printmaking from software concepts

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The Draughtsman

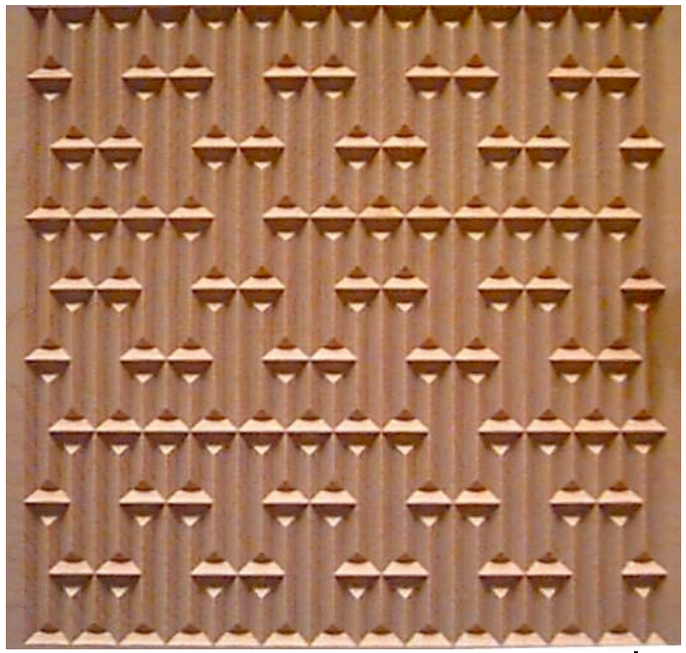
short statement

- conceptual lines & proofs on paper
  i only work from my own software, my works are my own ideas
- in search of quality for the marks on paper
- work process
  vision—>software—>calculation—>geometric data—>(device+tool+pigment+paper)—>proof
- why?
  most of my work has been drawing in ink or graphite on paper
  but I have been also strongly attracted to printmaking, and also to tracing ephemeral and musical lines in sand and sound

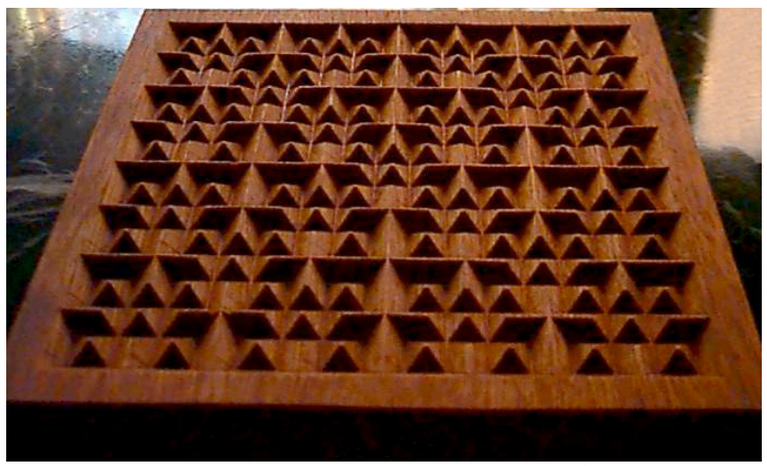
chronology of collaborations

- drawings from software with devices, 1970s to date
- first printmaking attempt with pierre chave, 1989
- woodblocks with bruce shapiro, 1997
- inkjet prints with cone edition press, 1998
- ephemeral sand traces, 1998 to date
- solar plates with elaine levasseur, 1999 to date
- inkjet tests with pace prints, 2002
- paper embossings with atelier richard tullis, 2002
- copper plates with neal sistek, 2003
- engravings with pace prints, 2005

woodblocks



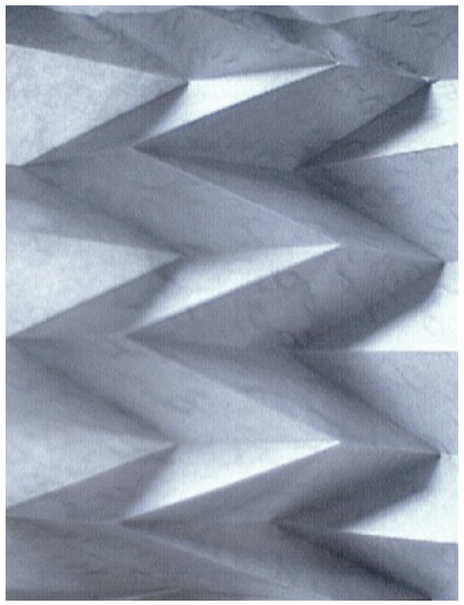
maple



mahogany

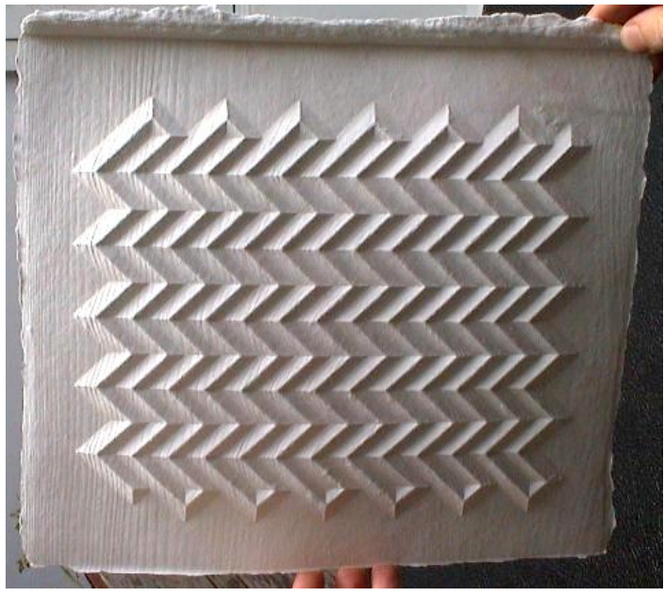
woodblock notes

inspired by earlier folded paper experiments...

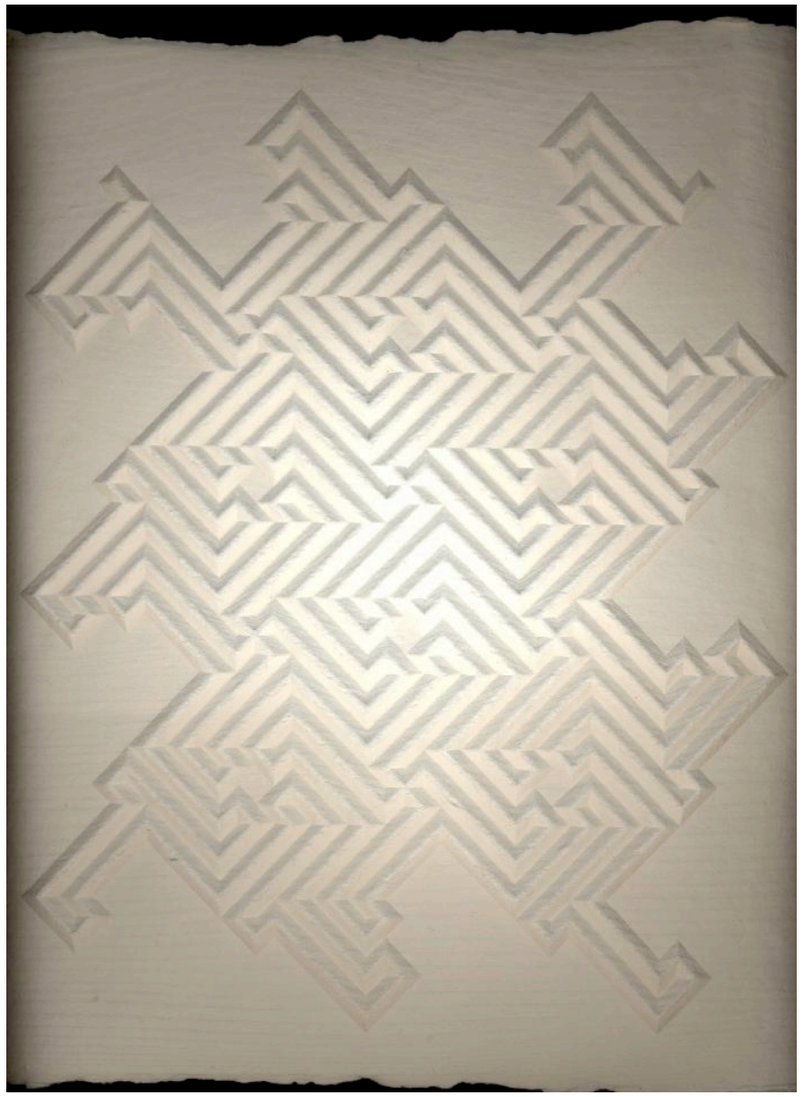


...and by max ernst's frottages

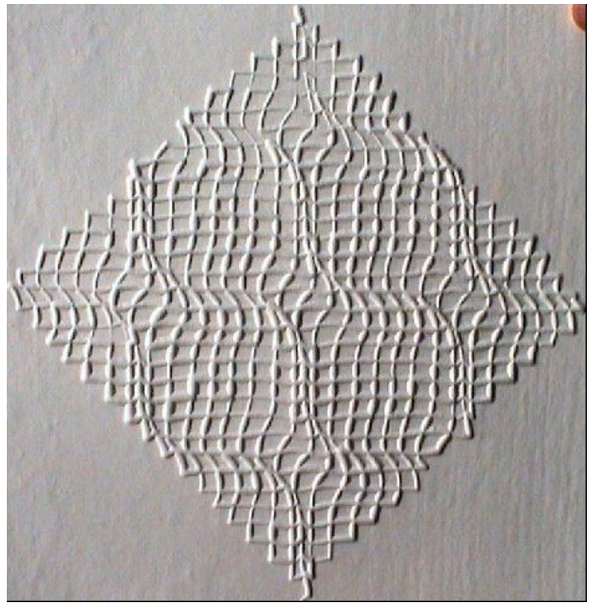
paper embossing



chevrons (7.5x9.5”)



aliette’s fractal (10x8”)



diamond fractal (9x9”)

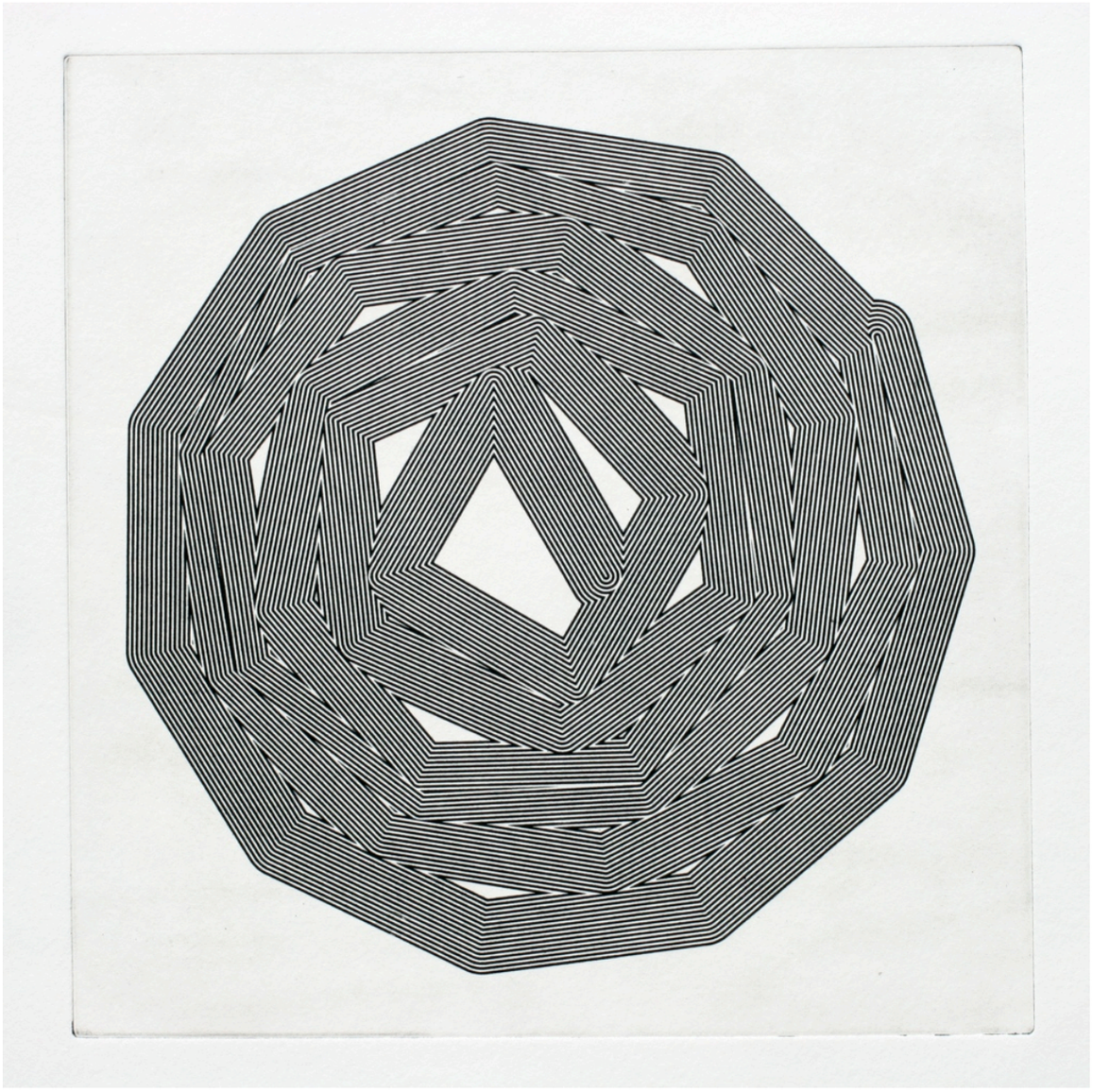
solar plate intaglios

veil, black (12x9")

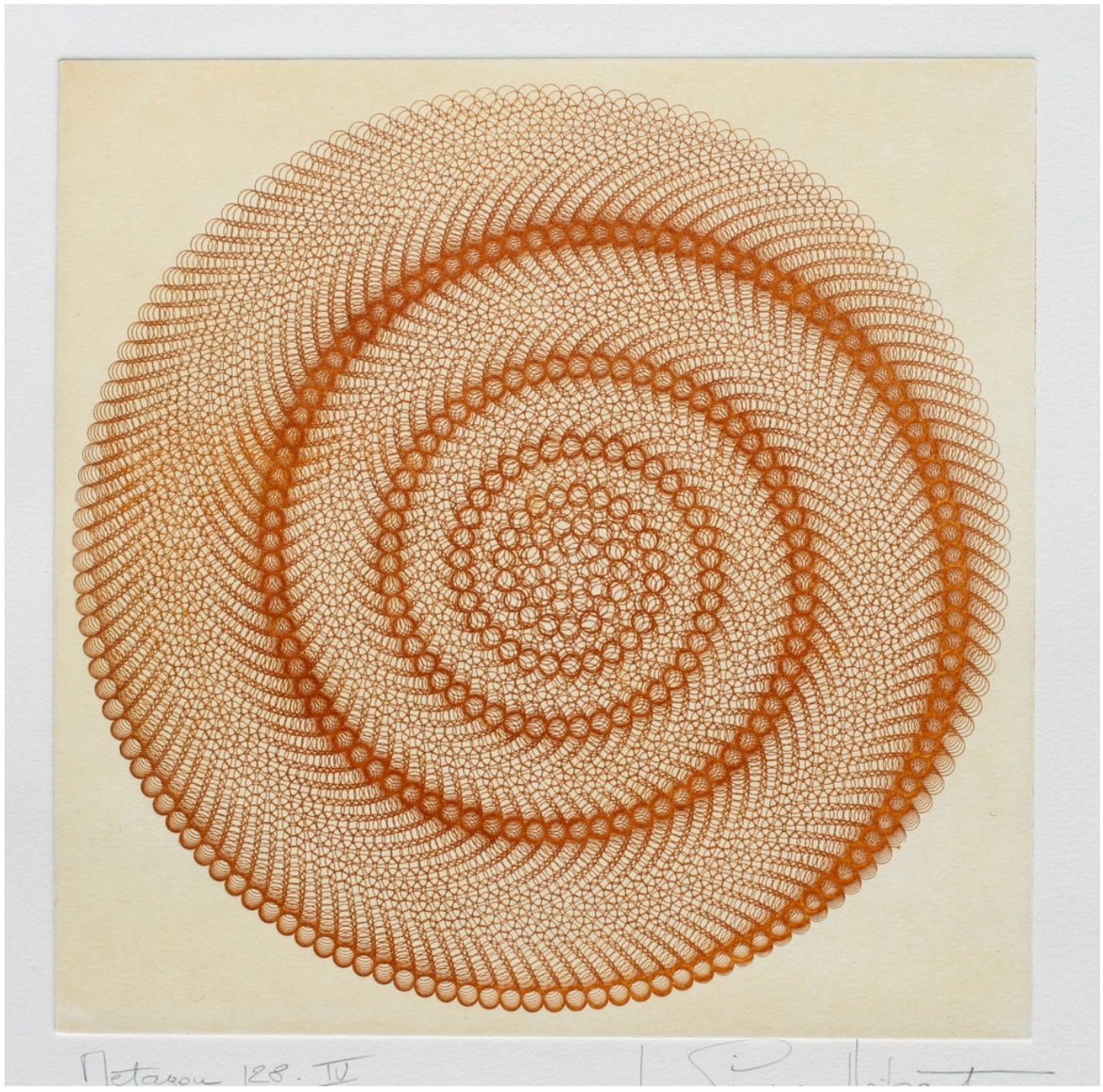
veil, white (12x9")

the process: composition—>software—>hi-res laser print on transparency—>expose plate in sunlight—> wash plate with water—>expose plate again in sunlight to seal polymer—>ink, wipe & print in intaglio

solar plate intaglios
hundred views of the metagon



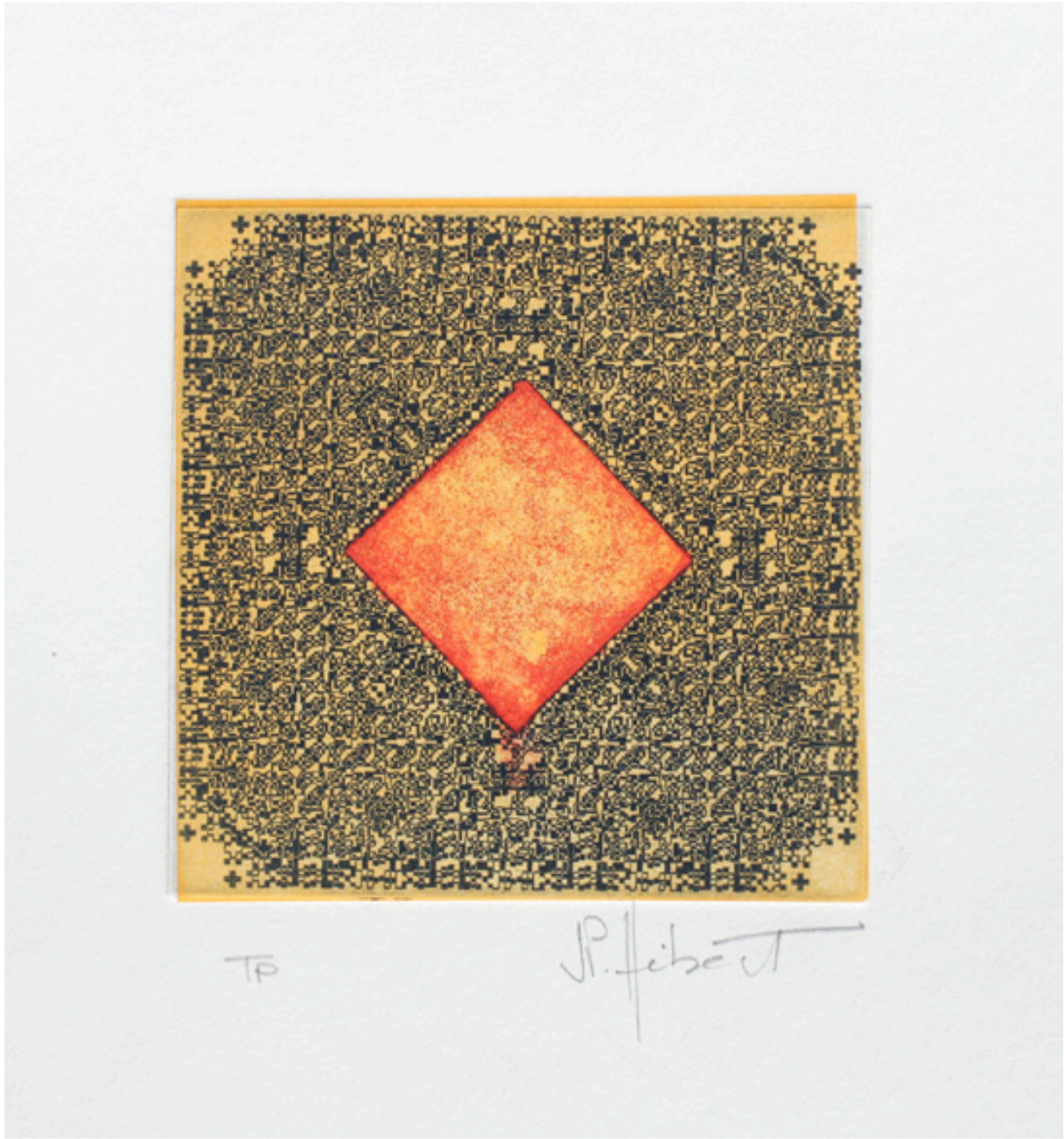
metagon 1462 (8x8")



metagon 1463 (9x9")

solar plate intaglios

heptagonal(10x8")



automata + red(4.5x4.5")

solar plate intaglios

mount huang (17.5x13")

