LOVE, PEACE & SHARING
Industrial Design and Sustainable Consumption
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Master thesis by Marie Nilsson 2008
Industrial Design
Department of Design Sciences/LTH
Lund University

Examiner: Professor Claus-Christian Eckhardt
Supervisor: Senior Lecturer Olof Kolte
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The level of consumption has increased rapidly during the last century and the current consumption patterns are unsustainable and have enormous negative impact on the people and environment of our planet.

Although we in the rich countries have a very high material standard and can buy everything we need or wish research has shown that we feel less happy and have an increasing level of mental ill-health.

OBJECTIVE
The main goals for this master project was to:

• create a vision of a sustainable lifestyle, with another way to relate to consumption and with better room for immaterial and emotional values.

• define and develop a product/service/system that is adapted to and support this lifestyle. The result shall reflect the three aspects of sustainable thinking; ecological, economical and social.

• reflect over the role of industrial design in relation to consumption and create some kind of sustainable basis for the design process.

DEMARCATIONS
The project is carried out from a European perspective. The intention is to have a holistic view and to avoid falling into details, both to avoid national differences and to keep the necessary overview.
USED METHODS
The common design methodology with definition, analysis, creative and realisation phase is used. Because of the complex and abstract nature of the project, the process has been adapted along the way. Information is collected from literature, internet, television, newspapers/magazines and via study visits and interviews.

Via key words, inspiration boards, brainstorming, mind mapping, sketches and sketch models, the information is work up during the process.

RESULT
The result is divided in three parts:

1. The Concept of Sharing - describes a holistic approach to sharing and symbolises a humanistic and generous basic view on our fellow humans and our society.

To survive, we again have to learn to share things with others, in all scales, from sharing books and meals, to sharing housing and the resources of our only globe.

By sharing the individual consumption decreases. By having a close social network our identity is strengthened and is no longer dependant only on consumption.

We do not need to sacrifice to be sustainable, we can share instead.

It seems that the potential of sharing products is very much disregarded in marketing and design today. It can be a powerful tool to find a more balanced level of consumption.

2. The Modern Collective - describes one application of sharing.

Collective living has a high potential of sustainability and has excellent conditions for our ambition to find a more balanced consumption.

The lifestyle creates good conditions for sharing resources, energy and products.

By modernising and profiling the Collective Houses, it will be attractive to a wide target group.

3. Design for Sharing - describes six guiding principles for helping industrial designers to integrate sustainable consumption and sharing in the design process.

ONE Encourage responsible business
TWO Encourage sharing
THREE Add immaterial values
FOUR Design for timelessness
FIVE Add true cyclic thinking
SIX Add emotional values

CONCLUSIONS
The Master Project was about an abstract and complex topic.

By using the design process I could deliver concrete results that correspond to the goals.

The result introduces a new parameter, sharing, with high potential of sustainability. The result also presents an application and concrete guidelines.

Key words: industrial design, consumption, sustainability, sharing, collective.
THANKS TO...

• Olof Kolte, my supervisor, for his big knowledge and engagement in sustainable questions.

• Claus-Christian Eckhardt, my examiner, for his ability to make me surpass myself.

• Vitre Industriedesign, for sponsoring with out-prints, company and laughs.

• The persons living in the collective houses Fortuna, Helsingborg and Slottet, Lund, for their hospitality and generosity with their experiences.

• Professor Dick Urban Vestbro, for supplying me with articles from his research about collective houses.

• My classmates at the Industrial Design Programme, for inspiring company and discussions.

• and of course my family and friends who always support me.
definition
BACKGROUND & IDEA

BACKGROUND
The level of consumption in the developed countries has increased rapidly during the last century and this has enormous negative influence on how we use the resources of our planet.

Governments and companies have created an economic system that force and encourage us to consume more and more, otherwise the structure of our society will collapse. This system is not sustainable, neither from an ecological, economical or social point of view.

Research has shown that people in rich countries with high material standard feel less happy although they can buy everything they need or wish. This consumption culture creates a need for a calmer and more meaningful everyday life, and many people search for immaterial and emotional values.

IDEA
My idea for this project is to:
• investigate in if and how a more sustainable lifestyle and consumption can be an attractive alternative to today’s way of life.
• try to define which values a product, service or a system shall have to stimulate a more sustainable consumption pattern.

My aim with this project is also to find a personal way to relate to these matters and create a foundation for my future work as an industrial designer.
**BRIEF**

Create a vision of a sustainable lifestyle, with another way to relate to consumption and with better room for immaterial and emotional values.

Define and develop a product/service/system that is adapted to and support this lifestyle. The result shall reflect the three aspects of sustainable thinking; ecological, economical and social.

Reflect over the role of industrial design in relation to consumption and create some kind of sustainable basis for the design process.

**DEMARCATION**

This project is carried out from a European perspective. The intention is to have a holistic view and to avoid falling into details, both to avoid national differences and to keep the necessary overview.
METHOD & OUTCOME

METHOD
The common design methodology with definition, analysis, creative and realisation phase is used. Because of the complex and abstract nature of the project, the process may be adapted along the way. After the first general analysis and creative phase the project concept is defined and followed by a concept analysis and creative work.

Information is collected from literature, internet, television, newspapers/magazines and via study visits and interviews. Via key words, inspiration boards, brainstorming, mind mapping, sketches and sketch models, the information is work up during the process.

OUTCOME
The work shall end up in a description of the result visualized and communicated in a:
• report
• oral presentation
• hand-out
• model
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“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

(Brundtland Commission 1987)
DEFINITION

The word *consume* can be derived from the latin word *consumo* or *consumere*, which means use up and destroy.

From Bonniers Svenska Ordbok 1995 (my translation):

**CONSUME**
expend, use, eat up

**CONSUMPTION**
use of goods and services

**CONSUMER GOODS**
goods intended to be expended relatively fast
(in contradiction to capital goods)

The term consumption is only a metaphor that describes many different phenomenon. Some of them are harmful for the environment, while others are of benefit or even necessary for the natural cycles.

A consumer is a person who consume energy, food, transports and products. While consuming this we use up different types of natural resources, stored, renewable and flowing, but also the landscape and the work of people.
Photographs by Chris Jordan from his photo exhibition “Intolerable Beauty - Pictures of American mass consumption” www.chrisjordan.com
INTRODUCTION TO THE THEME

The website www.storyofstuff.com writes:

“Consumption / Introduction

Current consumption patterns are unsustainable and inequitable and must be changed. But changing consumer behaviour isn’t enough. Yes, when we shop, we should buy the least damaging product available and affordable, but consumption is a system problem, meaning our choices at the supermarkets are pre-determined and limited by political and institutional forces beyond the store. To change these, we need to step beyond our role as consumers and reclaim our identity as engaged citizens in a democracy.”

Consumption / Environment

In much of the world, consumption rates are soaring, with more people using more resources and energy, and creating more waste and greenhouse gases than ever before. At the same time, millions of people consume barely enough to survive. While poverty is often blamed for environmental degradation, this tends to affect local environments whereas the over-consumers are threatening the entire planet.

Consumption / Health

Over consumption impacts our mental and physical health. We have more stuff than ever before, but we’re also more stressed, less happy and working longer hours to pay for it all. We’re trashing the planet and overworking ourselves to buy stuff that is so toxic it contaminates our homes and bodies and, on top of everything, all this consuming isn’t even making us happy.
Consumption / Workers
Workers caught in the work-watch-spend treadmill are working more hours than any time in recent history. There is no inherent reason that workers need to work so many hours, especially when overall labor productivity has increased significantly over the last generation. Longer work hours leads to more consumption, less life satisfaction, less time for building community and a bigger ecological footprint.

Consumption / Globalization
The U.S. exports its extractive industries, its polluting production plants, and its dirty disposal facilities, but the most hazardous export of all is this consumption-mania that is trashing the planet and our communities. Globalization facilitates the spread of this economic and cultural model, persuading other countries to follow suit. If everyone consumed like those in the U.S., we would need three to five planets.

