

SKETCHING FOSSILS: A PRIMER ON TECHNICAL ILLUSTRATION

Technical illustration is the use of illustration to visually communicate information of a technical nature. Technical illustration is the cousin to technical drawing. Technical drawing encompasses many different methods and visual representations, but focuses primarily on how something functions or is constructed. This is an incredibly useful field of work, but not wholly helpful for non-engineering fields. Technical illustration is what becomes key. In general, these illustrations aim to generate images to describe and explain subjects to a nontechnical audience. The image, therefore, should be accurate in terms of dimensions or proportions, and should provide an overall impression of what an object is or does.

Why would it then be acceptable to turn in a paper illustrated with a spiral, and the spiral haphazardly labelled as a snail? Should someone decide to argue that fleshing out the drawing in an essay is not worth the time, then by extension that person also believes that the essay is not worth their time. Professionals or academics often employ technical illustrations to get their meaning across. It helps not only explain themselves clearly to their colleagues, but to ensure accurate dissemination of information.

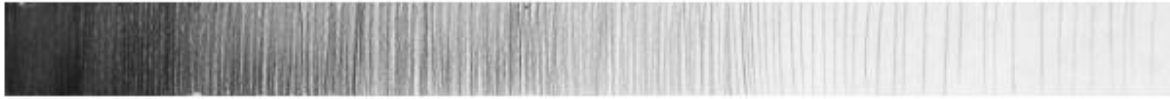
An illustration is a vital piece of any academic work. Illustrations should be designed in a way that someone with no technical understanding can understand the piece of art. Even low-effort techniques such as crosshatching, stippling, or simple lines can greatly enhance the illustration. If the issue is that the person doubts their skills in illustration, then there is no issue at all. Not everyone can master everything; a decent effort is far more than most will put in. Just applying fifteen minutes of good effort to a drawing with a pencil and ink will produce better drawings than will be seen in many Drawing 101 classes¹.

The three techniques to massively improve your illustrations are easy to learn. The first is hatching. Hatching is just putting parallel lines in various densities and arrangements to mimic perspective and contour. The second is stippling. Stippling is arranging dots – literal stabs of your pen/pencil on paper – in varying densities to mimic texture and shading. The last is crosshatching, which as it sounds, is a derivative of hatching. This means to cross the hatch lines, again to mimic the perspective and contour of an object.

Then it's easy to take that spiral snail and flesh it out a little. Draw the outline of the shell. Don't be afraid to lightly sketch it with the pencil first. Then trace it darker with ink. Erase the pencil marks, of course. Put in some hatching to suggest the curve of a shell or patterns. Maybe some stippling on the fleshy portion of the snail to suggest the texture of the skin. Fifteen minutes, tops, and your snail is 100% better. The snail doesn't have to be a da Vinci masterpiece – though no one will discourage it – it just needs a little effort.

¹ Source: Me and my arts degree

Hatching



Cross Hatching



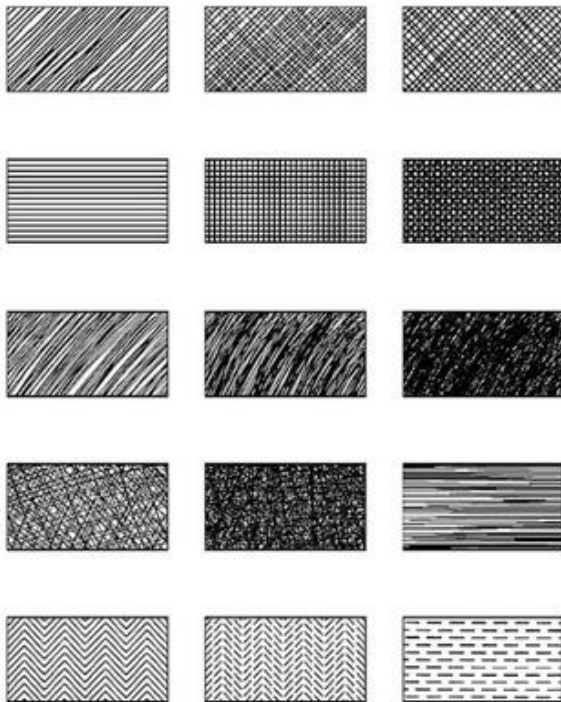
Stipple



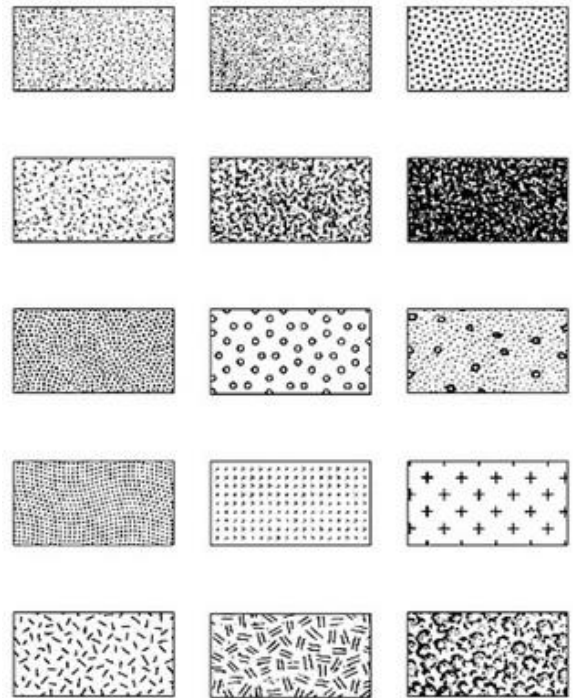
Random Mark



All-in-one illustration. Thanks, TES!



Hatching & Crosshatching Examples



Stippling Examples