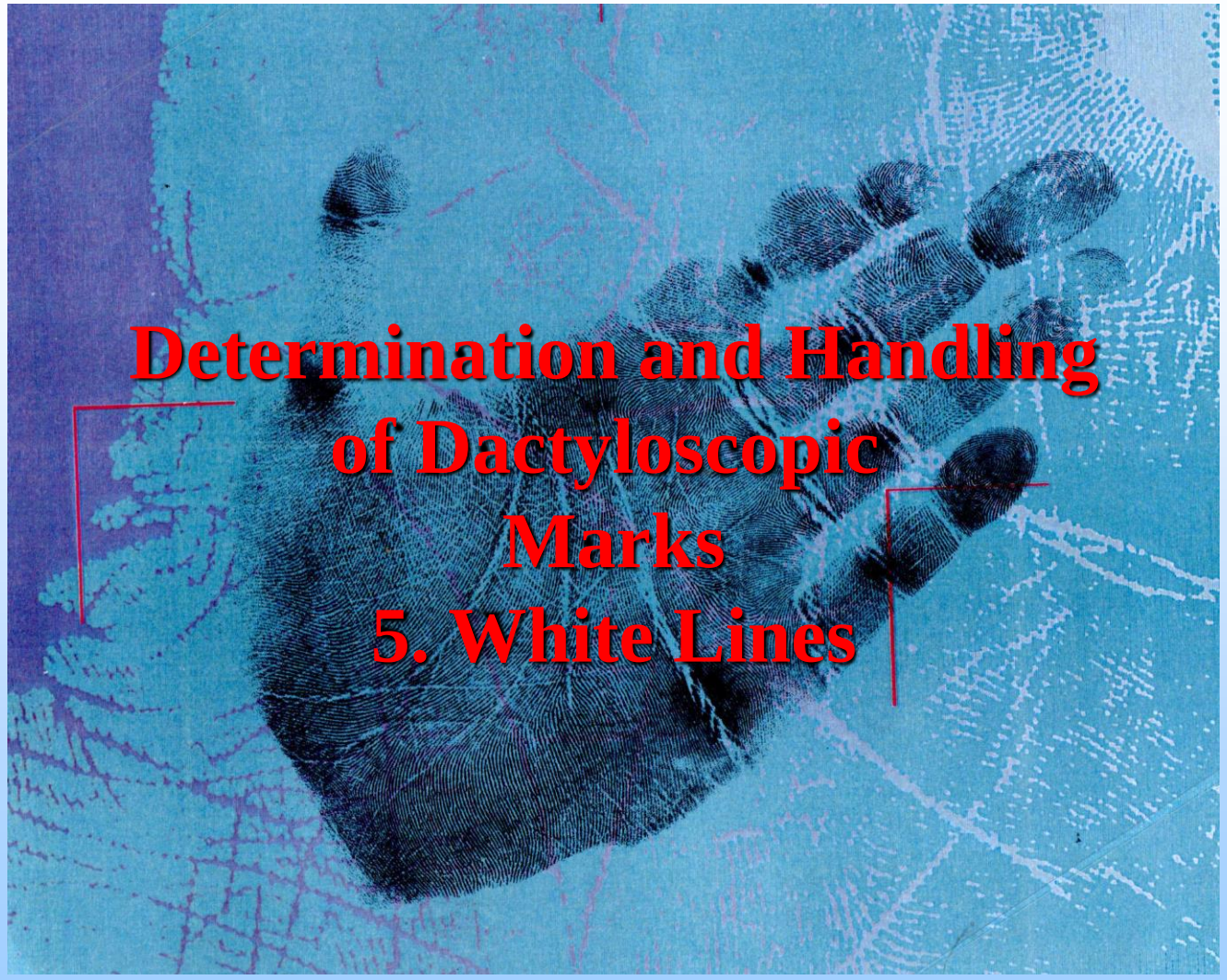
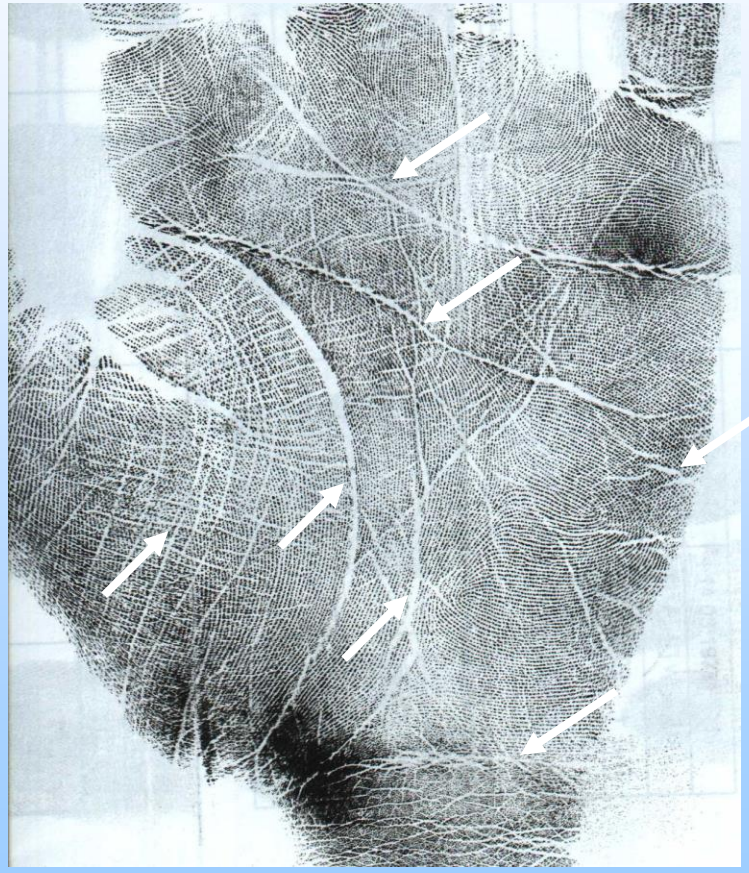
Büro für
Daktyloskopie
dewiselle



