

S A L U T O G E N E S I S

QUESTIONING ARCHITECTURAL DESIGN STANDARDS
BY IMPLEMENTING THE HUMAN AS A HOLISTIC LIVING BEING

D-ARCH ETHZ

FREE DIPLOMA THESIS
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FS20

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HAPPINESS

ENVIRONMENT

METHOD

MY HOUSE IS PRACTICAL. I THANK YOU, AS I
MIGHT THANK RAILWAY ENGINEERS OR THE
TELEPHONE SERVICE.
YOU HAVE NOT TOUCHED MY HEART.

Vers une architecture,
Le Corbusier

HISTORICAL OVERVIEW

‘The language of psychiatry is a monologue of reason about madness.’

Michel Foucault, *The History of Madness* 1961

The topic of mental health and illness has always been an important and difficult subject. As history shows, its architecture is an expression of the existing knowledge in this field. The position of humans in society has been evaluated with the definition of illness of the respective time. Whereas in the ancient world, people with what we would call mental problems today, got guided into a deep ritual sleep -the incubation- in order to heal their ‘misbehavior’, it became a tool of control, isolation and segregation in the progress of time. In the 1950ies, with the contribution of medication to the field of psychology, the treatment and its architecture experienced a drastic change. Clinics became labs, where people were stripped of their rights and became guinea pigs to medical studies. From the typology of the panopticon it evolved into a more hospital like architecture.

With those changes the definition of normality and simultaneously the one of illness were redefined over and over again throughout time, depending on several factors such as social and cultural values. In the present, the line between healthy and ill gets drawn in a very taxonomic manner,

by the diagnostic tool called DSM-5- a large collection of symptoms.

Looking at the history of mental illness also means looking at the history of medicine and women. Being the oldest mental illness ever described, Hysteria brought a lot of pain to the female gender. Making the life-giving organ responsible for behavior that fell out of the ‘normal’, women were burnt at the stake, their female organs were removed or later in history they even became showpieces for men of science.

Even though Hysteria was removed from the DSM in the 1960s, statistically seen women are still more effected by mental illnesses than men. If this is due to gender specific paid or unpaid work, or that women are more likely to talk about mental issues or that medical staff is more inclined to assign a mental illness to women’s physical complaints, is not resolved yet.

By researching different approaches on how to deal with mental illnesses throughout history, we came to question if contemporary renderings portraying new psychiatric clinics is how architecture for the mind should look like in the future.

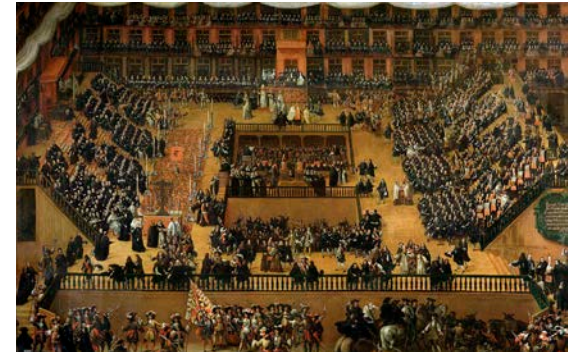




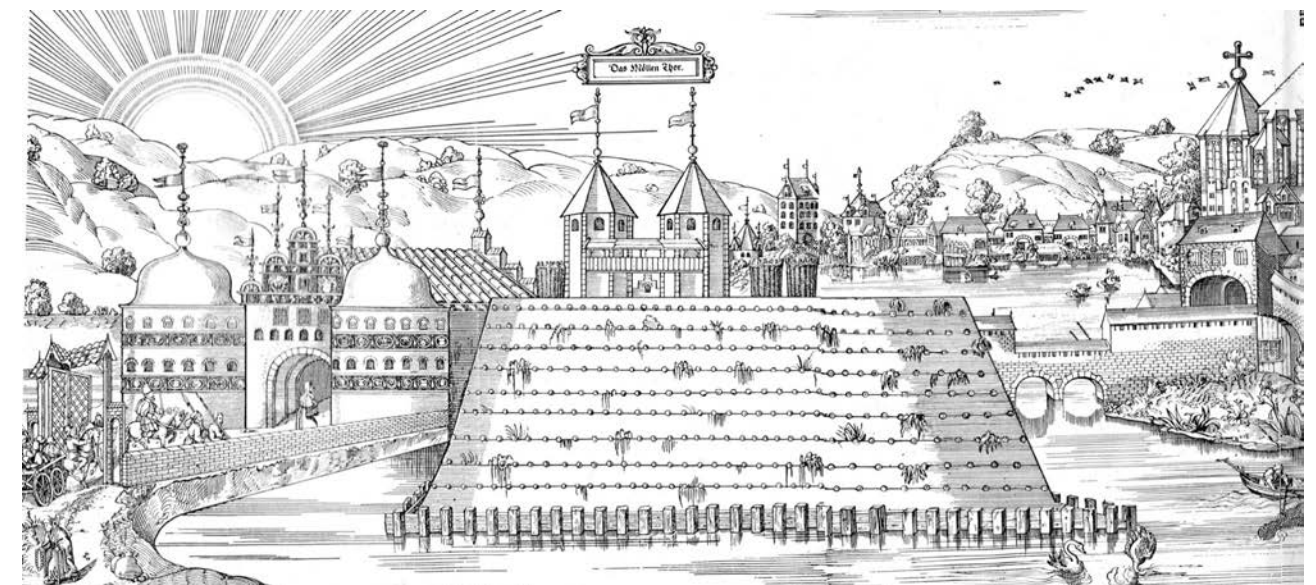
The god cures by touching a patient's shoulder during the act of enkoimesis
Around 30 AD was the first time something similar came up like what is called psychiatry today. The roman doctor Aulus Cornelius Celsus and the greek one Soranus von Ephesos already mentioned therapy on mentally ill humans in form of relaxing, employment (theatre, travel, play, literature) and body cleaning by diets and oil massages. If none of all this practices leaded to a solution, the last possibility would have been isolation.



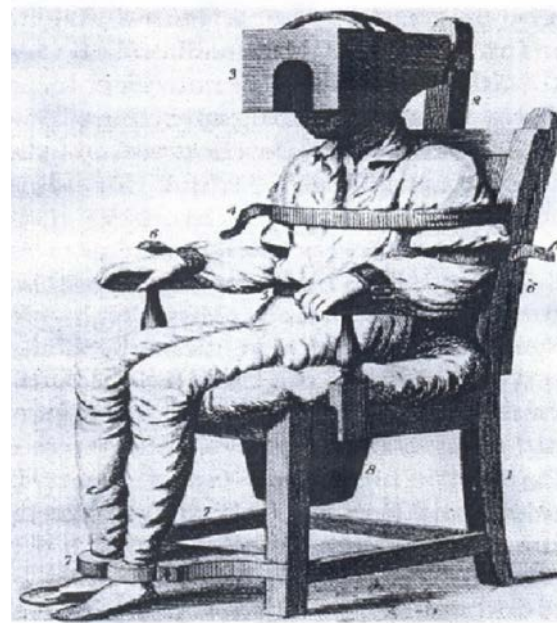
Bloodletting as an act of purification and cure of mental illness



Autodafé on the Plaza Mayor in Madrid
Painting by Francisco Rizi
In the beginnings of the middle age and the rise of Christianity they tried to find reasons for mental illness and blamed the devil for it. So the affected people, which were defined as witches and wizards got eliminated due to inquisition.

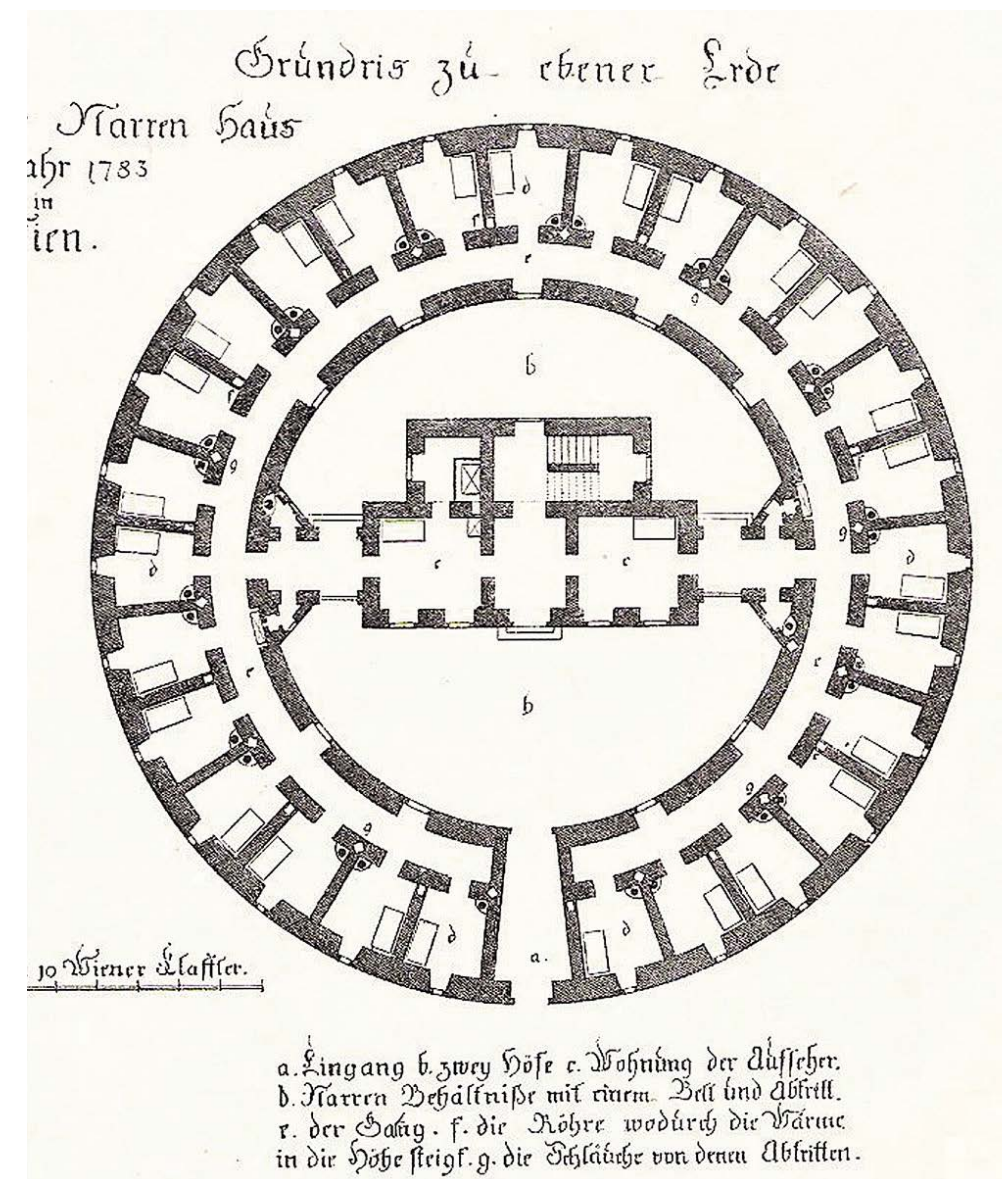


Social separation: Mühlentor-Anlage, Peter Monnik, Lübeck 1552. The lunatics got caged like animals outside the city walls without protection



Der Tranquillizer

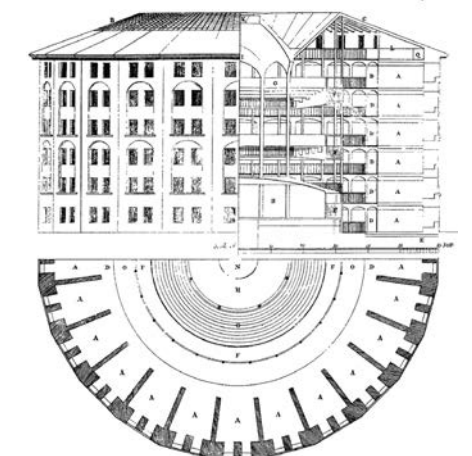
Forced treatment: Chair to control movement unrest



Architecture of surveillance: „Narrenhaus“ Wien



Square-plan workhouse, Sampson Kempthorne, 1835
In the 17. and 18. century instead of killing people by failed experiments the goal was to find an employment for the patients: workhouses and houses of correction.



