

.. **Textiles – Needle Makers.** .. At Gönnersdorf they make awls, needles, awls, spearpoints and darts. They work with bone, antler, and ivory. Precious ivory is traded for finished goods. Work intensive textiles, footwear, tools such as ivory needles, and ornamental carvings are traded for raw materials

[Needle Manufacture To make an ivory needle with least probability of breakage and waste: -1- first saw flattened slats, -2- drill holes in the slats, -3- grind the needle about the ready-made eye.

11. *Sail Maker's Needle Visceral Cords.*

Gonnersdorf,

[The ivory sticks are first cut, then drilled, and finally sharpened. It's easier to first drill then polish the ivory or bone to make a needle. However final drilling out of the needle's eye is done just before it's finally pointed and polished. The grooves for sharpening ivory sticks form an inclusion V. note that one groove is slightly bent. It's easier to finally sharpen an ivory or bone needle at such a bend.]

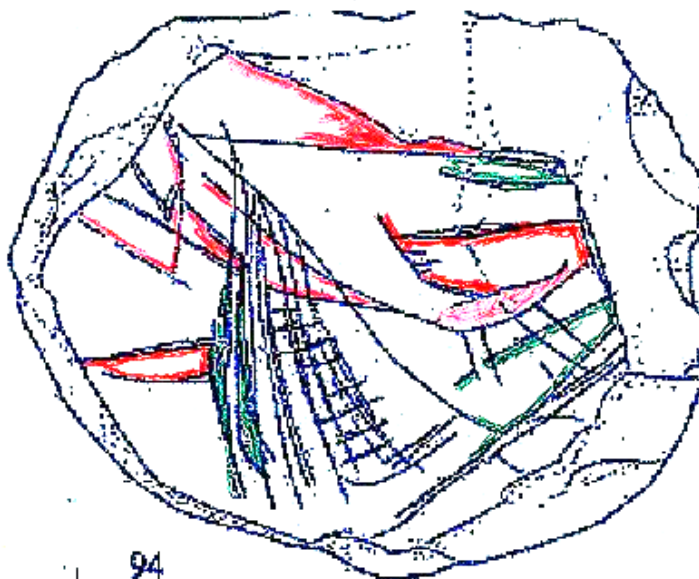
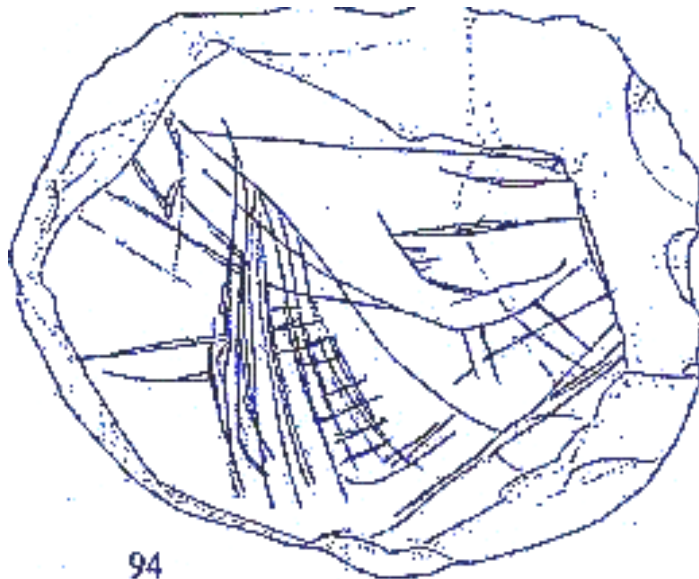
[note: That Hamburgian weavers made garments following what furry animals learned by evolution: Hair protrudes through insulating wool to protect the body-warming wool from wearing away by abrasion. Birds cloak their down with quills and feathers.]



[TRANSLATION] HE CUT-SCRAPE LONG HAIR WOOL PLY AND CORD SHE WITH BABY
 WITH STRIPPED FEBTHERS OF DUCK STITCHES & TAILORS FOR BABY SHE QUILTS STUFFS WITH DUCK
 DOWN AWL & PRESSING STONE FOR HIDE-WALLS VISCERAL CORDS TO STITCH HIDES AWLS MAKE HOLES IN HIDES
 HE CUT FROM TUSK BURINS SAIL-MAKER'S NEEDLE CALENDRIC FALL TERRACE RIVER
 RIVER HORSE SKIN HIS KNIFE RACK-SCRAPE-DRY STITCH TO HOUSE FRAME CAUGHT
 GEESE DUCKS PLUCK.