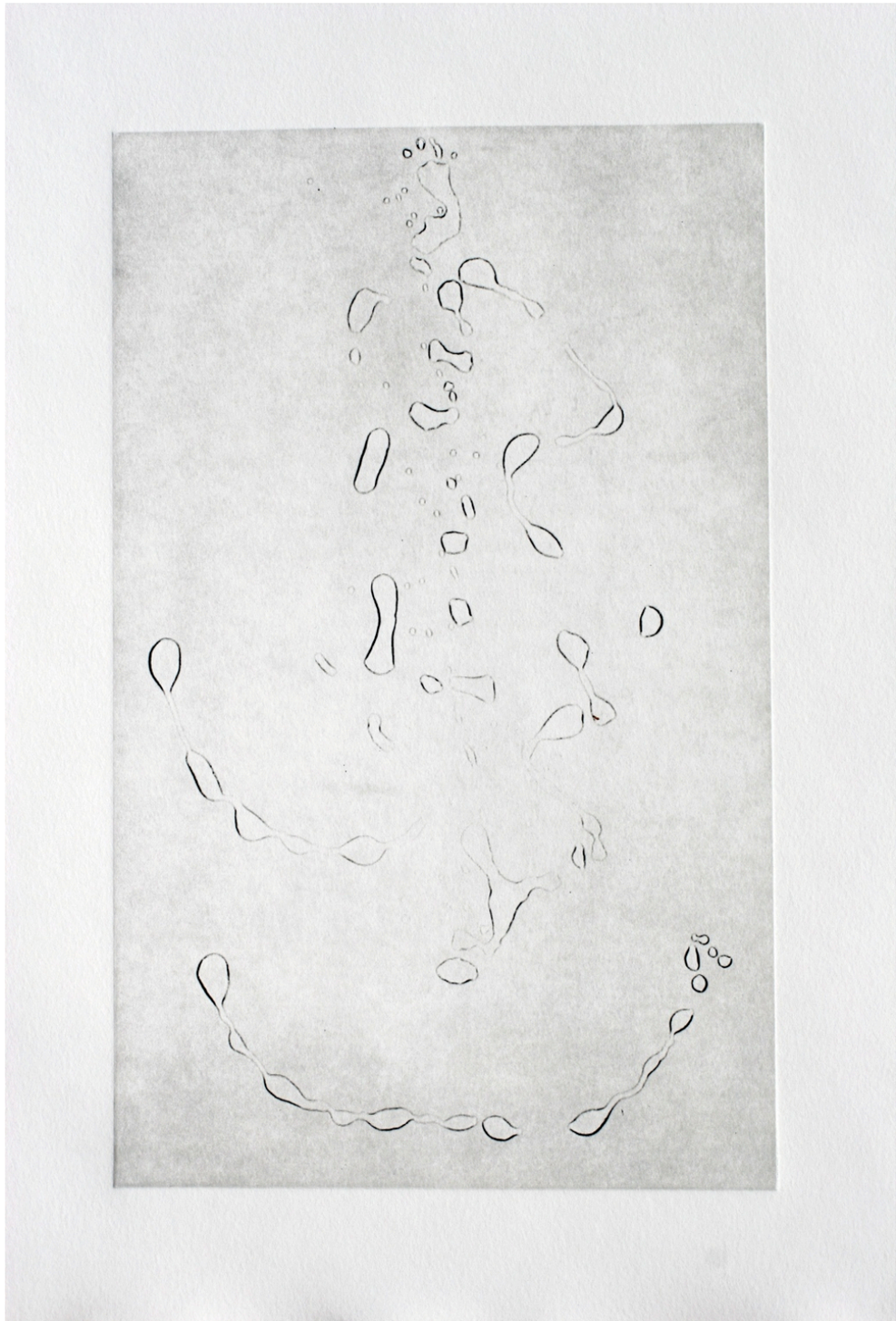
travellers among mountains and streams (17.5x13")

solar plate intaglio & chine collé

mount huang — marbled paper #2 (17.5x13")

organic solar plate intaglios

soap bubbles (5x3.5")

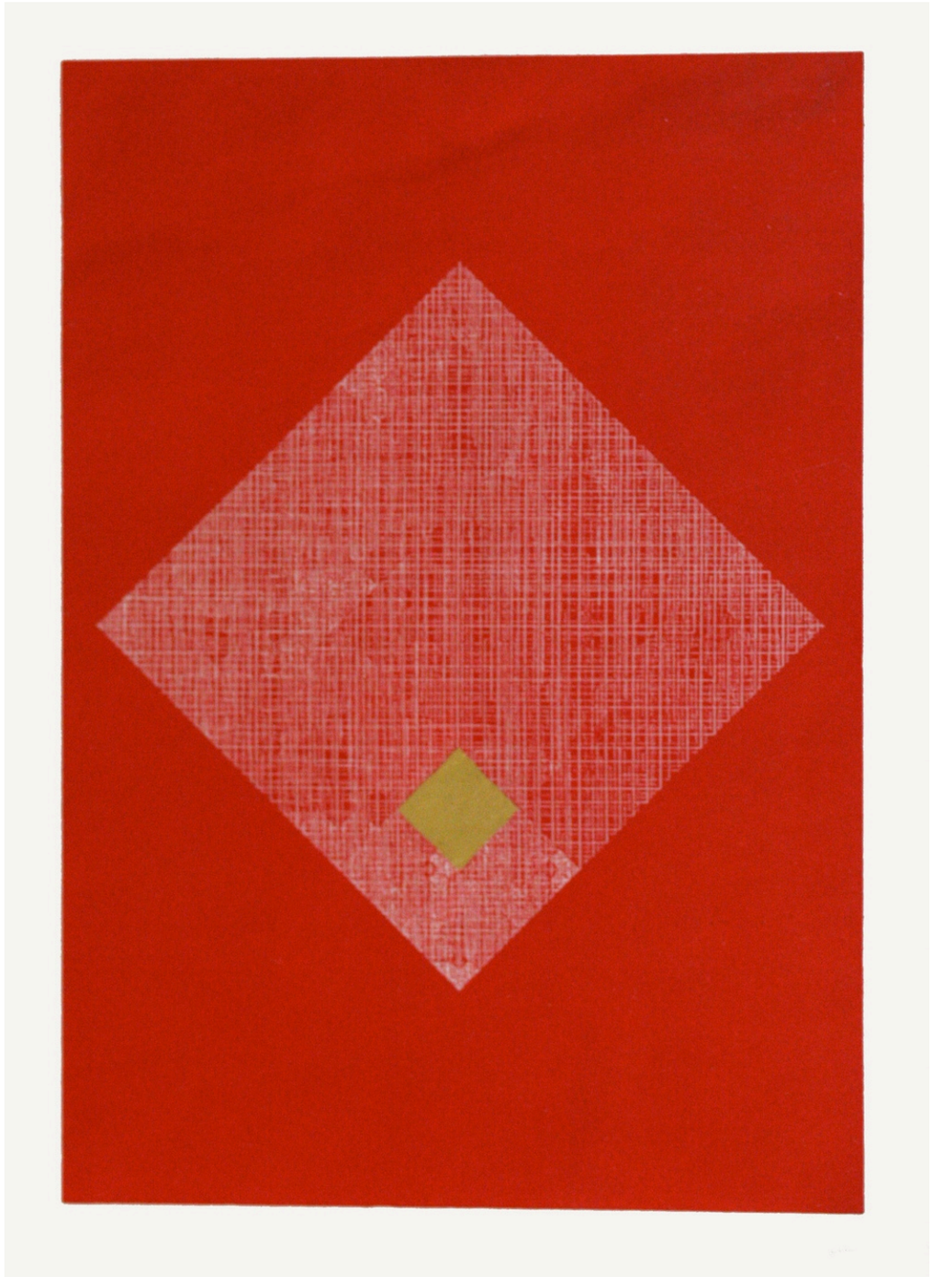


water drops (11x7")

collaborating with pablo…

demoiselles with fingerprints
solar plate intaglio (5x7”)

collaborating: gold leaf with victor raphael

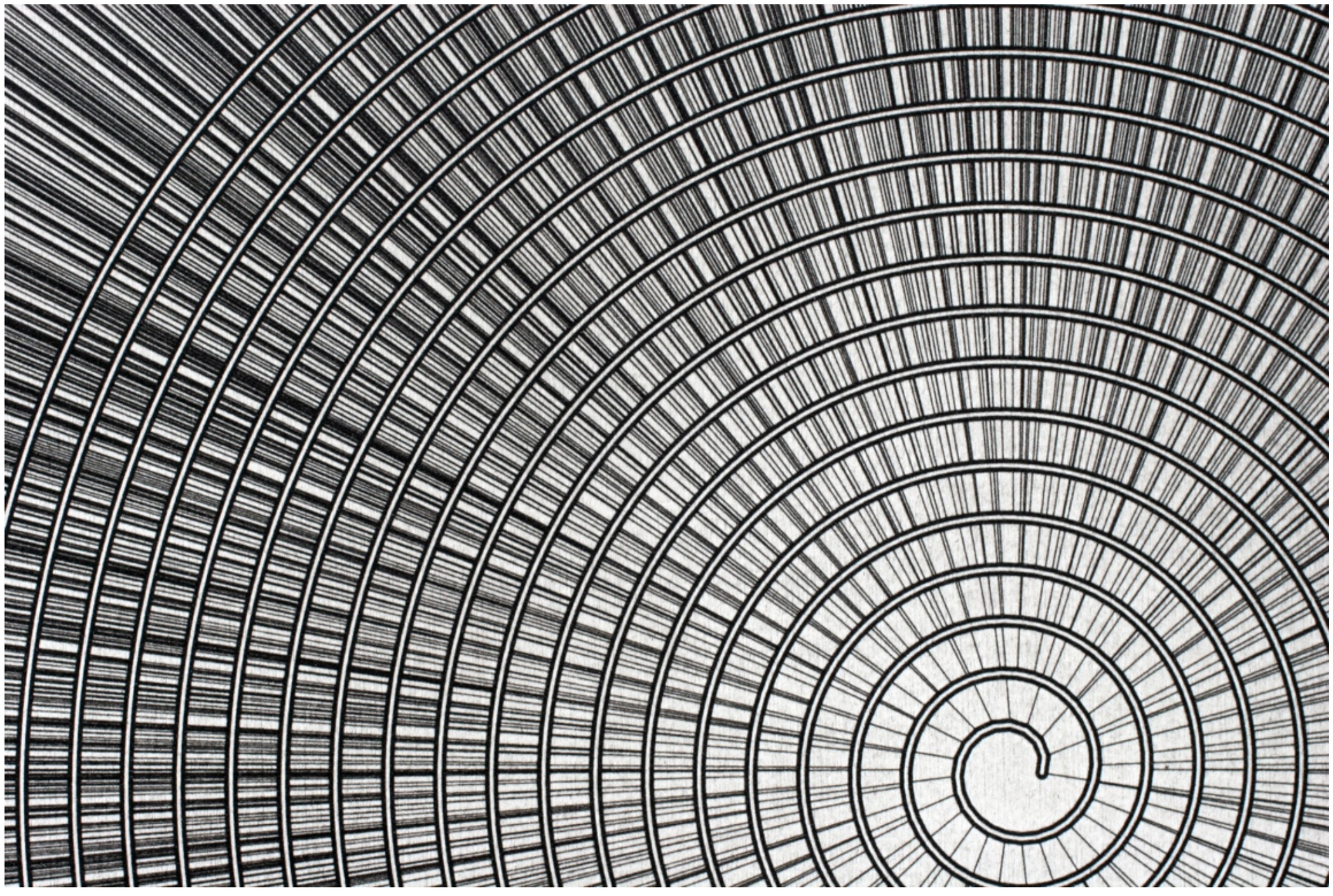


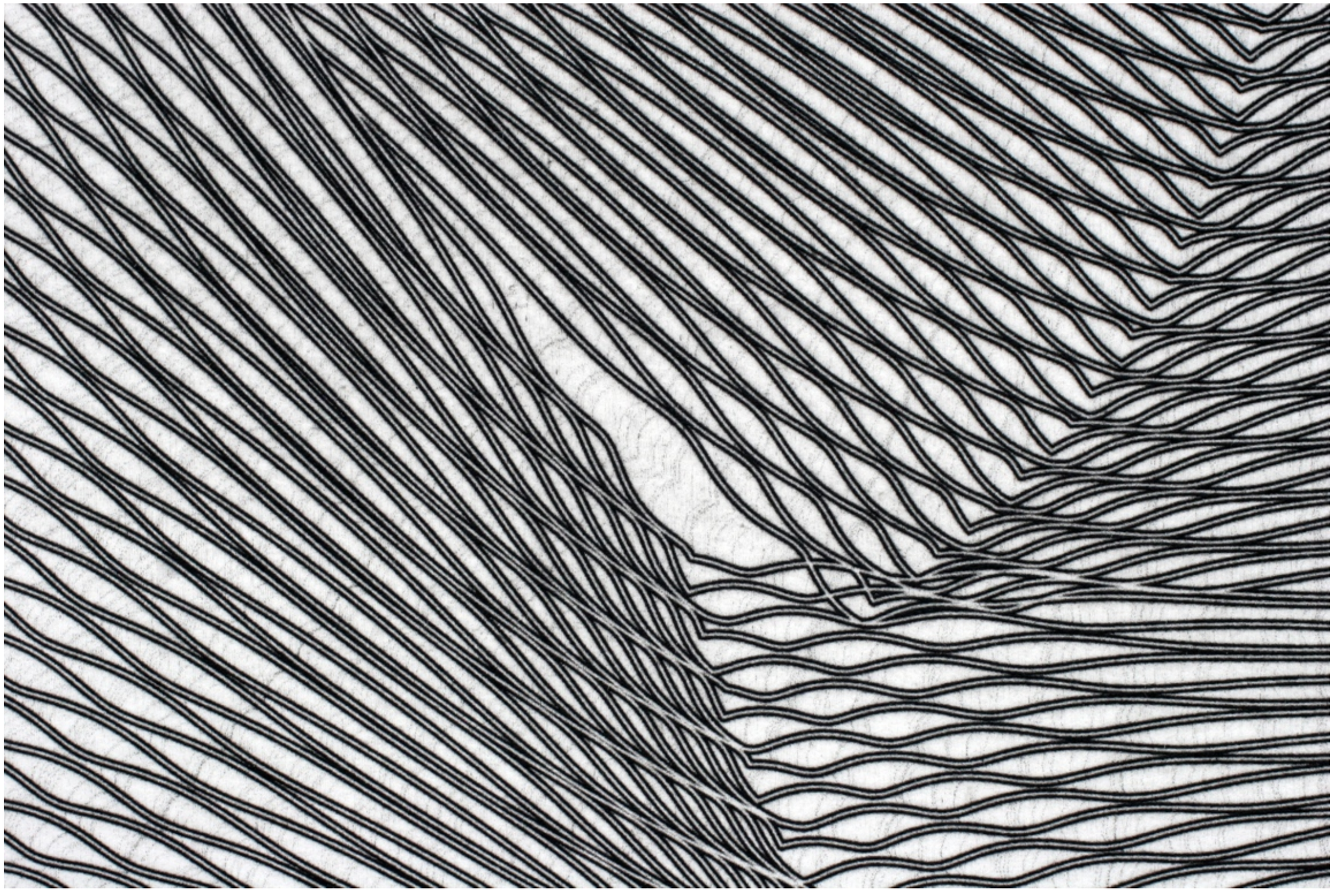
The image is in fact rectangular, and the brilliance of the gold is lost here