Consumption / Another way
While more stuff doesn’t bring happiness, we know what does: family time, health, community, collective action towards shared goals. As we replace time spent getting and maintaining more stuff with these things, life gets sweeter. There are lots of strategies to move in this direction, but there’s no ten simple steps because the level of change needed at this point just isn’t simple.
MORE ABOUT

Consumption is a multidisciplinary subject and relates to ethnology, human ecology, economy, psychology, medicine, social ecology, history, anthropology, urban planning, sociology and more.

This makes the subject extremely complex and to get a good overview I read the book “Konsumera mera - dyrköpt lycka” (Formas 2007). Here researchers from different disciplines have written about consumption from their perspective.

WHAT IS CONSUMPTION?
Orvar Löfgren (Department of Ethnology, Lund University)
Consumption means to miss, wish, long for, demand, need, acquire, own, collect, expose and consume. But what is adequate consumption and over-consumption? This is a debate always characterized by the spirit of the times and filled with moral questions. Therefore, it requires a distance and a historical perspective to change the consumption patterns.

Consumption is more than just buying and using. It also creates funny stories and memories with a touch of nostalgia, e.g. memories of beloved things or making great deals. It is memories of things as symbols for different periods in life. These stories seldom give place for the darker sides of consumption, like family quarrel about unnecessary purchases, economic anxiety or the feeling of buying too much.

IDENTITY CONSUMPTION
Alf Hornborg (Division of Human Ecology, Lund University)
In modern society, the need for people to develop and express their identity has become central. Earlier, family, relatives and neighbourhood were our main identity sources. When breaking up from this,
emptiness has been created. Instead of being satisfied with this we fetch our identity and meaning from more abstract and mobile profession or recreational pursuits. Our identity therefore needs to be designed and communicated. The consumption of identity fills the gap of emptiness. If this consumption decreased the gap must be filled with something else.

Most products do not have a soul. They are not made to be worshiped or make us reflect, but for being exchanged, consumed, wear out and throw away.

Alf Hornborg also writes that the sustainability problem of today is essentially cultural. It originates from our way to think and organise our societies.

CONSUMPTION AND LIFE SATISFACTION
Mats Alvesson (Department of Business Administration, Lund University)
Growth that take people away from poverty and distress, gives an increased wellbeing and satisfaction. Above this basic level there is no further improvement. Studies shows that there is no or very weak connections between income and life satisfaction. It is rather so that social indicators on welfare like abuse, suicide, crime and mental ill-health indicates a degeneration of life.

Why do we consume although we know that it won’t make us happier?
• We get used to a certain level and compare us with others.
• We want to be first and best.
• Dissatisfaction is a strong driver for advertising, consumption and increased growth. Without dissatisfaction the growth will stop.

CONSUMPTION BEHAVIOUR
Anders Biel (Department of Psychology, University of Gothenburg)
Why is it so hard to change our consumption behaviour? From a psychological view it is because we value our own short-term advantages higher than future advantages for the environment and the collective. The social dilemma is not that I make an environmentally wrong decision, but the fact that we are so many that does it.
• Social pitfall: The negative consequences of our actions are delayed.
• Social obstacles: To make an immediate sacrifice to avoid negative future consequences.
The consequences of our consumption appears far away in the future and/or in a totally other place.

PHYSICAL REASONS
Martin Ingvar (Department of Clinical Neuroscience, Karolinska Institutet, Stockholm)
Deep down in our big brain we have a system for rewards that gives us dopamine kicks when we satisfy our needs. We are born with the ability to obtain primary rewards like food, water, sex and social security. To obtain secondary rewards like money and things is an ability that we have to learn. These secondary rewards are easier to learn if they are connected to the primary awards, and this is used by the advertising industry.

The tendency for social punishment against over-consumption is a recurring theme in many religions and folklores. A possible explanation for this is that every form of over-consumption becomes a threat to the group and not only for the individual in societies with lack of material things.
CONSUMPTION SOCIETY
Håkan Hydén/Per Wickenberg (Department of Sociology of Law, Lunds University)
The more and often we consume, the better the economic systems works. This is the straight and simple logic of the economic system that totally dominates the world, and this is not leading to a sustainable development.

Christer Sanne (Society Planning, KTH Stockholm)
All consumption is loaded with social values. Today the commercial forces have big impact on these values and the companies wants us to buy more of their products and services. The media follows, perhaps by foolishness but also because they are dependant of the companies as advertisers. If we instead took the frames of nature seriously, a thrifty lifestyle could have a high social value.

The demands on us are contra dictionary. On one hand we are encouraged to care about the environment, but on the other hand increased consumption is encouraged.

OTHER VOICES
Naturskyddsföreningen writes in their magazine “Sveriges Natur” #1/08, that the problem is not the consumption or the economic growth themselves, but the contents of it that is crucial. There is a difference between military aircrafts and wind power stations. It is just as naive to talk about increased growth as to say no to growth at all. We shall focus on what it is we want - welfare.
INTERNATIONAL AGREEMENTS
It was agreed at the UN Summit Meeting in Johannesburg in 2002 that global sustainable development will require wide-ranging changes in the way societies produce and consume (www.un.org).

In Sweden Naturvärdetsverket is responsible for this and in 2004 they published Sustainable production and consumption in Sweden. In this publication they talk about the importance to “create the right conditions for sustainable patterns of production and consumption” and to “change the way we consume”.

My immediate reaction to this is that these statements do not seem to have led to any big actions and results so far. It seems like the consumption only have accelerated even more the last 3-4 years.

THINGS TAKE TIME
Jörgen Larsson (Department of Sociology, University of Gothenburg)
In a publication “Om föräldrars tidspress - orsaker och förändringsmöjligheter”, the author Jörgen Larsson writes that the most time-consuming activities parents have are working and shopping. The main factors for the time pressure that families with children perceive is the increased working hours and the increased consumption.

CONCLUSION
We have everything to win on questioning and changing our attitudes towards consumption. Another way to relate to this can give us increased life quality and health, but also a more balanced way of using the resources of the globe.
YESTERDAY & TODAY

INTRODUCTION
The desire for attractive things and food has always existed in all cultures. It has been limited only by purchasing power and transport technology. In ancient time the consumption was more of a cyclic system, while today’s consumption is on a totally other level, and mainly linear.

Trough the centuries the boundaries for our consumption desire constantly have been moved. The exclusive and exotic transform into public property and the ordinary.

After World War 2 it was important to build up the society, recover from the war and create welfare for the people. In USA and Western Europe this were made by adapting the economic system that we have today. Economic growth was created by producing and consuming goods and services, to “make consumption our way of life” (www.storyofstuff.com).

The welfare built up during the last century has increased the average length of life, has given us a physically healthier life and we can cure diseases that earlier were mortal.

At regular intervals in history, there have been moral debates about mass-consumption. During the 1960’s the critics was actually about the working class beginning to buy consumer goods which until then, had been reserved for the middle class. Since some years the debate are more gender focused, started by luxury handbags.
The following diagrams show an overview of the development since ancient time. (Data compiled from www.wikipedia.com)

**SOCIETY**

Human society has developed from ancient hunter-gatherer society where people lived a nomadic life in groups of 15-50 persons. They lived close to nature and hunted and collected what they needed. From our perspective this seems like the ultimate sustainable society.

Around 4000 B.C. people started to stay at one place cultivating their food and the agrarian society had started. People lived in bigger family groups in small villages.

In the 18th century the industrial revolution took place in the UK and spread to other countries and had a high impact in society. The 1st industrial revolution came with social, economical and technological changes. Industries grew up, the urbanisation increased and the agriculture was improved by a number of innovations. During the 2nd industrial revolution the energy supply developed. We got electricity and the combustion engine. During this time the social context for people were the nuclear family and the companies they worked for.