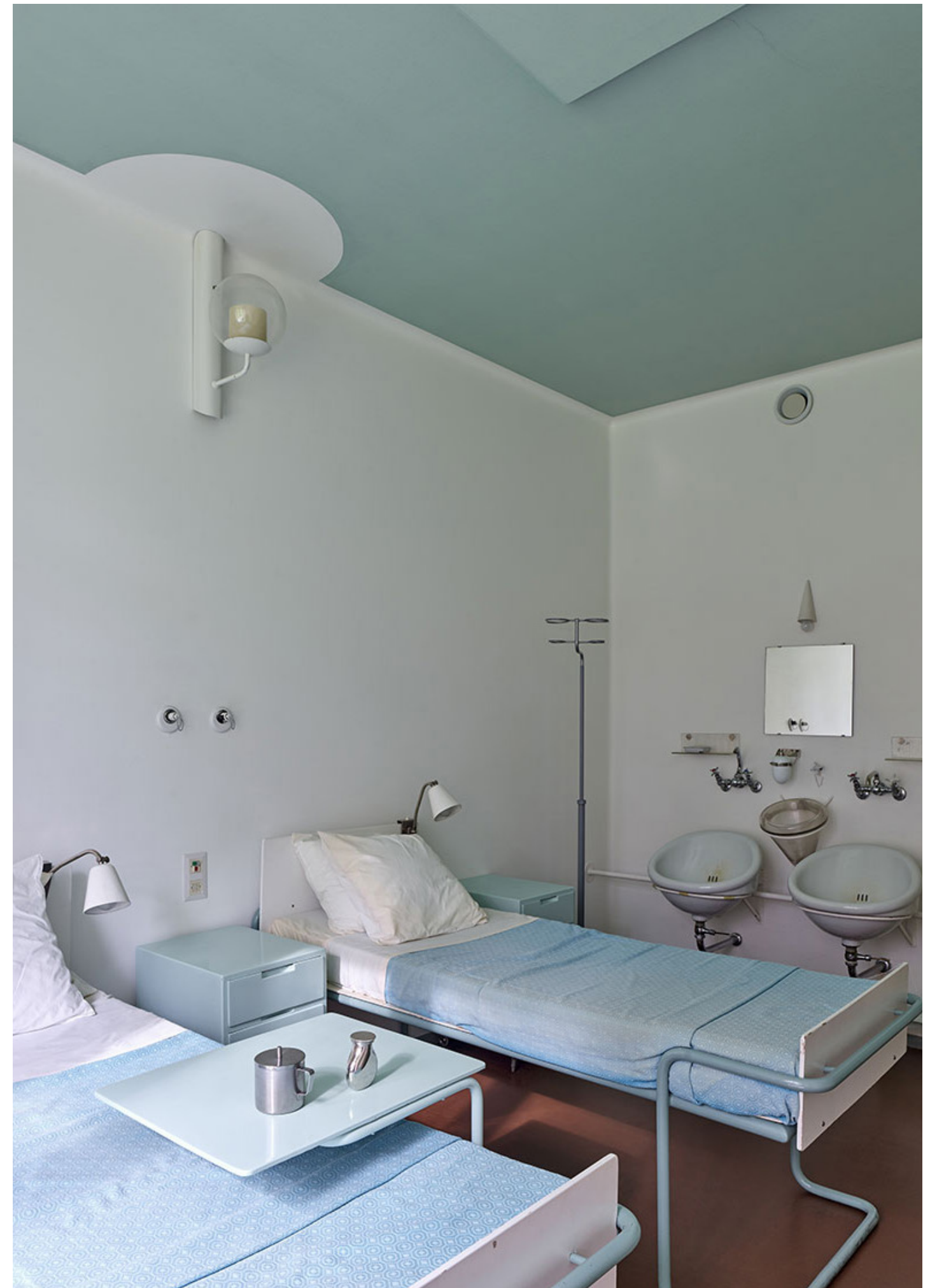
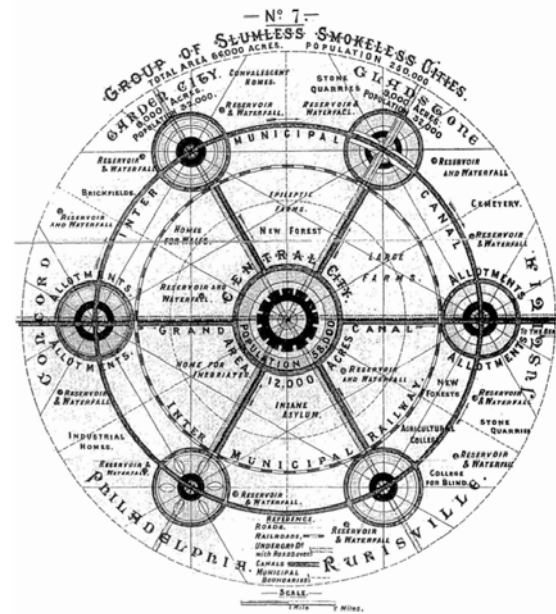
Panopticon, Jeremy Bentham

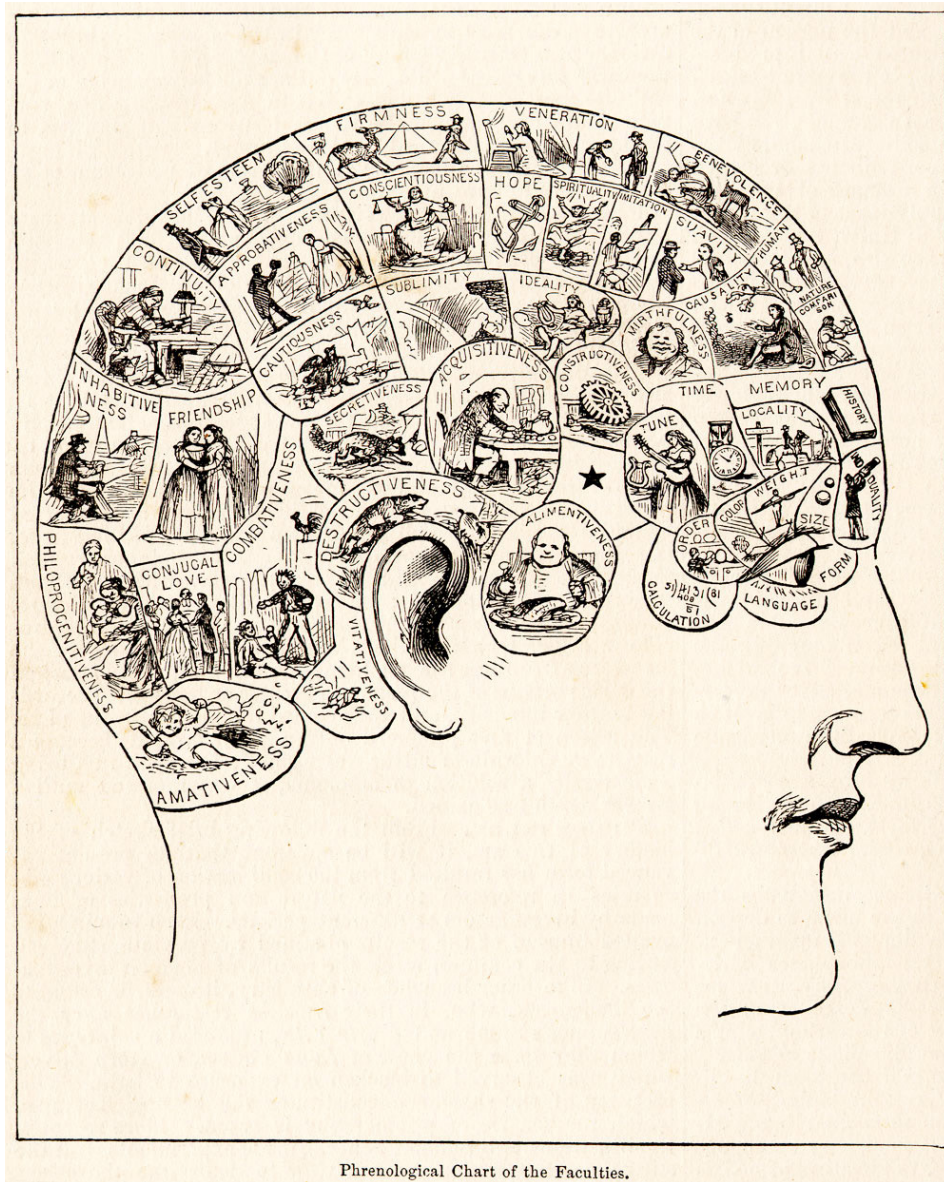
Interior Paimio Sanatorium
Alvar Aalto



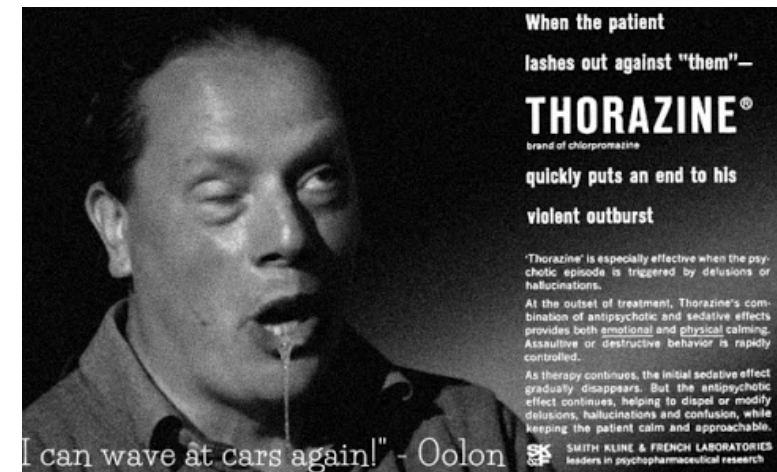
*Une leçon clinique à la Salpêtrière
painted by André Brouillet, 1887*

Urban plan of the Garden city by Ebenezer Howard 1898





Phrenology: is a pseudoscience which involves the measurement of bumps on the skull to predict mental traits. It is based on the concept that the brain is the organ of the mind and that certain brain areas have localized, specific functions. With the progress of the research in the field of neurology some psychiatric disturbance got referred on anatomical mistakes.



1952: Evolution of psychiatric medication.
 THORAZINE as the first promise, later refuted due to bad secondary effects.



Film still
 Snake Pit 1948

Dementia village
Lantern of Chagrin Valley, Chagrin Falls



Film still
One flew over the cuckoo's nest 1975



Environmental question
Psychiatric clinic Liestal, Burkard Meyer Architekten AG
Under construction



COMPLEXITY OF THE MIND

The mind is something extremely complex because of its high variety; existing as a unique and infinitive universe in each individual.

