

Engineer and artistic device design

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Artistic

NEEDS

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KNOW HOW

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Tools, components

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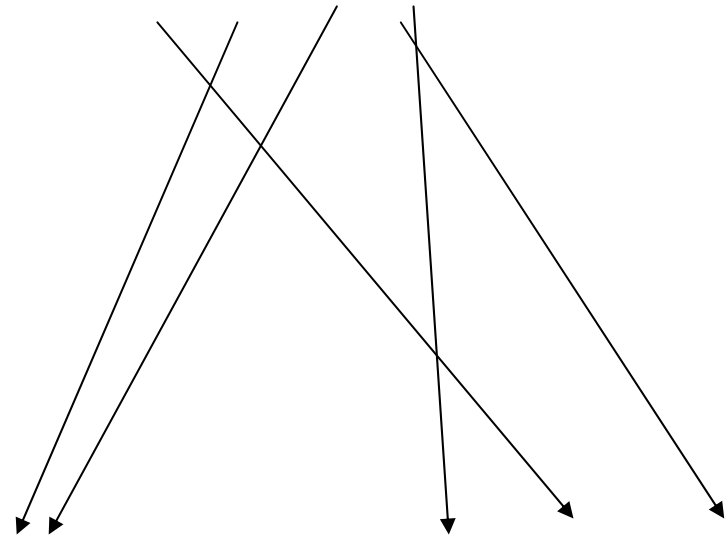
Tools, components

Freedom to the moon

Engineer and artistic device design

By a ready product

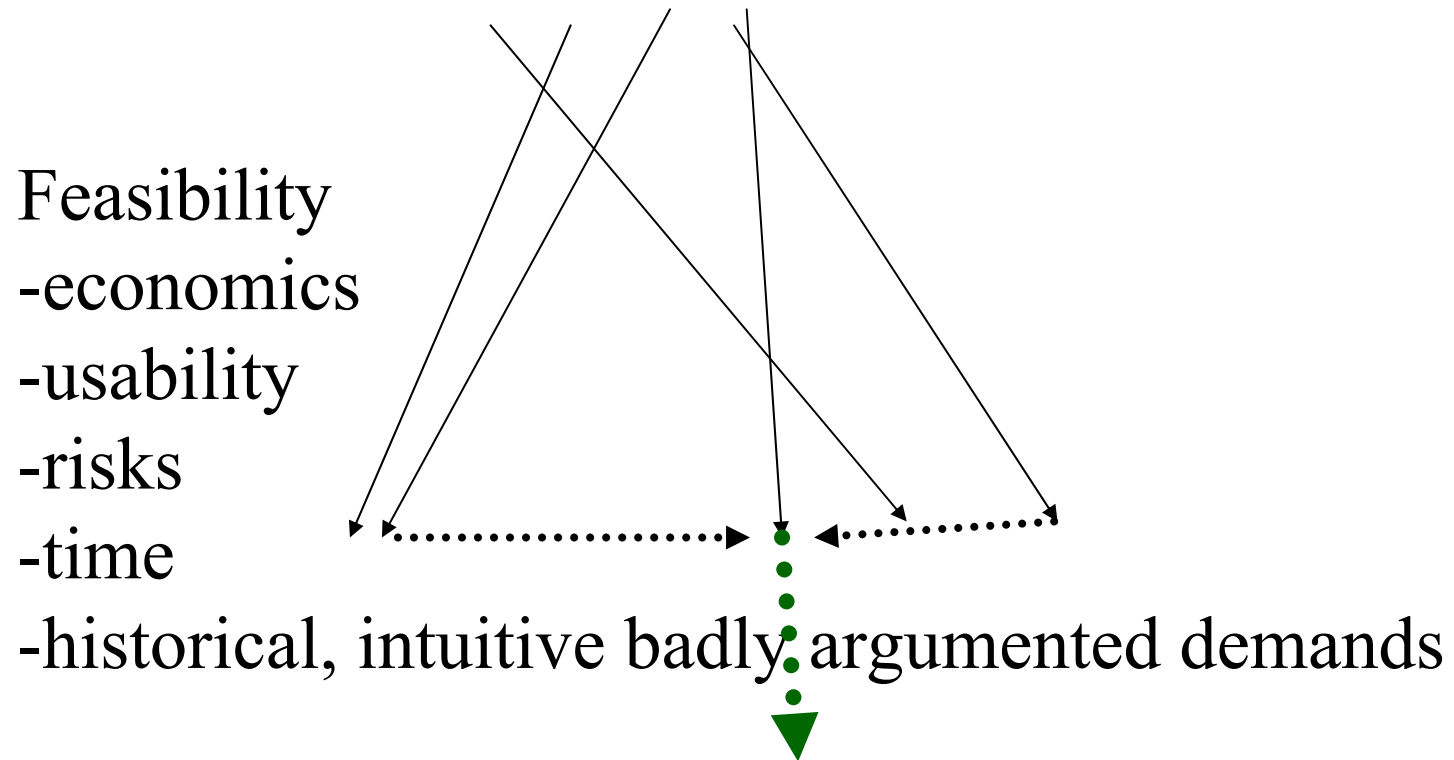
Freedom to the moon



Several options that differ,
even by purely random
reasons

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Freedom to the moon



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Engineer

Criticism, conservatism and fears are an essential part of the design from the very beginning