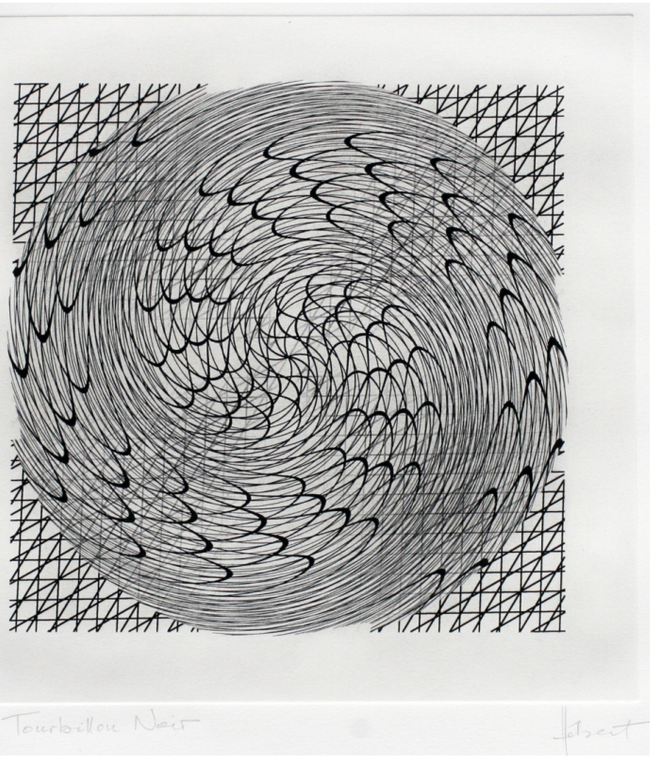
2006: more solar plates

1/9 Theodorus Hebert

2/9 Heptagonal Hebert







2/3 Tourbillon Noir

3/13 Nude Descending

about films, mylars and transparencies

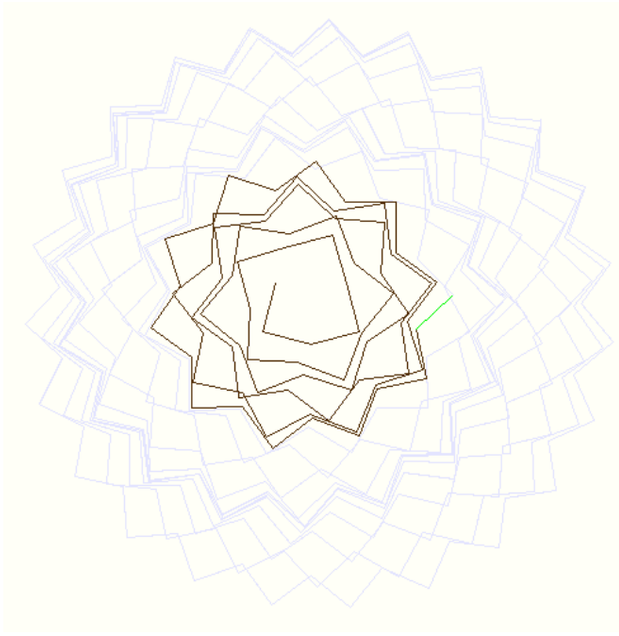
after several years attempting to identify the right way to produce work on transparencies for plate making from digital files, I have experimented with

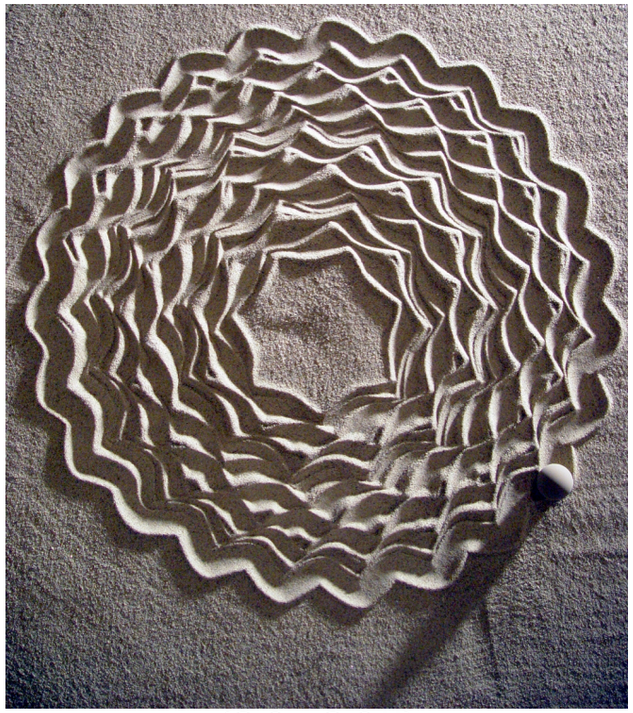
- *linotronic on film – excellent but service bureau is too expensive for experimentations*
- *pencil drawing on mylar – satisfactory but graphite structure remains present in the lines, not always wanted*
- *xerography – fair but size & quality limitations*
- *inkjet print on pictorico film – fair but fragile film easily spoiled*
- *inkjet print on other films – fair but size limitations*
- *laser print on xante film – poor UV transparency, plate tone*
- *ink drawing on mylar – poor ink absorption and uneven line rendering*

so I ended up trying more direct plate making, working directly on copper plates with different processes. I still want to explore device possibilities with wood and linoleum

and dry point by hand…

ephemeral sand traces

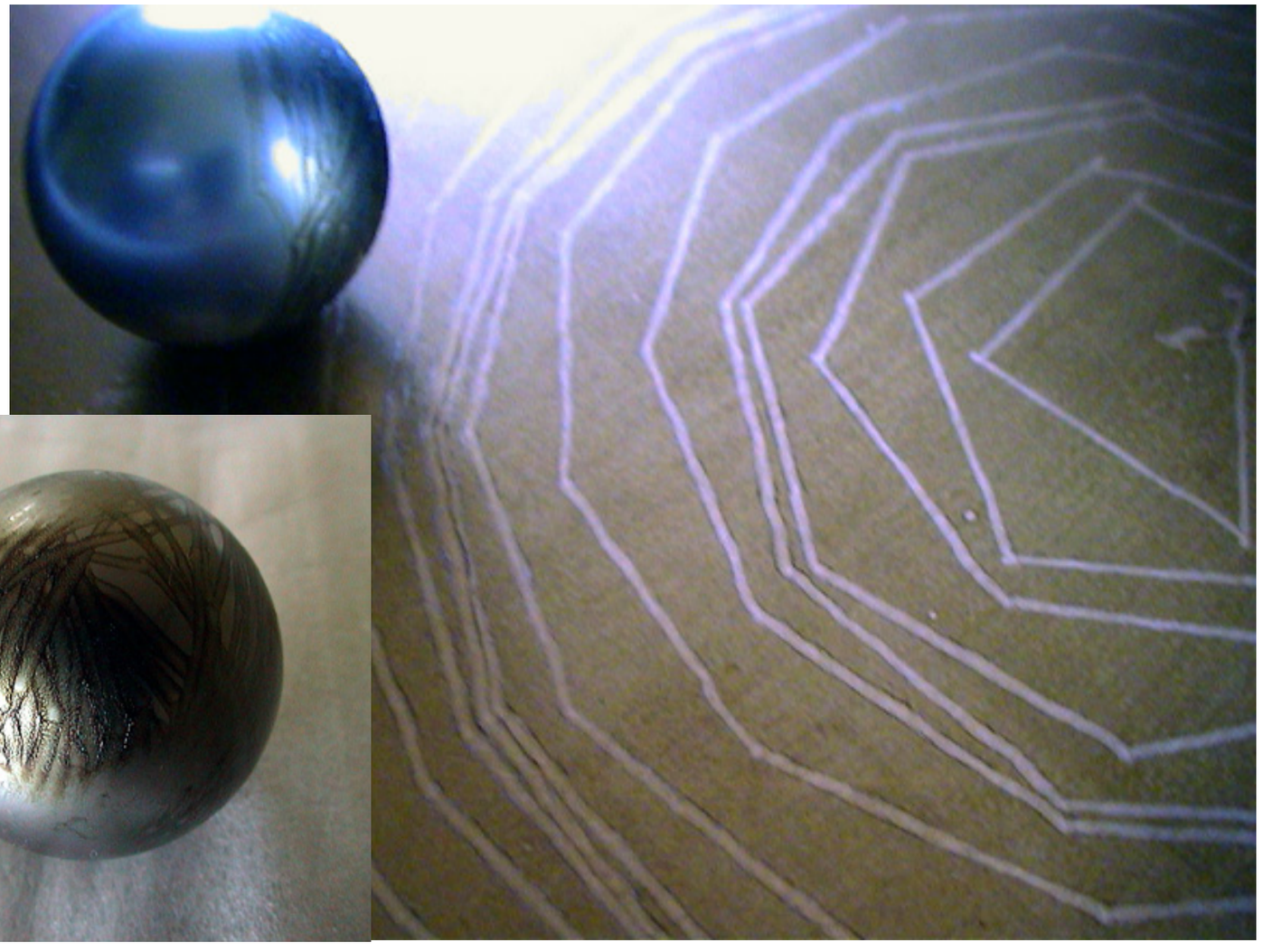


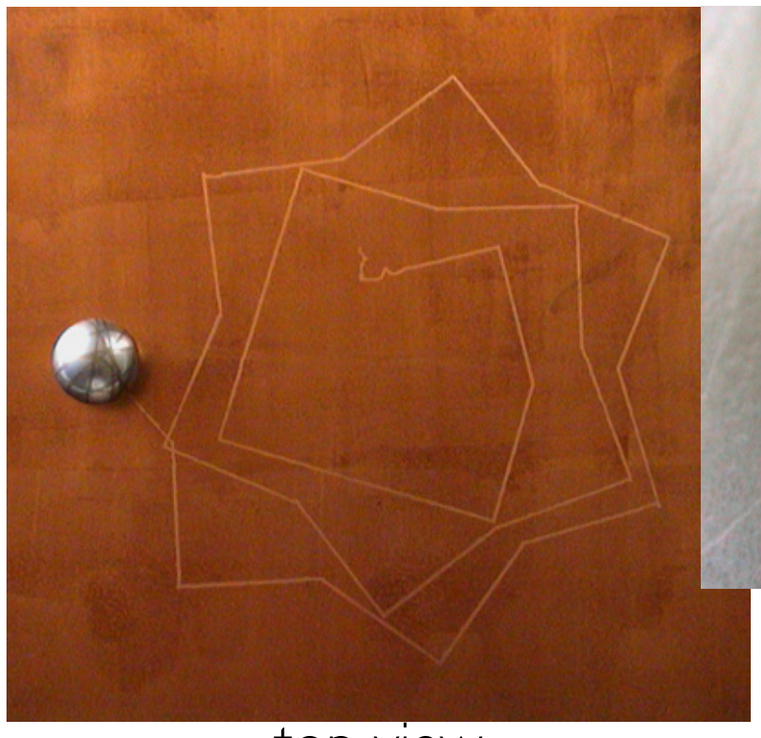


(30×30’’)

soft ground on copper with artist's device

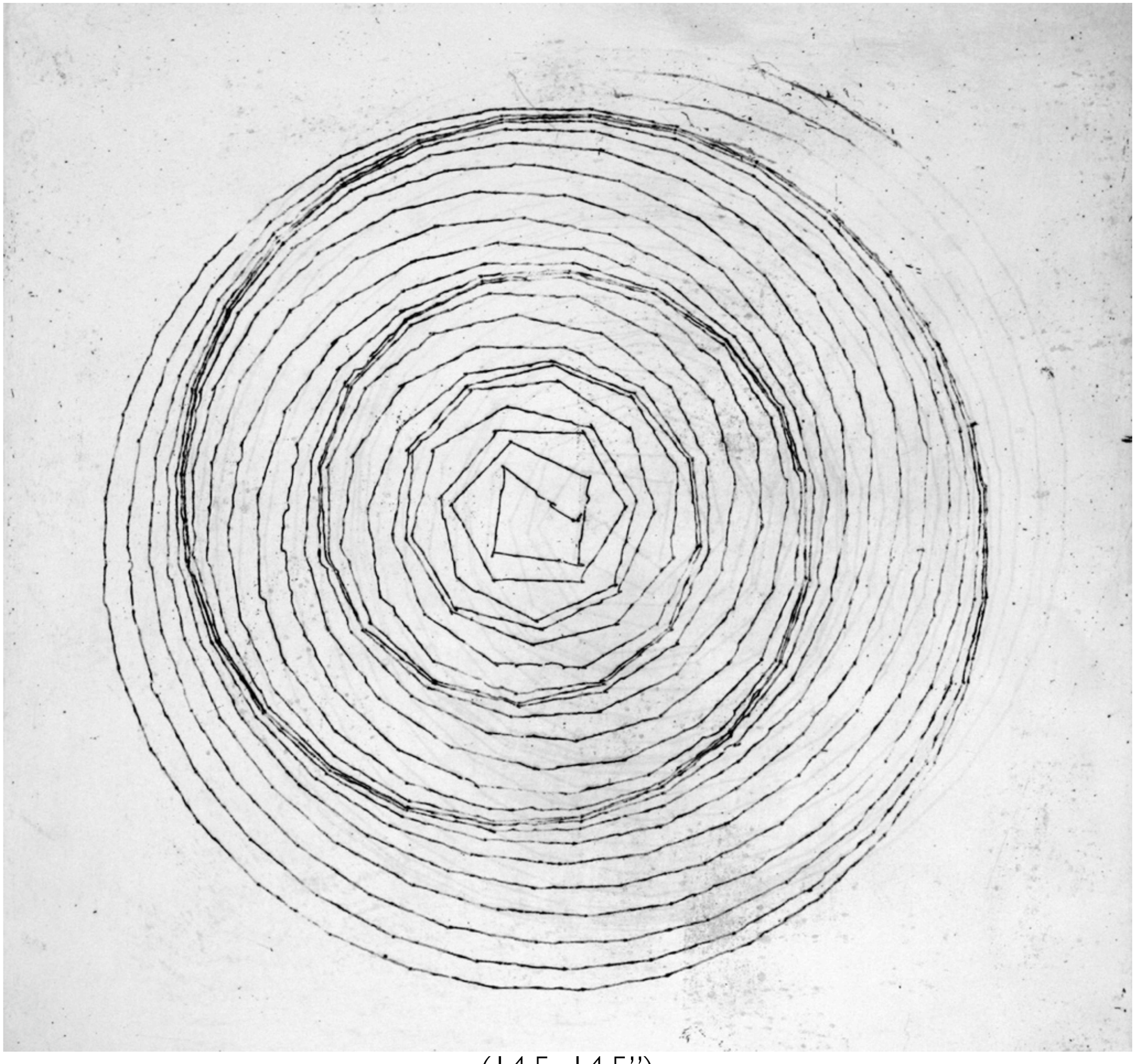
with pat merrill and
elaine levasseur





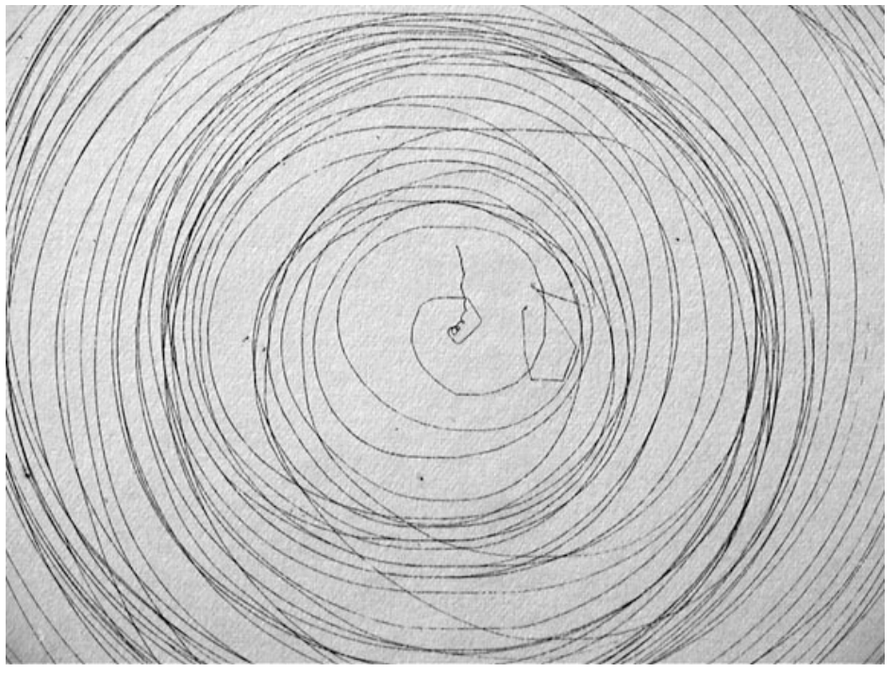
top view

ball rolling on the softground over copper, and showing
traces of the accumulated ground lifted from the plate

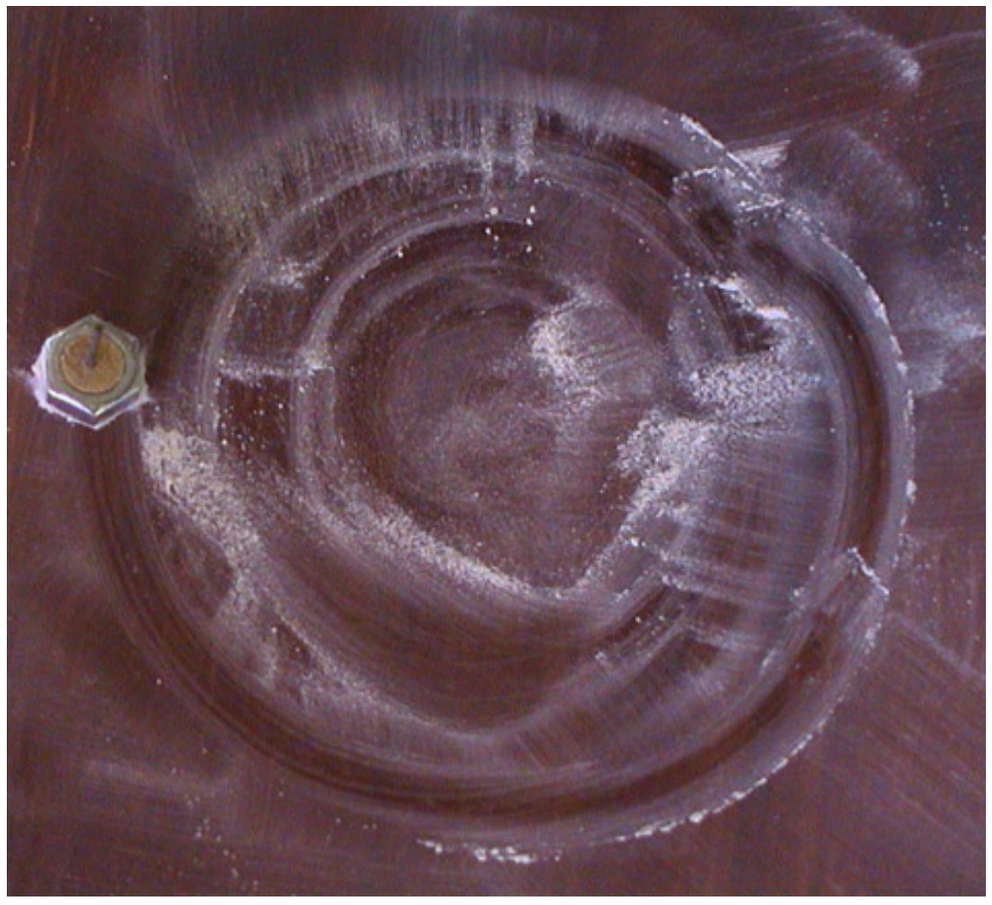


(14.5x14.5”)

hard ground on copper
with artist's device

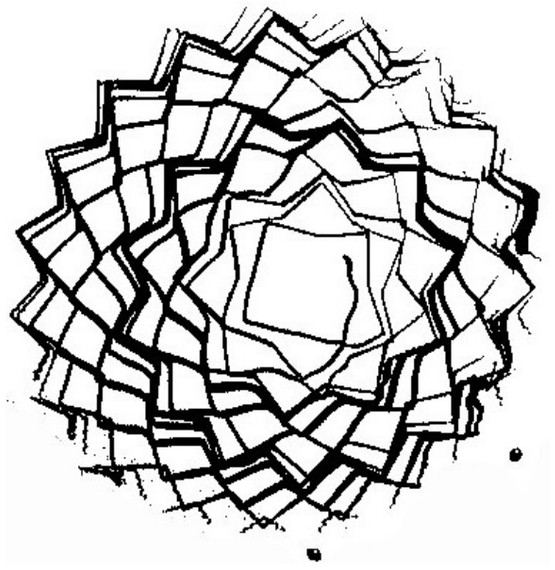


spots where the magnet lost –and later regained control of the puck are clearly visible. these accidents show the meeting of chance with the piece