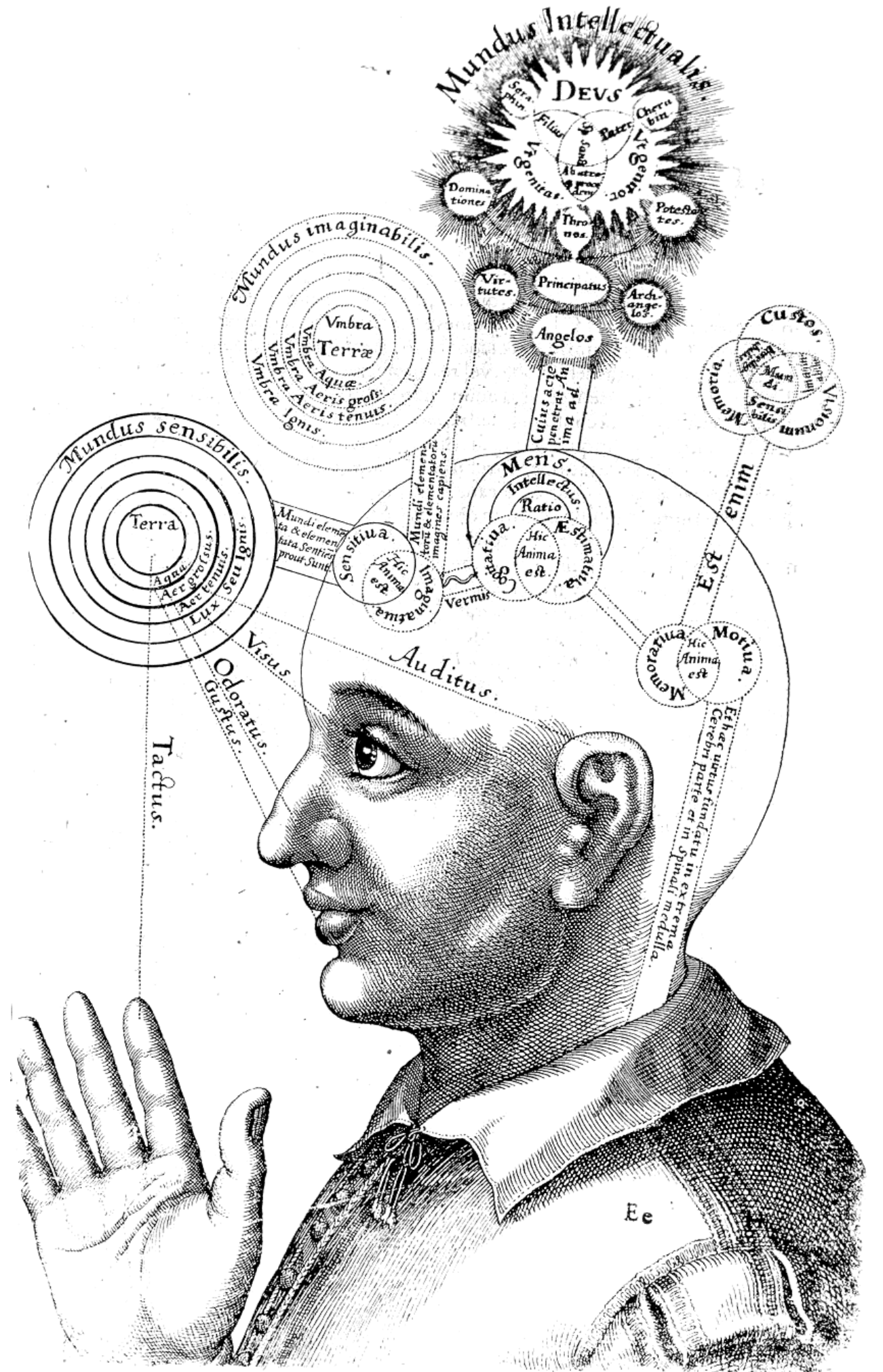
Mental disorder is classified as a pathological change in behavior and perception. An other definition is, that a mental disorder occurs, when there is an objectively determinable deviation from a previous defined norm, as well as subjective suffering of the person concerned. As norms undergo constant changes and vary from culture to culture, this definition implies that the determination of mental disorders is not static, e.g. homosexuality. As for the origins, the modern medicine does not assign specific causes to mental illnesses, as long as there is no definite biological reason. Therefore modern psychiatry is confined to symptoms and symptom combinations. This finds its expression in the DSM-5, a classification bible for any mental disfunction there is. Jerome Wakefield, who had a decisive influence on the DSM definition of mental disorders, developed the harmful dysfunction model, in which any mental disorder must fulfill two conditions: there must be a natural dysfunction and a scientific proof, that this dysfunction causes disadvantages or damages.

Whereas any broken leg can be fixed more or less in the same way and the medicine has successfully objectified the human

body, the mind is more complex, in the way that the same mental disorder can require a different approach in treatment.

The dichotomous division in healthy and unhealthy does not account for the big variety there is. On the other hand we have the two-continua-model which states: 'The absence of mental illness does not therefore automatically imply the presence of mental health. Nor does the absence of mental health imply the presence of mental illness. Consequently, full mental health can be defined as a combination of high emotional, mental and social well-being and absence of mental illness.' Further over it states that 'at the same time, it is an important indication that reducing mental illness in society does not necessarily lead to an increase in mental health, but that mental health - i.e. emotional well-being and mental as well as social functioning - must be actively promoted.' (OBSAN 72 2016)

In the world of design we find few nice examples, that actively implement the psyche into their work, such as the therapy objects by Nicolette Bodewes. As design claims to care, it is precisely this topic that needs caring from the architectural world.



THE MEDICAL SPACE

CURE

MENTAL ILLNESS

DEFINITION OF ILLNESS

NORMS
MEDICAL
SOCIAL ENVIRONMNET
TIME
CULTURE

Crazywise
Allen Frances: Normal

CLASSIFICATION

DSM - 5
IDC - 10

TYPES OF ILLNESS

DEPRESSION 30.3%
SPECIFIC PHOBIA (ANXIETY DISORDERS) 22.7%
SOMATOFORM DISORDER 20.4%
ADDICTION (ALCOHOL) 14.6%
BIPOLAR DISORDER
DEMENTIA
PSYCHOTIC DISTURBANCE
EATING DISORDER
SCHIZOPHRENIA
PERSONALITY DISORDER

WIDESPREAD DISEASE

DEPRESSION

LIFESTYLE DISEASE

SLEEPING DISORDER

SOURCE OF ILLNESS

BIOLOGICAL FACTORS
PSYCHOLOGICAL FACTORS
ENVIRONMENTAL FACTORS
IDIOPATHIC

TREATMENT

SOMATIC
Philippe Pinel & Samuel Tuke

PSYCHOTHERAPEUTIC
Sigmund Freud
William Tuke: The York Retreat
ART THERAPY, ART BRUT

PHARMACOTHERAPY
brain research, brainbow
Roland Kuhn: Antidepressiva
Klaus Dörner
HELSINKI-DECLARATION

INSTITUTIONS:

ROCHE
NOVARTIS

LAW

COMMITAL

INSTITUTIONS

PSYCHIATRIC CLINIC
HISTORY

TPOLOGY
MOVEMENT PATIENTS AND STAFF
ORGANISATION
HOMOGENEOUS / HETEROGENEOUS STRUCTURE
POSITION OF BUILDINGS

LITERATURE

Alfred Döblin: Berlin Alexanderplatz
Michel Foucault: Wahnsinn und Gesellschaft
Die Geburt der Klinik
Überwachen und Strafen
James Patterson: Mauer des Schweigens
Franzobel: Der Narrenturm, Stück

PERCEPTION OF SPACE THROUGH THE EYES OF ILLNESS

Healing through own imagination?

ARCHITECTURE SELECTION

Narrenturm, Wien, 1784
Kiyoshi Izumi: Mental health centre, 1965
Alvar Aalto: Paimio Sanatorium, 1929
architecten de vylder vinck taillieu, psychiatric clinic caritas, Melle, 2016
Maggie's

SWISS ORGANISATIONS

Pro Mente Sana
Mad Pride
Verrueckte Kindheit
Institut Kinderseele
Trajets (work reintegration)
Stiftung ipt (work reintegration)

THE SOCIAL SPACE

PREVENTION
MIND

MENTAL HEALTH

MENTAL WELLNESS
EMOTIONS, FEELINGS, MOOD
WELL-BEING
HAPPINESS
Gallup Inc.: Collecting Data of Happiness (Questions 0 to 10)
WHO: "A state of complete physical, mental and social well-being."
William Davies: Nervous state: How feelings took over the world

EMOTIONAL CAPITALISM
HAPPINESS AGENDA
GROSS NATIONAL HAPPINESS (GNH)

EVERYDAYLIFE

QUALITY OF LIFE

HUMANISATION

SWITZERLAND

FACTS, STATISTICS OF OBSAN BERICHT 72

WORLDWIDE

COUNTRIES:

Stiglitz-Sen-Fitoussi-Commission
AS A COUNTER ARGUMENT TO GNP
RANKING OF HAPPY COUNTRIES

URBAN SCALE

Italo Calvino: Invisible Cities
Neurourbanistik

5 PONTS OF WELL-BEING:

1 CONNECT (SOCIAL BONDING, COMMUNITY)
2 KEEP ACTIVE
3 TAKE NOTICE
4 KEEP LEARNING
5 GIVE

NEIGHBOURHOODS

APRTEMENTS

A PLACE FOR RESTING
A PLACE FOR FAMILY GATHERING

IMPACTS OF HEALTH

WHERE WE LIVE
ENVIRONMENT
GENETICS
INCOME
EDUCATION
RELATIONSHIPS FRIENDS/FAMILY

ARCHITECTURE SELECTION

Epidaurus ca. 4th century BC
vastu shastra & feng shui
Owen Williams: Pioneer Health center, Peckham, 1926
Finsbury Health centre, 1930

ARCHITECTURE PSYCHOLOGY

BEHAVIOR
MOVEMENT

EXPIRIENCE

PHYSICAL MATERIAL
ATMOSPHERE
SMELL
SUN, LIGHT
AIR
GREENERY
COLOUR

kopvol

COLLABORATION ARCHITECTS & PSYCHOLOGISTS

ENVIRONMENT

Heini Heidiger: Animal psychology
Humphry Osmond
William Ittelson

EXPERIMENT

Owen Williams: The Peckham Experiment
Stanford Prison-Experiment, 1971.

PREVENTION
BODY

INFRASTRUCTURE

HYGIENE
SPORT, EXERCISE
PHYSIOTHERAPY
NUTRITION

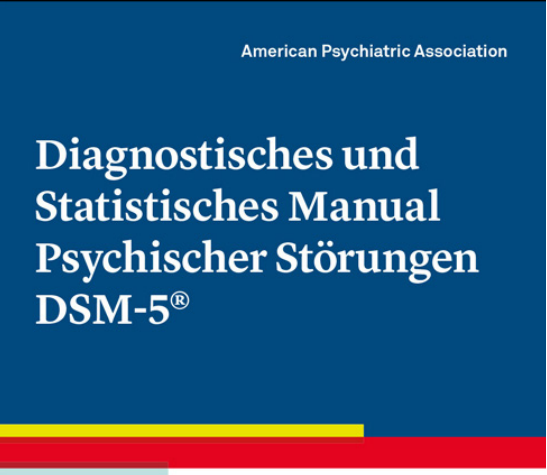
METHAPHYSICS

SURREALISM

DREAMS

SUBCONSCIOUS

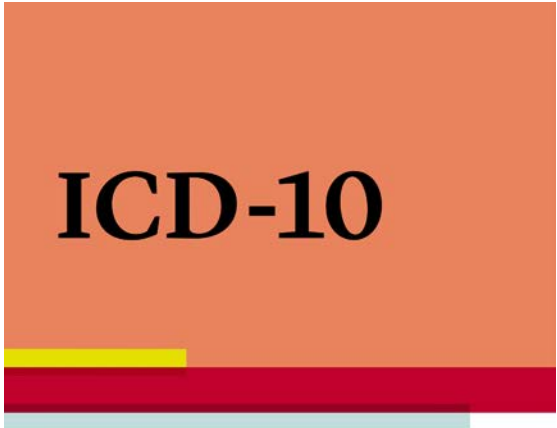
Lucien Lévy-Bruhl: participation mystique
C.G. Jung



Deutsche Ausgabe herausgegeben von
Peter Falkai und Hans-Ulrich Wittchen

mitherausgegeben von
Manfred Döpfner, Wolfgang Gaebel,
Wolfgang Maier, Winfried Rief,
Henning Saß und Michael Zaudig