Right now, we are living in a post industrial society, which also can be called a service, information and/or knowledge society. It is characterized by a strong individualisation both on a private and a professional level.

*Next phase?*

3rd revolution - environmental technology?

Collective living?
TRADE

Before the Middle Ages, the trade was mainly local and low-intensive. There was some trade of luxury goods from far away countries.

In the early Middle Ages there were a strong decentralisation and low economical growth. During the period, trade developed because of a strong economical growth, agrar technical development, increasing population and a stable, centralised political power. In the Late Middle Ages the growth suddenly ends and increased political disturbance, crises, epidemics and wars, make the trade stagnating.

During this time trade with cheaper consumption goods became more common. This led to high intensive trading zones like the Baltic Sea area and the Mediterranean, and big, powerful trading companies, e.g. East India Company and Hanseatic League.

Trade with the Orient increased a lot during the Renaissance and there were an economic, scientific and artistic expansion. This led to an increased specialisation in manufacturing goods, the guilds started and salaried work became more common.

The Industrial Era had an enormous impact on the trade, the mass-production and mass-consumption were a fact and the level of trade has increased ever since. Now we have a global market and global trade. Enormous quantities of information and goods are flowing over the whole globe. The growing population demands a more and more materialistic lifestyle supported and encouraged by the global multinational companies and their advertising campaigns.

Next phase?
More sustainable, qualitative and less materialistic values/trade?
RESOURCES - material and manpower

To be able to produce all the things we consume, resources are needed. In the ancient societies it was mainly local supply of material and manpower, even though there was some slavery. The slaves were captured from a hostile neighbour village or sometimes from trading journeys abroad.

From 1000 B.C. and forward the import of material and luxury goods increased. This were emphasised by the Colonial Era which started about 1400 and were formally ended around 1950. During this period a lot of raw material, exotic luxury goods and manpower/slaves were imported from the conquered colonies.

The slavery was formally forbidden by law in most countries around year 1800. At that time the salaried work had been common since the start of the industrial revolution.

Since the 1960’s when the globalisation really took off, the share of resources from other counties has increased. Now we have global supply of material and manpower mainly from low cost countries like Kina and India. It is no longer only raw material and work we get, but the whole production process to final product. As the salaries raise and the living standard increase in these countries it becomes less inexpensive to buy the products. Where shall our very cheap products be produced then?

We do not only import goods from developing countries, we also export to them... the garbage from our over-consuming lifestyle, often poisonous and ecologically harmful. The working conditions are often ethically doubtful and the association to old time’s slavery is not far away.

Next phase?
Global information/specification - local supply?
**TRADE PLACES**

In the early societies the trade places were very local. Around 1000 B.C. and forward central places with trade, craft, culture and political and military power grew stronger.

During the time 1500-1900 it was common with pedlars working around to the farms selling things.

In the 19th century the villages and cities grew and a lot of the trade took place at markets and shops in the cities.

A new way to shop came in the 20th centuries when it became possible to order goods via catalog and get it delivered by post.

In the 1960’s the big shopping centres became more common, and they have only been bigger and many more since. For many peoples nowadays the shopping centres are the weekend trip target and shopping has become a hobby.

A new arena for trading has, since the 1990’s, been internet. This trade place grows bigger and bigger in high speed and for many product categories it has the main share of the total sales.

*Next phase?*
A new form of local market places?
New forums for re-used products?
New trade places to lease or exchange products?
More person to person trade?
MEANS OF PAYMENT
The first way to pay for a product were by giving something else back, which were negotiated and agreed by both parts.

The oldest coin found is from around 700 B.C. and it became more and more common to pay with coins.

In the 17th century the first paper money were printed, and with them also other types of security paper appeared, e.g. checks, share certificate and bonds.

Around 1950 the credit card was launched and since then money has been less concrete and visual. Most of our transactions are now made via credit cards or internet. Money is more numbers than coins we can hold in our hand and we are even encouraged to use less cash. This makes money very abstract and it can be hard to really feel the value of money.

Next phase?
Local currency or local coupons only valid for local trade?
Increased amount of exchange trade and self support?
FROM CRYSTAL PALACE TO OUR TIME

Our modern way of consumption in many ways had its breakthrough at the Great Exhibition 1851 in Crystal Palace, London. This international exhibition of culture and industry were an enormous success with around six million visitors. Consumption had started to become a hobby and the earlier rather limited range of goods now had become abundance. But the exhibition also got negative critics from its contemporaries. Many of the exhibitors were criticized for decadents, tastelessness and exaggerated mixture of styles.

As earlier mentioned the Industrial Era was a period when major changes in agriculture, manufacturing, energy supply and transportation had a profound effect on socioeconomic and cultural conditions. Mass-production of consumer goods developed at this time. The mechanization of manufacture both served the needs of the population and also provided employment for the increasing numbers.

After World War 1 the society recovered and the 1920’s were characterized by several inventions and discoveries of far-reaching import, unprecedented industrial growth, accelerated consumer demand and significant changes in lifestyle. The Wall Street Crash of 1929 served to punctuate the end of the era, as The Great Depression, a dramatic, worldwide economic downturn, set in.

The 1930’s very much were a decade of recession and political extremism and ended into World War 2. After the war, the majority of the industrialized Europe lay in ruins and most of the European colonies gained independence. This made USA taking a position of major influence over world affairs.
During 1950’s, the society worked with recovering from the war. The welfare increased rapidly because of high economic growth. The amount of private motoring as well as other road transports increased.

The Cold War was a period of conflict, tension and competition between USA and Soviet Union. But during this time there were also an almost permanent economic boom until the Oil Crises 1973 when the oil prices raised dramatically. A recession took over and the debate very much were about energy saving and alternative energy sources.

The early 1960’s were characterized by unrestrained optimistic future perspective. But political conflicts, social tensions and problems with how to divide the new welfare, led to a period of revolts 1968 and the following years. The left-wing politics grew strong and continued into the 1970’s together with increased environmental consciousness.

The recession continued into the first half of the 1980’s, but the other half is characterized by political relaxation, Cold War ends and Soviet Union collapses. The economic growth increases again and this boom has been called “the happy 1980’s”.

The 1990’s brought a fast spread of democracy and globalisation and the optimism were high. During this time the communication techniques with cell phones and computers exploded.

This optimism was replaced by fear when the airplanes crashed into World Trade Centre September 11th 2001. George W Bush started his war against terrorism and encouraged people not to let fear change their way of life and continue shopping to stimulate growth and welfare.
In approximately the last 20 years the speed of changes and the pressure to produce and consume has accelerated to enormous levels. The financial market has grown rapidly and this economical focus has influenced every part of our daily life. The education system is striving for getting people into salaried work as fast as possible. The possibilities to reflect, play and socialise are getting smaller and smaller.

The globalisation is an important actor in this hype. Everything is possible to produce to a very cheap price. China and other Asian countries have come up as the next big economic superpowers.

Concern about our impact on the environment has become a major citizen movement. In the end of the 20th century, a lot of progress had been made in cleaning up the environment in the rich countries, but the environmental problems in newly industrialized countries, such as India and China, had grown horrendously. Another factor is that the worlds population has grown from about 1.65 billion (1900) to about 6.7 billion (2008). This over population is a cause of some of the world’s worst problems; pressure on resources, environmental problems and violent conflicts.

What are the reasons for this extreme over-production and over-consumption lifestyle? What are the alternatives?

Next phase?
Forbid advertising?
Ration electricity, consumption etc?
TODAY & TOMORROW

AWARENESS
Right now we can establish that the consumption is increasing rapidly. In five years the consumption in Sweden have increased with 30 %, but there are a tendency that people has begun to await to buy new things because the development speed is so high that the things they buy very soon is old fashioned.

There is also an increased awareness about ethic and sustainable production and consumption. Sales of ecological food and fairtrade and ethic products increase fast.