Determination and Handling of Dactyloscopic Marks
5. White Lines

Harald Weisel, October 2005

White Lines



- Palm prints are traversed by numerous ⇨ **“white lines”**. Knowledge of their regular courses is valuable for determining partial prints.

(Major) Flexion Creases M

- The characteristic major creases form the typical diagonally positioned ⇒ **“creases M”**, whose branches embrace the hypothenar area.

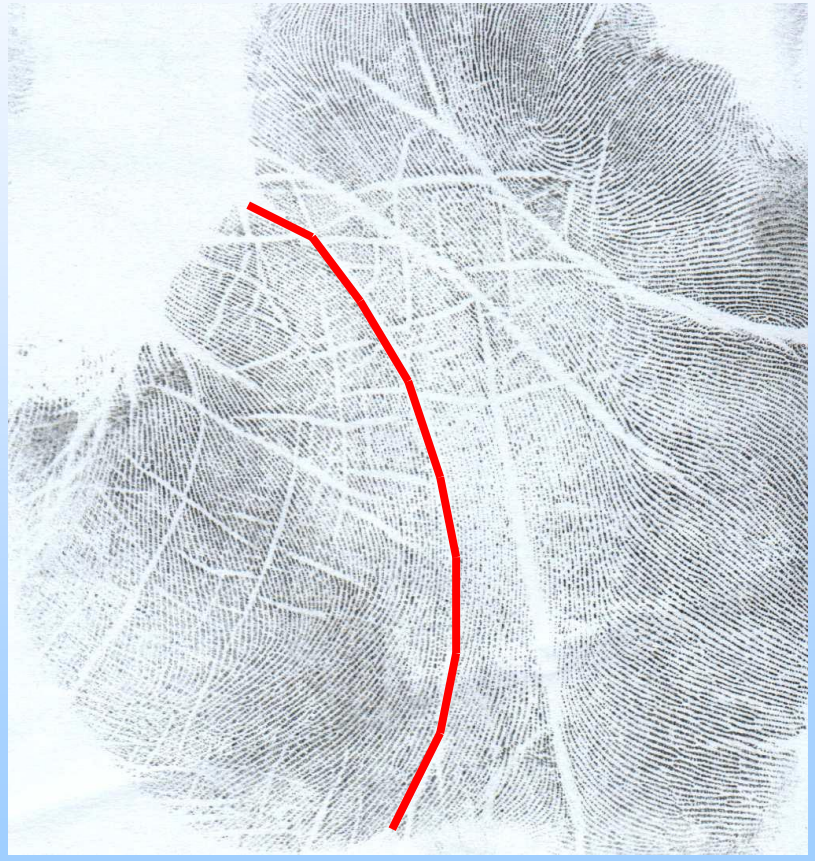
Top Crease
(distal transverse crease)

- The distal transverse crease runs in a slight arch from the outer edge of the palm towards the area between the index and middle fingers.
  ⇨ **"Crow's feet"** appear towards the edge of the palm, the other end of the crease may branch off in the form of a⇨**"dovetail"**.