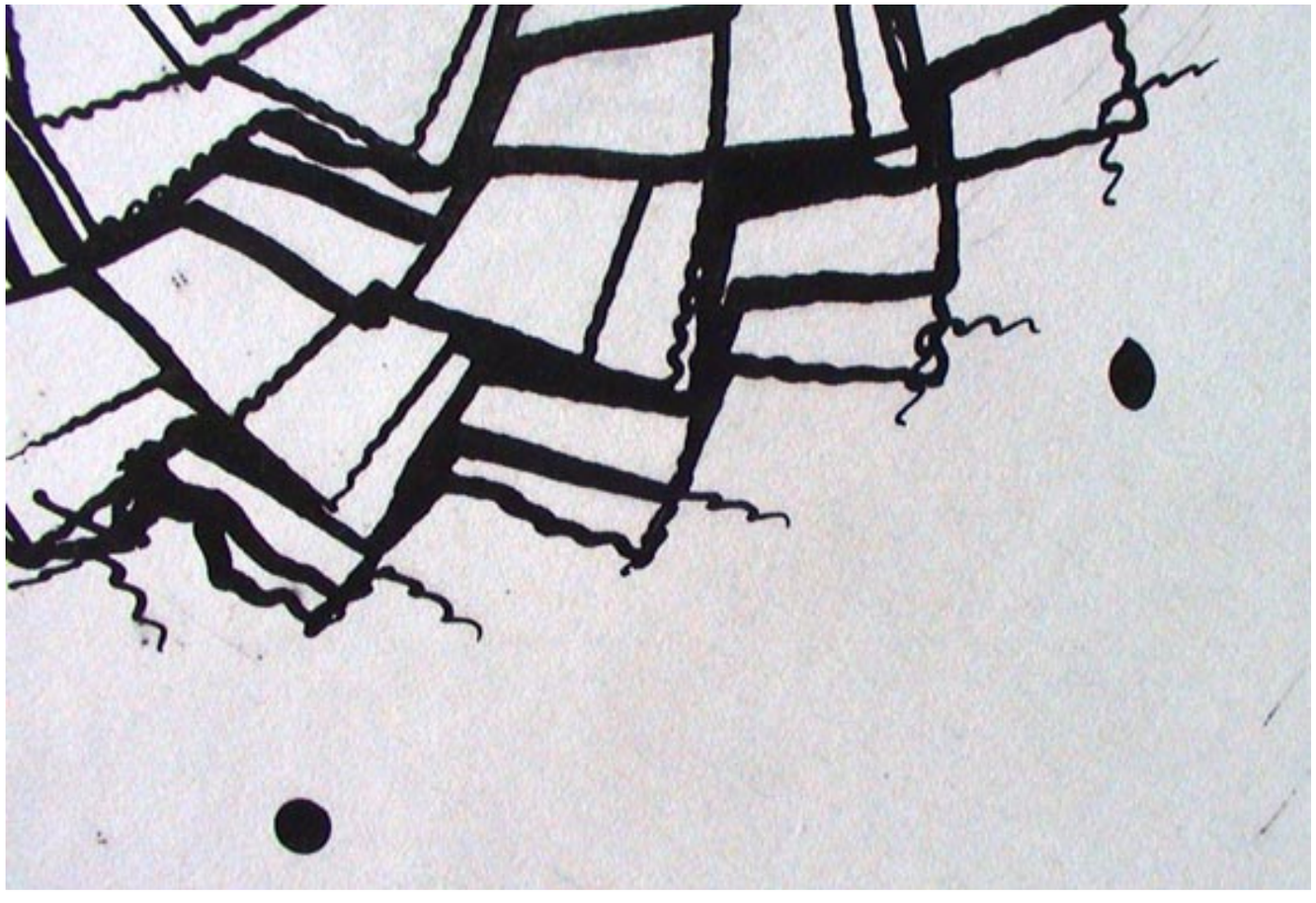


talc is applied to decrease the friction of the puck against the ground covered copper. the puck carries a fine tungsten point

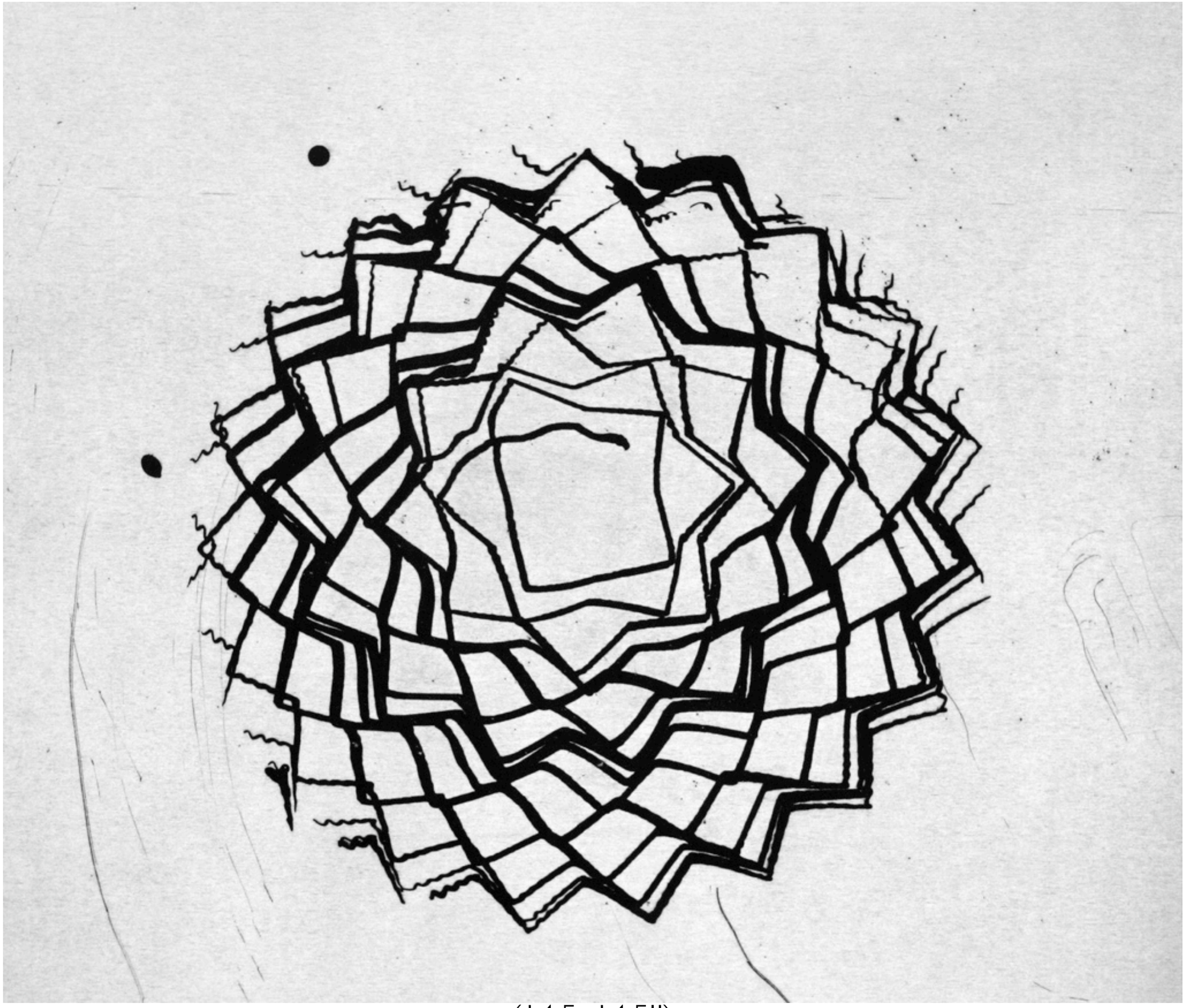
sugar lift on copper
with artist's device



A "flying brush" fit with a toric magnet hangs over the plate by a thread so that it will be pulled by the driving magnet. The brush is fed the usual ink-sugar blend. The tip of the brush moves in fact on a sphere so that contact with the copper decreases away from center. This explain the giggling lines as the brush takes off the plate. A next attempt will control the length of the thread to insure constant contact over the whole plate.



detail

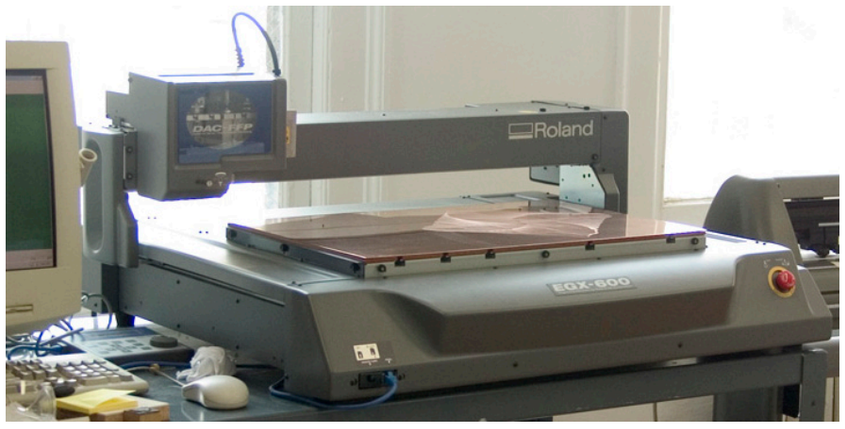


(14.5x14.5")

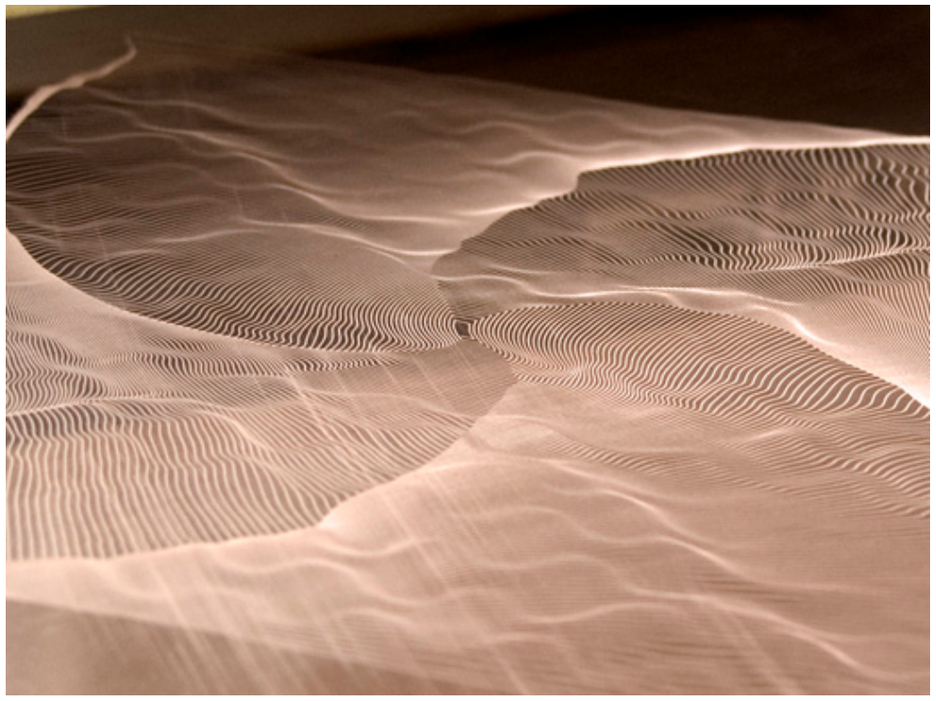
copper plate engraving

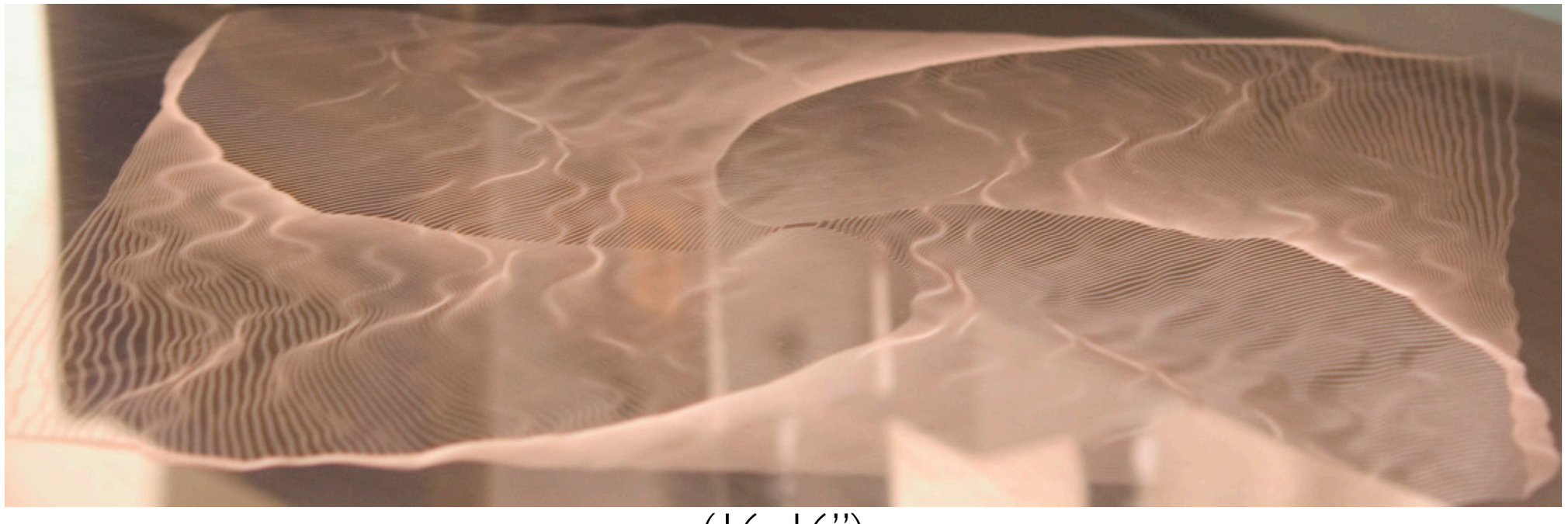
(in progress, with pace prints)

device



first test plate, as a "dry point" project





(16x16")

how does this happen?

details from behind the scene, skip as you will

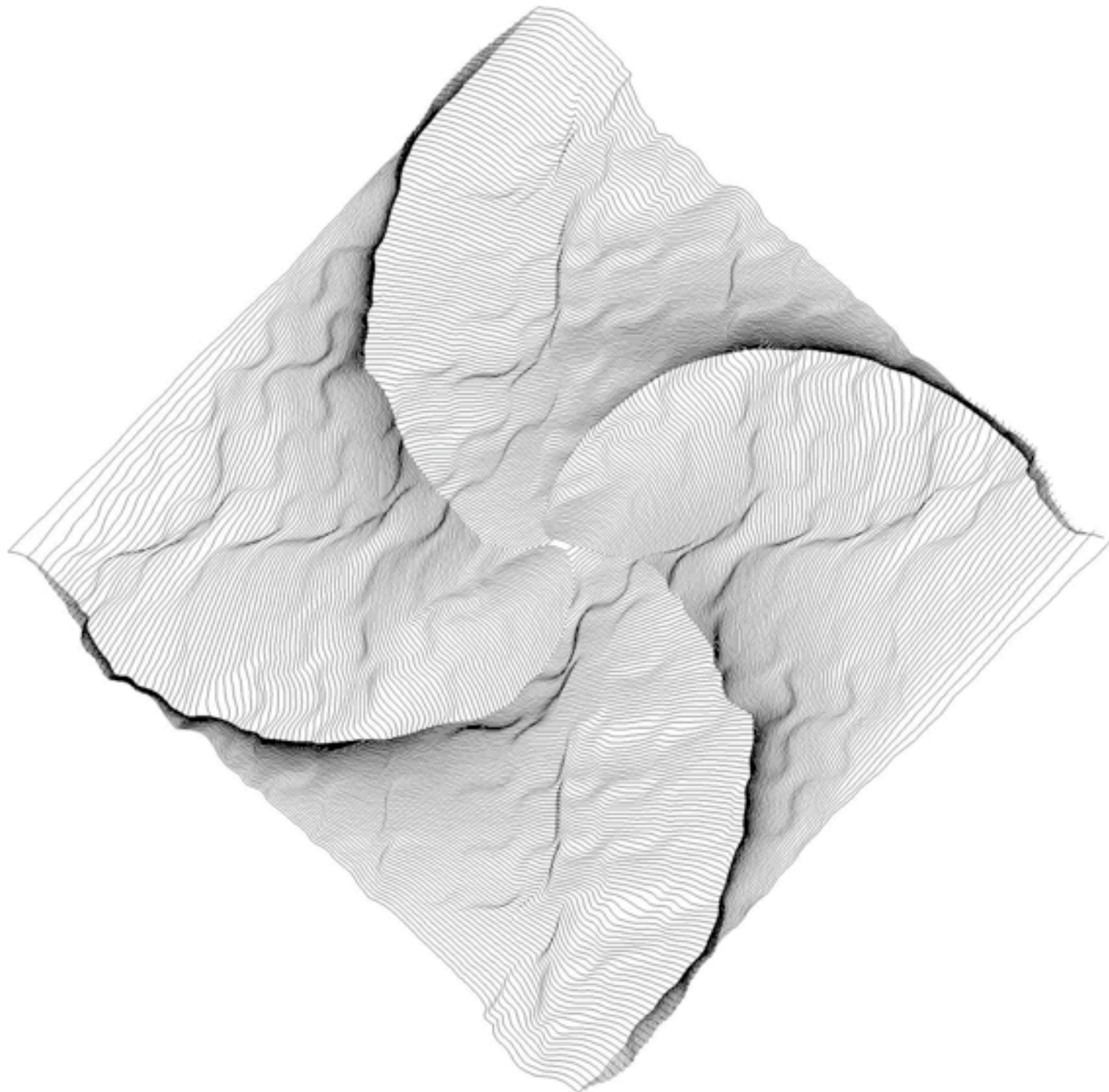
*1. start with a concept, a precise mental **vision** of the piece*

2. translate this vision into a short text, the software that will create the path of the actual engraving tool