Product design is fast and also development is economic but the new product is not so new, the new features are not optimal, the product is not optimal

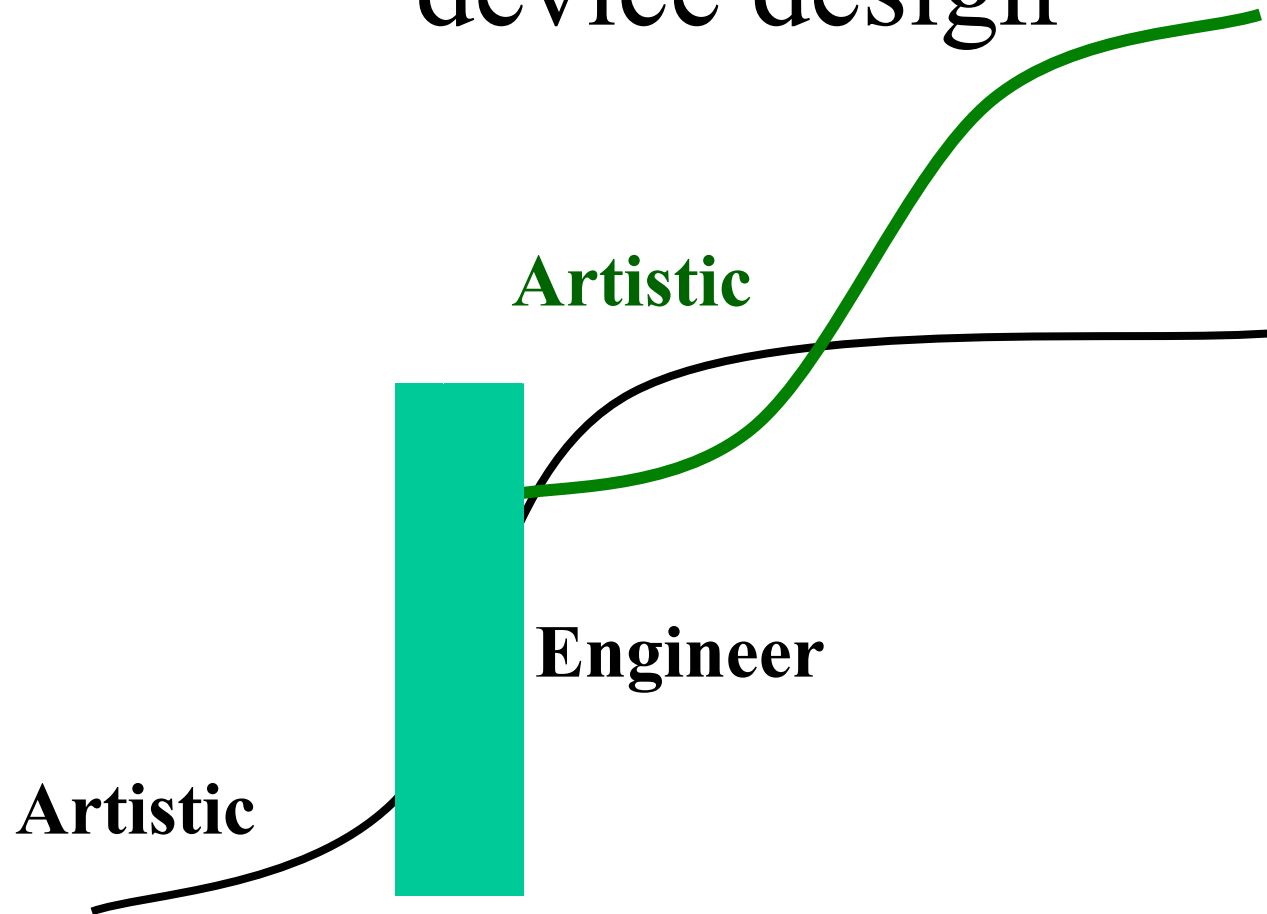
Artistic

Start from a clean table and active radicalism causes several design cycles and even really new design starts

