# QUESTIONS TO THE ARCHITECT

THE ARCHITECT'S ROLE WITHIN GLOBAL TRANSFORMATIONS

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## THE ARCHITECT'S ROLE WITHIN GLOBAL TRANSFORMATIONS

This booklet is a collection of questions concerning ongoing global processes, which have an influence on architecture and urbanism. It contains topics, such as global warming, urbanization, demographic change, wealth distribution, migration or digitalization amongst many others. Each process is shown on a double page as a transformation from one condition to another. Besides providing a short information to each transformation, the booklet confronts the reader with questions regarding the architect's role and responsibility within a complex network of multilayered and interdependent processes. Its aim is not primarily to provide solutions, but to raise an awareness and make the reader think about her/his opportunities regarding the creation of an ecologically and socially more sustainable world.

illustration a
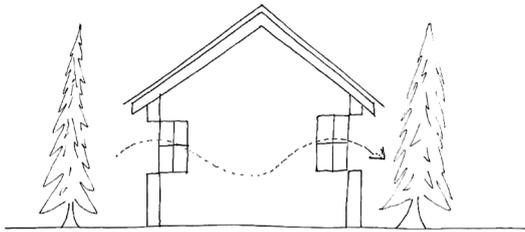
illustration b

condition a

general info/fact

FROM O_2

Global emissions increased from 2 billion tonnes of carbon dioxide in 1900 to over 36 billion tonnes 115 years later (Ritchie and Roser 2017).

condition b

architect's challenge

TO CO_2

How do we have to build to decrease the greenhousegas-emissions? How do we need to organize cities that the use of the car becomes redundant?
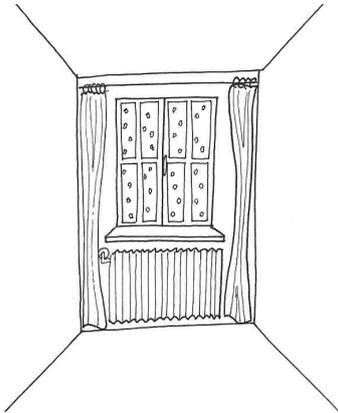
FROM HEATING

The planet's average surface temperature has risen about 0.9 degrees Celsius since the late 19th century, a change driven largely by increased carbon dioxide and other human-made emissions into the atmosphere (NASA).
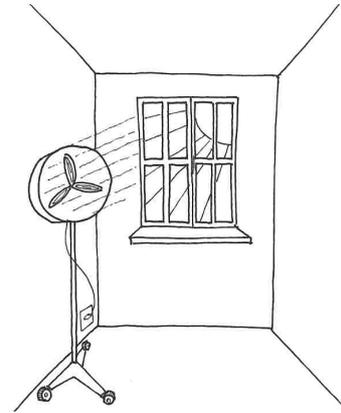
TO COOLING

What can we do to avoid or slow down global warming? How can we adapt buildings to the changing climatic conditions?
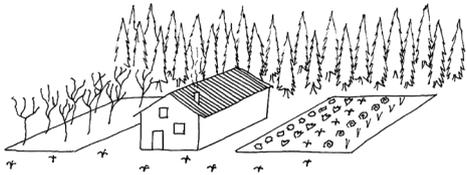
FROM CARING

A report by the UN Environment Programme, says rising consumption driven by a growing middle class has seen resource extraction increase from 22 billion tons in 1970 to 70 billion tons in 2010 (Bárcena and Potonik 2016).
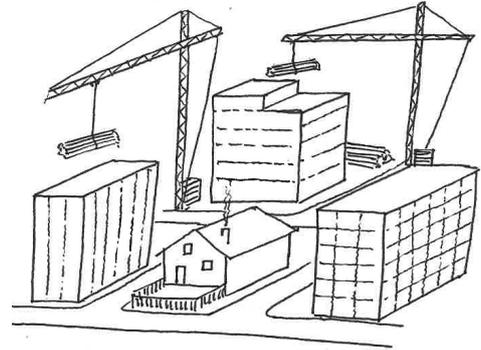
TO CONSUMING

How can we recycle building materials? How can we reuse building-parts and materials?

FROM BUILDING

Every year we dump about 2.12 billion tons of waste. If all this waste was put on trucks they would go around the world 24 times. This amount is partly because 99 percent of the stuff we buy is trashed within 6 months (The World Counts).

TO LAND—FILL

What happens with a building after its demolition? How can we think of the whole life-cycle of a building that reaches from the planning until its demolition/recycling? Can we even create a closed cycle?