2., korrigierte Auflage



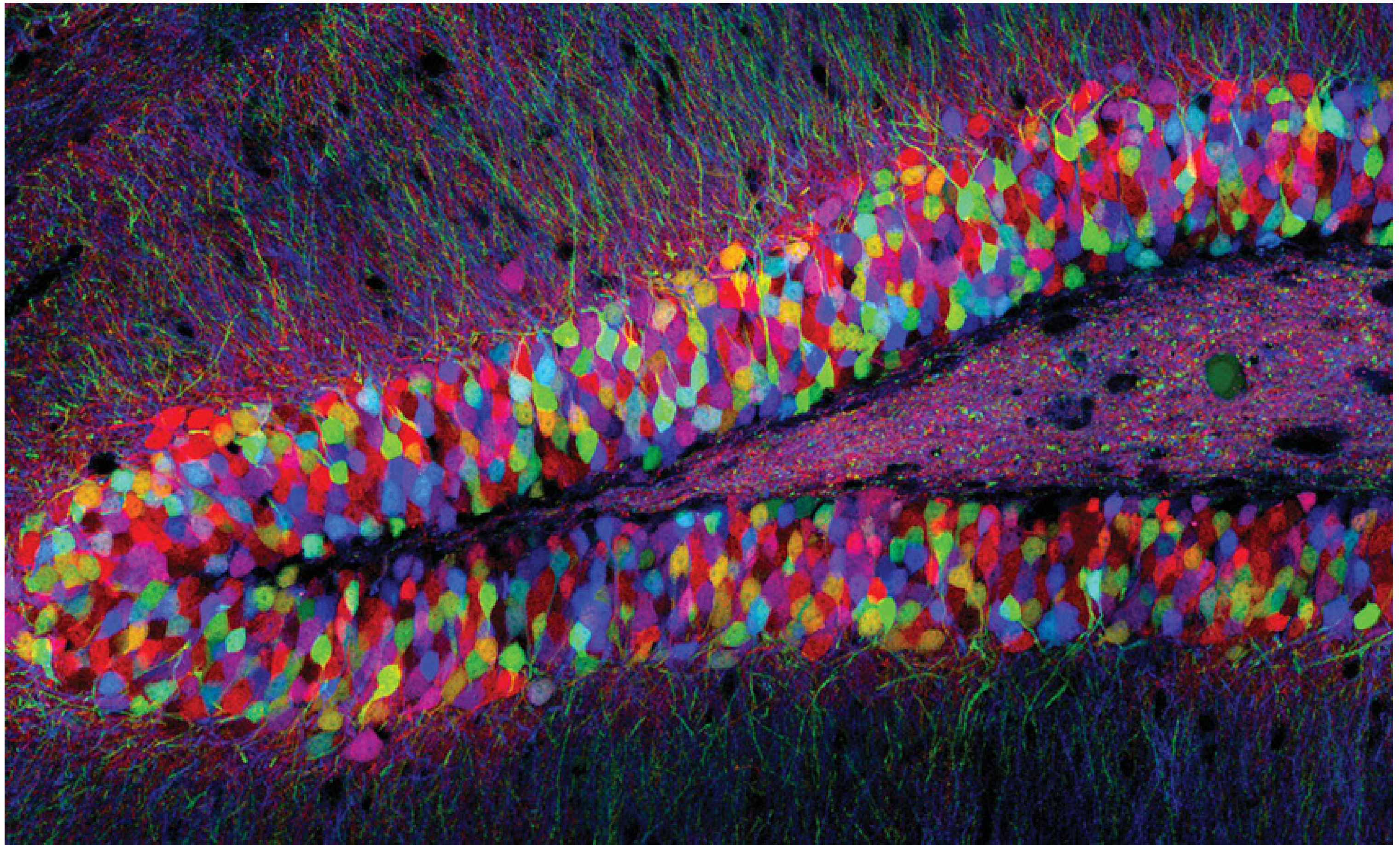
Horst Dilling
Harald J. Freyberger
(Hrsg.)

**Taschenführer zur
ICD-10-Klassifikation
psychischer Störungen**

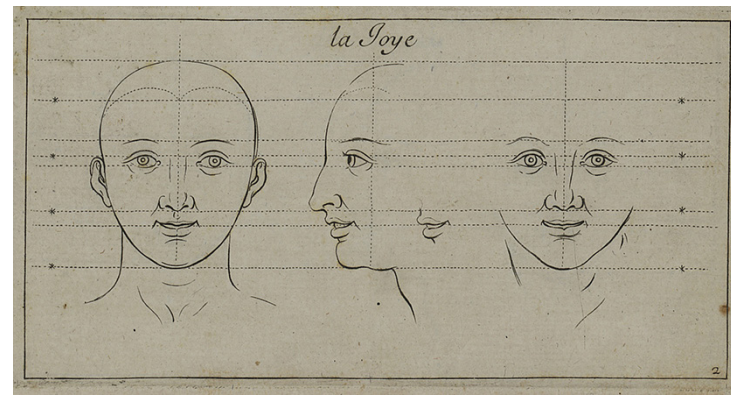
Nach dem Pocket Guide von J. E. Cooper

9., aktualisierte Auflage entsprechend
ICD-10-GM





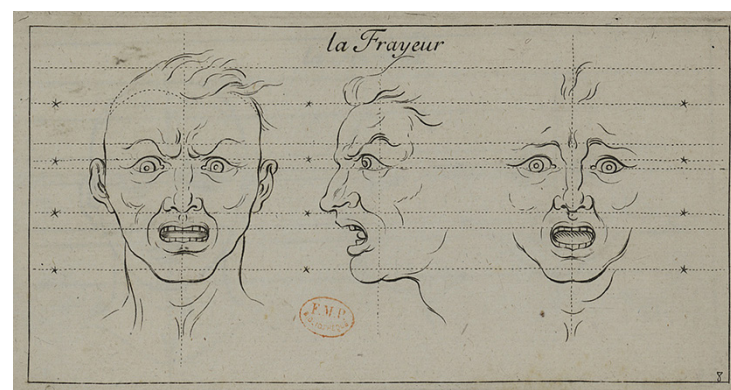
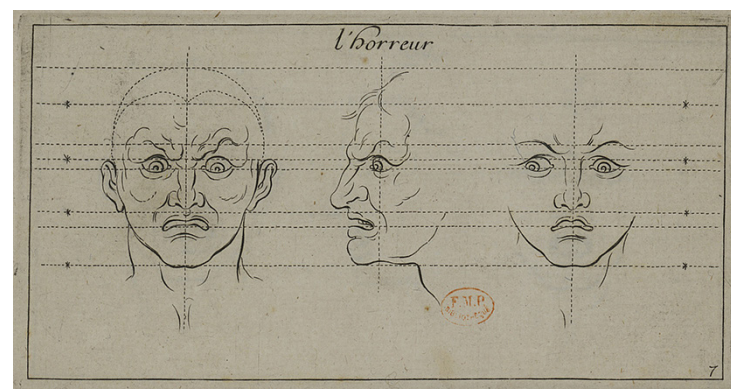
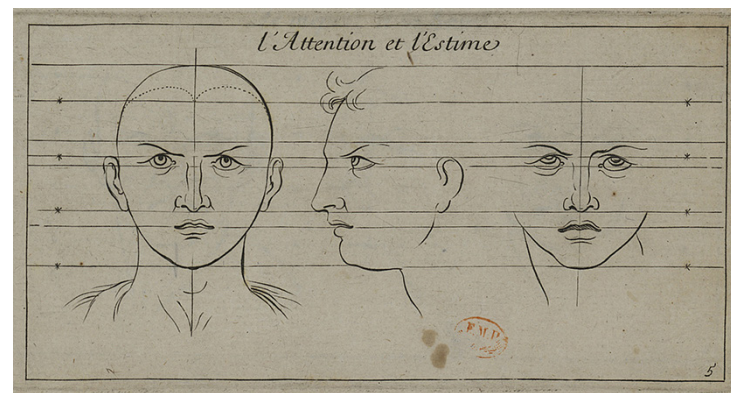
Brainbow of the Hippocampus
by Tamir Weissman, Harvard University

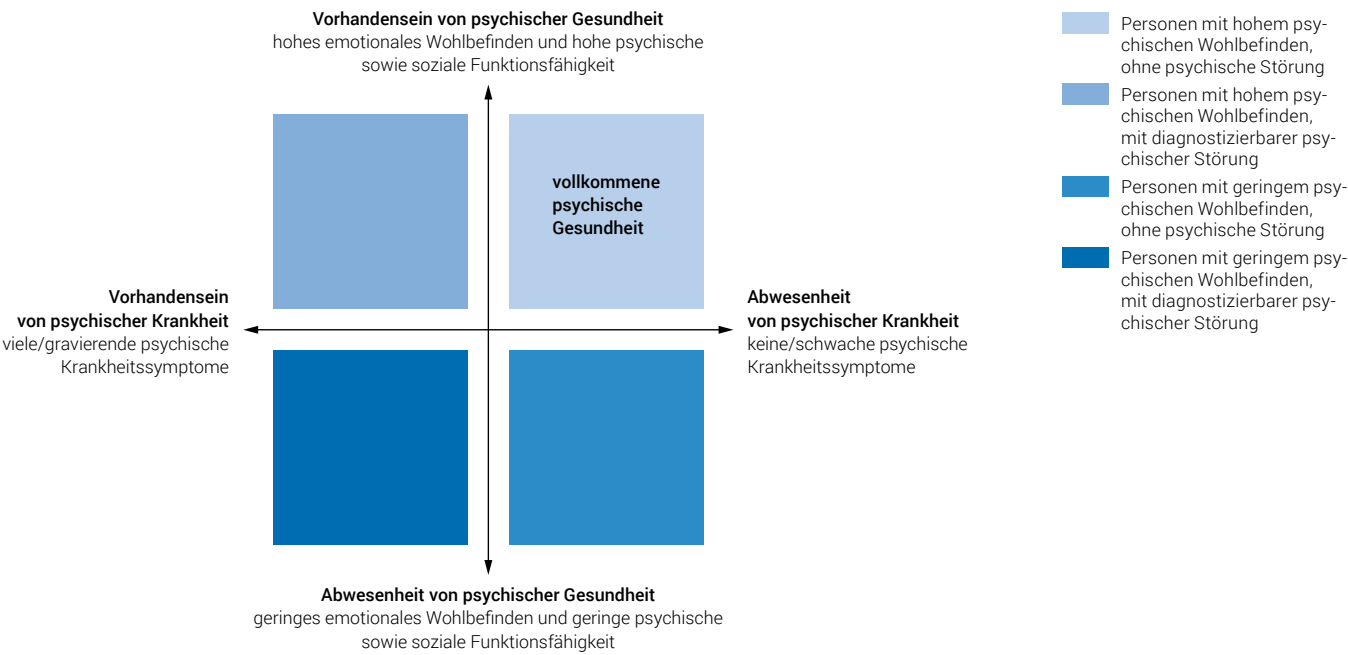


APPEARANCE OF ILLNESS

- 1 Delusion
- 2 Hallucination
- 3 Disorganized thinking
- 4 disturbed behavior
- 5 negative symptom

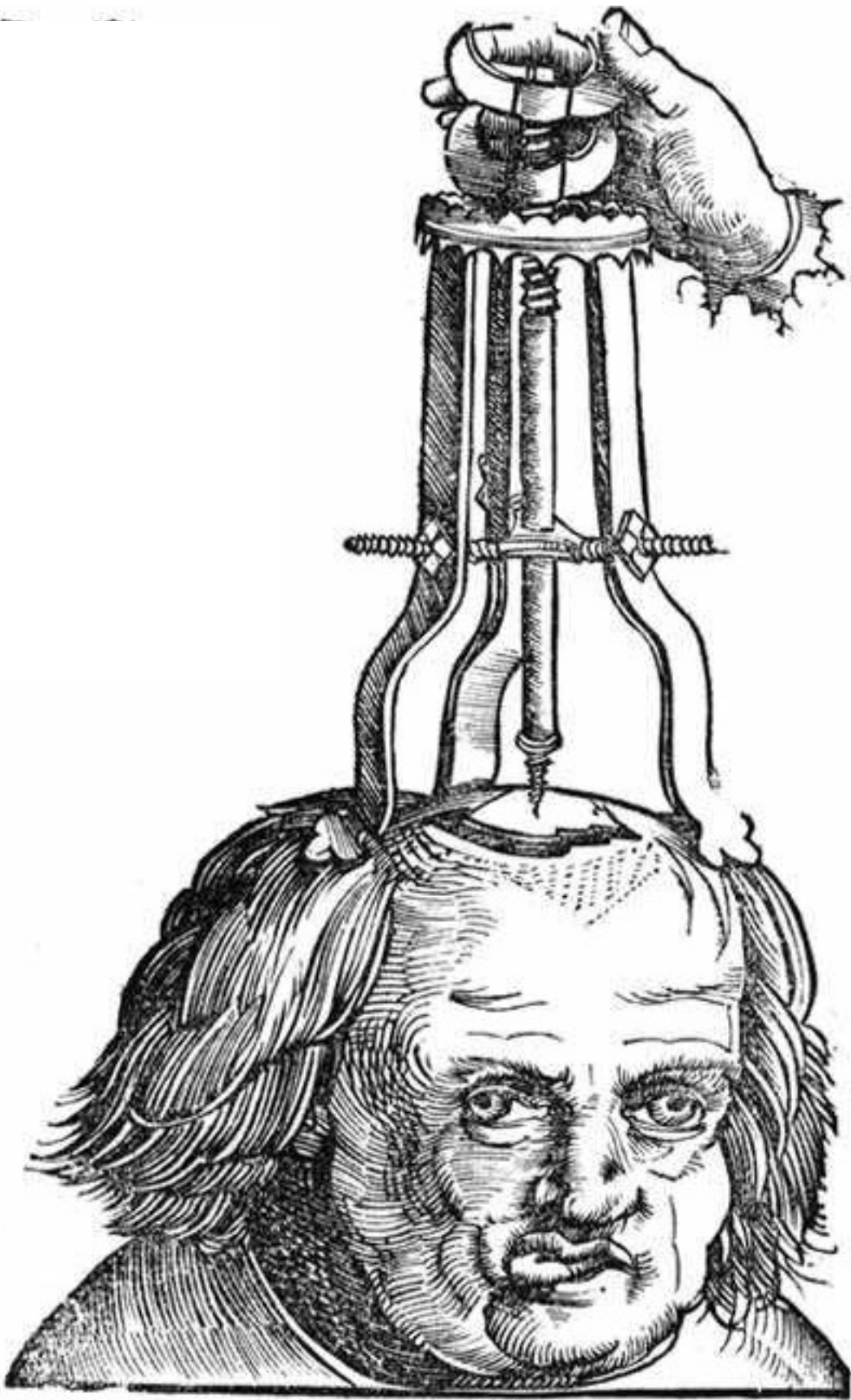
Two or more, one of the symptoms needs to be 1, 2 or 3.



