# Fablab and the expanding Makersphere

#### **Bart Bakker**

- www.fablab.nl
- www.minifablab.nl



#### **BartB**

Post-pensionado

Used to be retired, no more time for that

- Waag Society
- 1st NL fablab in 2007 'El Hema'
- Protospace Utrecht
- miniFabLab

Fablab Benelux

#### Erkende FabLabs

FabLab Amersfoort

FabLab Amsterdam Waag

Society

FabLab Arnhem

FabLab Den Haag

De Factorij Eindhoven

FabLab Enschede

Timelab Gent

FabLab Groningen

FabLab Noord-Brabant Den

Bosch

FabLab Leuven

Protospace FabLab Utrecht

miniFabLab Utrecht

Stadslab Rotterdam

FabLab Truck (mobiel)

FabLab Zuid-Limburg Maastricht

StartLab Afbramerij Ulft

FabLab Bergen op Zoom

FabLab Genk

FabLabXL Brussel

FabLab Flevoland Dronten /

BiblioLab Lelystad

FabLab Brainport Eindhoven

FabLab Luxemburg

FabLab013 in Tilburg

Rotslab Utrecht

RElab Liège / Luik

FabLab Zwolle

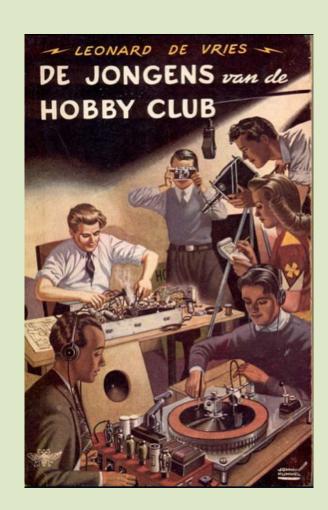
FabLab ZB45 Amsterdam

#### **Roots 1947**

Leonard de Vries during WWII wrote 'The boys from the Hobby Club'. 1947 His goal was to get people on the learning curve of new technology: radio, electronics, sound rec, film

By 1950 70 hobbyclubs in Holland

The hacker/makerspaces of the time



#### Roots 2006

7 years ago life was simpel

- Fablab
  - make things
  - edu MIT \$100k
  - vertical
- Hackerspace
  - hack things
  - nerdy
  - horizontal
- First Makerfaire in San Mateo

#### 2013

- Fablabs
- Hackerspaces
- Makerspaces
- in an expanding Maker Movement
- Repair Café Fix lab Hacklab
- Makelab Bibliolab Technasium
- Techlab Techshop iFabrica

## The Maker movement

DIY got a wider dimension

- MAKE magazine
- MakerFaires FUN
- Appeals to people
- Interest in 3D-printing
- Commercial makerspaces



# The Power of Play

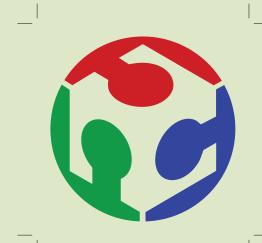
- Johan Huizinga, Dutch historian
- Homo Ludens, 1938
- 'Culture emerges from Play'
- 'Cultures that foster Play are richer'

 Play is the appeal of the Maker movement over Fablab



# Homo faber - Homo ludens

- FabLabs
  - serious usefulness
- Makerspaces
  - fun and Play



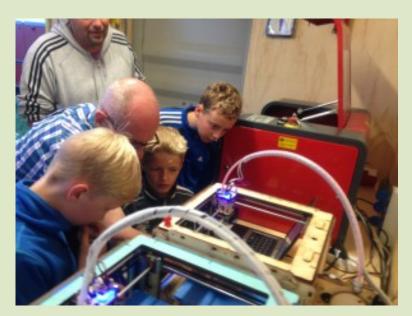
- Fablabs
  - overrated by the public
- Maker Movement
  - is still underestimated



# Objectives of both

- No real difference
- Get people on the learning curve of digital fabrication
- Underlying long term philosophy
- Digital local fabrication

Kids



### Trends in NL

- Fablabs/makerspaces in
  - Schools
  - Libraries
  - Neighbourhoods/communities
- Institutional funding is scarce
- 50% of initiatives is 'grassroots'
- Bottom up
- Tenacious individuals





# Community aspect

- Each want to create a community
- Power of any movement
- Grassroots are good in that
- More of a club feeling
- Nurture your community!
- Lifecycle

By 1974 all Hobby Clubs were gone



# Challenges for fablab

- Widening makersphere
- Big potential
- Our labs are very diverse
- Fablabs not open in evening/weekend
- Little outreach

- Growth can and will occur outside fablab
- Where? Why?

# O'Reilly

- If you want to start a Makerspace
- Download the Makerspace Playbook
- Free
- Tons of info

- Of course a commercial interest in anything 'Make'
- Power of Play



#### Adafruit

- If you want to start a Hackerspace
- Download 'How To Start A Hackerspace'
- Free
- Nice tutorials

Commercial interest too



Both nourish the Makersphere

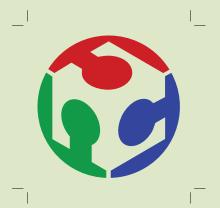
#### **Fablab**

- If you want to start a FabLab
- Scattered info is available indeed
- No good vehicle to offer knowledge outside
- Our labs are very diverse and introvert
- Not even a good vehicle to share knowledge
- The MCU (Polycom) is hardly used
- Should we bother about the Makersphere?

# Option 1

- Focus on current fablab
- \$100k type MIT labs
- Institutional (=vertical) funding
- Education oriented
- Fabacademy as global campus
- Worldwide community

'MIT-elite'

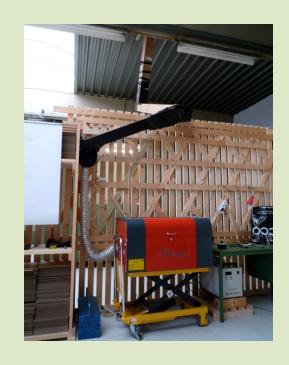


# Option 2

- See existing \$100k fablabs as hubs
- Coaching smaller \$10k labs
  - Fablabs
  - Makerspaces
  - Others
- Possibly helping with MtM
- Regional focus

# Option 3

- Extend the fablab definition
- Embrace smaller inititatives
- Condition: offer open access
- A mesh of \$10K labs
  - Neil Gershenfeld



The fablab objective stands:

Get people on the learning curve of digital fabrication

#### What we do in Holland

- We embrace newcomers and initiatives
- Community spaces
  - Schools, libraries, neighbourhoods, cities
- Promote the Spirit of the FabCharter
- Community, open access



- We try to coach them with limited resources
- Fabtable, miniFabLab, visits

#### Worldwide

- Easy in the Benelux
- Our 250+ worldwide fablab community is not geared up to that
- Should they?

- We should reflect on our ambition.
- As the Makersphere expands.