FROM BEACH

Global sea level rose about 8 inches in the last century. The rate in the last two decades, however, is nearly double that of the last century and is accelerating slightly every year (NASA).
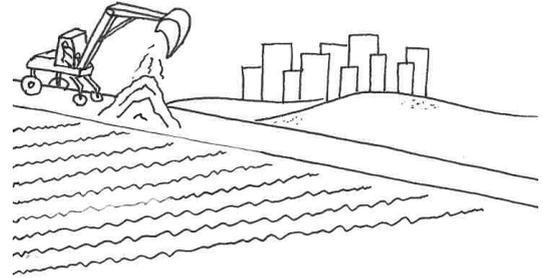
TO DIKE

How can we avoid a further rise of the sea-level? How can we protect cities from the rising sea level in an attractive way? And what happens with the towns, that cannot afford protective measures?

FROM HOUSE

By the end of 2017, 68.5 million individuals were forcibly displaced worldwide as a result of persecution, conflict, violence or human rights violations (UNHCR The UN Refugee Agency 2018).
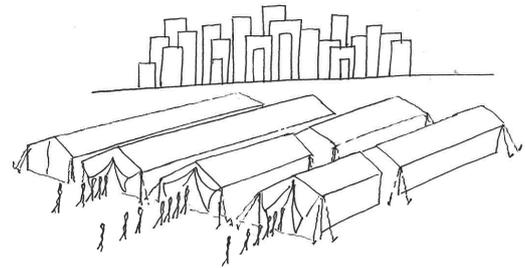
TO TENT

How can we create a sense of belonging and foster the integration of people with a different cultural background in search of a new home?
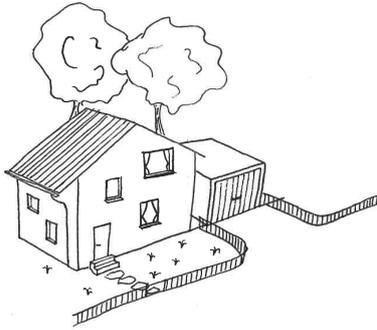
FROM BUILDING

1 out of 7 people on the planet currently lives in a slum. 1 out of every 4 people will live in a slum by 2030, according to current estimates. In developing countries 1 of 3 urban residents lives in slums (Habitat for Humanity Great Britain).
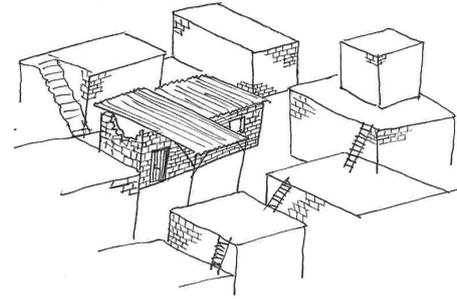

TO SHELTER

How can we build adequate habitats for all people, instead of just fulfilling luxurious dreams of the wealthiest class?
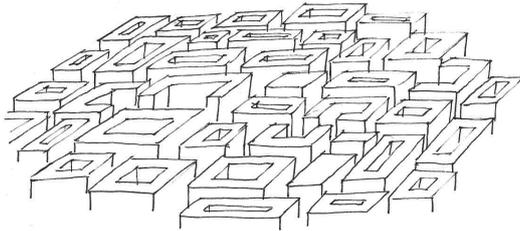
FROM POOR / RICH

More than 70 percent of the world's adults own under $10,000. The world's wealthiest, those owning over $100,000 in assets, total only 8.6% of the global population, own 85.6% of the global wealth (Credit Suisse 2018).
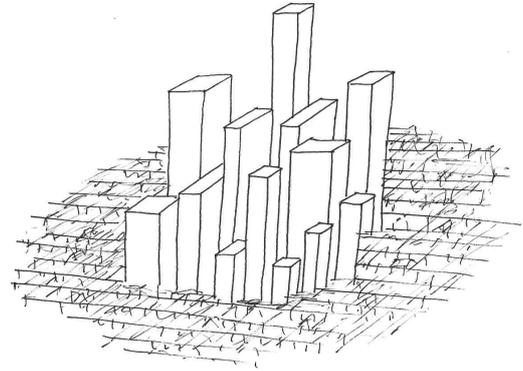
TO POORER / RICHER

How can cities become a common ground of interaction and confrontation of people independent of their income, religion, sex or cultural background?
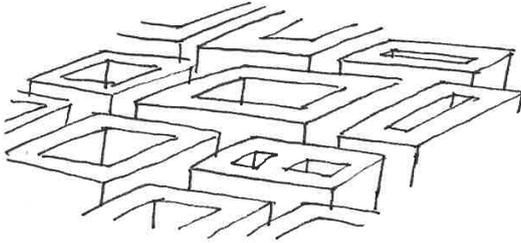
FROM COMMUNITY