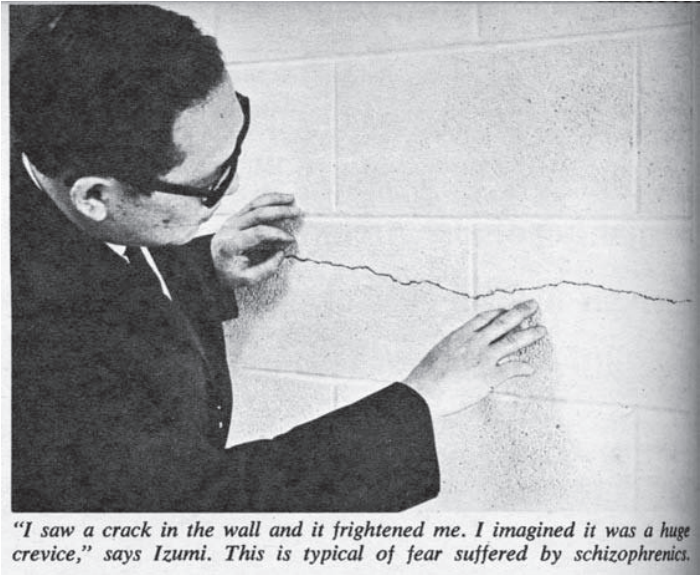
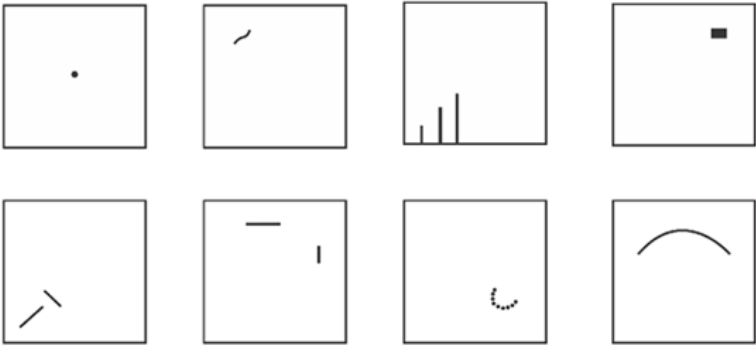


Two-continua-model
Westerhof & Keyes 2010

Therapy objects
Nicolette Bodewes, 2016

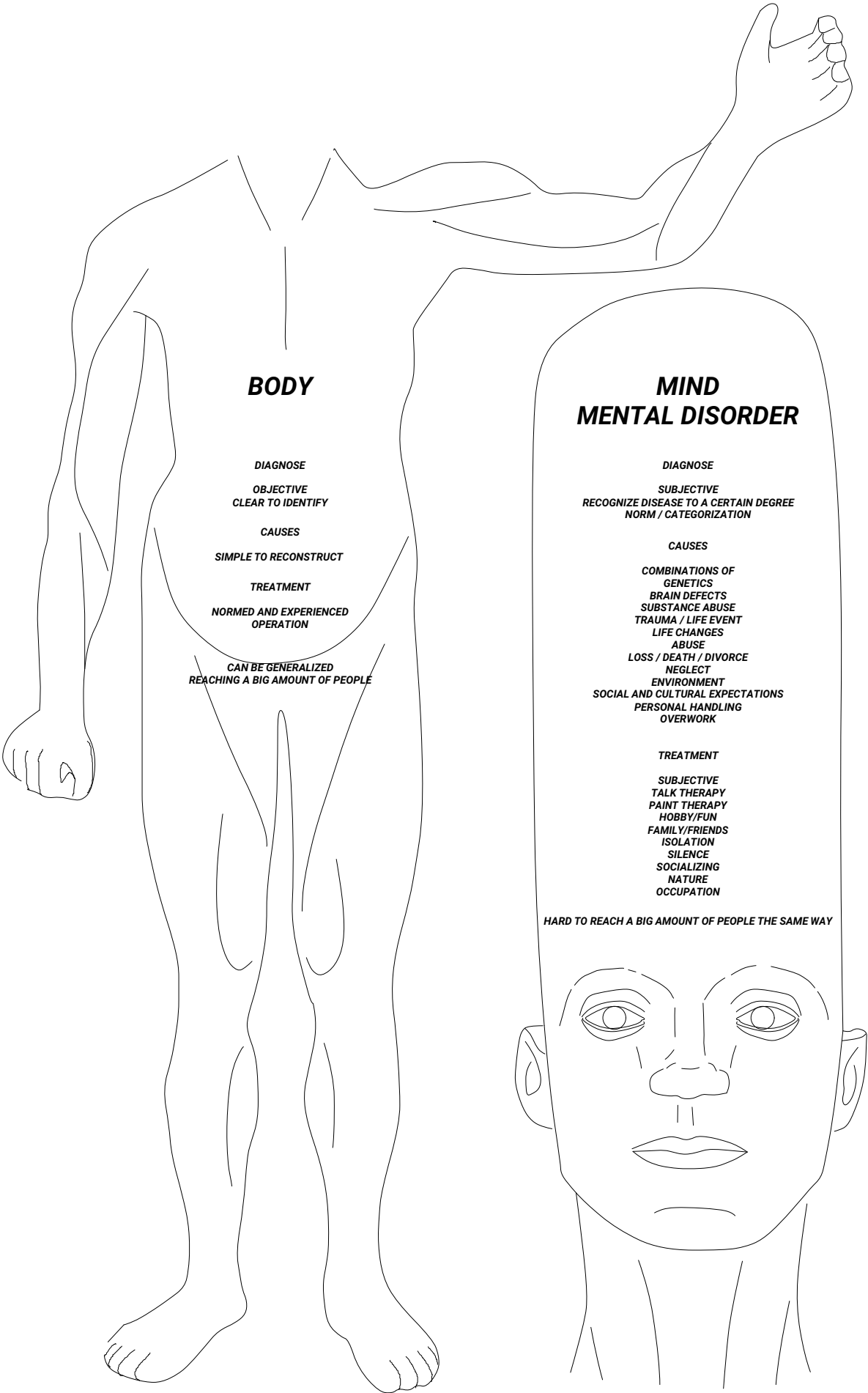


Trepanation



"I saw a crack in the wall and it frightened me. I imagined it was a huge crevice," says Izumi. This is typical of fear suffered by schizophrenics.

Wartegg drawing test, 1939
Kiyoshi Izumi



Complexity body and mind
Davide Morgillo & Jana von Wyl

CONTEXT SWITZERLAND

13 % of Swiss people have a mental disorder according to the monitoring review of 2016. This generates costs of 7 Mrd. each year. Wittchen and Jacobi have found out in their research in 2005 that almost every second person will suffer from a mental disorder in their life. Therefore it is an issue that affects everyone and should also be part of the design world.

The international focus on healthcare is evident. Several of UN's 17 climate goals relate to healthcare aspects, and strategies for healthy cities are recently formulated by WHO. All over the world strategies for healthy living and general wellbeing are developed. The report from 2015 'Psychological Health in Switzerland- an inventory and fields of action' concludes, that gaps in measures for mental health in Switzerland exist and sees a primary need for action in the fields of raising awareness, destigmatization and information, in the implementation of activities within health promotion, prevention and early detection, in advocacy and knowledge and in the field of structures and resources.

According to the report, there is good, high-quality mental health care in Switzerland, which enables mentally ill people to receive treatment in line with their needs, but sees potential improvement especially in the ambulant treatment and the linkage between the individual offers. The average duration of stay of a patient in a psychiatric clinic is approximately 29 days, of course strongly varying depending on type and degree of illness.

After a stationary stay the reintegration in familiar work environment is very difficult, amongst other factors due to stigmatiza-

tion and so people often end up remaining ghosts along the edge of society. The vision needs to be to prevent mental disorders and to raise awareness through its visibility as far as it is possible with the means of architecture.

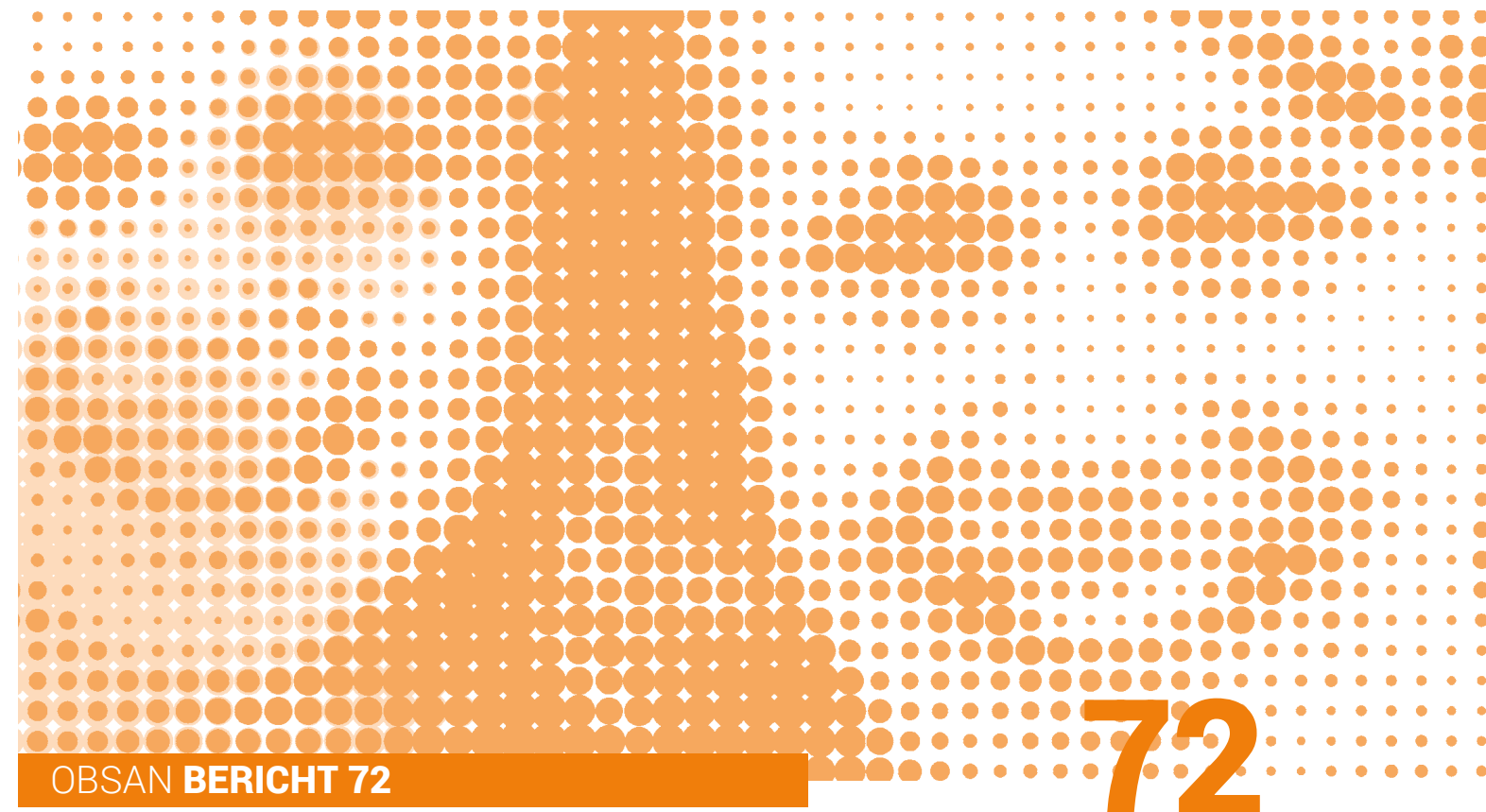
As society transformed itself more and more towards great individualization, former values of collectivity got replaced by self-actualization and felt loneliness within society increased. The demand of one person households grew significantly during the last ten years.