As a reaction to this, we can see a commercialisation of this new awareness in marketing and sales of doubtfully sustainable products, e.g. industrial mass-production of ecologic salad, “green” cars and an ongoing short-term thinking

POLITICS
On the political arena international agreements are made and environmental taxes or other economical incentives become more common. But politicians also give dual messages. On one hand “environmental consciousness” and “sustainable society”, and on the other stimulating economic growth by making us consume more.

ALTERNATIVES
Today we can see some reactions to the consumption society. More sustainable lifestyles like “Downshifting” or “Voluntary simplicity” becomes more common. This means less working hours, less consumption and more leisure time. In the latest years different anti-commercial movements has started, like “Buy nothing day”, “Reclaim the streets”, Slow-movements and container divers.
HEALTH
The mental ill-health is increasing. Magnus Henreksson, Research Institute of Industrial Economics, Stockholm, describes the world we live in as “The age of meaningless”. We live in an existential vacuum, without religion, without big family like in the agrar society, often without feeling that we contribute to a bigger context. Instead we have been obsessed with measuring everything economically (Lyx-mer än bara prylar, Helsingborgs Dagblad 2006-12-23)

FUTURE LUXURY
The definition of luxury has started to be redefined. In the same article, trend analyst Cay Bond says that people more and more tend to chose immaterial consumption. The ultimate luxury is the things that are most rare and valuable: time, knowledge and time for reflection. Non-profit work, charity, ascetic life during a period and personal development feels more meaningful. Handmade products are also seen as luxury.

Design entrepreneur David Carlson writes (David Report 6/2007) that over consumption is no longer a signal of success and we will soon see a more responsible luxury. Future luxury will not be all about consumption, more cultural experiences than material possessions, more about sharing than keeping.

INSPIRATION WORDS
• Reduce and reuse
• Nostalgia
• Responsibility
• Simplicity
• Sharing
• Charity
The **LONG-TERM MACRO TRENDS** that rules the future is, according to Richard Watson (Future Files: A history of the next 50 years, 2007):

1. **Globalisation**
   This trend has been around a while and now it is further emphasised by GPS and RFID.

2. **Localisation**
   A reaction and anti-trend towards globalisation. We can see a return to clan economy and more protectionistic expressions.

3. **Polarisation**
   This is about growing gaps, conflicts and loss of neutrality, not anything new, but still very relevant.

4. **Anxiety and fear**
   This has affected us very strong since September 11th 2001 and will continue to do so.

5. **Meaning**
   This trend is about the future importance of religion and the reasons to why people in different ways search for safety and spirituality.
ALL DRESSED UP – but nowhere to go
is a book (Copenhagen Institute for Futures Studies, 2007) that delivers radical thinking and is foreseeing the death of the consuming capitalism that is the current norm.

They think we have reached a tipping point, a level at which the momentum for change becomes unstoppable.

In the future we will see a new kind of companies, because it will no longer be possible to run the business only on economic logic. New organisational forms, new kind of marketing and advertising and new kinds of human right organisation will appear when economy no longer is based on money but on human talent and relations.

INSPIRATION WORDS
- Local
- Solidarity
- Human talent
- Relations
- Thrift
- Participation
- Honesty
- Personality
- Social innovations
- Genuine
- Cyclic
SUSTAINABLE LIFESTYLES
Even if the developed, rich countries in total live very unsustainable, there are remains from old times, new tendencies and subcultures that are striving to live more sustainable and have another consumption behaviour.

- **Downshifting** or Voluntary simplicity. People, who chose to work less, consume less and have more leisure time.

- **Self supporting**. “Rus in urbe”, people living in big cities trying to cultivating much of their own food everywhere it is possible, indoors, on roofs and so on. Cultivation food in own garden or allotment gardens is also a way to strive for self supporting.

- **Slow movements**. Reactions towards the fast and stressful, developing into a subculture in various other areas, Slow Food, Slow Travel, Slow Shopping, and Slow Design and more.

- **Vegetarians**, who do not eat the resource demanding meat.

- **Container divers**, who live of what others throw away.

- **Christiania**, in Copenhagen works as a freetown for alternative lifestyles since 1971.

- Real enthusiasts that still *renovate and maintain* products like it were done before, and not just throw them away.
1. Freetown Christiania, Copenhagen, www.vagabond.se
2. Allotment garden, www.cityfarmer.org
5. Downshifting, www.amazon.co.uk
SUSTAINABLE PRODUCTS AND SERVICES
The environmental work in product development has in the last 10 years, been mostly about energy use and recycling. The result is that we have good products but still the basic approach is to produce, sell and consume as much as possible.

In my search for more true sustainable products, I looked for those connected to another consumption pattern. It was hard to find, probably because most products derive from an unsustainable consumption based context.

Reuse
- Vintage and second hand.
- Return system, e.g. swedish glass bottle system.
- New products made of old.

Long lasting
- Genuine wooden furniture with classic and long lasting design.
- Products with spiritual, nostalgic or emotional values.
- Products that can be upgraded.

Sharing
- Car pools
- Library
- File sharing

Ease-your-conscience-and-continue-shopping-products
- Amazonas table by Eero Koivisto for Offect. Recyclable table where a part of the profit goes to project for saving the rain forests.
- Carafes of old wine bottles, designed by Tord Boontje and Emma Woffenden.
Amazonas table from Offecct.
www.offecct.se

Wooden furniture from Norrgavel.
www.norrgavel.se
4. Return system - glass bottles, www.retursystem.se
5. Old dinnerware - product with nostalgic values, www.royalcopenhagen.com
INFORMATION ABOUT SUSTAINABLE WAYS

There are many new books and web communities about how we can “save the world” and be “climate smart”. The sources I have studied are:

- 100 sätt att rädda världen... (Johan Tell, 2007)
- Klimatsmart (Persson, Sjöström, Johansson, 2007)
- Grön Design (Naturskyddsföreningen, 2008)
- www.klimatsmartcommunity.net (WWF)
- Camino #5 (Swedish lifestyle magazine for sustainable development with focus on sustainable consumption)

The advices are from different areas that affects the climate, e.g. energy saving, transportation, recycling, food and so on. The advices connected to consumption are about:

- Buy quality
- Consume less
- Do not buy copies.
- Buy what you understand.
- Avoid plastics.
- Favour environment conscious companies.
- Think global, act local.
- Buy environmentally certified products.
- Share products with others.
- Repair
- Buy second hand

Is this kind of information and measures enough? Probably not, but in the society we live today it is probably reasonable and realistic levels.

If you want to live more sustainable than this, it becomes hard. The society system does not support it and you will probably be seen as eccentric.
**INSPIRATION**

**KEY WORDS**
The creative work is started by transferring input from the analysis phase to the creative phase by identifying key words to be inspired of, to work around and develop.

The input is organized in a cyclic way instead of the traditional linear, which is the most common way to look at time, life, processes and so on. With this I want to introduce a more cyclic thinking into this project and to the outcome.

From this, the first step is to brainstorm around sustainable scenarios and lifestyles that can contribute to more sustainable consumption patterns.
creative

family
health
community
collective actions - shared goals
non moralic
symbols for phases in life
dreaming
longing
satisfaction
visible consequences
rewards
social value
gather
environmental revolution
collective
quality
less materialistic
global specification-local supply
personal trade
exchange trade
self support
reduce and reuse
nostalgia
responsibility
simplicity
charity
sharing
local
solidarity
human talent
relations
thrift
participation
honesty
personality
social innovations
genuine
cyclic

today & tomorrow
yesterday & today
about

family
health
community
collective actions - shared goals
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symbols for phases in life
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reduce and reuse
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responsibility
simplicity
charity
sharing
local
solidarity
human talent
relations
thrift
participation
honesty
personality
social innovations
genuine
cyclic

today & tomorrow
yesterday & today
about
With the analysis and inspirational words as a background, I listed ideas for a more sustainable consumption.