11.20—Textile *Fishing Net*

[FORMAT] . Magdalenian, Saut-du-Peron Region, France .ca.12,500 BC. Bölling III Wurm-1V Phase 17 .. Plaquette -- 94 --



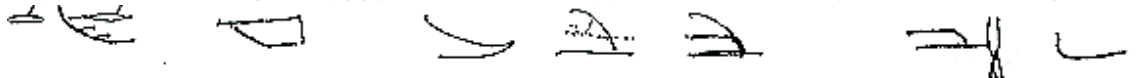
TRANSLATION. SHE SPINS THEN PLYS INTO CORDS AND WITH THE CORDS MAKES A NET SHE



HORIZONTAL & VERTICAL NET-STRANDS AT SITE BY-RIVER NET THE FISH CAUGHT CUT-FAT RENDER-OIL

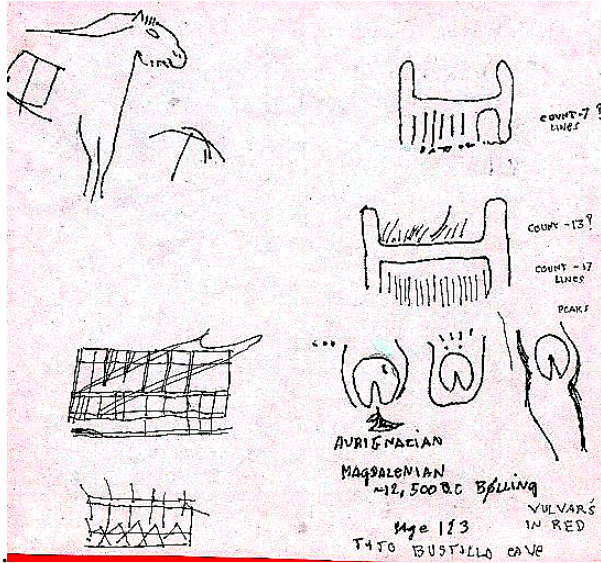


WICK LAMP LAMP OIL GOOSE-LEAD LINE DUCK DUCK FAT FISH .FAT WITH FISH OIL FAT

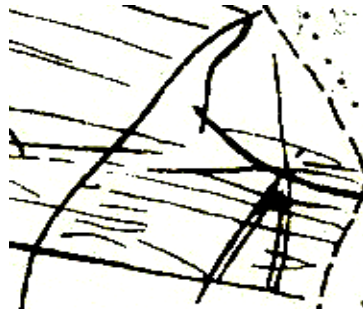
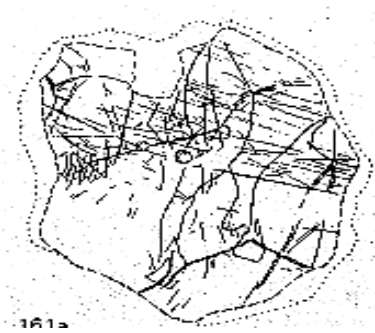


CONVENTIONS: Read beginning from left edge of this cutter-scaper tool. **VOCABULARY:** by, catch, cord, cut, duck, fat, fish, GEOGRAPHIC, goose, horizontal, lamp, lamp-oil, LEAD-LINE, net, oil, ply, render [verb- render oil from fat], river, she, site [fishing site beside river], spin, strand, vertical, wick,

...-11- Personal. **Comb**... of Tito Bustillo,



...-11- Tools *Twirl-Stick Holder & Fire Bow*



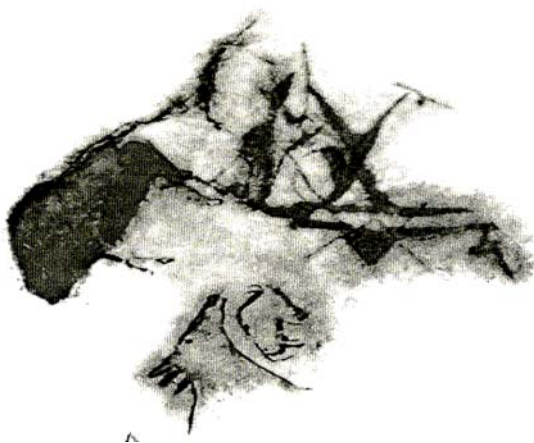
. . . at Gönnersdorf left: a stone held atop a stick twirled with a fire bow. Right: image of a person spinning the twirl-stick with a fire bow and with his left hand holding the stone tool on top of the stick..



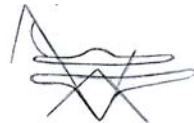
-11- Tools *Calendars, Clocks & Maps*

[see *Bølling file A* Left from Lascaux: Thirteen dots (with one dot marked) below the caribou indicate that during a solar year there may be twelve to thirteen lunar months.]

.. [see *Bølling file A -1a-Calendar Cardinals, Symbols, Signs* . Below from Altamira: the horizontal symbols show sunrise and sunsets; the angle opening upward winter sunrise and sunset angles; the angle opening downward summer sunrise and sunset; the crescent indicates the waxing crescent moon closest to the solar winter solstice. Other astronomical observations show approximate coincidence between the solar and lunar calendars every five years.]