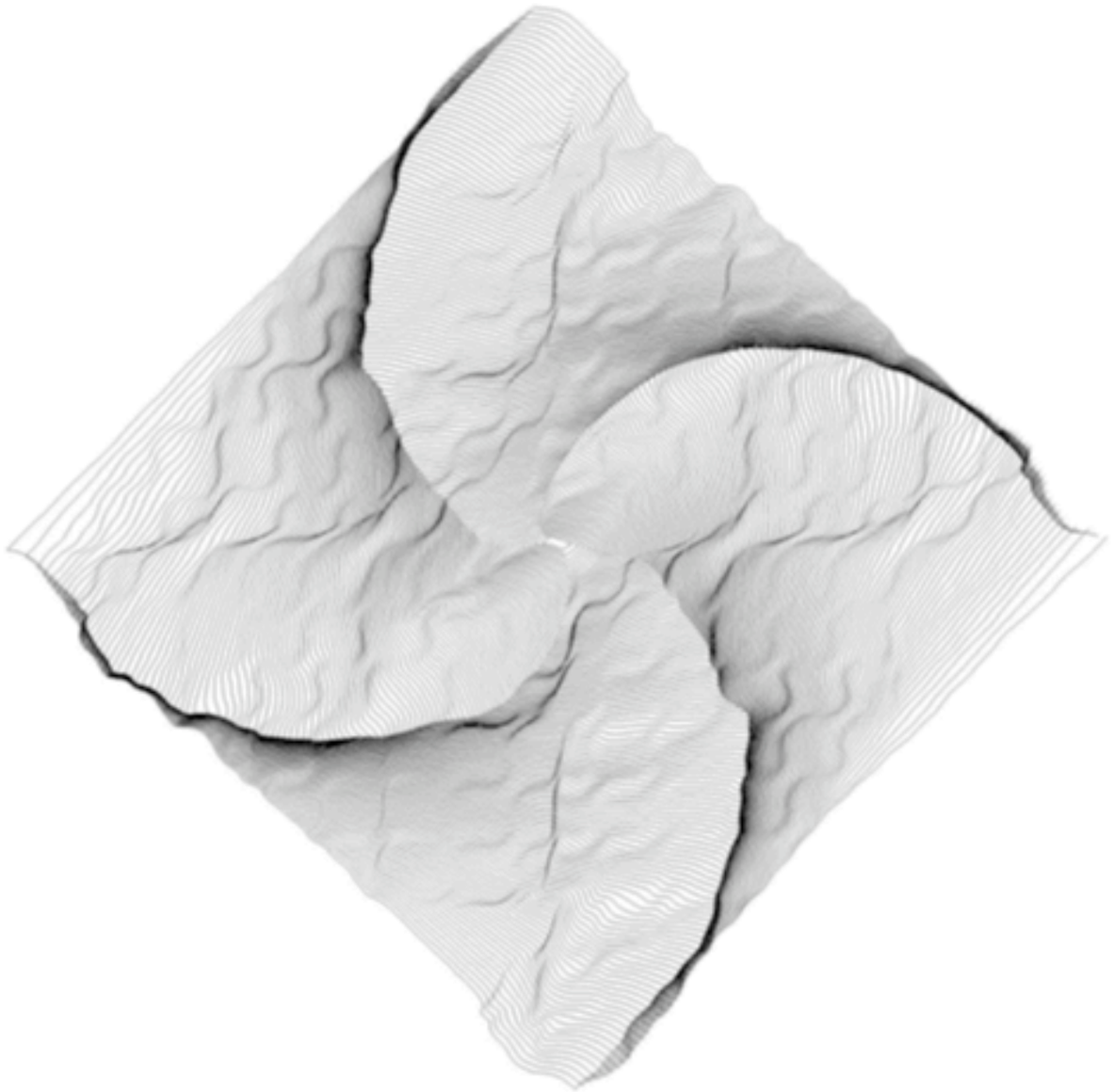
```
freeD[l_, d_: - 4] := Module[{n = {}}, (* 3D translation for dxf format *)
    Do[n = {n, {l[[i, 1]], l[[i, 2]], d}}, {i, 1, Length[l]}];
    Partition[Flatten[n], 3]]

saffro3D[l_, n_, cntr_:{0, 0}] :=(* where the art is made *)
  Module[{s = {}, g = {}, size = 1, alpha = 0, da = 2Pi/4/n, depth = .01 n},
  (* calling my drawing libraries, thirty years in the making *)
  Do[new = warp[snip[pscale[rotate[l, da alpha++], size++, cntr]]];
      g = {g, Line[new]};
      d = If[True, -1 - depth i/n, -.5  depth];
      s = {s, Line[freeD[new, d]]},
      {i, 1, n}];
    {Flatten[g], Flatten[s]}]

project[n_:128] := (* calling for output files *)
  Module[{g = saffro3D[unitGone[0, 0, 4, .1], n]},
    gg = Graphics[g[[1]], AspectRatio -> Automatic];
    ggg = Graphics3D[g[[2]], AspectRatio -> Automatic];
    Show[gg]; Show[ggg];
    ggname = StringJoin["/Users/jp/
      Desktop/andre2-top-", ToString[n], ".jpg"];
    gggname = StringJoin["/Users/jp/Desktop/andre2-persp-
      ", ToString[n], ".jpg"]; Export[ggname, gg, ImageSize -> {1800, 1800}];
      Export[gggname, ggg, ImageSize -> {1800, 1800}];
    dxfname = StringJoin["/Users/jp/Desktop/andre2-dxf-", ToString[n],
  ".dxf"]; Export[dxfname, ggg]]

project[]
```

3. running the software calculates the data file for the engraver

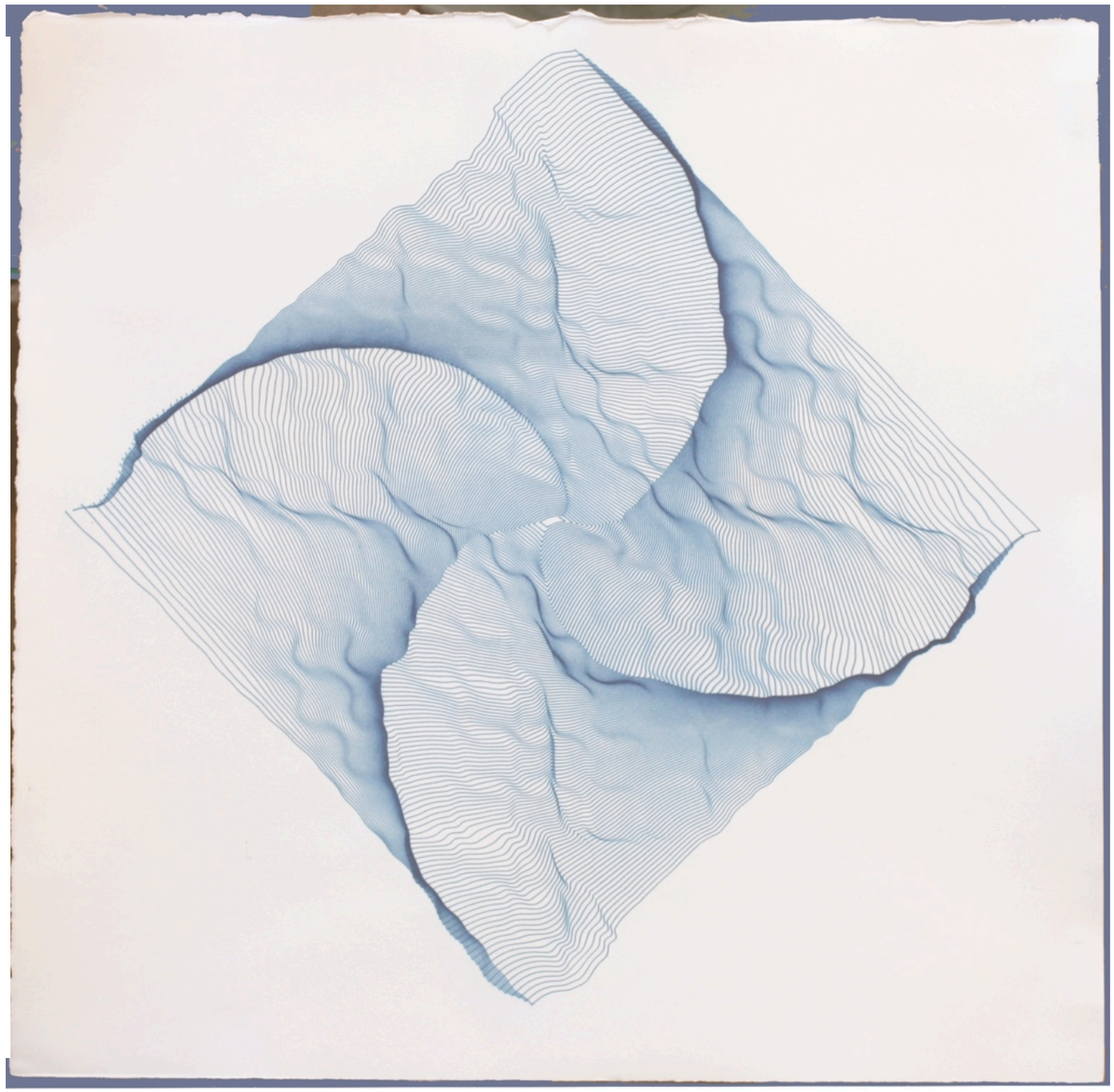
4. the data file is emailed to pace prints to control the engraver and engraving parameters and tools are discussed and tried out



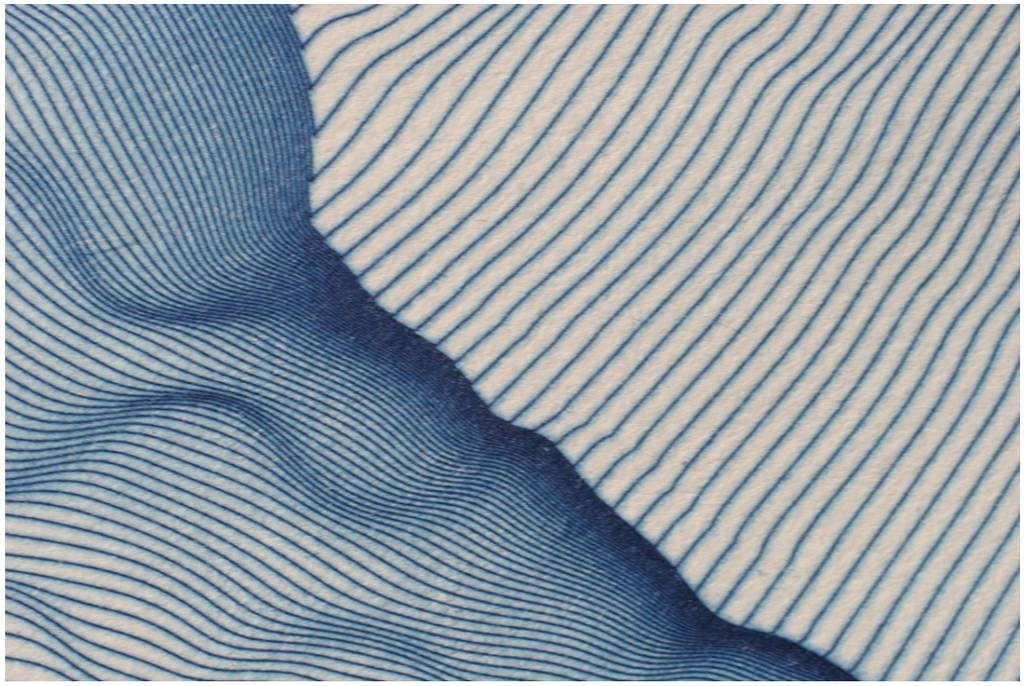
5. plate design produced by the code on the left

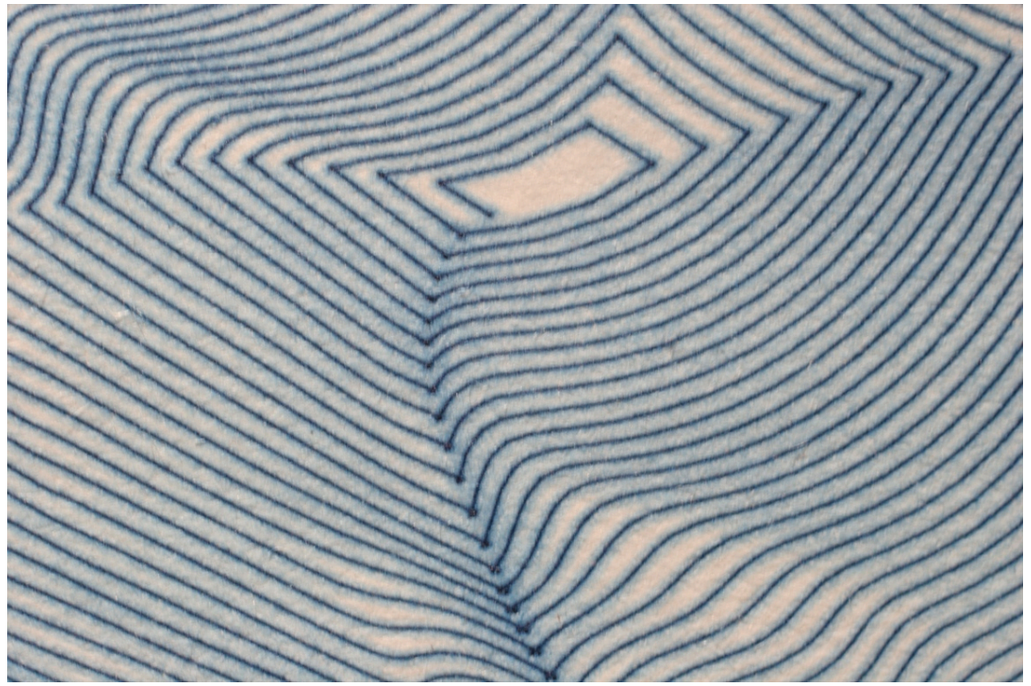


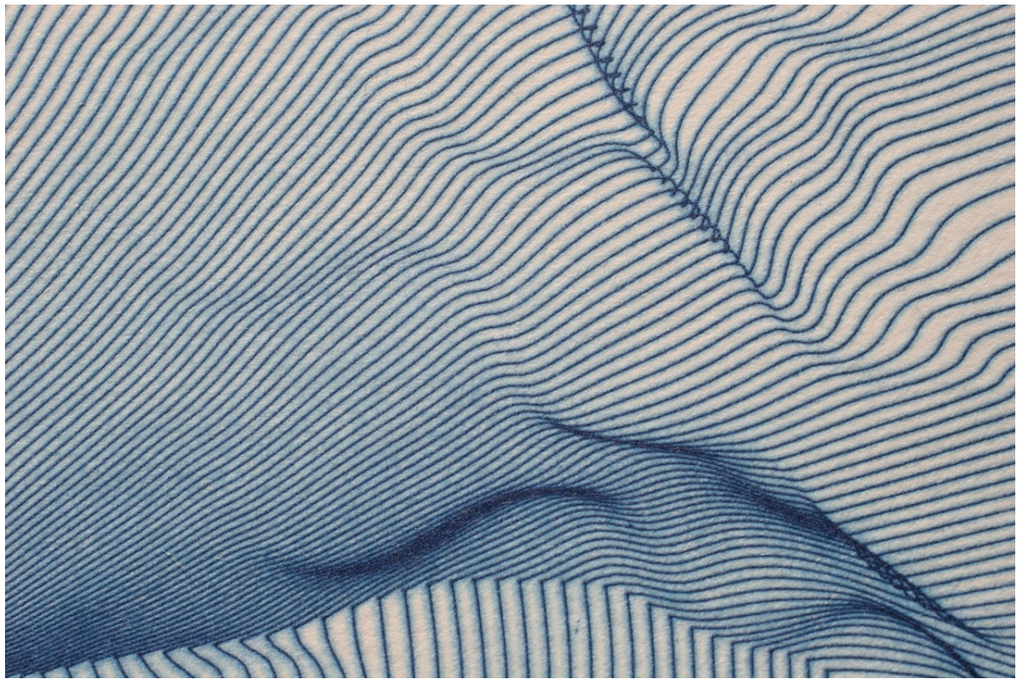
from the plate...



...to the actual proof from the masterprinter and the press at Pace...



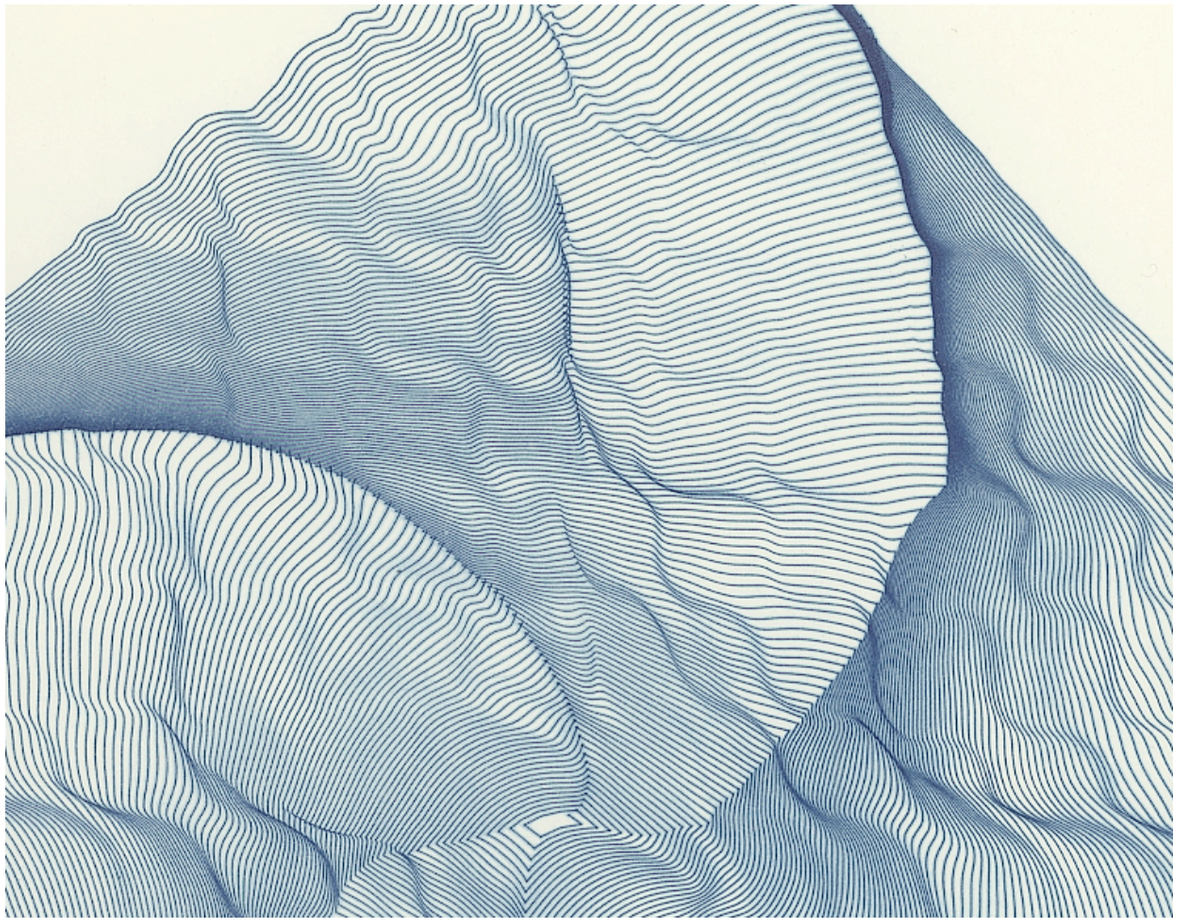




... here are some details. The engraving tool leaves a burr that produces a soft fuzzy line, very interesting although not what I expected. This surprise must be explored further.