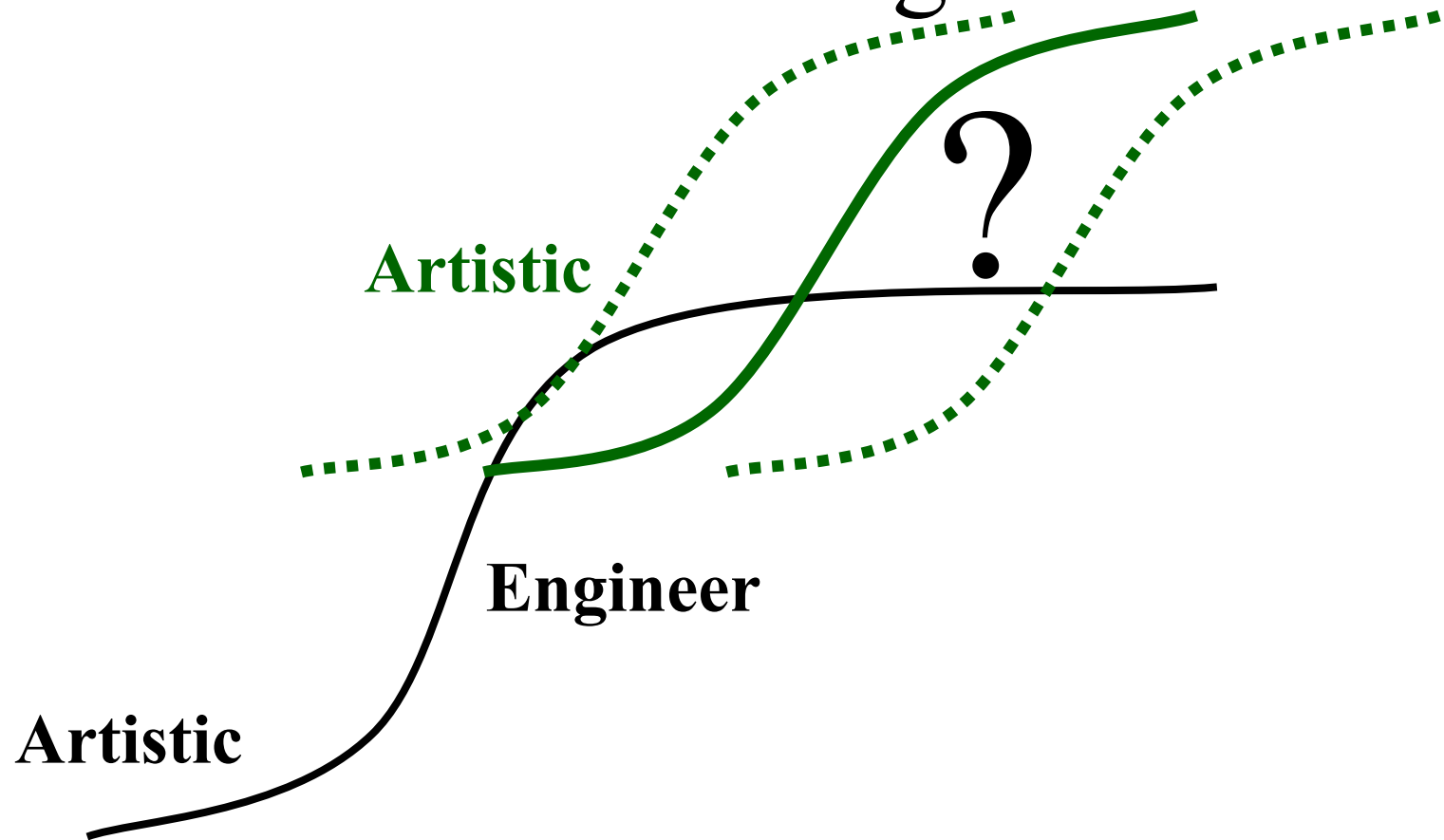
Design may be fast but development is nearly always slow and expensive