Since the 1960s one-person households have increased. In many European countries, as well as in Australia, China, Japan and the United States, the proportion of one-person households has more than doubled (Chamie 2017).
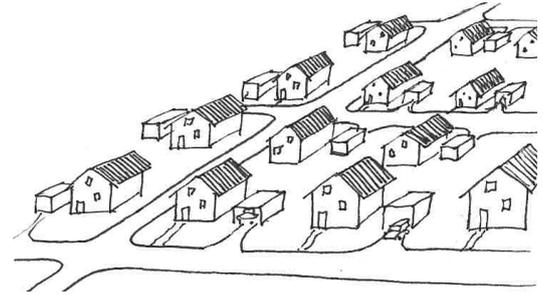
TO INDIVIDUAL

How can cities enhance social interaction and communal activities?
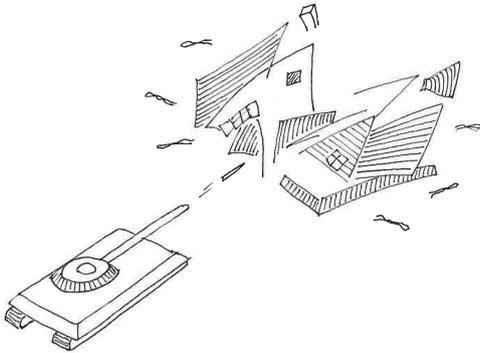
FROM WAR VICTIMS

The World Health Organization reports more than 800,000 people die by suicide every year. Its first global report on suicide prevention said more people die from suicide than from conflicts, wars and natural disasters combined (Schlein 2014).
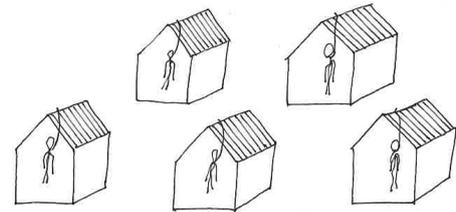
TO SUICIDES

How can architecture make people happier?
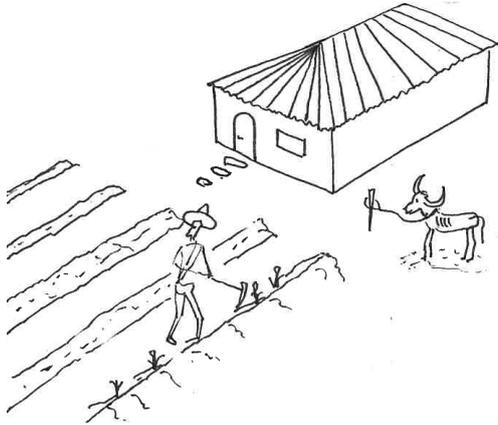
FROM HUNGER

Globally seen, obesity is a bigger health crisis than hunger, and the leading cause of disabilities around the world, according to a new report published Thursday in the British medical journal The Lancet (Dellorto 2012).
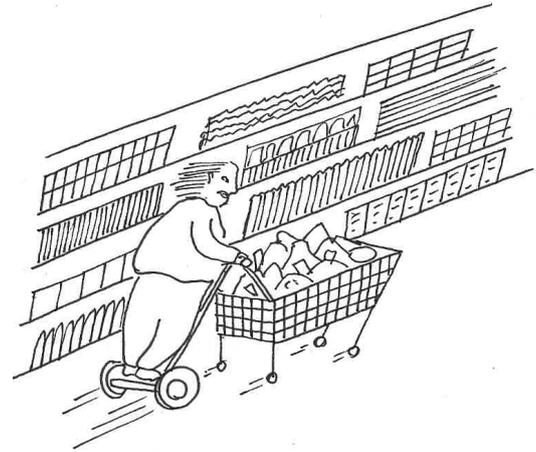
TO OBESITY

How can we create cities that encourage people to walk or bike?