Middle Crease
(proximal transverse crease)

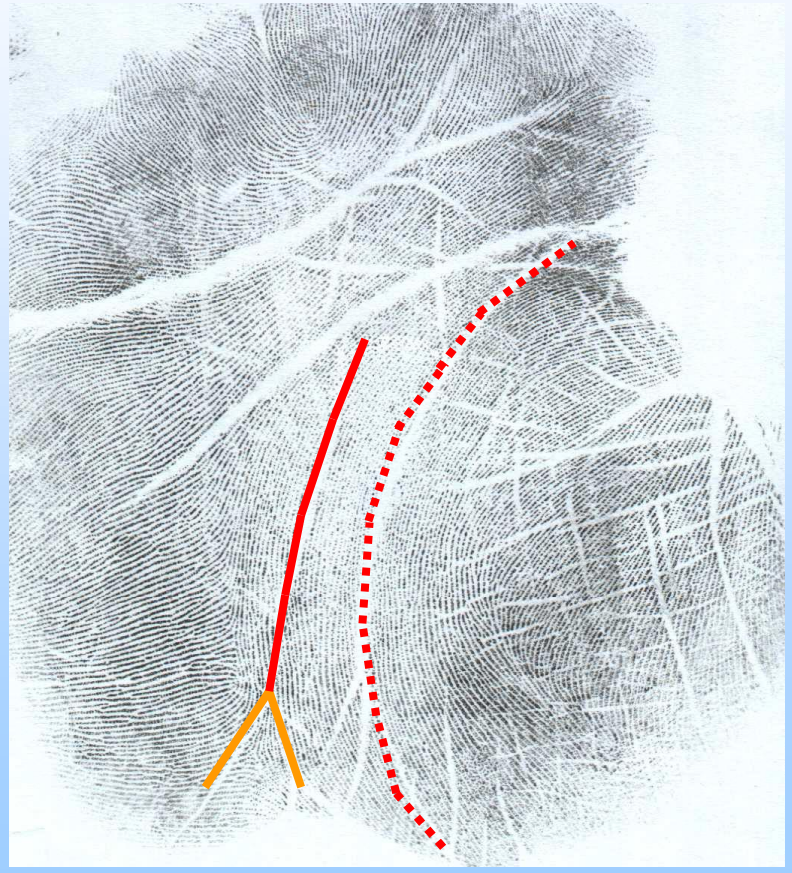
- The proximal transverse crease starts between thumb and index finger, travels through the tunnel region and ends in the hypothenar area, where it may also form a ➡ **“dovetail”**.

Thenar (Bottom) Crease
(radial longitudinal crease)



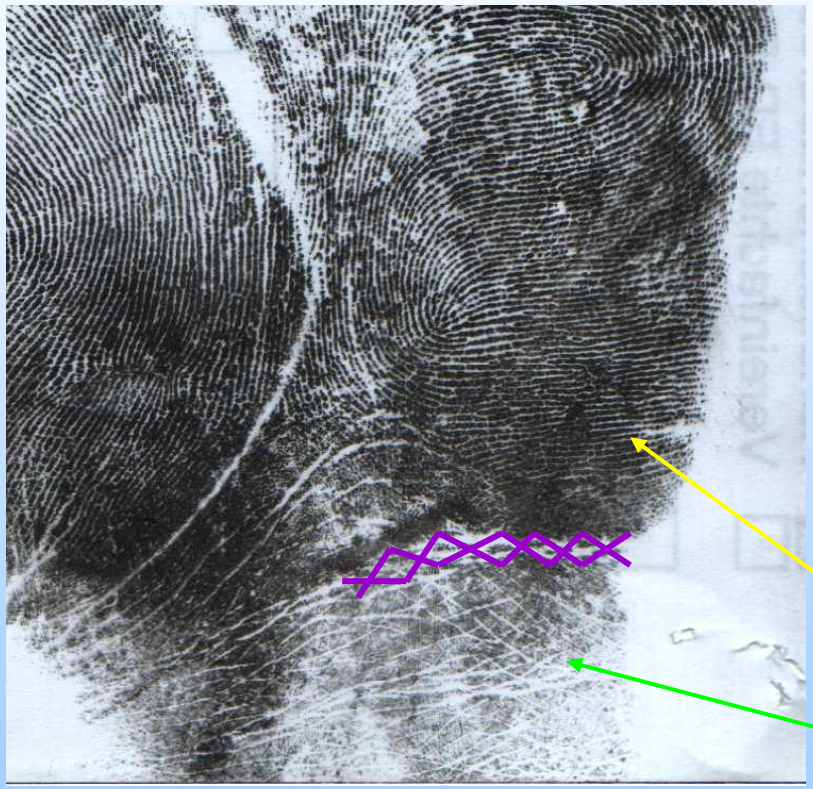
- The thenar crease encloses the thenar area like ➡ **“brackets”**,
- “ **(** “ -*open brackets*- = left palm
- “ **)** ” -*closed brackets*- = right palm

