Design: The Impossible Task

Models and Views
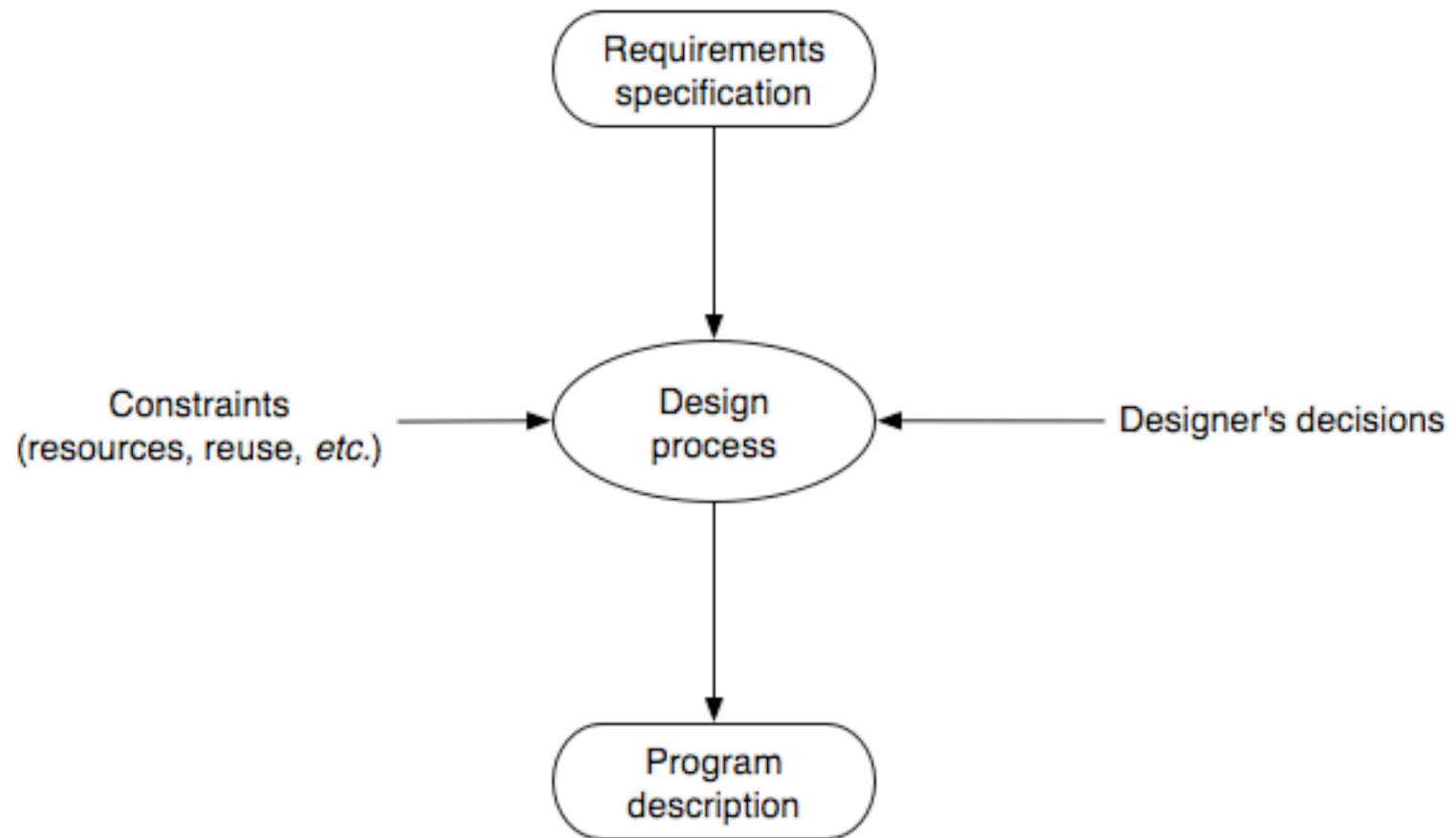
Communication

The fundamental problem is that designers are obliged to use current information to predict a future state that will not come about unless their predictions are correct. **The final outcome of designing has to be assumed** *before the means of acheiving it can be explored: the designers have to work backards in time from an assumed effect upon the world do the beginning of a chain of events that will bring the effect about.*

[J. Christopher Jones, 1970]

A General Model of the Software Design Process

Requirements
specification

↓

Constraints
(resources, reuse, *etc.*) →

Design
process

← Designer's decisions

↓

Program
description

[Bugden 2002]

Some Sentences about Design

I never have to look at the manual: it's so well designed it seems to know what I want.

It's so hard to clean this thing: what were the designers thinking of?

That toy broke because of a design flaw: but this one was just cheaply made.

I don't think this is going to work: let's look at that part of the design again.

Ford vans share their basic design with Ford trucks; but Chrysler vans are more like cars.