The preventive measures that exist in Switzerland are based on campaigns and dialogues, but do not have an agenda concerning the built environment.

As there is still a lack in systematic and broad empirical data, the statistics should be carefully read, but as it is still a topic that lacks visibility and wide spread knowledge within society, it is an important part of the political agenda in Switzerland.

We think that global challenges such as mental health, climate change, limited resources, gender aspects and quality of life must be acknowledged as factors, that increasingly influence architectural design.

We see prevention and collectivity as two parameters to the project.



Psychische Gesundheit in der Schweiz

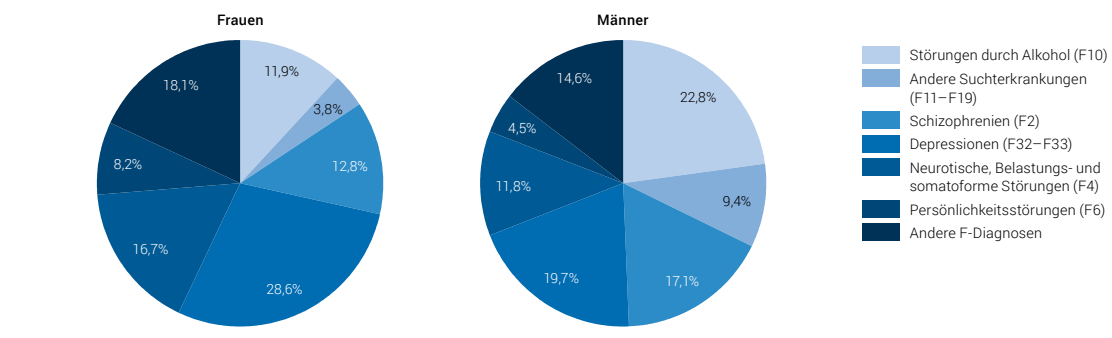
Monitoring 2016

Daniela Schuler, Alexandre Tuch, Nathalie Buscher, Paul Camenzind

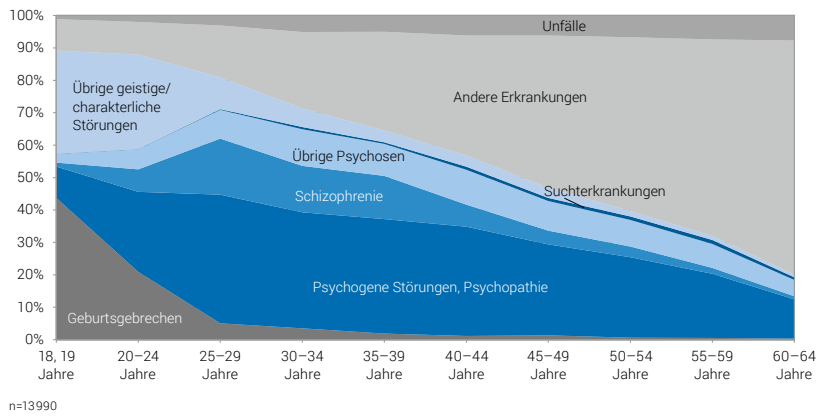


- 1 Clinique du Grand-Salève
- 2 Les Hôpitaux Universitaires de Genève HUG
- 3 Clinique Belmont
- 4 Clinique la Métairie SA
- 5 Hôpital de Prangins
- 6 Clinique la Lignière
- 7 CHUV Centre Hospitalier Universitaire Vaudois
- 8 Secteur Psychiatrique Est Fondation de Nant
- 9 Etablissements Hospitaliers du Nord Vaudois (eHnv) St. Loup
- 10 Réseau fribourgeois de santé mentale - RFSM Centre de soins hospitaliers
- 11 Centre de psychiatrie du Nord vaudois
- 12 CNP Centre Neuchâtelois de psychiatrie
- 13 Universitäre Psychiatrische Dienste Bern (UPD) Gemeindepsychiatrisches Zentrum Bern West
- 14 SRO Spital Region Oberaargau AG - Psychiatrische Station Niederbipp
- 15 Services Psychiatriques Jura Bernois BienneSeeland (SPJBB)
- 16 Regionalspital Emmental AG Psychiatrische Dienste
- 17 Lindenhofspital
- 18 südhang Klinik für Suchttherapien
- 19 Klinik Selhofen
- 20 Privatklinik Wyss
- 21 Soteria Bern
- 22 Universitäre Psychiatrische Dienste Bern (UPD) Uniklinik Murtenstrasse
- 23 Hôpital du Jura - Porrentury
- 24 Zentrum Hard
- 25 Solothurner Spitäler AG - Bürgerspital
- 26 Klinik Wysshölzli
- 27 Klinik SGM Langenthal Psychosomatik, Psychiatrie, Psychotherapie
- 28 Zentrum für Psychiatrie und Psychotherapie Langenthal SRO
- 29 Luzerner Psychiatrie
- 30 Klinik ESTA
- 31 Ita Wegman Klinik
- 32 Klinik für Suchttherapie Niederlenz
- 33 Psychiatrie Baselland
- 34 Universitäre Psychiatrische Kliniken Basel (UPK)
- 35 Psychiatrische Klinik Sonnenhalde
- 36 Schützen Rheinfelden AG Klinik & Ambulatorium
- 37 Klinik Barmelweid AG
- 38 Von Effinger-Stiftung Klinik im Hasel für Suchtkranke
- 39 Klinik Suchttherapie Egliswil
- 40 Psychiatrische Dienste Aargau AG Psychiatrischer Dienst Königsfelden (PKF)
- 41 Klinik für Schlafmedizin
- 42 Klinik für Suchtentzug KSM Drogenentzug/Übergang/Krisenintervention
- 43 Suchtbehandlung Frankental
- 44 Spital Affoltern
- 45 Sanatorium Kilchberg
- 46 Psychiatrische Universitätsklinik Zürich
- 47 Privatklinik Hoheneegg
- 48 Clenia Schlössli AG
- 49 Integrierte Psychiatrie Winterthur IPW, KIZ
- 50 Spitäler Schaffhausen
- 51 Forel Klinik
- 52 Klinik Aadorf AG Klinische Psychotherapie
- 53 Clenia Littenheid AG Klinik für Psychiatrie und Psychotherapie
- 54 Psychiatrie St. Gallen Nord, Wil
- 55 Spitalregion Fürstenland Toggenburg - Spital Wattwil
- 56 Spital Thurgau AG Psychiatrische Klinik Münsterlingen
- 57 Spitalverbund AR Psychiatrisches Zentrum
- 58 Psychiatrie St. Gallen Nord, St. Gallen
- 59 Klinik Gais AG Fachklinik für kardiale & psychosomatische Rehabilitation
- 60 Psychiatrie-Dienste Süd
- 61 Psychiatrische Dienste Graubünden
- 62 Kantonsspital Glarus
- 63 Klinik Meissenberg AG
- 64 Klinik Zugersee
- 65 AeskulapKlinik
- 66 Therapiezentrum Meggen
- 67 Kantonsspital Obwalden
- 68 Privatklinik Meiringen Zentrum für Psychiatrie und Psychotherapie
- 69 Clinica Holistica Engiadina SA
- 70 Spitäler FMI AG - Spital Interlaken
- 71 Hôpital du Valais - Centre hospitalier du centre du Valais (CHCVs) Saint-Amé
- 72 Spital Wallis - Spitalzentrum Oberwallis (SZO) - Spital Brig
- 73 Clinica Santa Croce SA
- 74 Ospedale Malcantonese Fondazione Giuseppe Rossi
- 75 Clinica Viarnetto
- 76 Clinica psichiatrica cantonale

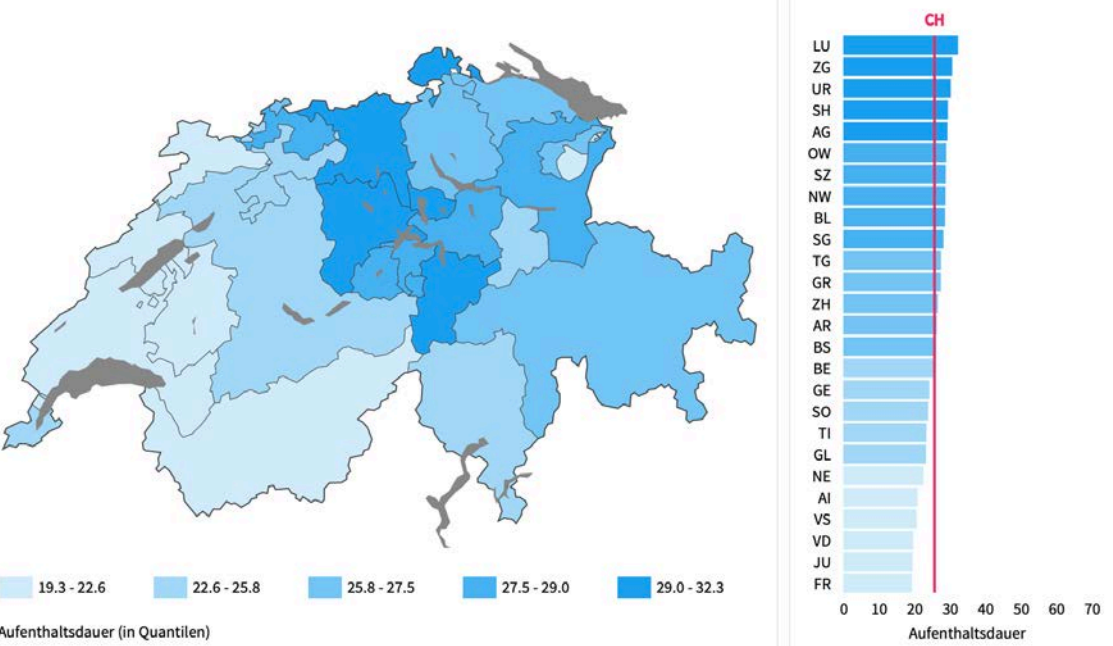
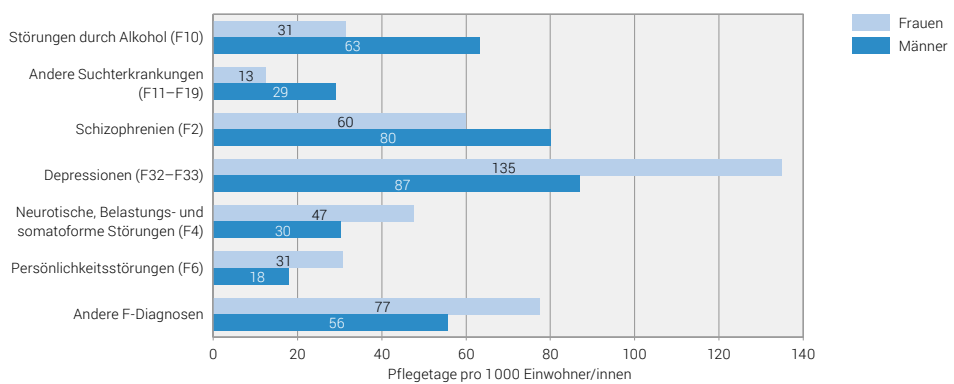
Verteilung der Hospitalisierungen nach psychiatrischen Diagnosen (Fälle), nach Geschlecht, 2014 G 4.6