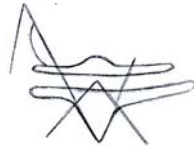


SOUTH
winter Az angle



WINTER sunrise
SUMMER sunset

summer Az angle
NORTH



crescent new-moon [closest to WINTER SOLSTICE]

[left: Ref.: by Kurtz, Patricia, *Explorations- to the Ends of the Earth*, in "Skywatch'0.5" from publisher of "Sky and Telescope"-----picture21st June 2001, Chisamba, Zambia by Espenak, Frank of solar eclipse.]

RDE Both the Sun and Moon subtend close to one/half degree. With just a plumb-bob and the horizon, or also with a liquid level --- using shadows, and/or strings it's easy to make astronomical observations correct to a tenth of a degree. I suggest that division of the circle into 360 degrees dates to at least Magdalenian times ca. 12,500 BC or 14,500 years ago.

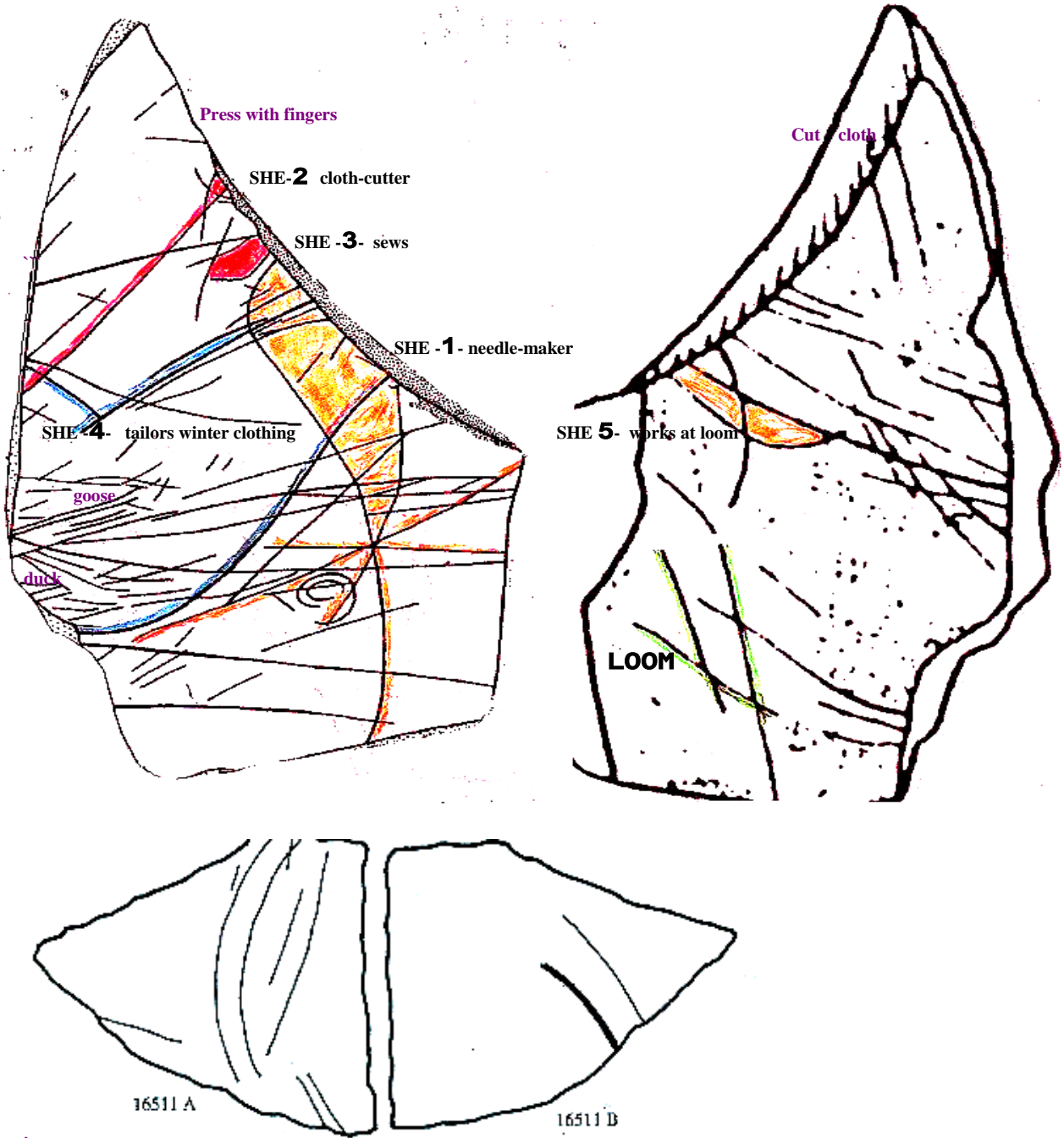


..11.20—Textile *Tailor's Scissors*

[see Bolling file C. ...5 -10--.TextilesTailor's{Scissors}Cloth-Cutter.