There is a possibility that the product will be ~optimal

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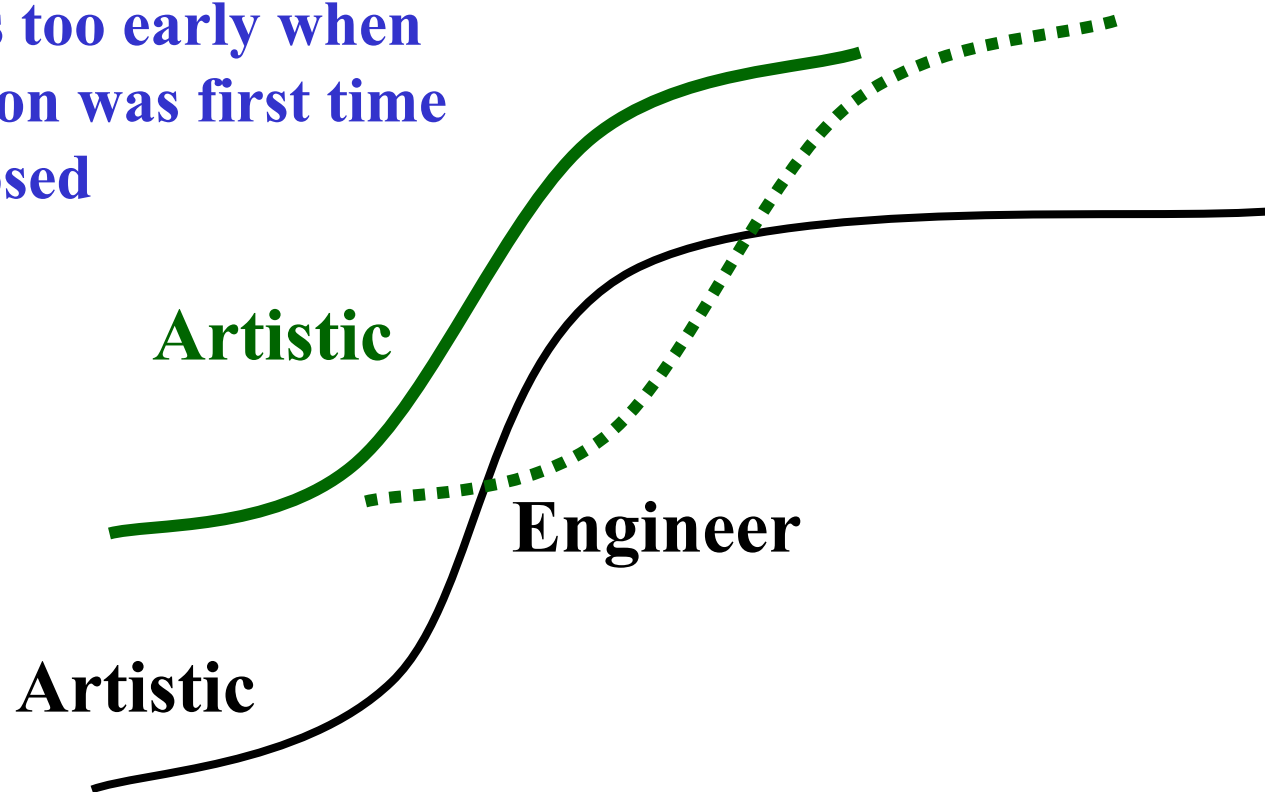


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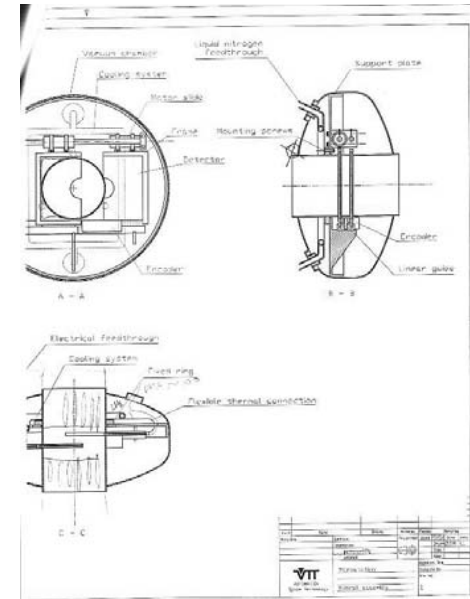
It was too early when
µstation was first time
proposed



Artistic device design of μ station

THE NEEDS

- To hold a detector on it's rest position "far" from the p-beam
- Moving of the detector into the measuring location and keeping it dynamically there by compensating the relative movements between the beam and the support mechanics
- To bring the detector back in the rest position



μ station design 2001,
before this several other
proposed geometries

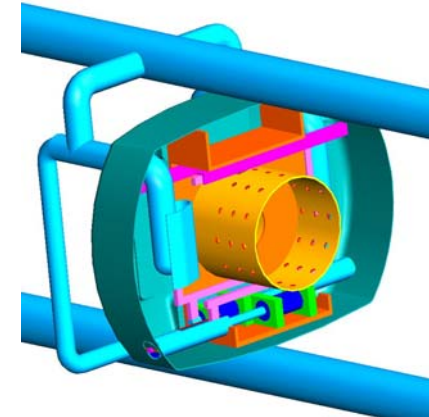
Artistic device design of μ station

In vacuum &

high magnetic field

high radiation

- electric power in
- control data in, measured data out
- stiff detector holder and moving mechanics
- 10 μm dynamical relative positioning accuracy
- stable measuring temperature when power on
- thermal power transportation out
 - low temperature for detector recovery when power off



μ station with services