These ideas are input to the process of creating a vision of a sustainable lifestyle and to define parameters for future product design in aspects of sustainable consumption.
introduce “consumer responsibility”
we already have “producer responsibility”
government control
rationing coupons?
prohibit advertising
strive for self-support
- collect
- exchange
- cultivate
cost-per-unit-price on all goods.
t-shirt 3 EUR/wash
sofa 100 EUR/year
cost-per-unit-price on all goods.

immaterial consumption
- culture
- experiences
cyclic thinking, instead of linear
change social norms

support of local structures
- locally produced products
- local stores
- local currency

less work =>
less money =>
less consumption

focus on “welfare” instead of “growth”
drug/medicin that take away the psychologic need for shopping

collective living
share things with others
collective living
share things with others

GENERAL CREATIVE - brainstorming | 53
To be able to create a vision of a sustainable way to relate to consumption and design, I selected the ideas from the brainstorming that I thought had most impact, relevance and holistic view.

The ideas that I decided to investigate further are:
• collective living, share things with others.
• immaterial consumption.
• products with sustainable values and long-lasting design.

INSPIRATION BOARD
In the inspiration board to the right, I have collected inspiration for the creative process.
A community is a social group of organisms sharing an environment, normally with shared interests.

hippie [hippi] supporter of youth movement, who were opposed to status thinking, craving for performance and consumption society.

reduce & reuse

responsibility

genuine

immaterial consumption

cyclic

collective

shared goals

participation

nostalgia
THE CONCEPT

SHARING

My main idea is to re-launch the herd.

Humans are herd animals and have always been dependent on cooperation with others to survive. Only during the last decades it has been materially and socially possible to live alone.

Our need for belonging to a group is very strong even if we live alone. Earlier, our main identity sources were family, relatives and neighbourhood. Nowadays we have broken up from this and emptiness has been created, so we search for identity and meaning in other contexts. Our identity needs to be designed and communicated and we do this by consumption, which fills the gap of emptiness.

With inspiration from the old agrar society, when we lived and worked in an extended family, and the values of the hippie movement of the 1960’s,

I think collective living can be a way to a more sustainable lifestyle and consumption.

If we share resources, energy and products, the individual consumption can decrease. Having a social network and a spirit of togetherness increases the life satisfaction and mental health.

GUIDELINES

I will also try to define guidelines that can help me as an industrial designer to design products, services or systems that encourage a more sustainable consumption pattern.
COLLECTIVE LIVING

There are six main groups of collective living (Vestbro, Collective housing in Scandinavia, 1997).

1. Collective services
Multi-family housing with collective services in the housing area.

2. Collective housing
The collective housing unit with a central kitchen and other facilities connected by indoor communication to individual apartments. This model can be divided into three categories:

   a. The classical collective housing unit, based on services through employed staff, aimed at reducing house work.

   b. The small collective housing unit, based on communal work, a unit of 15-50 apartments, where the residents take care of meal services and other tasks through communal efforts.

   c. Service housing for elderly combined with a collective housing unit, where communal premises are used by both categories of residents.

3. Collective housing for special categories
People such as elderly people, students and persons with dysfunctions.

4. Co housing
A group of people initiate and plan their housing cluster collectively, and where indoor communication is not required, often with other communal facilities than a central kitchen.
5. Housing communes
More than four persons, who are not relatives, live and eat together, usually in a large one-family unit.

6. Production communes
A group of people, who are not relatives work and live together.

I have chosen to investigate more into COLLECTIVE HOUSING since it seems to be the most interesting way of collective living for this project.
ABOUT COLLECTIVE HOUSES

WHAT IS A COLLECTIVE HOUSE?
A collective house is often a house with around 15-50 individual apartments and shared collective spaces like big kitchen, dining room, TV-room, playroom for children, sauna, workshop and laundry room. The individual apartments are relatively small because everyone can use the collective spaces whenever they need or wish.

HISTORY
The historical perspective on collective houses is very interesting and contributes with a holistic view on the project (Vestbro, Kollektivhusens historia).

The idea of collective living has always mirrored the time spirit and been used in a certain aim.

Utopism
There have always been ideas about the ideal way to organize living. Already Plato described a ideal society which were totally collectively organised. The same did the renaissance utopist Thomas More in his book “Utopia” in 1506. In this society, people were organized into blocks with collective dining rooms and recreation arrangements. Descriptions of an ideal society were a way to express critics about the society conditions of that time.

Socialism
300 years later, the industrialisation was revolutionary changing society in Europe. Reactions towards this awakened in shape of visions about a society of equality and where living and working were collectively organized. Both Robert Owen and Charles Fourier describes collective houses for workers, with
big kitchens, collective dining rooms, child care, theatres, gardens and so on. The most offensive part for those in power, were the idea that workers could improve their conditions through education and collective actions.

The development of industry made it possible to transfer technical inventions to other sectors e.g. the living, stoves, water toilets and central heating. The private kitchen appeared old-fashioned in a time were rational mass-production were modern. Houses with a central kitchen and collective maids were built.

Functionalism / modernism
The functionalists were convinced that new types of living could contribute to a new, rational and democratic human. In a rational organised society, as many people as possible should participate in the production. They should build up their health through sports and recreation, and educate themselves via study circles and political meetings. Functionalistic collective houses were built in the middle of the 1930’s and the intention was to have services in the house that made it possible for the women to continue working even if they got married and had children. The opponents claimed that this was a threat towards the family and only for the privileged people, so the politicians took a decision not to support the idea.

Equality and solidarity
During the 1960’s, it became more accepted for married women to continue working. Day care centres for children were built and the private homes were equipped with products that facilitated cooking and other home work. Collective living became more interesting again, but it happened with strong resistance from the patriarchal society.

In the end of the decade, a new spirit inspired of the radical tendencies in society grew strong. The collective houses attracted residents who were inspired of student, solidarity and feminist movements.

During the 1970’s, collective thinking and cooperation became modern. It was no longer service in focus, but shared working. The main idea was that by cooperating in the necessary work, it should be a less burden to the small household. In exchange they got a spirit of community and a working social network in the local environment. At the same time they can be satisfied with less private space and equipment without reducing the standard.

In the 1980’s there were a kind of break-through for the collective houses. Around 50 houses were built in Sweden during this period. Most of them were organised for shared work and community spirit.

TODAY
Today it is not very common with collective houses, though there are some, around 25 in Sweden. This means around 0,5 ‰ of the total housing clump.

The collective idea is more common when it comes to eldercare, but lately there have been a newborn interest in this way of living. An article in Dagens Nyheter (2008-03-13) writes about the high amount of single households and that there are an increased interest to live both alone and together, especially among elder people with grown up children who are preparing for a substantial and stimulating old age.
ORGANISATION
The house is often owned by the municipality or a residential company. The inhabitants of the house are organized in a non-profit association that handles all the common interests and activities. If the inhabitants have a practical responsibility for the care of the building, this work is often organised in an economic association.

THE DESIGN OF THE HOUSES
The existing collective houses are very different in terms of size, architecture, interior planning and location. Most of them are rather anonymous and are not sticking out in the cityscape.

The house is divided in individual apartments and collective shared spaces. The layout can of course look in many different ways and on here you can see an example from Bogemenskapen Sjöfarten in Hammarby Sjöstad, Stockholm, Sweden. It is a drawing of the shared spaces and one example of a small apartment.

www.sjofarten.se
SOCIAL ASPECTS
Living in a collective house increases the social contacts between people in the close environment (Molina and Renner, Kollektivhus och sociala nätverk i storstaden, 1999). Through working groups and activities most of the inhabitants have got better and closer connections to their neighbours. Conflicts appear because of different values and lifestyles but most of the inhabitants are satisfied with their living.

The people who chose to move to a collective house describe their dreams of a spirit of community and an increased life quality. They think that this way of living can combine materialistic and social needs. Living in a collective house presumes that the inhabitants are willing to co-operate and compromise and in some way share the same values.