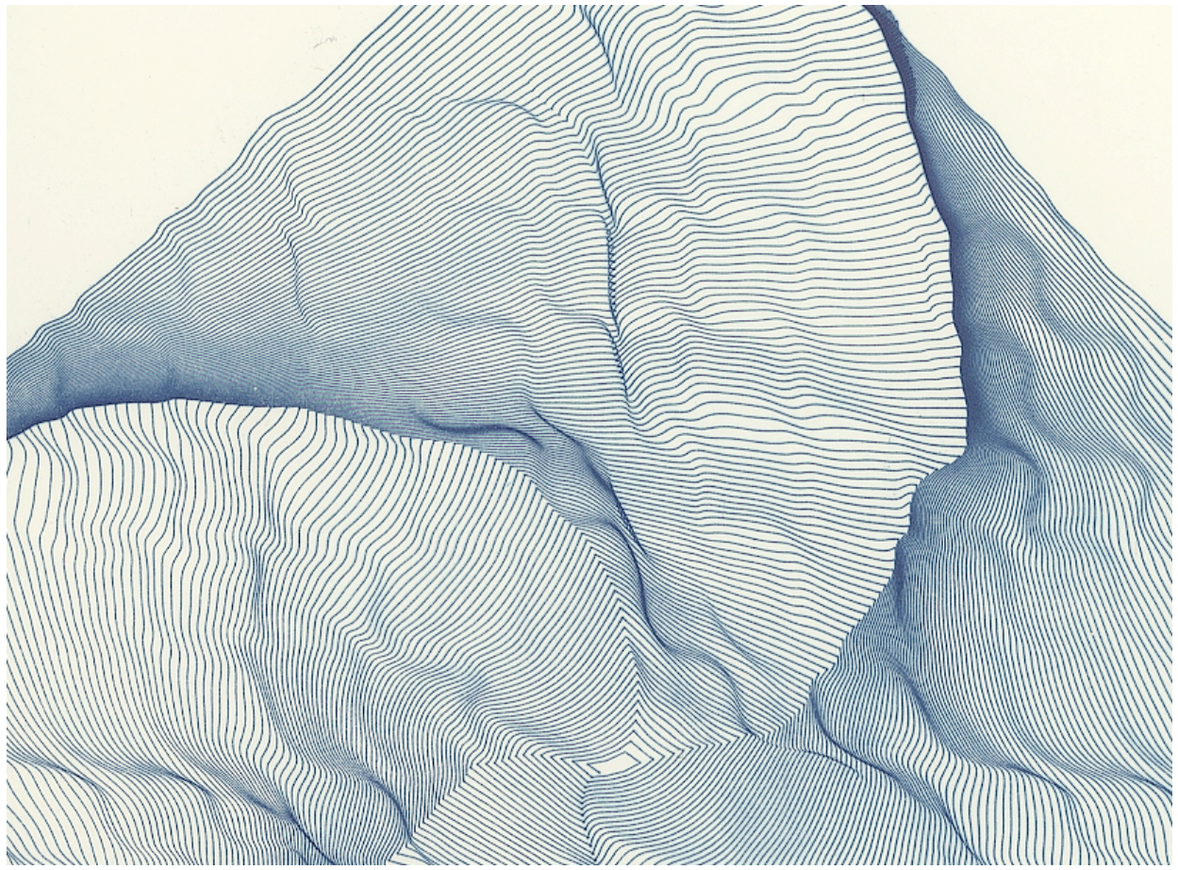
Next we will engrave a hard ground, then etch the plate in acid, aiming for a very thin line.

with Pace: testing the first plate



first proof from the raw plate

note: arcs retain too much ink,
soft lines

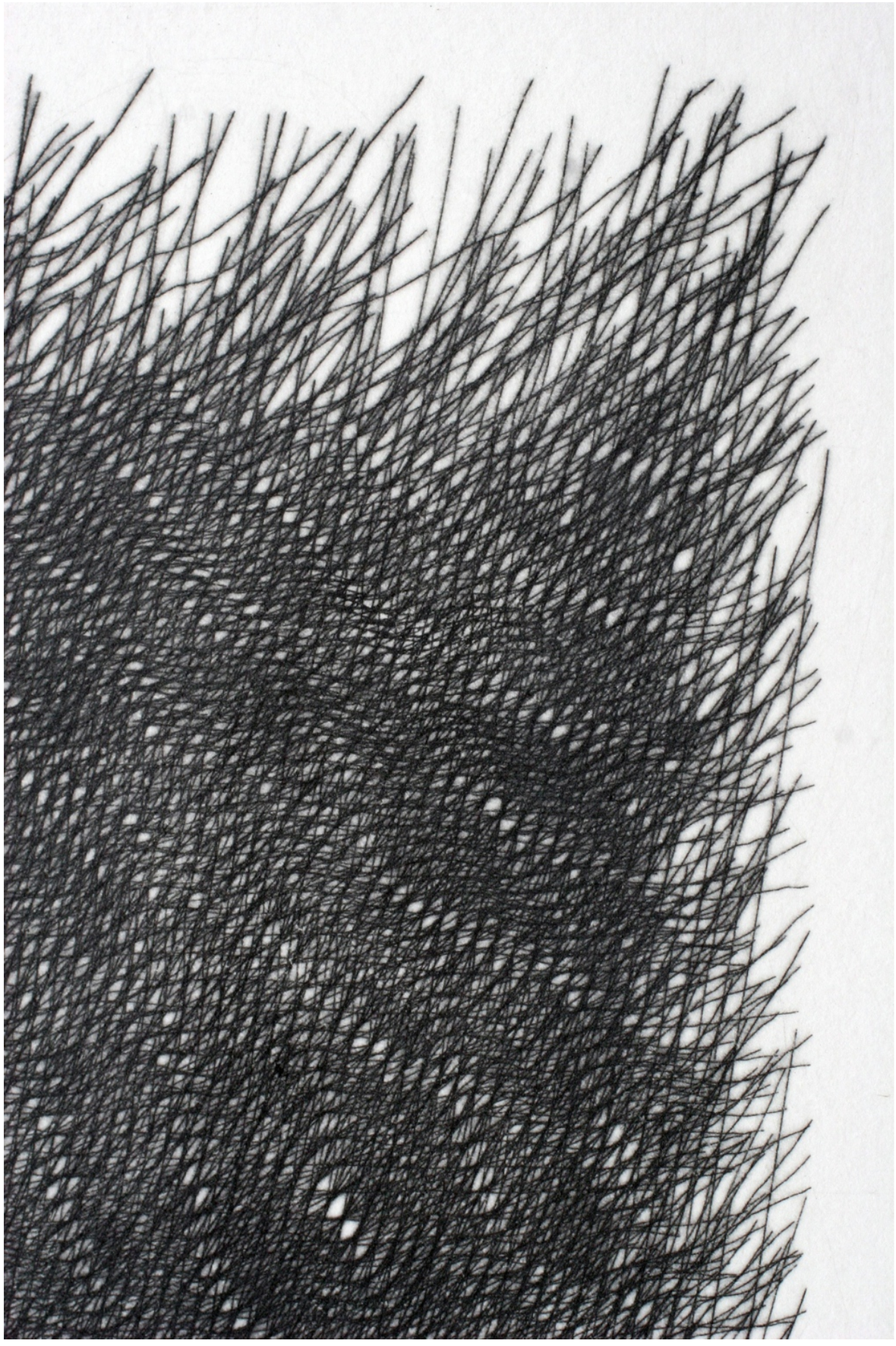


second proof after polishing the plate

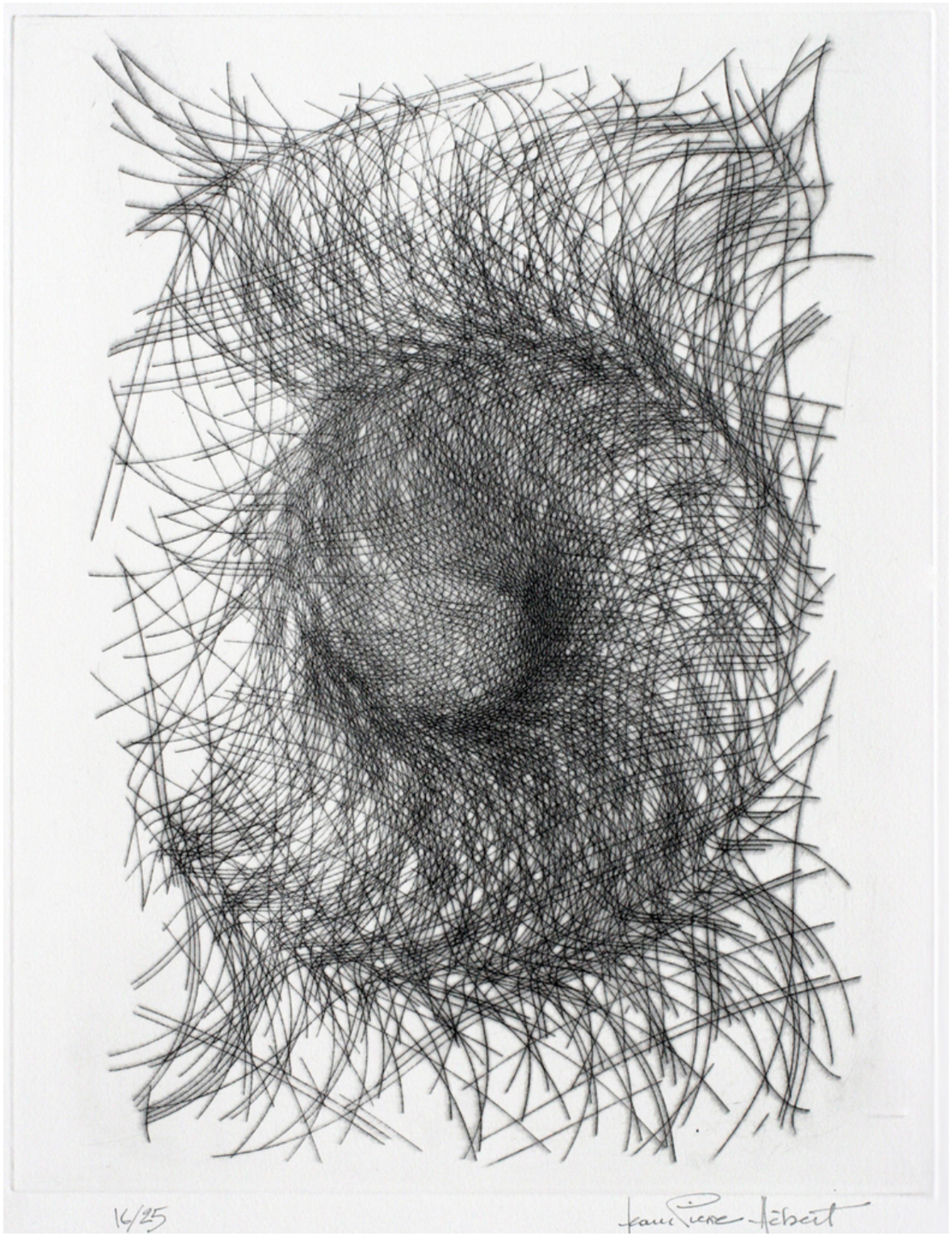
note: polishing burs sharpens lines,
excess ink persists
(different crop & orientation of samples)

fall'05: eight new dry points with pace

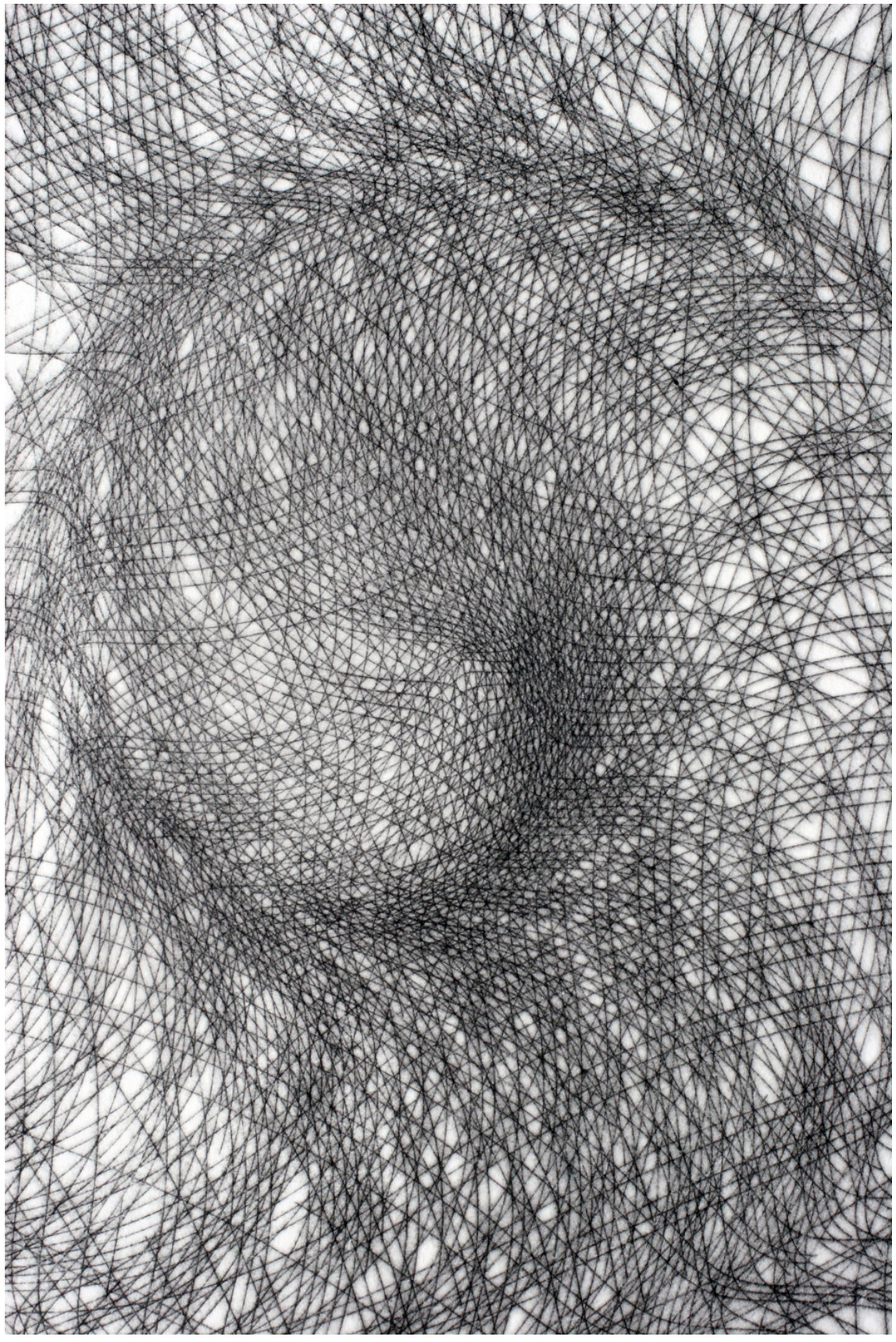
long weave (on)



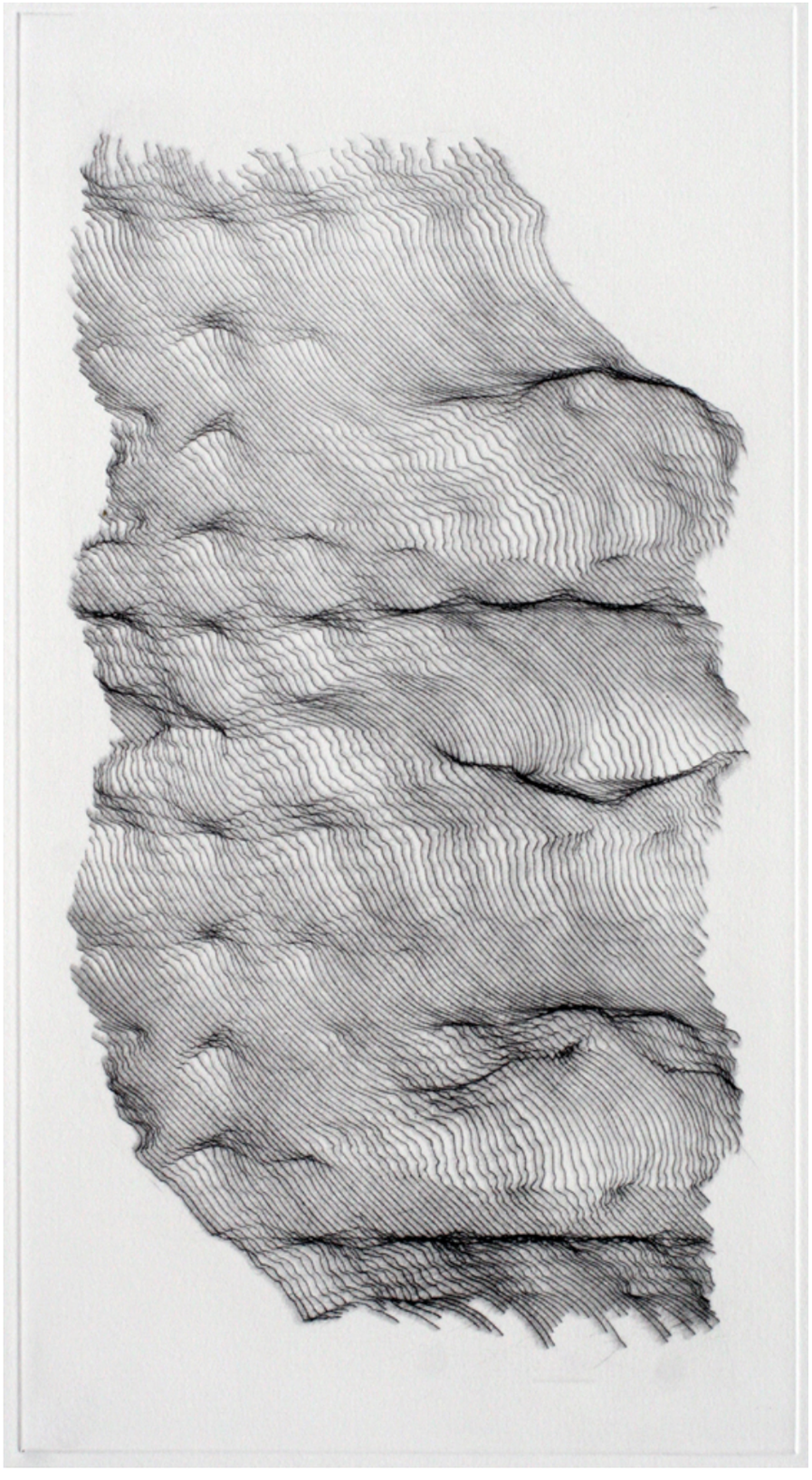
upper left detail



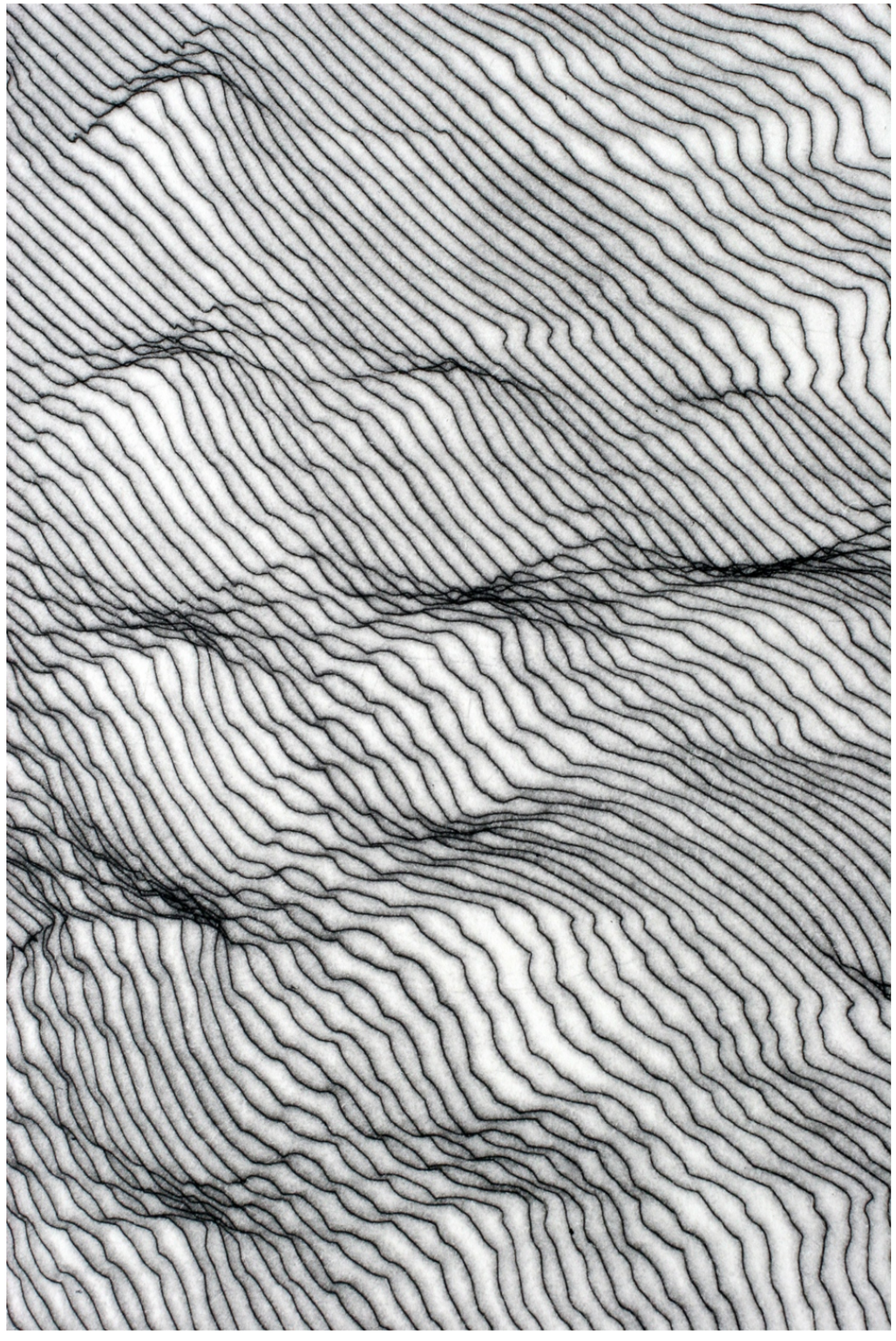
nautile (on)



center detail



unwoven (on)