FROM JUVENILE

The proportion of the global population aged 60 years or over increased from 8.5 per cent in 1980 to 12.7 per cent in 2017. It is projected to reach 16.4 per cent in 2030, and 21.3 per cent in 2050 (United Nations 2017a).
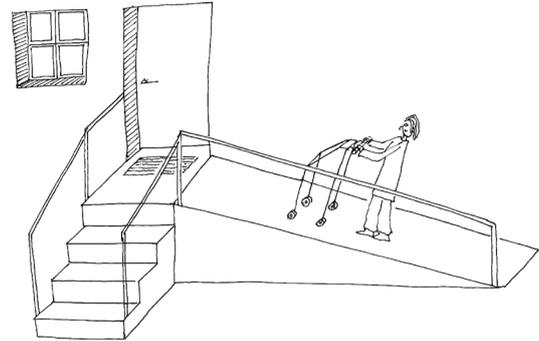
TO RETIREE

How can buildings contribute to the integration of the increasing number of old people in the society?
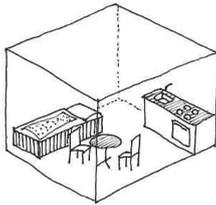
FROM STUDIO

The average housing-area consumption per person has increased a lot during the last decades, especially in western societies. This is an important reason for the increasing energy demand and the high greenhousegas emissions.
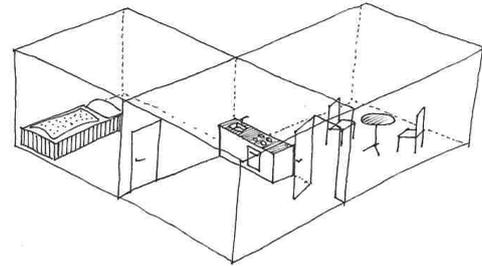
TO FLAT

How can we decrease the average housing area consumption by not lowering the life-quality? Or can we even increase the life quality through sharing and social interaction?
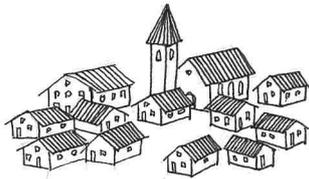
FROM VILLAGE

The world's population counts 7.6 billion people and is expected to grow to nearly 10 billion by the middle of this century before leveling off at around 11.2 billion by the end of the 21st century (United Nations 2017b).

TO METROPOLIS

How can we densify cities and make them more attractive at the same time in order to house more people?
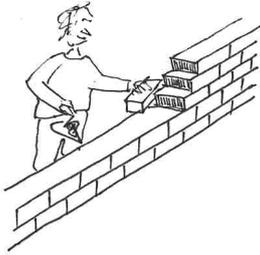
FROM CRAFTMANSHIP

In terms of craftmanship human labour is increasingly replaced by industrial, standardized production. The advantage of liberating humans from demanding, physical labour comes along with the loss of the unique identity of manual work.
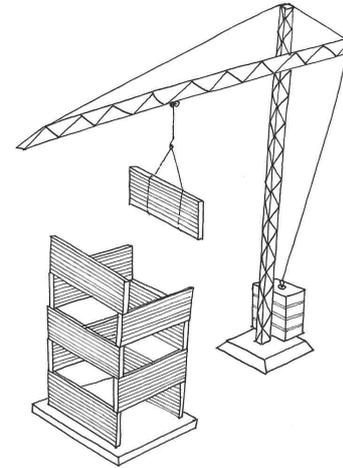
TO INDUSTRIAL PRODUCT

How can we make a reasonable use of standardized production methods without loosing the quality of craftmanship and local traditions?
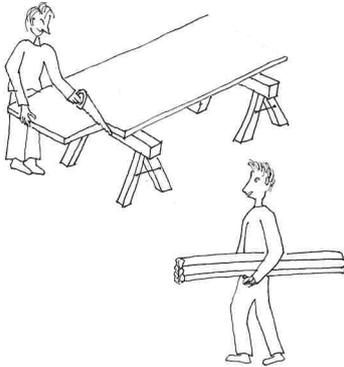
FROM HUMAN

By 2025 more than half of labour in working hours will be executed by robots. Amazon uses 30,000 robots in its global warehouses, which reduce operating expenses by approximately 20%.
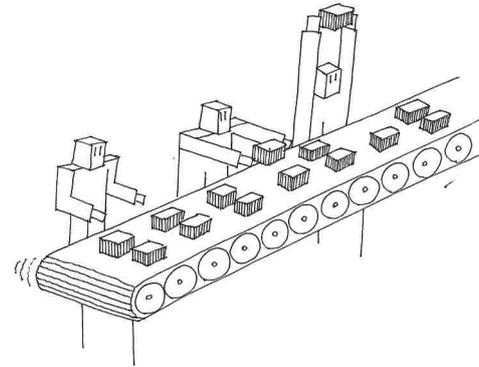
TO ROBOT

