Specialty

Scientific illustration

Creates accurate images of living things, objects, and processes for scientific research, teaching, and outreach. It includes branches such as medical and botanical illustration.



In Spanish

Ilustración científica

Origin

Early milestone: Vesalius's De humani corporis fabrica (Basel, 1543). First university program in medical illustration: Johns Hopkins (1911)

What problem it addresses

A photo records everything, including dust, damage, and what doesn't matter. A drawing can select, complete, and highlight the features that help recognize or explain something.

Principles

From the original

You draw from the specimen, the dissection, or the data, not from memory.

Highlight what matters

The features that allow recognition or comparison are emphasized, and what distracts is left out.

Show what the camera can't reach

A drawing can reconstruct a damaged specimen, combine several views, or show an extinct animal.

Applications in design

✓ Use it like this

Before drawing, agree with the researcher on which features must be visible and who the image is for.

✗ Avoid

Adding or embellishing details the original doesn't have.

👁 Don't fall for it

A drawing always selects: if others will measure or check it, pair it with photos or data from the original.

Connections

Related to

- Exhibition design
- Information design
- Design for health

Authors and works

1543	**Andreas Vesalius**	Published an anatomy treatise based on his own dissections, with woodcuts that were copied for centuries. Who drew each plate is debated; they are attributed to the workshop of Titian.
1911	**Max Brödel**	Directed the department of art as applied to medicine at Johns Hopkins University, the first program of its kind, which opened in 1911.
2003	**Elaine R. Hodges**	Edited the Guild of Natural Science Illustrators' handbook, which brings together the techniques, subjects (from molecules to mammals), and business of the field.
2013	**Ang, Wong and Meier**	Showed that, in taxonomy, line drawings highlight the features that set a species apart and capture variation between specimens, but may leave out features that matter later.

Sources

Original sources

- Vesalius, A. (1543). De humani corporis fabrica libri septem. Basilea: Ioannes Oporinus.

Secondary sources

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- Hodges, E. R. (Ed.). (2003). The Guild handbook of scientific illustration (2nd ed.). Wiley.
- Ang, Y., Wong, L. J., & Meier, R. (2013). Using seemingly unnecessary illustrations to improve the diagnostic usefulness of descriptions in taxonomy: A case study on Perochaeta orientalis (Diptera, Sepsidae). ZooKeys, 355, 9–27. View source (https://doi.org/10.3897/zookeys.355.6013)
- American Museum of Natural History (n.d.). Scientific illustration. Consultado el October 30, 2026. View source (https://amnh.org/explore/news-blogs/news-posts/scientific-illustration)

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