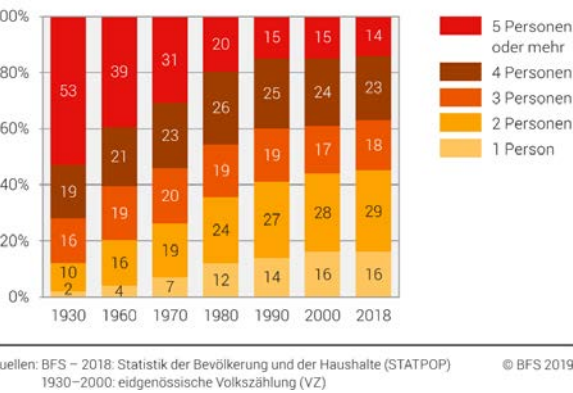
Anteil Neuberentungen, nach Alter und Invaliditätsursache, 2015



Pflegetageraten nach psychiatrischen Diagnosen, nach Geschlecht, 2014



Personen in Privathaushalten nach Grösse des Haushaltes



Statistics from OBSAN Bericht 72, 2016
Percentage of hospitalisation according to mental illness diagnosis
Amount of retirement
Stay duration according to psychiatric diagnosis

Statistic OBSAN, 2020
Stay duration in days
Statistic Bevölkerung und Haushalte BFS, 2019
One person houtholds

-16 YEARS

EXPECTATION OF LIFE DURATION

1:4

FOR EACH DOLLAR OF THERAPY -
4 DOLLARS OF PRODUCTIVITY RESULTS

2x

NON-PRODUCTIVE DAYS DOUBLED THE LAST 10 YEARS

4x

MORE SUICIDES THAN TRAFFIC ACCIDENTS

29 DAYS

AVERAGE STAY DURATION

30 YEARS OLD

IS THE AVERAGE AGE FOR DEPRESSION

36%

SUFFER LONELINESS

40%

OF THE SWISS POPULATION DON'T FEEL VITAL AND FULL OF ENERGY

46%

OF ALL THE IV IS DUE TO PSYCHIATRIC DISORDER

50%

OF COSTS ARE INDIRECT

118 PATIENTS

PER YEAR FOR EACH PSYCHIATRIST

1900 EURO

PER PERSON

14.5 MIA.

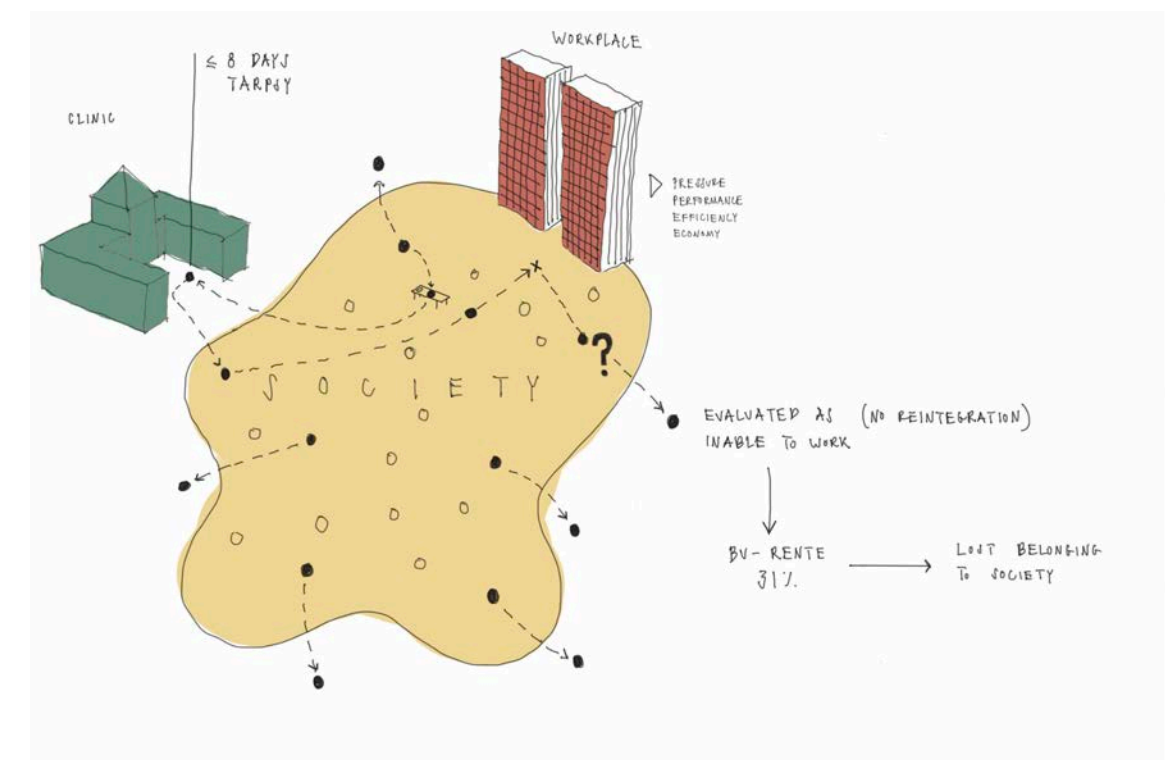
COSTS BECAUSE OF PSYCHIATRIC DISORDER IN SWITZERLAND

3/4

OF ALL MENTAL ILLNESSES REMAIN UNTREATED

„If the topic of mental health would have more visibility within the increasingly self-oriented society, it would contribute a lot to the prevention of mental illness.“

Kerstin Jüngling
ZHAW School of Health Professions
Institute of Health Sciences





Reading room, psychiatric clinic Hohenegg




Psychiatric clinic Hohenegg, 2013
Psychiatric clinic Beverin, areal view, 1947



„Our head psychiatrist hands out coupons for ‚mindfull spaghetti eating‘. The patient becomes a plate full of the best spaghetti Ma `Kaira with a delicious tomato sauce. You then simply order the dish and enjoy it in the dinning hall, trying to be completely aware of every bite and taste for several minutes.“

Zoom meeting with Walter Denzler, administrative director
Psychiatric clinic Hohenegg



		UNION	PUBLICATION	RESEARCH	LAW	ECONOMY
	WORLDWIDE	World Health Organization (WHO)	Prevention and Promotion in Mental Health Prevention of Mntal Disorders-Effective Interventions and Policy options Promoting Mental Health - Concepts + Emerging evidence + Practice			
SWITZERLAND	FEDERAL GOVERNMENT	Bundesamt für Gesundheit (BAG) Schweizerisches Gesundheitsobservatorium (Obsan) Independent Analysis of the Health system of Switzerland for the federal government and cantons	Magazin „spectre“		Psychiatrische Patientenverfügung	SwissDRG TARPSY
	CANTONS	Schweizerische Konferenz der kantonalen Gesundheitsdirektorinnen und -direktoren (GDK)	Psychische Gesundheit in der Schweiz - Bestandsaufnahme und Handlungsfelder	FHNW - Gesundheitsförderung und Prävention		
	FOUNDATIONS/ORGANISATIONS	Zürcher Stadtmission Pro Mente Sana Gesundheitsförderung Schweiz Radix feel-ok.ch Aktionsbündnis Psychische Gesundheit Schweiz Netzwerk Psychische Gesundheit Schweiz NPG/RSP bündnis gegen Depression mental help club ensa - erste Hilfe für psychische Gesundheit	Zürcher Stadtmission - Jahresbericht Clubmagazin „KONTEXT“ Pro Mente Sana Newsletter	Consultation in form of newsletter, talks, chats, peers education support group		
	CAMPAIGNS/SOCIAL					



„Of course there's a need of work for destigmatization like our institution is doing but at the same time you feel like fighting against Goliath when the media repeatedly report about a person suffering from schizophrenia attacked someone else, eventough the possibility is very very very small.“

Zoom meeting with Nadia Pernollet, employee psychosocial
Pro Mente Sana

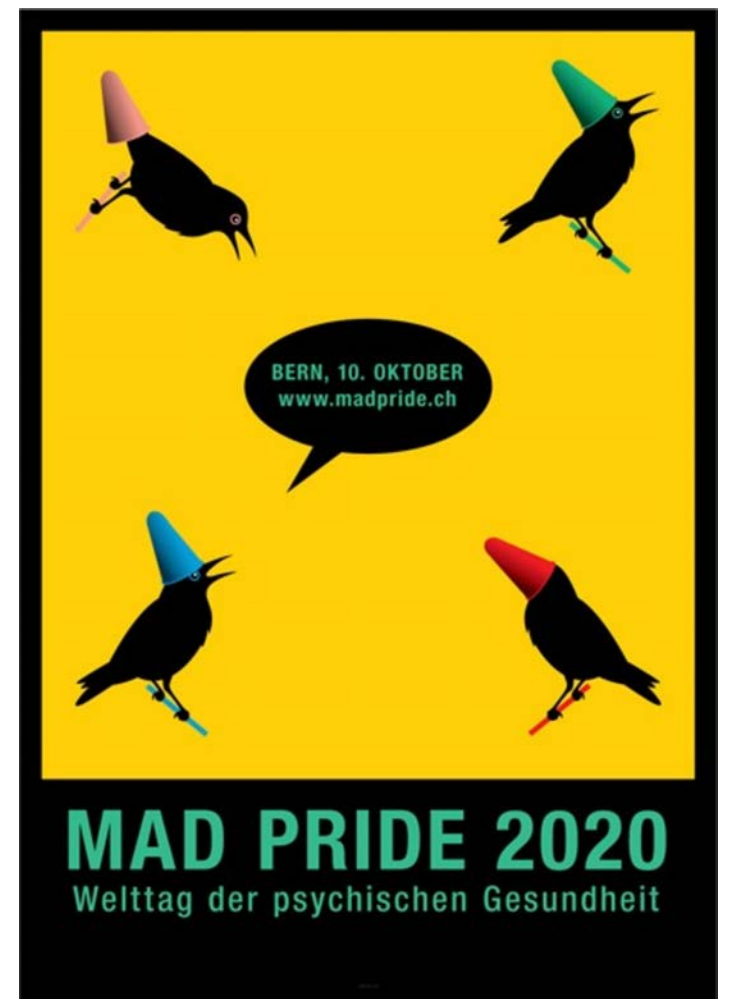


ALLE VERANSTALTUNGEN
SIND KOSTENLOS

**AKTIONSTAGE
PSYCHISCHE
GESUNDHEIT**

**20.-30.
OKTOBER 2019**

allesgutebasel.ch



Poster Swiss Mad Pride, October 2020
Flyer Aktionstage Psychische Gesundheit Basel 2019

HEALING ARCHITECTURE

'It needs an appreciation of the role the environment plays in meeting our fundamental psychological needs such as stimulation, security and identity. All this requires an approach to the design and organisation of space that does not treat it, as so much architecture does, as an abstract geometrical construct, but as a social and psychological one.'

Prof. Bryan Lawson

One might say, that healing architecture goes back to the nurse Florence Nightingale. She resisted the expectations for women in the 19th century of becoming a housewife and having a family and became the head of a nursing home and founded the Nightingale School of Nursing at the St. Thomas's Hospital in London instead. She was one of the first, documenting the effects of environmental factors on the recovery of patients. As the more recent founding figure of healing architecture, Roger Ulrich needs to be mentioned. His study on how the view out of a patient's room influences the healing process is seen as the ground stone to the healing architecture movement. His thesis, that spatial quality influences people both physically and psychologically, is nowadays widely accepted and proven. Alongside the health architecture department at the TU Berlin, many researchers dedicate their work on how to improve the health system by improving the architecture of clinics and hospitals. Evidence based design theory, that tries to base the physical environment onto scientific research is part of the healing architecture agenda. The results require from architects to have a deep understanding of the social psychology

of space and it needs a shift from seeing health facilities as machines of treatment to places of healing. The number of published research papers on this topic has risen up to 1000 over the last few decades. The applied knowledge can nicely be seen in the Maggie's centers. They try to provide a space for people affected by cancer outside of the hospital atmosphere, to exchange with other cancer patients, to engage in conversations or to simply be. A caring environment. An other example is the Vidar clinic in Sweden. It is based on anthroposophic views and provides the patients a spatial sequence from privacy to reconnecting with others, that accompanies the healing process.