WHO CHOSE TO LIVE LIKE THIS?
Among the people living in a collective house today, it is common with academic education and independent and flexible professions. Many are employed in the public sector and very few are production workers. They often have experience from alternative movements like e.g. feminism, environment. There are proportionately many families with children and single parents and more women than men.

ADVANTAGES
People living in collective houses find many advantages in it:
• Safety in knowing the neighbours.
• Spirit of community in every day life.
• Makes everyday life easier and practical advantages in joint meals, sharing tools and so on.
• Increased equality.
• Social network.
• Economical saving.
• Various competences among the inhabitants.

DISADVANTAGES
There are of course also disadvantages:
• Different view on the collective responsibility.
• Unequal work load.
• Social control.
• Conflicts.

SUSTAINABILITY
Even if the focus in today’s collective houses is the spirit of community and shared work, and not sustainability, this form of living has big possibilities for sustainable behaviour:
• Exchange of products, clothes, services between inhabitants.
• Sharing of expensive or low-frequently used products.
• More efficient energy use by co-ordinating e.g. cooking.

MY OWN REFLECTIONS
The key success factor for this type of living seems to be the balance:
• Social balance between privacy and public.
• Emotional balance between intimacy and distance.
• Practical balance between individuality and community.

This affects how the space shall be planned and the work and activities shall be organised. It is also important that the inhabitants have a relatively shared view on this balance.
STUDY VISITS

To learn more, get own experience, talk to people living this way and study the environment, I made two study visits in collective houses, “Fortuna” in Helsingborg and “Slottet” in Lund.

ORGANISATION
Both collective houses are in about the same size, 20 resp. 16 appartments. The residents are from the same social background, but spread in age from newborn to 70 years old. The aim is the spirit of community and the rationallity of every day life. The core activity seems to be the collective meal in the evenings. Information is spread via notice boards, the meals, notes and on the monthly meetings.

THE HOUSE
In both houses the private apartments are smaller than usual to stimulate usage of the shared spaces.

There seems to be a clear connection between how the house is design and the usage of the shared spaces. Transparency, carefully designed communication zones and a good balance between private and collective seems to be the key.

SPECIFIC NEEDS
Because the shared spaces are used by many, they are something in between private and public spaces. This means specific demands for both interior and products in aspects of:
• functionality
• acoustics
• aesthetics
• ergonomics
• durability
• flexibility
• communication
1. Exterior from Slottet.
2. Notice board, Slottet.
4. Shared living room, Slottet.
5. Private kitchen, Slottet.
6. Private apartment, Slottet.
7. Shared tv-room, Fortuna.
8. Shared books, Fortuna.
10. Shared dining room, Fortuna.
11. Flexible wall, Fortuna.
12. Shared kitchen, Fortuna.
MIND MAPPING

IDEAS
While studying collective living and diving deeper into the concept of sharing, I realized that there were great opportunities and many different ways to go. This mind mapping structures the ideas and different opportunities that I have discovered.
Collective House

**Experiences**
- Culture
- Spirit of community
- Personal development
- Introduction to collective living
- Team building/group dynamics
- Conflict management

**Education**
- Practical help
- Need for education
- How to start up/organise a collective house
- In-house system for sharing, lending, inheriting
- Shared responsibility for collective things
- Spread of information

**Communication**
- Practical help
- Need for education
- How to start up/organise a collective house
- In-house system for sharing, lending, inheriting
- Shared responsibility for collective things
- Spread of information

**Services**
- Design of collective spaces e.g.
  - Kitchen
  - Dining room
  - Entrance
  - Stairs
  - Garden
- Needs between private and public use
- Flexibility to adapt to number/scale, e.g.
  - Rooms
  - Furniture
- Specific demands on shared spaces and products
  - Functionality
  - Aesthetic
  - Wearing
  - Ergonomics
  - Acoustics
- E.g.
  - Tools
  - Toys
  - Storage
  - Furniture
  - Bikes
  - Books/magazines
  - Media products

**Interior Design**
- Architecture
- Lay-out - manage social, emotional, practical balance
- Transparency of building to encourage use of collective spaces
- Different needs when planning individual apartments

**Shared Products**
-精神 of community
- Personal development
- Introduction to collective living
- Team building/group dynamics
- Conflict management

**Architecture**
- Lay-out - manage social, emotional, practical balance
- Transparency of building to encourage use of collective spaces

**Shared Spaces**
- Needs between private and public use
- Specific demands on shared spaces and products
  - Functionality
  - Aesthetic
  - Wearing
  - Ergonomics
  - Acoustics
  - E.g.
    - Tools
    - Toys
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  - Wearing
  - Ergonomics
  - Acoustics
- E.g.
  - Tools
  - Toys
  - Storage
  - Furniture
  - Bikes
  - Books/magazines
  - Media products

**Interior Design**
- Architecture
- Lay-out - manage social, emotional, practical balance
- Transparency of building to encourage use of collective spaces
- Different needs when planning individual apartments

**Shared Products**
- 精神 of community
- Personal development
- Introduction to collective living
- Team building/group dynamics
- Conflict management
OPPORTUNITIES

It seems that there is a potential in sharing products and resources, but this is a parameter of no significance today. Sharing can be a powerful tool for us to find a more balanced level of consumption.

The mind mapping show different areas of improvements, and here is a big potential for product development, design, architecture and many more areas. There are also possibilities for new business concepts.

WHICH WAY TO GO

Product?
My first intention was to develop a product that could carry the idea of sharing or were optimized for a shared environment. After a lot of sketching, I decided not to, because the risk that the product should be taken from its context and be misunderstood.

Architecture?
Another area that has big impact on how well the collective house is working is the architecture. But since I am not an architect and there seems to have been a lot of work made in this area already, I chose not to develop this.

Organisation?
Also within this area of importance there has been a lot done already.
Idea sketches - symbolic products that could carry the idea of sharing.
In this phase of the project, the main questions were:
• How far shall I develop the ideas?
• Which level of refinement vs. over-view?
• What is the best way to communicate the ideas?

Instead of being detailed and product oriented, I wanted to keep the holistic view and put focus on the concept of sharing.

This means that I want to:
• Describe the concept of sharing, arouse new thinking, show the opportunities and introduce it as a sustainable parameter.

• Develop the idea of collective houses by changing focus towards “sharing”, and make it more modern and attractive to a wider target group.

• Define guidelines for encouraging sustainable consumption.

COMMUNICATION
This can be communicated via:
• Text and images.
• A model of a shared environment that communicates the core values of the concept.
• A list with concrete guidelines.
Sustainable to consume

- knowledge/education
- time
- services
- experiences
- community
- play
- nature
- exercise
- collect

Idea sketches.
Objective
The objective for this master project was to:

- create a vision of a sustainable lifestyle, with another way to relate to consumption and with better room for immaterial and emotional values.

- define and develop a product/service/system that is adapted to and support this lifestyle. The result shall reflect the three aspects of sustainable thinking; ecological, economical and social.

- reflect over the role of industrial design in relation to consumption and create some kind of sustainable basis for the design process.

Result
The result of my analysis and creative work are divided in three parts:

1. The Concept of Sharing - describes the holistic approach to sharing.
2. The Modern Collective - describes one application of sharing.
3. Design for Sharing - concrete guidelines to encourage sustainable consumption.

The result is communicated via:
- project documentation (fully described)
- oral presentation at examination seminar
- hand-out (summary of the result)
- model
and exhibited at the Master Exhibition.
THE CONCEPT OF SHARING

BACKGROUND
The level of consumption has increased rapidly during the last century and the current consumption patterns are unsustainable and have enormous negative impact on the people and environment of our planet.
Although we in the rich countries have a very high material standard and can buy everything we need or wish research has shown that we feel less happy and have an increasing level of mental ill-health.