What does it mean for architecture, if it is built to house robots instead of humans?
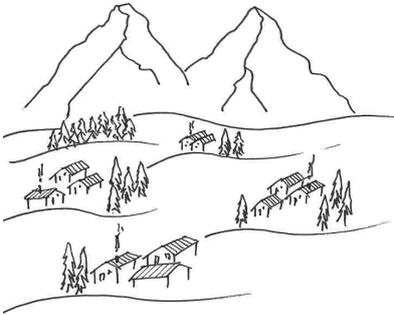
FROM GROUNDED

More people live in urban than rural areas, with 55% residing in urban areas in 2018, compared to 30 percent in 1950. By 2050 this proportion is expected to reach approximately 70% (United Nations 2018).
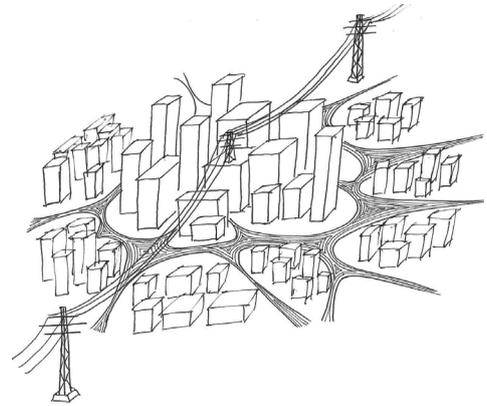
TO INTERCONNECTED

How can we create a sense of rootedness in a world of constant transformation?
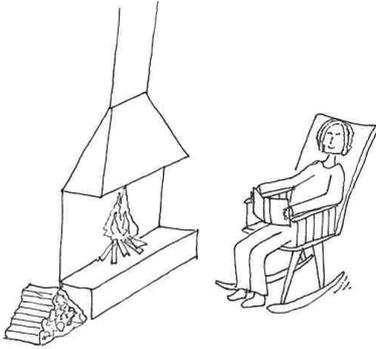
FROM SETTLED

New means of infrastructure allow fast and cheap transportation of humans and goods around the world. Thus mobility has become an important part of many western lifestyles when it comes to working or holiday destinations.
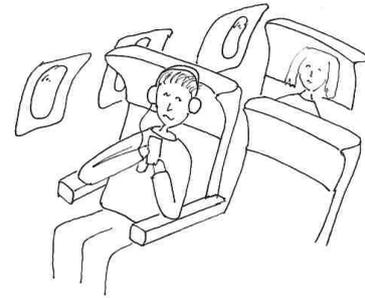
TO MOBILE

What is home in a time where it needs to fit into 55 x 35 x 25 centimeters? What happens to architecture and cities, if we become nomads again?

FROM BOOK

Digitalization has changed our lifes, the way we communicate, search for information, listen to music, watch movies or photographs, or read books, to only mention a few examples of daily life.
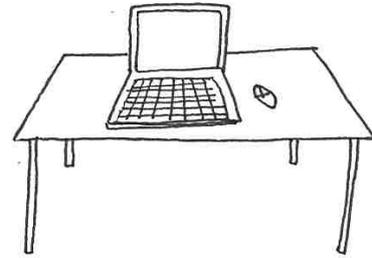
TO MAC BOOK

What does home mean in a time where lifes are increasingly digitally defined?
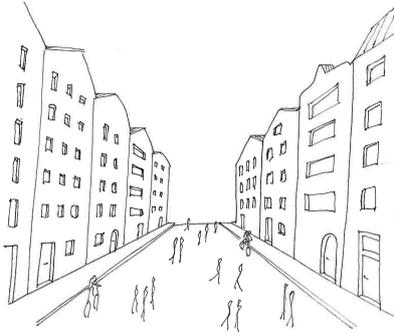
FROM ALLEY

While in the past public space of squares and alleys was usually defined by the neighbouring buildings, today it is often a left over between vast means of infrastructure.
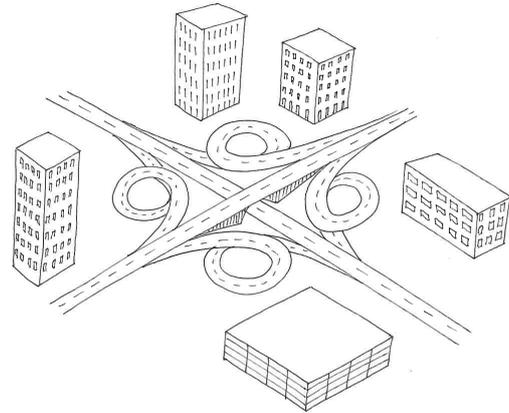
TO MOTORWAY