[FORMAT]. **Magdalenian** GONNERSDORF ...Bolling ca.12,500 BC

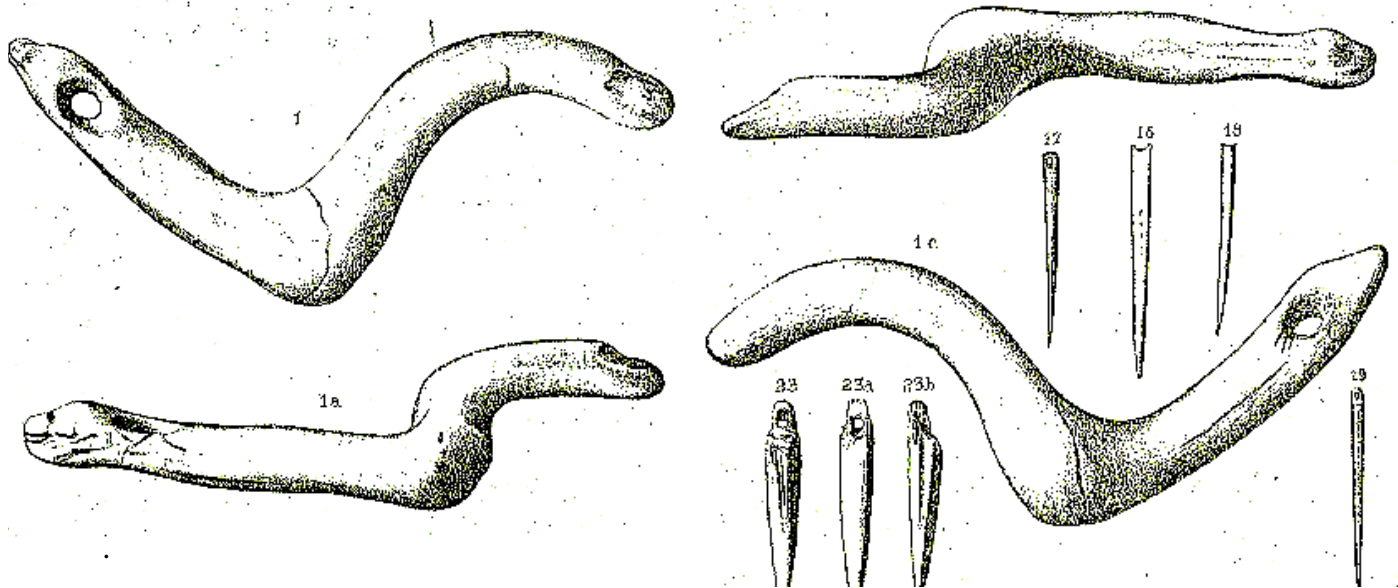
SHE -1- needle-maker; SHE-2 cloth-cutter; SHE -3- sews; SHE -4- tailors winter clothing; SHE 5- works at loom [probably 1, 2 or 3 with two duties.]



Spain, *Parpalló Site*, (figure 67 16511 A and B) CLOTH-CUTTER with NEEDLE-SHARPENING Groove, Rendezvous Geographic

.. **11**.₂₀—*Textile Tools* **Chain-Stitch Hook**

.. [see-5-16--Textiles. Bølling file C Chain-Stitch Hook



.. **11**.₂₀—*Textile Tools* **Net-Corder's "Marlin Spike" Batten.**

[see -5-16-- Bølling file C Textiles. Net-Corder's "Marlin Spike" Batten.

-16- **NET-CORDERS MARLIN SPIKE** [Ref.: *Le Dr René de Saint-Périer, 1936 Inst.Paleontologie Humaine, Memoire 25, la Grotte D'Isturitz III LE MAGDALÉNIEN DE LA GRANDE SALLE (Foundation Albert Ist Prince de Monaco) Mémoire 17]*

[below: to indicate technological change through millennium of weavers; is an Aurignacian equivalent of a Batten used with a most primitive HAND Loom or possibly a slightly more advanced GROUND Loom]



[**FORMAT**] . Magdalenian Weaver's BATTEN of ca.12,500 BC used with a Weighted UPRIGHT Loom. Inscribed on the batten are instructions for: -1- making a batten; -2- antlers and/or animal long bones useful for making batters; -3- manipulating thick, strong fibers with the batten- to make nets? -4- ? plant fibers ? used for nets and fishing lines ??; -5- fisherman's geographic; -6- calendric indication; -7- major types of fish caught.