Field

Design studies

Studies design itself: what designing is, how designers reason and work, and how that knowledge differs from that of the sciences and the humanities.



In Spanish

Estudios de diseño

Origin

Emerged from the design methods movement (1962) and Simon (1969); consolidated with the journal Design Studies (1979) and Cross (1982)

What it studies

How design is done and what sets it apart. It gives design a language to explain and improve its own way of working.

Principles

The artificial

Designing is thinking about how things ought to be, not only describing how they are.

Wicked problems

Many design problems have no definitive formulation and no correct solution, only better or worse ones.

A way of knowing of its own

Design thinks by proposing solutions, not only by analyzing the problem.

Applications in design

✓ Use it like this

Draw on it to explain how you work, argue why a design process isn't linear, or teach design.

✗ Avoid

Thinking a design problem can be solved just with more data: often it has to be redefined.

👁 Don't fall for it

Theory describes how design is done; it isn't a recipe that guarantees the result.

Theories and concepts



Concept

Wicked problems

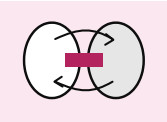
Problems that can't be fully defined or solved right or wrong, only better or worse.



Theory

Reflective practice

Designers think while they act: they try something, see how the situation responds and adjust.



Model

Problem–solution co-evolution

Problem and solution are defined together: each idea changes what the problem is understood to be.

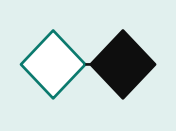
Methods and tools



Approach

Design thinking

Tackling open problems the way design does: understanding people, reframing the problem and prototyping.



Process

Double Diamond

Open up and narrow down twice: first to find the right problem, then the solution.



Approach

Research through design

Researching by designing: prototypes are used to generate knowledge, not just products.



Method

How might we...?

Turning an insight or a problem into an open question that invites ideas.

Connections

Campos cercanos

- Design history and criticism

Used in

Design research

Related to

Four orders of design

Authors and works

1969	**Herbert A. Simon**	Separated the natural sciences from the sciences of the artificial and defined design broadly, as devising how to move from an existing situation to a preferred one.
1973	**Horst Rittel and Melvin Webber**	Called "wicked" the planning problems that cannot be defined once and for all and have no true or false solution.
1982	**Nigel Cross**	Argued that design has a way of knowing of its own, different from that of the sciences and the humanities.
1992	**Richard Buchanan**	Linked wicked problems to design thinking and described design as a discipline that integrates knowledge from many fields.

Sources

Original sources

- Simon, H. A. (1969). The sciences of the artificial. The MIT Press.
- Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. Policy Sciences, 4(2), 155–169. View source (https://doi.org/10.1007/BF01405730)
- Cross, N. (1982). Designerly ways of knowing. Design Studies, 3(4), 221–227. View source (https://doi.org/10.1016/0142-694X(82)90040-0)
- Buchanan, R. (1992). Wicked problems in design thinking. Design Issues, 8(2), 5–21. View source (https://doi.org/10.2307/1511637)

Secondary sources

- Design Research Society (n.d.). History. Design Research Society. View source (https://designresearchsociety.org/cpages/history)

Last reviewed: October 26, 2026

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