How can we transform cities, that they become more walkable again? How can we create public spaces instead of empty gaps?
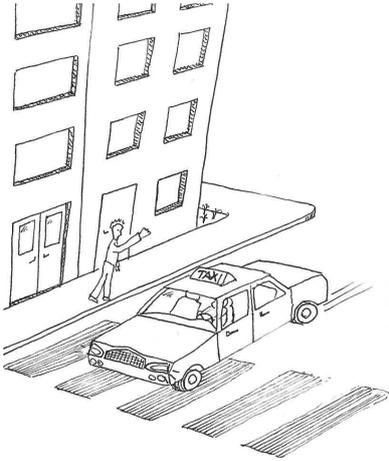
FROM WALKING

Taxi drones started flying passengers in Dubai in July 2017. Passengers will select destinations on a touch screen and will be able to travel up to 30 minutes at a top speed of around 100 km/h (BBC 2017).
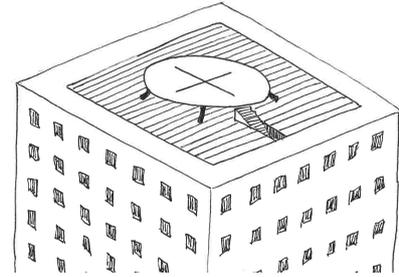
TO FLYING

How do we imagine the city, if new means of transportation start to question the dependence on the ground?
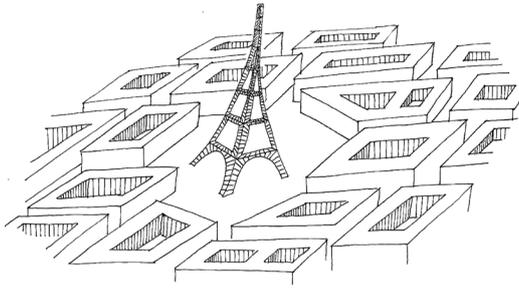
FROM REAL

While architects have always used other build-ings for inspiration, some Chinese works of archi-tecture go much further and are actually inten-ded to directly replicate some of the world's most iconic structures.
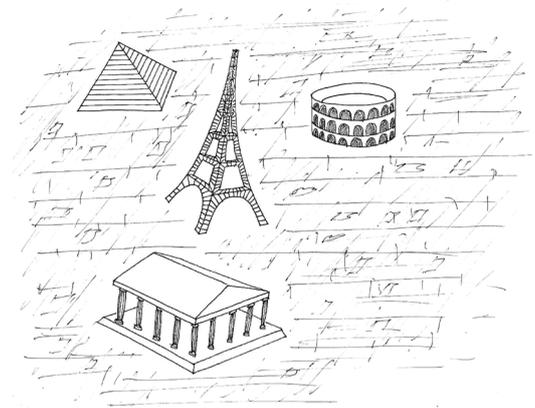
TO FAKE

How do we create authenticity in a world, where the distinction of original and copy becomes more and more difficult?
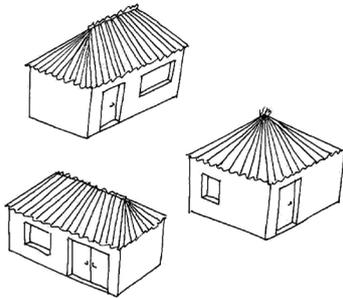
FROM MICRO—BUSINESS

With a bigger choice and cheaper offers global chains often supress local microbusinesses. Thus, local culture gets lost. Identities of places are vanished by an equalizing, standardized, highly westerly characterized globalization-product.
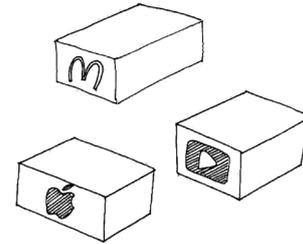
TO GLOBAL—PLAYER

How can we create buildings that are rooted in space and time and thereby define the identity of a place?
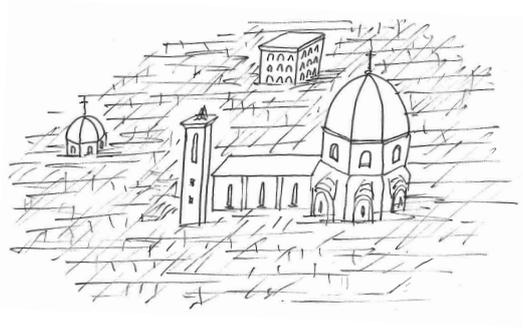
FROM CULTURE