IDENTITY
Even if we live in an individualistic society we have a strong need for belonging to a group and a meaningful context. Earlier, family, relatives and neighbourhood were our main identity sources, but now, we search for identity and meaning in more abstract and mobile contexts. Our identity needs to be designed and communicated and we do this by consumption.

RE-LAUNCHING THE HERD
Human beings are originally herd animals and if looking back in history we have always been dependent on cooperation with others to survive. It is only during the last decades it has been possible to live alone, because the materialistic standard has increased and society has changed. In The Concept of Sharing, I want to re-launch the herd.

To survive, we again have to learn to share things with others, in all scales, from sharing books and meals, to sharing housing and the resources of our only globe.
RESULT - the concept of sharing

Collage images: see References p.107.
SHARING IN A DOUBLE SENSE
Sharing can be seen in a double sense:

**Physical sharing**
- to share products, resources and spaces.
- to share (divide) the resources of the globe.

**Mental sharing**
- to share, be a part of, participate.
- to do one’s share.
- to have a share in something.

The Concept of Sharing symbolises a humanistic and generous basic view on our fellow humans and our society.

By adapting this, we take an active share and responsibility in our way of living and its social and ecological impact.

**HIPPIE REVIVAL**
In a future scenario analysis we can see what scenario we live in “today”. It is an individual society where our lifestyle not is affected yet by the environmental consequences.

But already today we can see a movement towards “Lack of products” as the ecological problems cause lack of food in some countries.

In the scenario called “Hippie revival” the impact of ecological problems is high and we have moved towards a communal society were we share resources and products.
EFFECTS

By sharing resources, energy and products, the individual consumption decreases. By having a close social network, in real life, and an everyday spirit of togetherness, the life satisfaction and mental health increases. Our identity is strengthened and is no longer dependant only on consumption.

The Concept of Sharing questions the traditional view on owning. Private owning can be complemented with collective owning. It can give economical benefit because you share the cost with others.

A common feeling is that we have to sacrifice things to live more sustainable. By sharing we can still have access to products, comfort, luxury, but we share them with others.

We do not need to sacrifice because we are sharing instead.

THE TIME IS RIGHT

Can this idea really penetrate our individualistic society?
Yes, I hope so. I base this on the signs of change that is already possible to see:

• The attitude to consumption is changing. People have started to experience a lot of the consumption as vulgar and depthless. Over consumption is no longer a signal of success. Future consumption will hopefully be more about sharing than keeping and people will value time and experiences higher than material possessions.

• Time is one thing that is most rare and valuable for many people. Sharing products and work can help us release time for other activities we today long for, like rest, reflection and doing nothing at all.

• The Concept of Sharing can channel our interest in ethical and ecological matters and encourage conscious consumption.

• As the population is growing and the resources is running short, we will have a lack of products that will force us to share.

NEW OPPORTUNITIES

It seems that the potential of sharing products and resources is very much disregarded in marketing and design today. I think it can be a powerful tool for us to find a more balanced level of consumption.

The concept creates possibilities for entrepreneurship and new business concepts. It also gives existing companies an opportunity to show responsibility by adapting this parameter.
The Modern Collective

One application to The Concept of Sharing is the way we live. COLLECTIVE LIVING can be a way to a more sustainable lifestyle and consumption.

Collective living is a very natural way for us to live.
- Since ancient time we have lived together in herds.
- In the old agrar society people lived and worked together in extended families.
- During the hippie movement and the Green Wave in the 1970’s, the collective living in occupied buildings was protest actions toward the established society.

A NEW IDEAL

Historically, collective living has been guided from rather different ideal, from the idea of “rational life” to “the ideal home” (Vestbro, Kollektivhusens historia). In today’s Swedish collective houses the main purpose is the spirit of community and the rationalisation of everyday life. Without loosing these, I now want to introduce the sustainability aspect in general and The Concept of Sharing in particular. Collective living has excellent conditions for our ambition to find a more balanced consumption.
Collage images: see References p.107.
A SOCIAL INNOVATION
Collective living is not a new idea but in the individualistic society of today, it is a very unusual way of living.

I think collective living and sharing has such a high potential of sustainability that it should be seriously considered by governments, society planners, housing politicians, property owners, tenants and other parts of society.

SUSTAINABILITY
Living in a collective house creates conditions for sharing resources, energy and products. It can also strengthen our identity and this creates good conditions for more sustainable consumption patterns.

EMOTIONAL VALUES
Living in a collective house can offer the modern human of the 21st century values that can be hard to find today:

• Security and safety
We feel safe in our daily life when we know the people around us and belong to a social network. It gives a spirit of community and decreases the loneliness.

• Authentic and genuine
In our global society we need and long for the small-scale, the local, the authentic and genuine.

MODEL
The way of collective living that best suit the modern human is the Collective Houses that I earlier described. This model combines individuality and collectivism in a balanced way.
TARGET GROUP
Most people who are resident can live in a Modern Collective. The level of collectivism can vary and each person can join as much or little she wants, as long as the necessary tasks are fulfilled.

But for some people it can be hard:
- persons who have an extremely mobile lifestyle and hardly settles down before they move again.
- people who by any reason need or wish a more isolated style of living.

MAKING IT ATTRACTIVE
The possibility to live in collective houses today is rather limited. They are few and unknown and it is a niched category of people who lives in this way.

By marketing and highlight this way of living, the knowledge and demand for it will increase.

Modernising the concept will make it attractive to a wider group of people.

MODERNISATION
To get rid of the prejudices towards the word “collective”, it is possible to use vocabulary from internet and call it community. The modern collective is a Community IRL (in real life).

It is also important to tone down the sense of guilt that surrounds the eco/climate debate and avoid the too decent feeling of the Green Wave.

A nostalgic flirt with the hippie collectives of the 1960-70’s can be made, if it is humoristic and put in a modern suit.
PROFILES
Like the communities on internet, the Community IRL, can have a specific area of interest and a profile. The estate owner or the collective can market themselves with this profile to attract tenants.

The collective spaces in the house can be adapted and used in line with the profile, in addition to the ordinary shared spaces and products.

Through diversity of profiles, the target group is widened, and many more people can feel attracted.

Only imagination can set the limit for the opportunities. Here you can see some examples of profiles and marketing.

- **Gourmet & slow food profile**
  This community chose to focus on a well equipped collective kitchen, collective organic cultivation of herbs and vegetables, shared cooking and eating and coordinated purchasing of meat from a local farmer.

- **Sport profile**
  This community chose to focus on shared membership at a nearby gym, healthy food, shared sport equipment, subscription to all sport channels, sports bar with a big TV and collective travelling to big sport events.

- **Art & music profile**
  This community chose to focus on a shared music studio, shared instruments, shared painting studio, subscription to cultural magazines and they arrange exhibitions in their own gallery.
comfort and togetherness in a community IRL

In the collective house ShareHouse you enjoy the combination of both individual and collective living.

Our profile, Art & Music
A tenant-ownership in this lifestyle living offers an individual apartment and collective spaces with big kitchen, dining room, music studio, painting studio, garden, café, media room and play room.

We share instruments, painting equipment, books and magazines and of course all other equipment necessary for the shared spaces. We also arrange music events and exhibitions in our own gallery.

The monthly cost is about the same as a traditional living, but the advantages with sharing products bring economical advantages.

And anyone who thinks that makes it less claustrophobic is having a laugh. It just meant even more people wanting to know about your life, dropping in for visits or sulk about not being invited to a wedding. It also meant that wherever you went in the UK, you were expected to drop in on the family, and there may be someone you really feel a bond with. When you have few relatives, and not much connection, you can feel a little adrift.

As one of four siblings married to one of five, I would agree that a big family can be very claustrophobic. My extended family is also huge as my mother (one of three) had 23 first cousins and my father (one of four...
WHERE?
The collective houses can be organised into most types of buildings:

• existing buildings, renovated and adapted to the demands.
• new buildings, designed for the purpose.
• old buildings that are not in use any more, e.g. abandoned industries and military buildings. Empty buildings that often have a very high potential.

