Hatch and Cross-hatch

With the hatch and cross-hatch methods for creating value, the artist uses the pointed end of a drawing tool to build areas of tone through the distribution of adjacent linear strokes known as hatch marks (parallel lines). The lightness or darkness of the tonal area is determined by regulating the size or weight of the strokes as well as the intervals between them. The closer together the hatch strokes, the darker the value (assuming you are drawing with a dark medium on a light surface). It is possible to develop the entire value scale in a drawing by using only single-directional hatch marks, but one can also apply several layers of overlapping hatch marks, a technique known as cross-hatching.

Rendering Light with Hatch and Cross-Hatch

The way light creates visually perceived shifts in value over the subject directs the phrasing of hatch marks. Philip Pearlstein provides an example of how the hatching lines take their cue from light to build areas of varying opacity. Values areas have been created entirely with thin diagonal hatch marks, all of which traverse with essentially the same vector. Combining contour line to define the body’s perimeter, he uses slanted hatch marks to describe the shaded portions of the body. Value areas build up in this way are perceived as shadows, and it is through the reading of shadow areas that the form is extrapolated.
Philip Pearlstein

*Nude Curled Up*
1969, lithograph,
18 x 24.
<table>
<thead>
<tr>
<th><strong>TITLE:</strong></th>
<th>Twisted Reclining Nude</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ARTIST:</strong></td>
<td>Phillip Pearlstein</td>
</tr>
<tr>
<td><strong>WORK DATE:</strong></td>
<td>1971</td>
</tr>
<tr>
<td><strong>CATEGORY:</strong></td>
<td>Works on Paper (Drawings, Watercolors etc.)</td>
</tr>
<tr>
<td><strong>MATERIALS:</strong></td>
<td>Pencil on plate finish paper</td>
</tr>
<tr>
<td><strong>SIZE:</strong></td>
<td>ht 47.6 x w: 60.3 cm / ht 18.7 x w: 23.7 in</td>
</tr>
<tr>
<td><strong>REGION:</strong></td>
<td>American</td>
</tr>
<tr>
<td><strong>STYLE:</strong></td>
<td>Contemporary (ca. 1975-present)</td>
</tr>
</tbody>
</table>
RAFFAELLO Sanzio
Italian painter (b. 1483, Urbino, d. 1520, Roma)

Entombment
C. 1507
Ink on paper, 209 x 320 mm
Modeling Form with Hatch and Cross-Hatch

Value can be orchestrated to reveal the plasticity of the body, its structure and nuances of its surface anatomy separate from the direction of light on the subject. When modeling form is the focus, the direction of the hatch strokes takes on a particular significance. In addition to establishing value areas, the hatching patterns provide special clues akin to elements of linear perspective. The degree of looseness or density in the hatch marks is not just read as lightness or darkness but becomes an
indication of advancing or receding surfaces, of the slant or curvature of the surface. In this way, each hatch stroke conveys information about the slope and terrain of the body.

To visualize this phenomenon, imagine a net or wire screen with even-sized openings wrapped around a white cylinder. On the surface nearest you, the lines are straight and the openings appear at full size. But as the net curves around the cylinder, the lines also curve and the spacing appears to compress. At the outer edge, where the form rolls back and around to the other side, the open spaces disappear, the lines converging into a darker value. In like manner, the hatching pattern of inscribed lines can create value areas descriptive of volume that need not have a direct reference the play of light or shadow. These are contour modeling lines (also called cross-contour hatching), which, when taken collectively, are also conceptualized as value.

The hatching pattern used by the sixteenth-century Dutch draftsman Jacob de Gheyn II demonstrates their use as contour modeling lines. Notice how nearly every line, no matter how short, suggests the curvature of the form over which it lies. This is clearest on the arm of the center figure, where only single hatching is used to turn the form. On the torso of that figure we can also see how the cross-hatching pattern becomes tighter toward the back of the torso. The primary role of these hatch marks is to sculpt the form of the body and represent a recession of the surface toward an edge, ideally implying the turning of the form around the other side. Any suggestion of the illuminating effects of light is secondary to the sculpting of the form. Value does not fall lightly over the surface as an indication of ephemeral shadows; instead, it builds with the accumulation of contour lines that collectively shape the body and define its spatial relationships. The hatch marks left behind record the shaping action of the artist’s drawing tool, much like the marks left by the sculptor’s chisel or filing rasp.
Additional works of contour modeling lines:
Integrating Value Techniques

The artist whose focus is describing light is concerned with faithfully duplicating what the eyes can see, irrespective of whether the light and shadow patterns reveal or obscure the form. Light is both
the artist’s inspiration and the drawing’s content. In contrast, the artist who is first concerned with
modeling form interprets the body’s physical characteristics – its volume and surface structure – and
uses value as a plastic medium, formative and concerns in applying value. They indicate cast
shadows and the direction of a light source when they are modeling form. Others who render light
patterns often use dark lines and add value beyond what is strictly visible to accentuate depth and
lend clarity to the body’s form.

Artists often combine tonal gradations with hatching strokes in the same drawing to take advantage of
what both techniques bring to the drawing.
Daniel Dallmann.
Study, *Learning About Fire* 24x18" graphite/paper 2004
MICHELANGELO  
Leda and the Swan  
- Engraving, 305 x 407 mm  
British Museum, London