City-tourism mainly occurs because of cultural differences. However, these differences are getting lost as part of an equalizing process of globalization. Thus identity has to be recreated "artificially" and quickly by expressive landmarks.
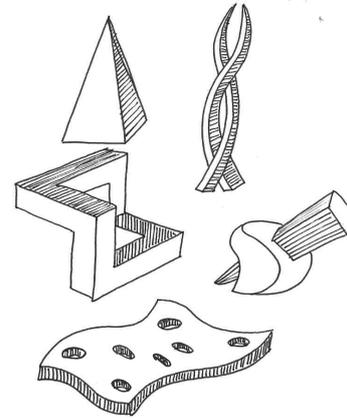
TO COMMERCIAL

How can we design buildings that are based on local culture and not just an outcome of a temporary fashion and global trends?

FROM COMMON GROUND

The increasing power of private, commercially driven investors and the often lacking power of municipalities results in a privatization of former public space. Thus cities transform into a place to park money instead of housing people.
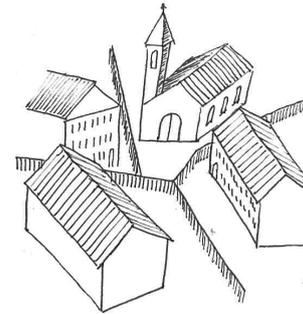
TO FENCED PROPERTY

How can we create public spaces that enhance social interaction and make cities more lively and attractive? How can we work against the gentrification of neighborhoods?
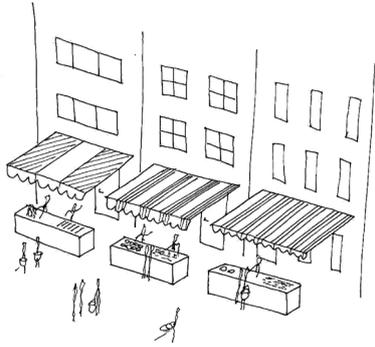
FROM MARKET

By 2020, approximately 70% of online purchases in China will be made via a mobile phone. This is a significantly higher prediction compared to other countries: United States, 46%; United Kingdom, 40%; Japan, 40%; and India, 30% (Evans 2016).
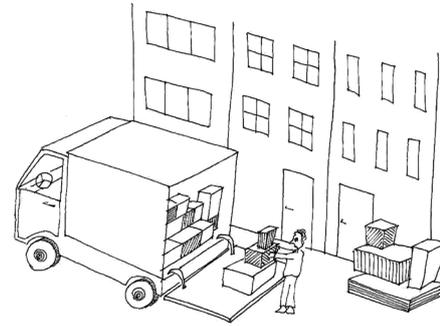
TO ONLINE STORE

How can we enhance real interaction of people in a world where the digital, global network has replaced the physical, local network within the alleys of a neighbourhood?

FROM OUTDOOR

Throughout history humans have build shelters to protect themselves from nature. This protection is continuosly turning into an alienation from nature, as nowadays people in western countries spend around 90% of their lives inside buildings.
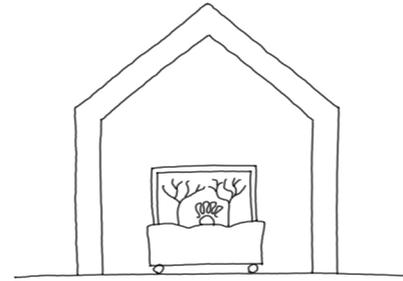
TO INDOOR

How can we promote the human health in our built environment? How can we reintroduce nature in buildings?
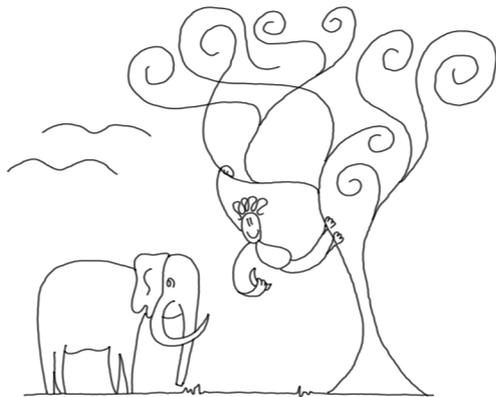
FROM WILD

According to biologists, around 96% of the global mass of all living animals are humans and the animals raised and domesticated to feed humans. By 2018 only 4% remain for the wildlife of our planet (Guardian 2018).
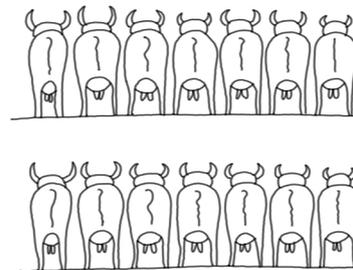
TO DOMESTICATED