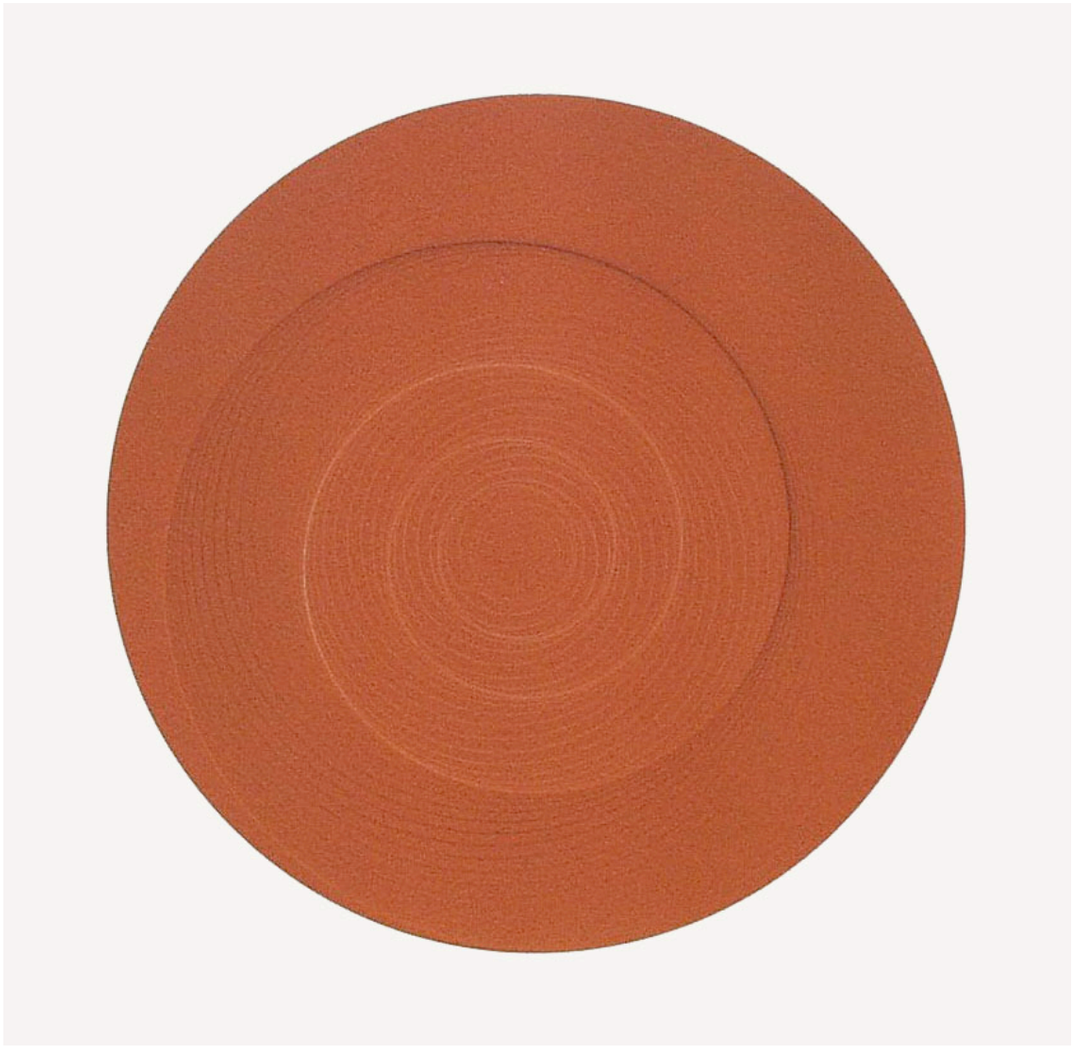


left center detail

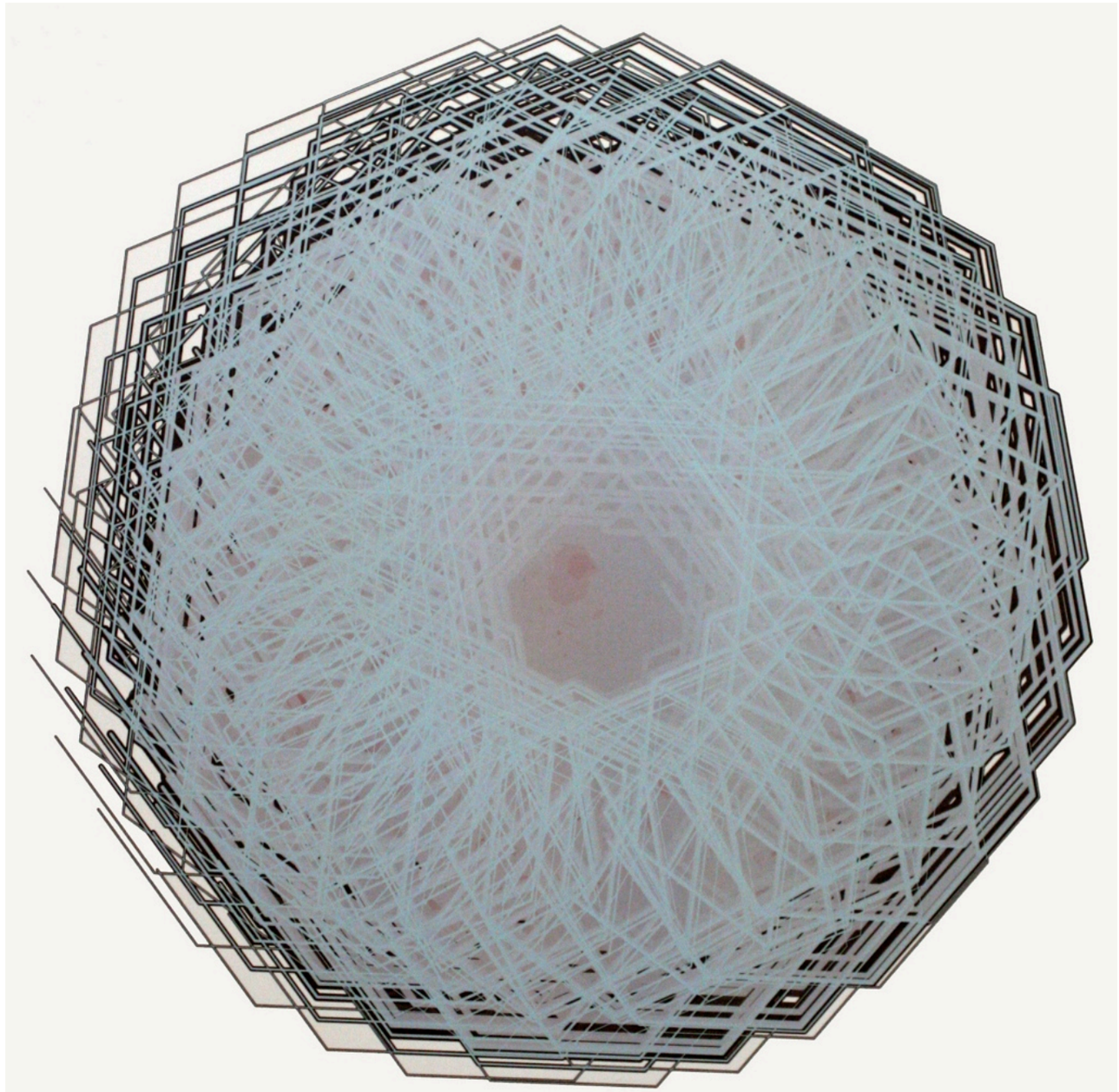
about inkjet prints...

- *I do not exactly like inkjet prints*
  - *no deep ink-paper interaction*
  - *unsaturated haze of colors*
  - *permanence questionable*
  - *lack of brilliance*
  - *very expensive inks*
  - *limitations on paper*
  - *color control very hard*
- *but they can offer some interesting features*
  - *fast proofing*
  - *safe printing – so much easier than any other process*
  - *thinnest lines possible (on the iris printer)*
  - *very large sizes possible*
  - *raster images support*
  - *postscript support with all the postscript invaluable features*
  - *limited editions support*
- *so I have only experimented with them in a very limited way*
- *and I use them for sketches, unique prints, a few short editions of 3 to 5*

inkjet prints from cone editions (1).

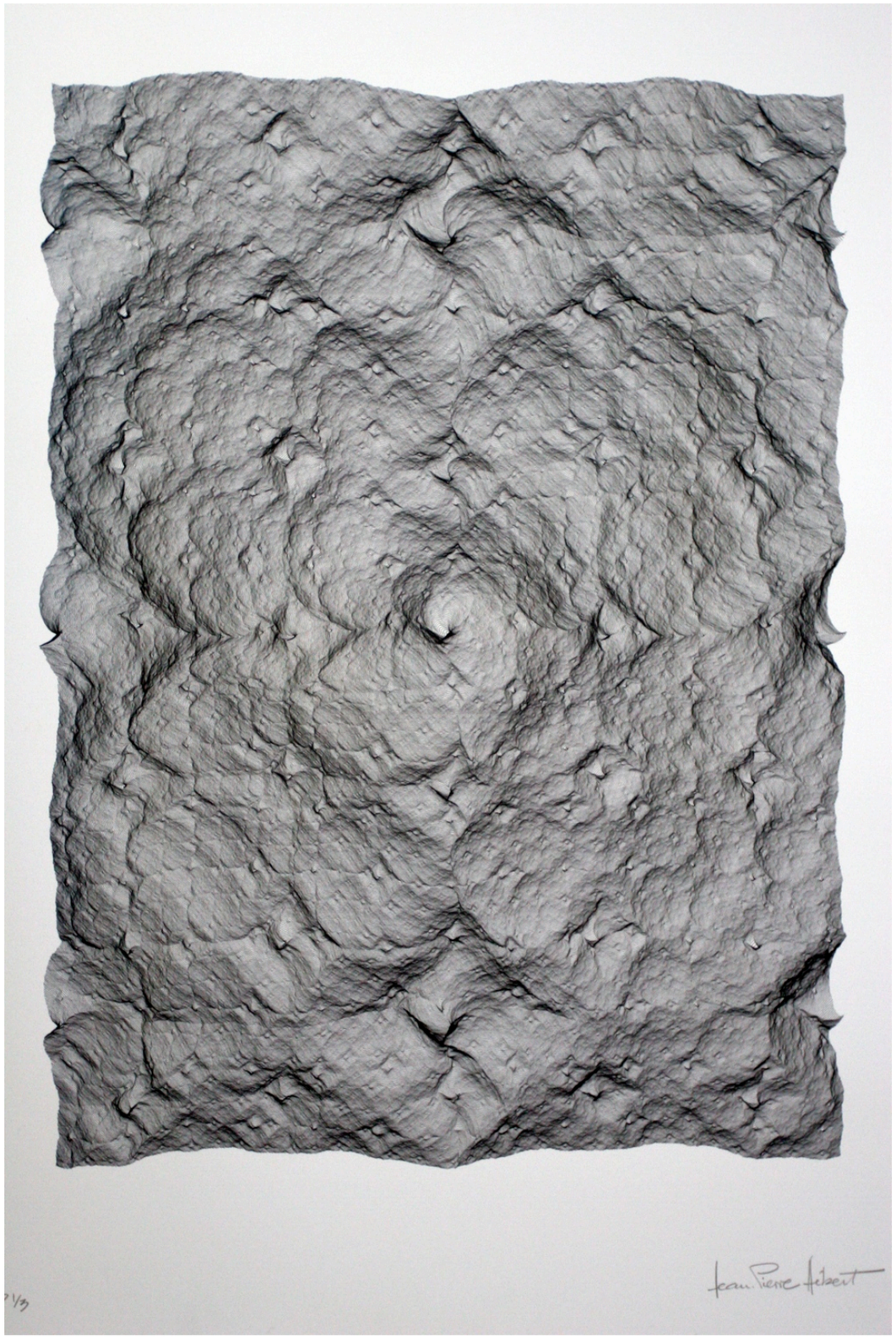


one of the prints from "One Hundred Views of the Metagon"
a limited edition of 24 prints in 12 (9x9 on 19x13")
to see more check: http://hebert.kitp.ucsb.edu/hv/
(this is the one and only digital edition extant. all other digital works are unique)



21 prints from "One Hundred Views of the Metagon" were printed in 1 (16x16 on 41x25"). this print was selected for the "Brooklyn Print National" show of 2001

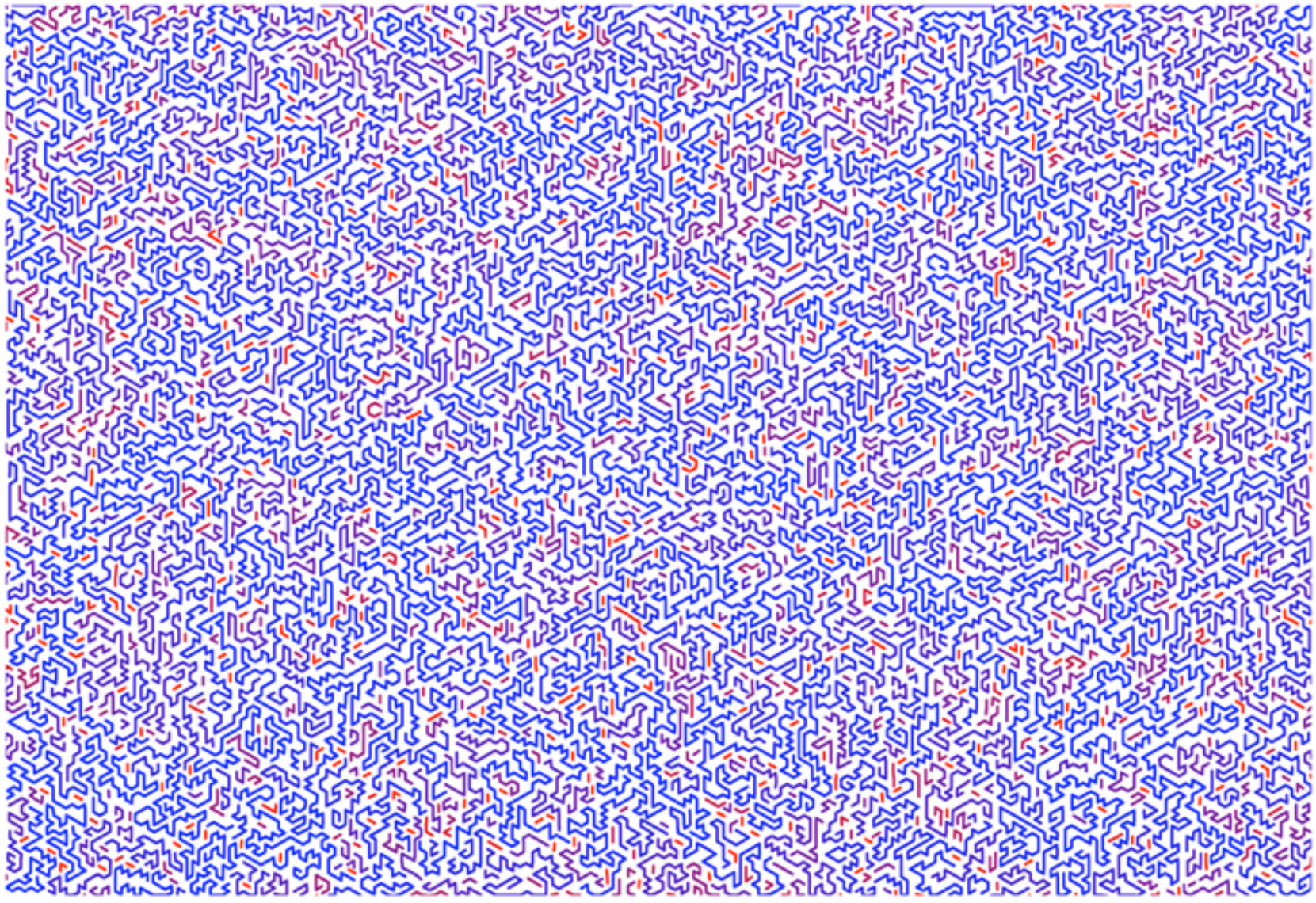
inkjet prints from cone editions (2).



several other limited editions in 15 have been completed in 1998 at cone editions press in Vermont.

inkjet prints from pace editions.