IMAGE
To live in a modern collective, Community IRL, shall be considered modern, comfortable, luxury and meaningful. People shall choose this way of living because it is smart, trendy, suit their interests and strengthens their identity.

WIN-WIN
The modern collective makes all of us winners.

• The governments that initiate investments in this type of housing can profile themselves and their country by taking responsibility for the global environmental problems.
• The property owners develop their estates and activities towards sustainability and in that way market themselves as a responsible and trustworthy company.
• The tenants get a modern style of living, comfort, and a spirit of community.

WHAT CAN BE SHARED?
Almost everything can be shared; it is only a matter of fantasy and organisation. To the right I have listed products, spaces and activities that can be shared.

BORROW AND INHERIT
Some products are hard to share because they are very personal, are used very often or are situated far away. The collective living creates a contact with others that makes it easier to borrow and inherit products from each other. Examples:

Suitable to borrow:
• summer house
• house wagon

Suitable to inherit:
• prams
• children’s clothes
• shoes
• leisure equipment

NEGATIVE ASPECTS
Of course, not everything is positive with collective living e.g.:

• The social climate can be subject for dissatisfaction and even harassments.
• The level of cooperation and different view on responsibility can lead to conflicts.
• A too close collective can isolate themselves from society and develop a sect like behaviour.
• A risk that after a while, the sharing in the collectives does not work any more, because of the influences from society as a whole.

Despite this I think sharing and collective living have such a sustainable potential that it should be seriously considered.
SHARED PRODUCTS
- books
- newspapers, magazines
- garden equipment
- cleaning equipment
- sport equipment
- leisure equipment
- outdoor grill
- outdoor furniture
- tools, manual and electric
- sewing machine and sewing materials
- clothes care - washing machine, drying cabinet, iron, mangle.
- bicycles
- cars
- media products - tv, dvd-player, digital box.
- entertainment - films, music, tv-channels.
- computer - network, server, printer, scanner, fire wall, software, computer games.
- party clothes, shoes
- instruments
- toys, games
- kitchen machines
- big scale kitchen utensils
- furniture in collective spaces

SHARED ACTIVITIES
- coordinated purchasing in bigger scale
- cooking dinner
- eating; breakfast, dinner
- exchange market
- cleaning
- sports
- cultivating
- choir
- yoga, tai chi
- play
- composting, recycling

SHARED SPACES
Collective spaces in addition to the individual apartment.

- big kitchen
- dining room
- media room
- workshop
- laundry room
- sauna
- sport spaces - table tennis, aerobics
- garden for recreation
- garden for cultivating
- play room
- café
- terrace
- studio - painting, sewing
- pub - billiards, dart
- library
- greenhouse
### DESIGN FOR SHARING

#### BACKGROUND

The role of industrial design is traditionally very closely connected to consumption. But we can establish the fact that consumption patterns of today are unsustainable... so when the rules of the game are changing, what is the new role of industrial design?

One aim with this Master Project has been to find a personal way to relate to these matters and create a foundation for my future work as an industrial designer. Therefore I have tried to define some guidelines to use.

#### SIX PRINCIPLES

This chapter describes six guiding principles for helping industrial designers to integrate sustainable consumption and sharing in the design process.

The principles can be introduced in discussions with clients and companies, be integrated in the design work and considered while designing products, services, systems and environments.
ENCOURAGE RESPONSIBLE BUSINESS
In the future, companies have to show sustainability and responsibility to be able to keep their customers. They have an opportunity for long-term survival and to strengthen their identity by considering this principle.

The potential of sharing products and resources is very much disregarded in marketing and design today, and this creates possibilities for new business concepts or for developing the existing business.

*What to do!*
- Introduce the three sustainability aspects; ecological, economical and social.
- Introduce The Concept of Sharing.
- Introduce a holistic and long-term view.
- Do not focus only on maximising the profit, but see the value in ethical and conscious business.
- Act more considerate towards the consumer, by being less aggressive in commercialism/advertising, and more engaged and understanding in customer needs. Help the consumer act sustainable instead of selling as much as possible.

ENCOURAGE SHARING
Introduce The Concept of Sharing in the design process. Create products, services and systems that encourage sharing.

Question the traditional approach of buying and private owning and see the possibilities of collective owning, leasing and lending.

Consider the specific demands on products that will be shared by many:
- Functionality
- Durability
- Ergonomics
- Communication
- Cognitive ergonomics
- Flexibility (modularity, scale/size/number)
- Aesthetically adapted to an environment between private and public.
- Adapted for many without being impersonal.
- Acoustics
ADD IMATERIAL VALUES
Future consumption can be more about experiences and services than material things. This can be more sustainable than consuming material.

Services
Add value to a physical product by integrating a service. This can for example be a service that:
- increase length of life
- make up-grading possible
- allow maintenance
- increase usability
- optimize usage

Experiences
Add value to a product, service or system by integrating experiences. The effects of this kind of consumption are increased mental health and decreased material flow.
It can be more sustainable to consume:
- knowledge/education
- time
- spirit of community
- nature
- physical activities
- play/games
- culture
- digital/virtual products instead of physical

DESIGN FOR TIMELESSNESS
Say no to the wear and tear society and reject the trend where ethical values and sustainable issues are put aside for low prices and huge volumes.

Encourage systems for prizing and paying that visualizes the real cost over time.

Add value to products by integrating long-term thinking and long-lasting design:
- Long-lived products that can age with grace and be inherited by our children.
- Products that can be repaired, maintained and upgraded.
- Products built on lasting values.
- Product that have high second hand value.
- Encourage the use of less but better products.
- Products with long-lasting aesthetics, that speaks with a lower and more subtle voice.
ADD TRUE CYCLICAL THINKING
Add cyclical thinking in all design of products, services and system. Not only recycling that is the traditional approach, but true cyclic with means considering functionality and usage in the second, third and fourth life cycle.

Create systems that encourage owners of products to share them with others when they do not need or use them any more.

Introduce the idea of re-using in bigger scale than only second hand shops. Re-use can be a way to extend a business concept and re-used products can be “raw-material” in industrial scale.

ADD EMOTIONAL VALUES
Adding emotional values in design of products, services and systems, can make the products more sustainable and good for our wellbeing.

Strive for design that:
• make us see the pleasures of the moment
• make us build a relation to the product
• attract our senses
• make us feel in control of our own time
• stimulate our dreams, imagination and creativity
• creates harmony
• make us reflect

Let the design reflect our longing for authencicy and genuinity by:
• being locally produced
• good workmanship
• limited editions
• communicate the circumstances for production
**MODEL**

The aim with the model is to visualise my work and to create new thinking, start discussions and inspire around The Concept of Sharing and The Modern Collective.

The model shows an environment from collective spaces in a Modern Collective, including central objects and core activities that symbolises the idea.

- a big pot with the shared meal
- a big stove with shared heat
- shared cultivating
- a big table used by all for different purposes
- a big notice board which communicates the organisation and activities.
CONCLUSIONS

ARE THE OBJECTIVES FULFILLED?
The Master Project was about an abstract and complex topic. By using the design process I could deliver concrete results that correspond to the goals. The result introduces a new parameter, sharing, with high potential of sustainability. The result also presents an application and concrete guidelines.

EVALUATION OF THE PROCESS
The common design methodology with definition, analysis, creative and realisation phase worked well, but because of the complex and abstract nature of the project, the process has been adapted along the way.

PERSONAL THOUGHTS
I had the privilege to investigate into industrial design and sustainable consumption during my Master Project. I feel that I have gained knowledge and come to conclusions that will help me relate to these matters in my future work as industrial designer.
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• Nord, Lennart (boende i kollektivhuset Slottet, Lund)
• Palm Lindén, Karin (boende i kollektivhuset Slottet, Lund)
• Christoforidou, Despina (PhD student at Department of Design Sciences, LTH)