How can we ensure a harmonious balance between our natural and built environment? How can buildings promote biodiversity?
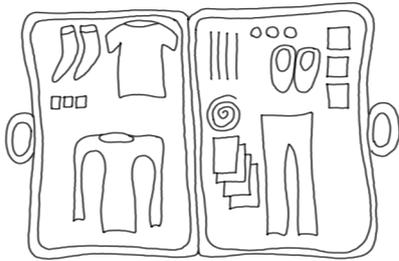
FROM 500

Whereas an average household possessed around 500 objects in the past, nowadays a household with western standards accumulates more than 10'000 things, even though digitalization would allow a much less materialistic lifestyle.
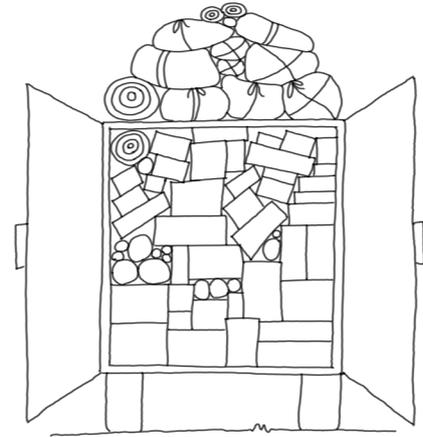
TO 10'000

How can architecture promote a simple and light lifestyle that is not based on material possessions but on interactions of people?

Reference list

Bárcena, Alicia; Potonik, Janez (2016): *Gobal Material Flows and Resource Productivity*. Assessment Report for the Assessment Report for the UNEP International Resource Panel. United Nations Environment Programme.

BBC (2017): *Dubai announces Passenger Drone Plans* (Technology). Available online at https://www.bbc.com/news/technology-38967235.

Chamie, Joseph (2017): *The Rise of One-Person Households*. Inter Press Service. Available online at http://www.ipsnews.net/2017/02/the-rise-of-one-person-households/.

Credit Suisse (2018): *The Global Wealth Report 2018*. Available online at https://www.credit-suisse.com/about-us/en/reports-research/global-wealth-report.html.

Dellorto, Danielle (2012): *Global report: Obesity bigger health crisis than hunger*. CNN (Health). Available online at https://edition.cnn.com/2012/12/13/health/global-burden-report/index.html.

Evans, Michelle (2016): *Connected Consumer. Digital Commerce's Impact by Industry*. Euromonitor International. Available online at https://blog.euromonitor.com/connected-consumer-digital-commerces-impact-by-industry/.

Guardian (2018): *Humans just 0.01% of all life but have destroyed 83% of wild mammals*. Available online at https://www.theguardian.com/environment/2018/may/21/human-race-just-001-of-all-life-but-has-destroyed-over-80-of-wild-mammals-study/.

Habitat for Humanity Great Britain: *What is a Slum*. Available online at https://www.habitatforhumanity.org.uk/what-we-do/slum-rehabilitation/what-is-a-slum/.

NASA: *Global Climate Change. Vital Signs of the Planet*. Available online at https://climate.nasa.gov/evidence/.

Ritchie, Hannah; Roser, Max (2017): *CO_2 and other Greenhouse Gas Emissions*. CO_2 emissions– global and regional trends. Our World in Data. Available online at https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions.

Schlein, Lisa (2014): *More People Die from Suicide Than From Wars, Natural Disasters Combined*. VOA NEWS (Science & Health). Available online at https://www.voanews.com/science-health/more-people-die-suicide-wars-natural-disasters-combined.

The World Counts: *World Waste Facts*. Available online at https://www.theworldcounts.com/counters/shocking_environmental_facts_and_statistics/world_waste_facts.

UNHCR The UN Refugee Agency (2018): *Global Trends. Forced Displacement in 2017*. Available online at https://www.unhcr.org/5b27be547.pdf.

United Nations (2017a): *Population Facts. Population ageing and sustainable development*. Available online at https://www.un.org/en/development/desa/population/publications/pdf/popfacts/PopFacts_2017-1.pdf.

United Nations (2017b): *World Population Prospects*. New York. Available online at https://www.un.org/development/desa/en/news/population/world-population-prospects-2017.html.

United Nations (2018): *World Urbanization Prospects*. New York. Available online at https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html.

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The architect's role within global transformations
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Bergen School of Architecture
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