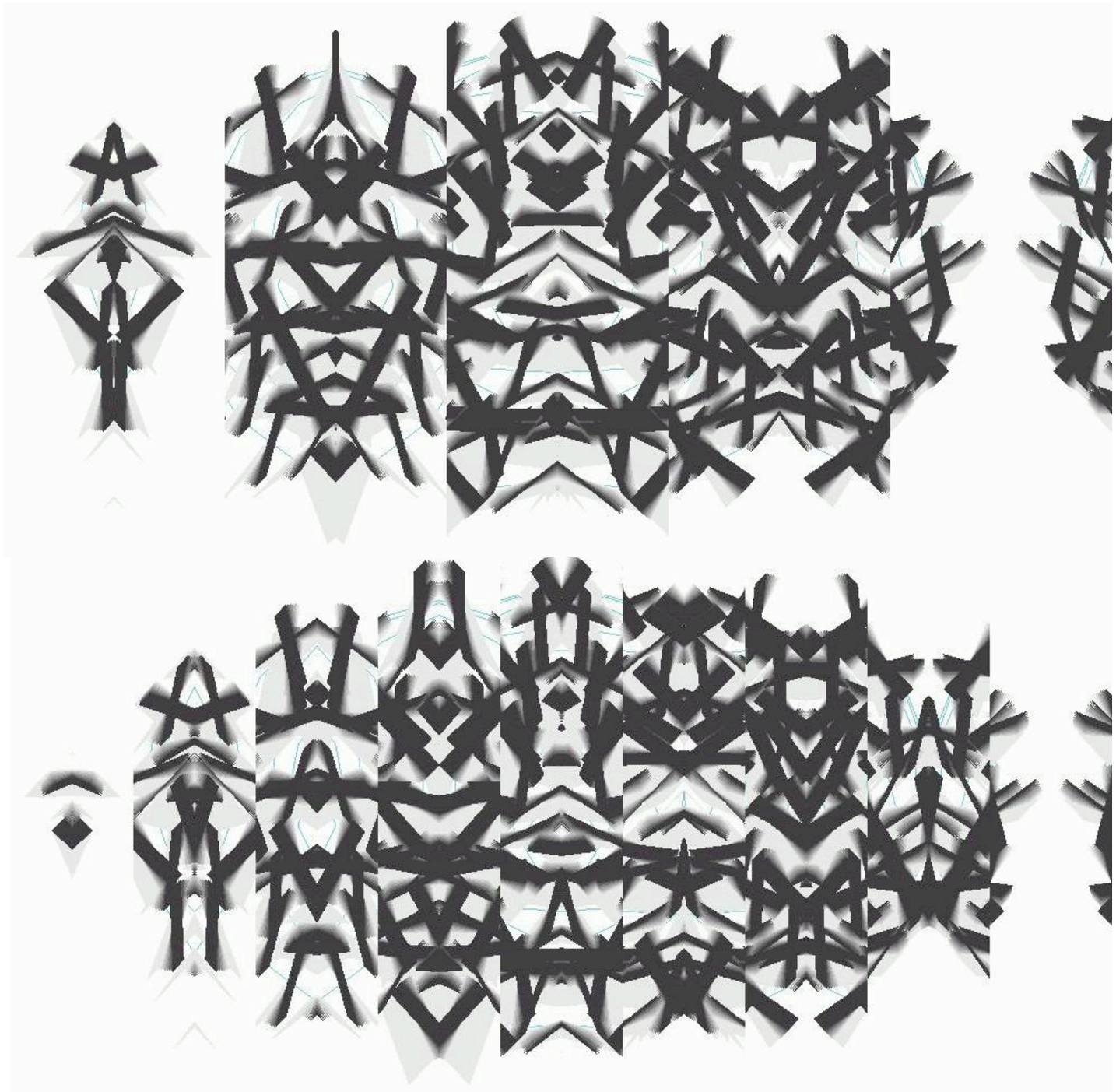
inkjet prints from my studio.

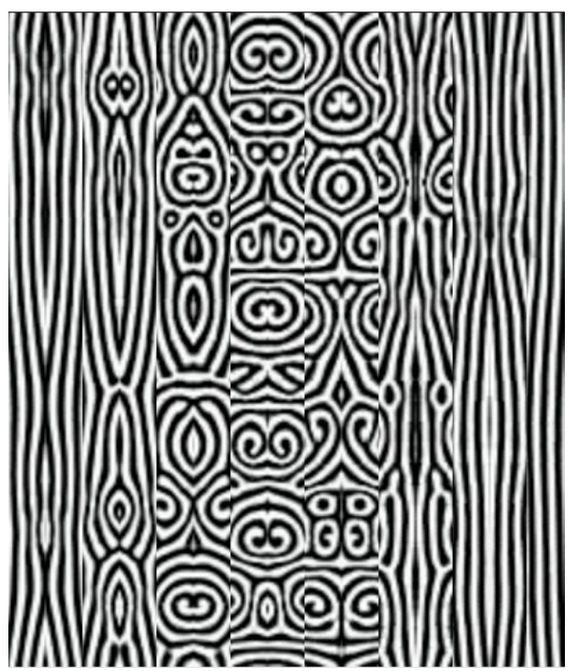


rorschach printmaking / umberto eco statement

Suppose we take a white sheet of paper and spill some ink on it. The result will be a random image with absolutely no order. Let's now fold the paper in two so that the ink blot will spread evenly on both sides of the sheet. When we unfold the paper we will find before us an image that has a certain order --i.e., symmetrical repetition, one of the most elementary forms of redundancy as well as the simplest avatar of probability. Now, even though the drawing remains fundamentally ambiguous, the eye has a few obvious points of reference: indications of a particular direction, suggestions of possible connections. **The eye is still free, much free that it was with the traditional mosaic, and yet it is directed toward the recognition of some forms rather than others, varied and variable forms whose very identification involves the unconscious tendencies of the viewer, while the variety of possible solutions they invite reconfirms the freedom, the ambiguity, and the suggestive power of the figure.** *And yet, as I have already mentioned, the figure contains a number of interpretive directions, enough so that the psychologist who proposes the test feels quite disoriented if his patient's answer falls outside the province of his predictions."*

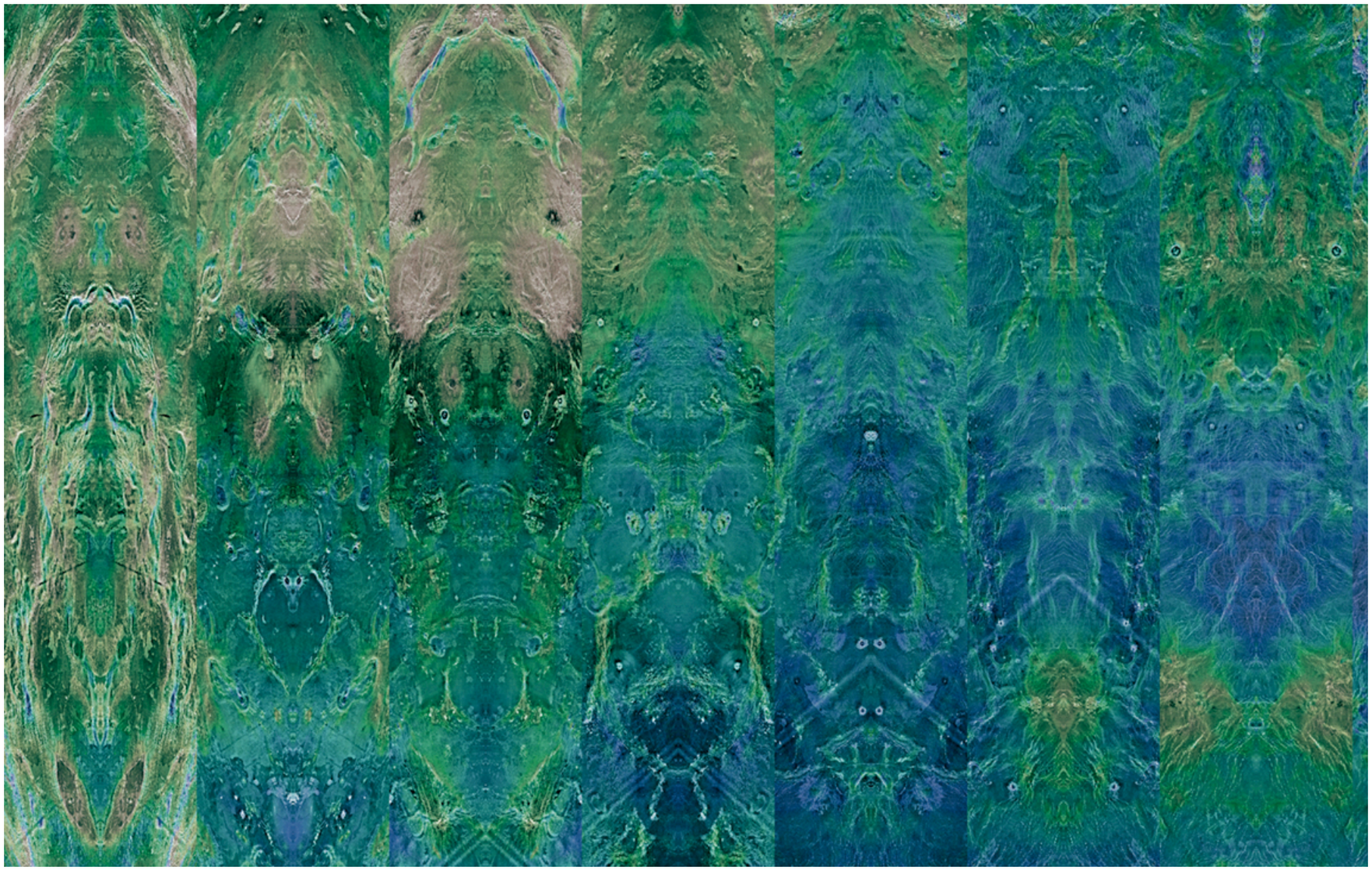
("The Open Work", Umberto Eco, Harvard University Press 1989).



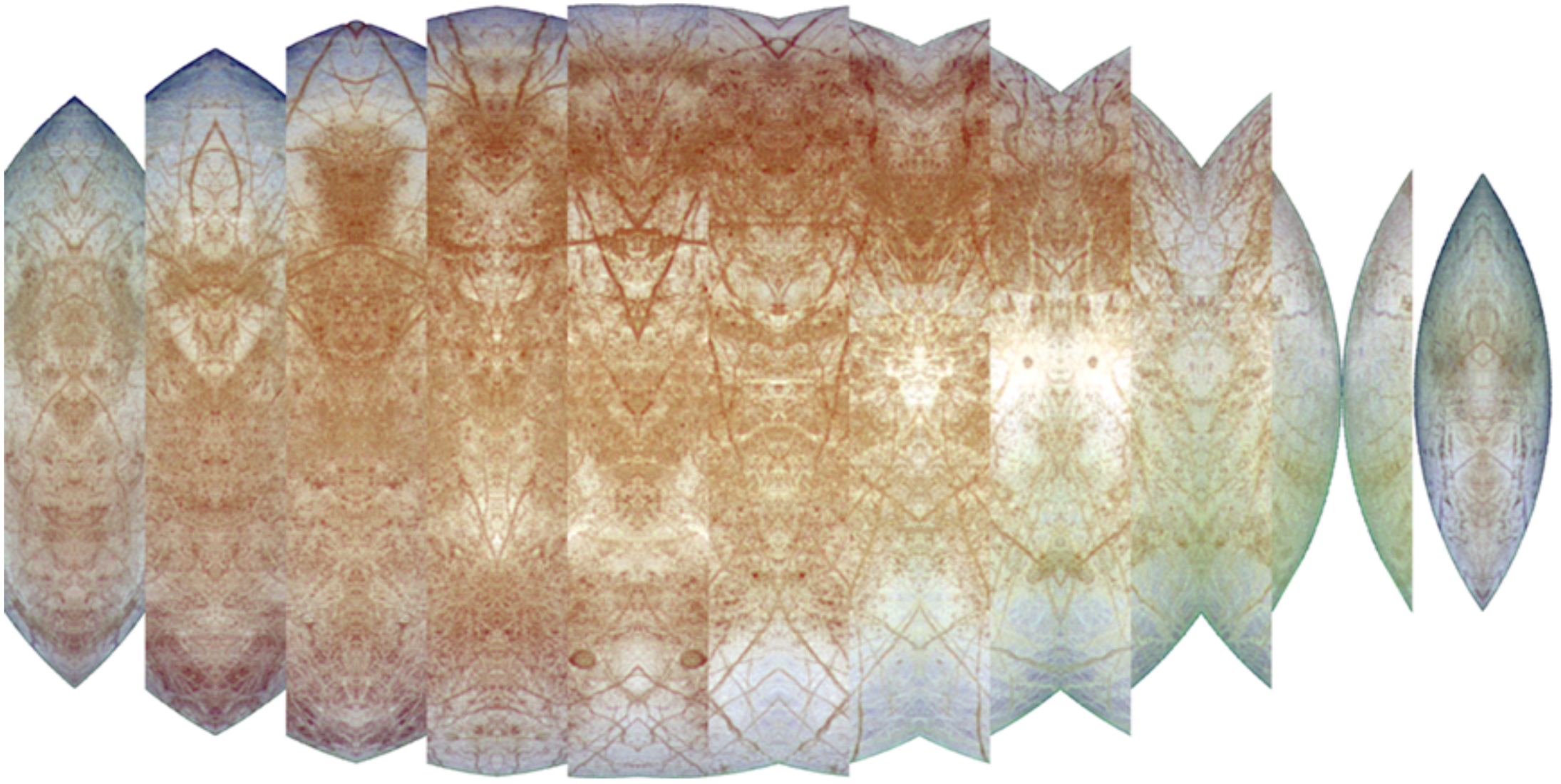


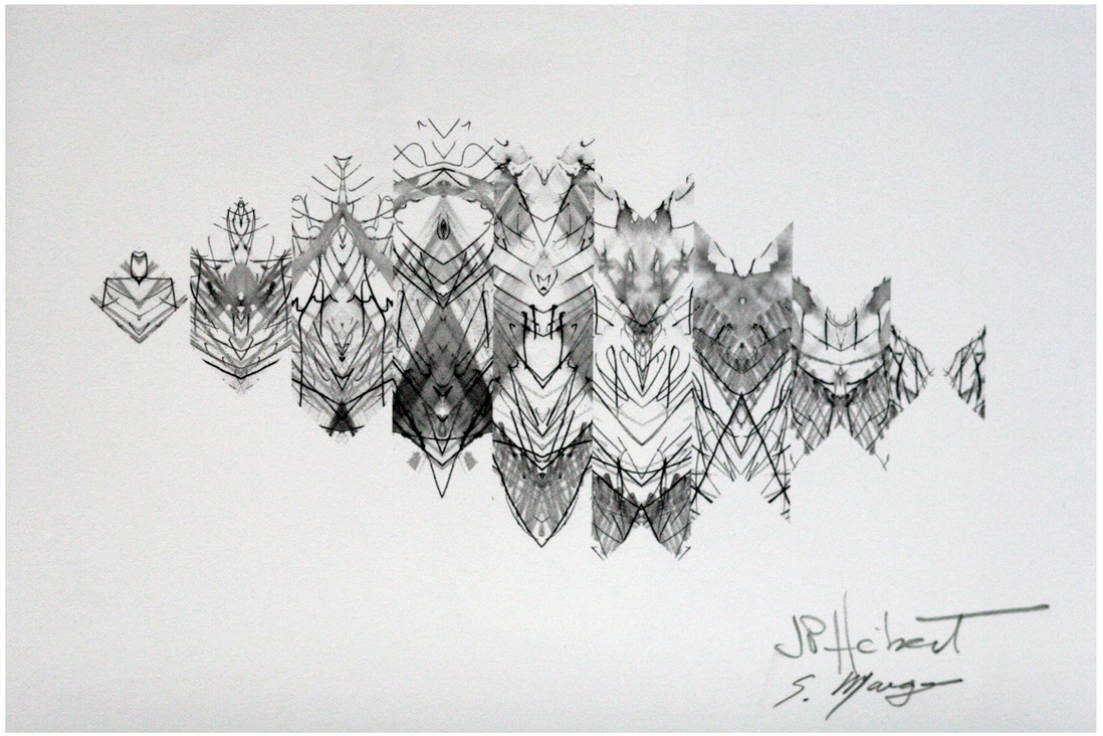
- rorschach essays, inspired by bruce conner

- venusian dreams, a series of six rorschach prints from JPL data (detail)



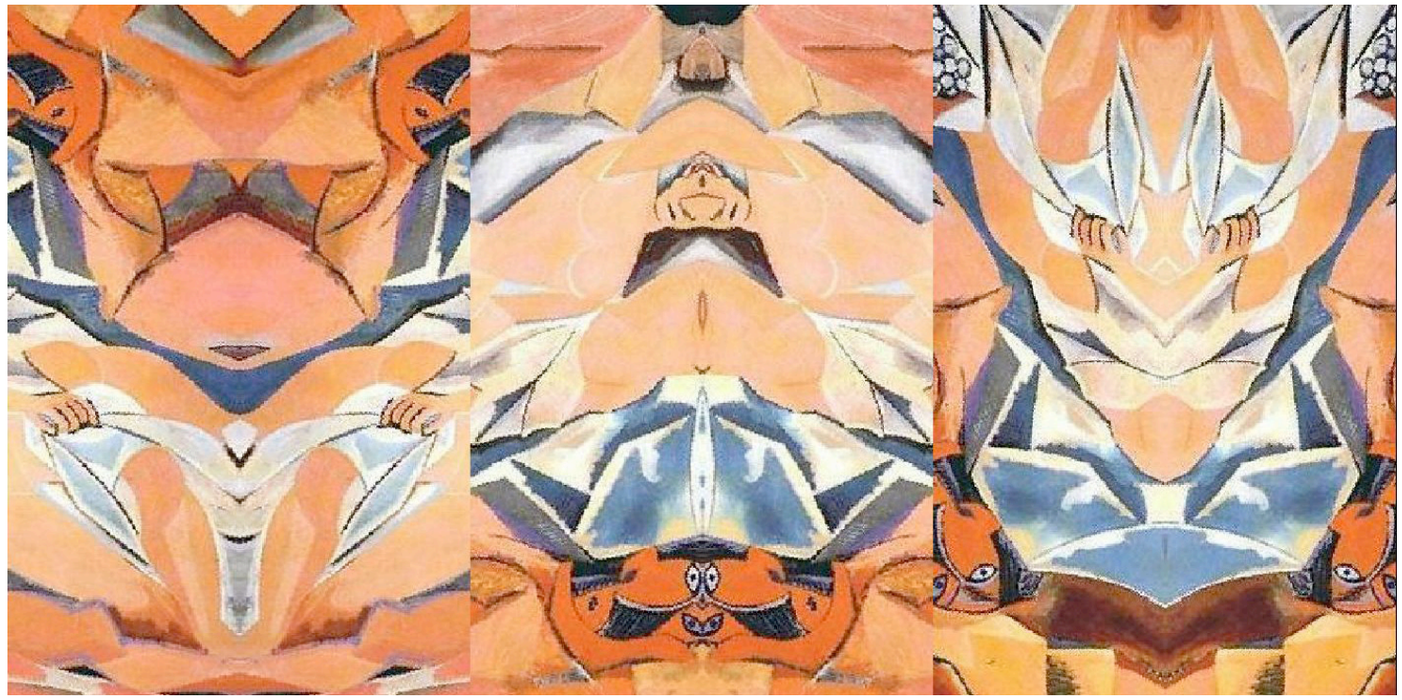
- in search of europa, rorschach print from JPL data





rorschach printmaking with saritha margon …

wols, henri michaux …



… les Demoiselles d'Avignon, the Cosmos!