A SUSTAINABLE HOME?
A SUSTAINABLE [GLOBAL] DEVELOPMENT?

SAFE & JUST OPERATING SPACE FOR HUMANITY

(RAWORTH, 2012)
‘A SUSTAINABLE BUILT ENVIRONMENT’
About 40% of the total Swedish energy use is attributed to the sector ‘housing & services’

Households are ascribed 24% of total final energy use in Sweden

Heating of housing is approx. 15% of total energy use

But... does low energy & ‘green’ housing development also mean a less energy and resource intense way of living? Is there such a thing as a sustainable home?
integration of holistic perspectives on home?

integration of sustainability aspects?
CHANGING CONDITIONS

- Growing individualism; more single-person households
- Larger living space per capita
- Increased segregation & inequality
- Notion of comfort & behavior
- Rebound effects

A need to reconsider - for whom and what is being built? How are more sustainable practices enabled?
A NORMATIVE DEVELOPMENT
“Homes are tangible reflections of cultural adaptations, practices & beliefs”
Bo triosant

A.B. MYRESJÖ’-HUS
HOME IS THE MOST IMPORTANT PLACE IN THE WORLD
PATTERNS OF PRODUCTION & CONSUMPTION
TAYLORISM & ‘OBJECTIVITY’
SOCIO-TECHNICAL DEVELOPMENT
PARADOX OF THE ‘GREEN’ HOUSING SECTOR
SUSTAINABLE URBAN FORM?

CENTRALIZATION

SPRAWL

CONCENTRATION

DECENTRALIZATION

ERLING HOLDEN (2004)
NEED FOR ALTERNATIVES

key empirical findings

STRUCTURAL LOCK-INS IN MAINSTREAM REPRESENTATIONS

GAP IN INTEREST VS WHAT IS CURRENTLY OFFERED

transitions in & of the home

SHAPING NEW CONCEPTS, SEEING HOME AS A NODE

SEEING RESIDENTS AS AGENTS RATHER THAN “END- USERS”

need to diversify the image & alternatives of low-impact ways of living
THE HOME AS A NODE
“People need new tools to work with rather than new tools that work for them”

IVAN ILLICH (1973)
AN IMAGE OF MORE RESILIENT HOMES?
“NEW” PRACTICES
THE FLOWS OF THE INDUSTRIAL CITY

“NEW” PRODUCTION & CONSUMPTION FORMS
AN OPEN COMMUNITY CONSTRUCTION SET

WikiHouse

WikiHouse is a mass-collaborative design project. Its aim is to make it possible for almost anyone, regardless of their formal skills, to freely download and build structures which are affordable and suited to their needs. There is no single design, or single designer. House and components are designed by an open community of designers and users for everyone’s benefit.

WikiHouse generates a complete set of printing drawings which can be used by a CNC cutter to fabricate the house parts.

The parts are cut by a CNC mill using locally-sourced material. This is 8mm plywood, in the standard sheet size of 2440mm x 1220mm (8’ x 4’).

Download house and components which are created and shared by an open community of users around the world. Individual components can be combined or adapted to form a structure which responds to an individual site or set of needs.

Click ‘Make this house’. From the model, WikiHouse generates a complete set of printing drawings which can be used by a CNC cutter to fabricate the house parts.

The parts are cut by a CNC mill using locally-sourced material. This is 8mm plywood, in the standard sheet size of 2440mm x 1220mm (8’ x 4’).

WikiHouse

Set out the parts for each section onto the ground, assembling it like a jigsaw.

Wedge together the two layers to form a single section.

Staple the sections up vertically, positioning them approximately at 600mm intervals.

Fit the connector pieces into the slots in the sections. These should be staggered alternately. Use the marker provided on the inking sheets to hammer these lightly into place.

Fit the internal and external cladding panels onto the structure. Internally these usually need to be screwed into place.

The structure is ready for insulation, cladding and services.
‘DOMESTIC KNOWLEDGE’
“NEW” FORMS
ONE CONCEPT?

eto-efficient buildings & areas

urban co-housing

‘tiny houses’

eco-villages