Middle Finger Crease
(longitudinal crease)



- Next to the bottom crease -left in left palms and vice versa-, a middle finger crease may show. It takes a straight course from the metacarpus towards the heel of the hand, where it may also form a ➡ **“dovetail”**.

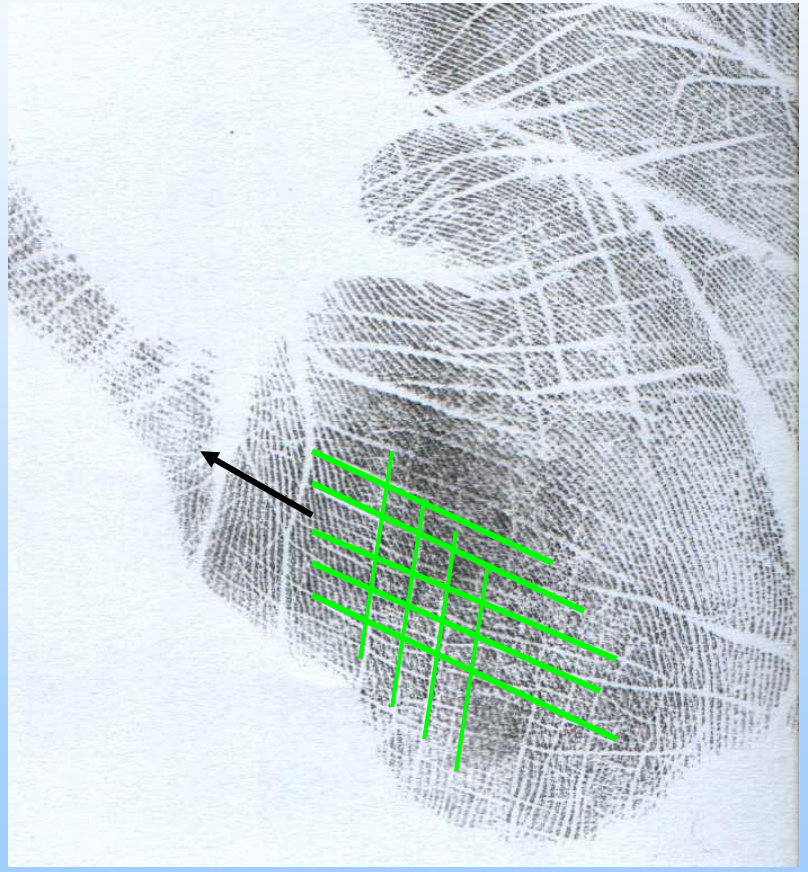
Wrist (Carpal) Crease



"Wrist bracelet" of a right palm

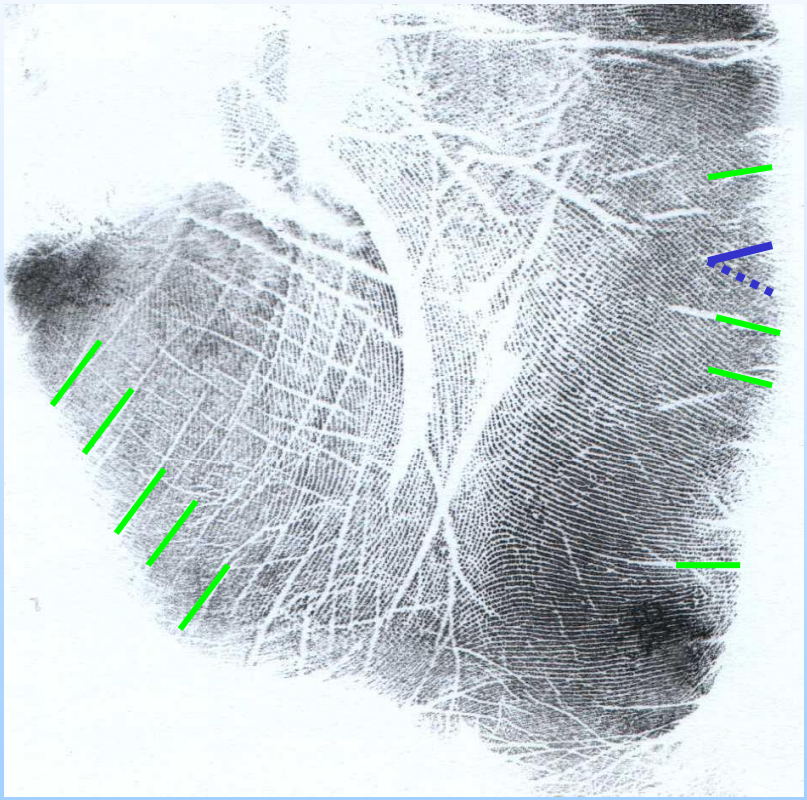
The wrist crease often appears as a ⇨ **"bracelet"**. For anatomical reasons, its impression is more pronounced beneath the hypothenar area. As opposed to the thumb base crease, papillary ridges (friction ridge skin) show only on one side, the other side discloses thin skin.

Cross-Hatching



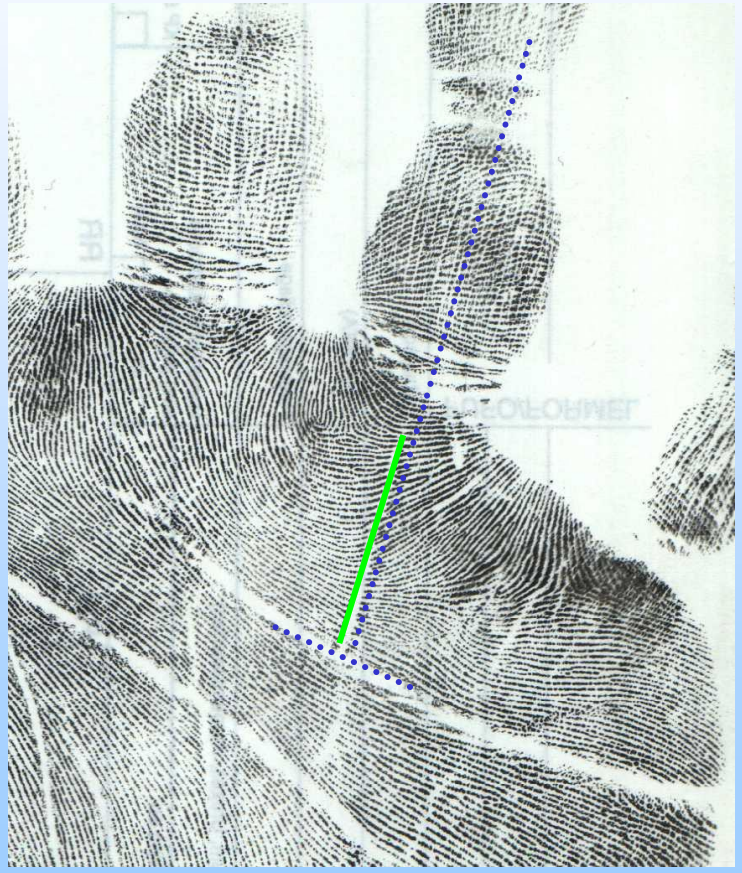
- The tension creases which take a course perpendicular to each other only in the thenar area appear as so-called ➡ **“cross-hatching”**, with most of the more pronounced lines pointing in the direction of the thumb.

Edge/Wedge Creases



- **“Edge creases”** form at the outer edges of the palm, the **“wedge creases”** in the hypothenar area help determine not only the outer edge but also the grip direction (crease is at the top!).

Ring Finger Crease
(longitudinal crease)



- Below the ring finger and parallel to its longitudinal axis, a ➡ **“ring finger crease”** may appear. It meets the top crease almost at right angles.

Note

- While the flexion creases regularly show in prints, the tension creases, i.e. for example cross-hatching, edge/wedge and ring finger creases, are not necessarily as pronounced in reference material.