Healing architecture is about re-humanising the physically built world of the health care system. As it only finds its application in the architecture of clinics and hospitals, our project tries to implicate it into the architecture of the everyday.

APPENDIX VII See Chapter x

Record of the spontaneous activities

1938	1939				
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23	SUNDAY	☸	☸☸☸	☸	
24	☸☸☸☸		☸☸☸☸☸	☸☸☸☸☸	☸☸☸
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27	☸☸☸☸	SUNDAY	☸	☸☸☸☸	☸
28	☸☸☸☸☸☸☸☸	☸☸☸	☸☸☸		☸
29	☸☸☸☸☸☸☸☸	☸☸☸☸☸	SUNDAY		☸☸☸☸
30	SUNDAY	☸☸☸	☸☸☸		
31			☸☸☸		

≡ GYM: ≡ SWIMMING ≡ DIVING ≡ BADMINTON ≡ Table tennis ≡ BILLIARDS

NB Two swims a day allowed in school holidays



Florence Nightingale
1820-1910
social reformer, founder of modern nursing
Vidar clinic
Erik Asmussen, 1985

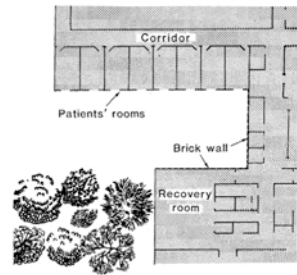


Fig. 1. Plan of the second floor of the study hospital showing the trees versus wall window views of patients. Data were also collected for patients assigned to third-floor rooms. One room on each floor was excluded because portions of both the trees and wall were visible from the windows. Architectural dimensions are not precisely to scale.

HEALTH

Bauen für Kinder
Building for Children

2017

EVIDENZBASIERTE DESIGNFORSCHUNG

CHRISTINE NICKL-WELLER &
ALVARO VALERA SOSA

2012 unterstützte das deutsche Bundesministerium für Gesundheit (BMG) eine umfangreiche Literaturprüfung zu den Aus- und Einwirkungen der Architektur auf gesundheitsrelevante Ergebnisse. Die Ergebnisse wurden in dem Buch *From Concepts of Architecture to German Health Economics* veröffentlicht. Sie betonten die Dringlichkeit, rigorose Methoden zu entwickeln, um Nachweise über die heilenden Fähigkeiten und wirtschaftlichen Auswirkungen der Architektur zu sammeln, und zweitens das Bedürfnis, auf transdisziplinäre Weise zu arbeiten, um Kommunikationsprobleme in der Planung zu überwinden. Ab diesem Zeitpunkt wurde das Evidence-based Design (EBD) Researcher Cluster in der Abteilung „Architecture for Health“ der TU Berlin etabliert.

Das relevanteste Kommunikationsproblem war die offensichtliche Inkompatibilität von Forschungsansätzen, die in den Gesundheitswissenschaften und Designdisziplinen bestanden, zusätzlich zu Konzepten, Begriffen und Terminologie.

Dieses begriffliche Problem wurde teilweise mit dem folgenden Modell angegangen, das eine mögliche Integration eines laufenden Designforschungsprozesses mit einem objektiveren Ansatz angeht und dadurch die Ergebnisse evaluieren und gültige Ergebnisse verbreiten möchte.

In der Praxis wurde dieser EBD-Ansatz von Nickl & Partner bei der Entwicklung von Kinderkrankenhäusern angewendet. Es wurden retrospektive Informationen

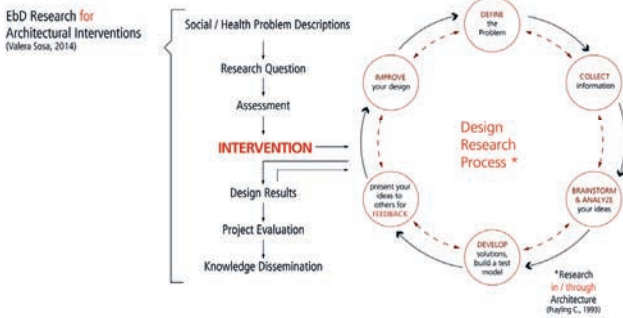


Abb. 1: Schema EBD-Forschung
Fig. 1: EBD research scheme

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Roger Ulrich
View through a window may influence recovery from surgery
1984

Nickl and Partners
Evidence based design research
2017

That maxim was important for our design work, but it was also a barb directed at political decision-makers. The building's spaces were equated with somatic medicine's equipment, as though to hint, "Who knows anything about medical technology equipment? We have no choice but to make the necessary investment!" Or: "Everyone knows how important technological equipment is in medicine," with the same affirmative response. Throughout the entire project, which ended up taking five years to complete, we maintained a lively *dialogue* about the role of architecture in healthcare—from detail to whole—for the benefit of the final design results.

In the anthology *Architecture as Medicine*, written just over two years after the hospital's completion, I tried to describe what I thought contributed to the project's good results. In the chapter "The Architect Speaks," I make an argument in ten parts with a total of forty recommendations for how architecture for psychiatric inpatient care should be designed. I could have chosen to briefly summarize those points here, but instead—with the benefit of the five intervening years—I will restate them in a slightly different way. I am now able to formulate them in a more focused and fundamental way than before. The most important aspects can be summarized in the following seven recommendations:

- *Promote dignity!*
- *Encourage normalcy!*
- *Create a free and open atmosphere!*⁵
- *Promote social interaction!*
- *Promote patients' independence!*
- *Offer views to the outside and free access to the outdoor environment!*
- *Balance the demands for a safe and healing healthcare environment!*

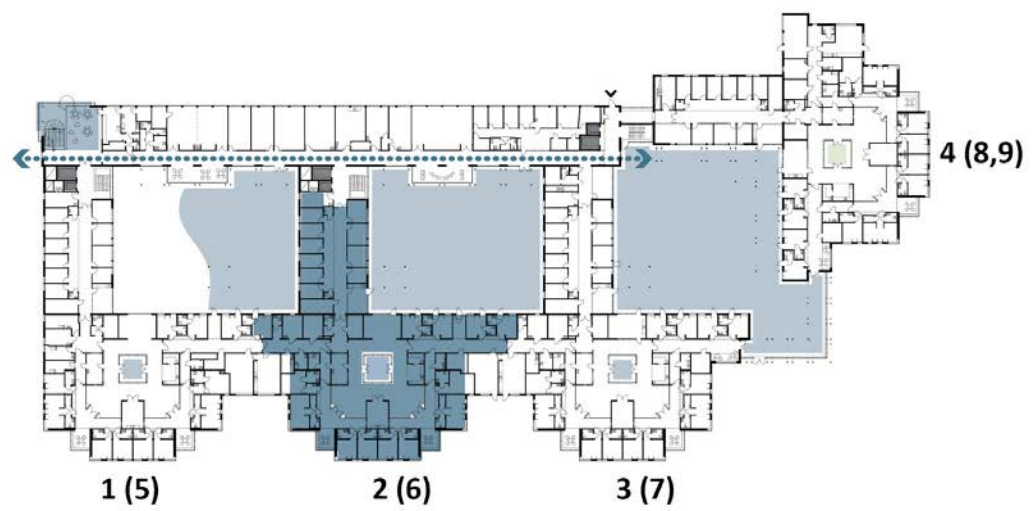
Promote dignity! It is important that the building be able to convey an expression of dignity. Psychiatric care has often been relegated to older facilities—sometimes the facility left behind when a somatic ward gets a new one. Psychiatry has often had to make the best of a hospital's worst spaces, and accept its role as "a minor medical specialty"—in spite of the fact that about 40% of today's medical leave costs are related to mental

⁵ A concept used by the Danish architecture firm PLOT in conjunction with the architectural competition for the design of the psychiatric wing for the Helsingør Hospital.





Psychiatric clinic CARITAS
De Vylder Vinck Taillieu Belgium 2016



9 wards, 124 beds and three internal courtyards

Evelina London Children's Hospital
Hopkin Architects 2005

Sahlgrenska Östra psychiatric clinic
Stefan Lundin Sweden
Health care building award 2007



BODY-MIND INFRASTRUCTURE

,In this respect, the Peckham experiment could be interpreted in the sense of a historical anthropology that deals with „images of man“ and thereby reflects on the conditions under which they were created, i.e. the knowledge and practices involved in the genesis of these images.'

Self-responsibility as an experiment

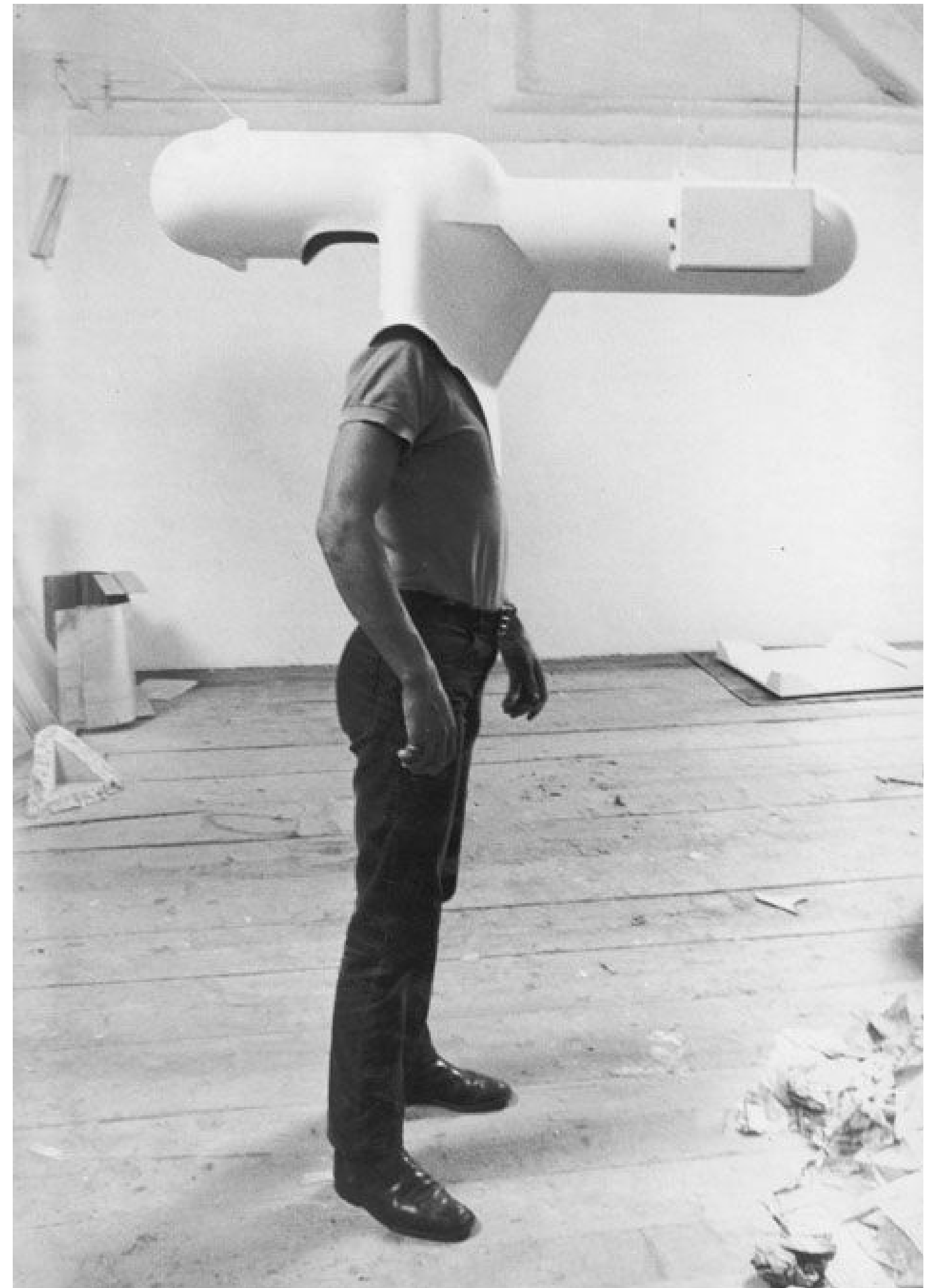
The London Pioneer Health Centre (1926-1950)

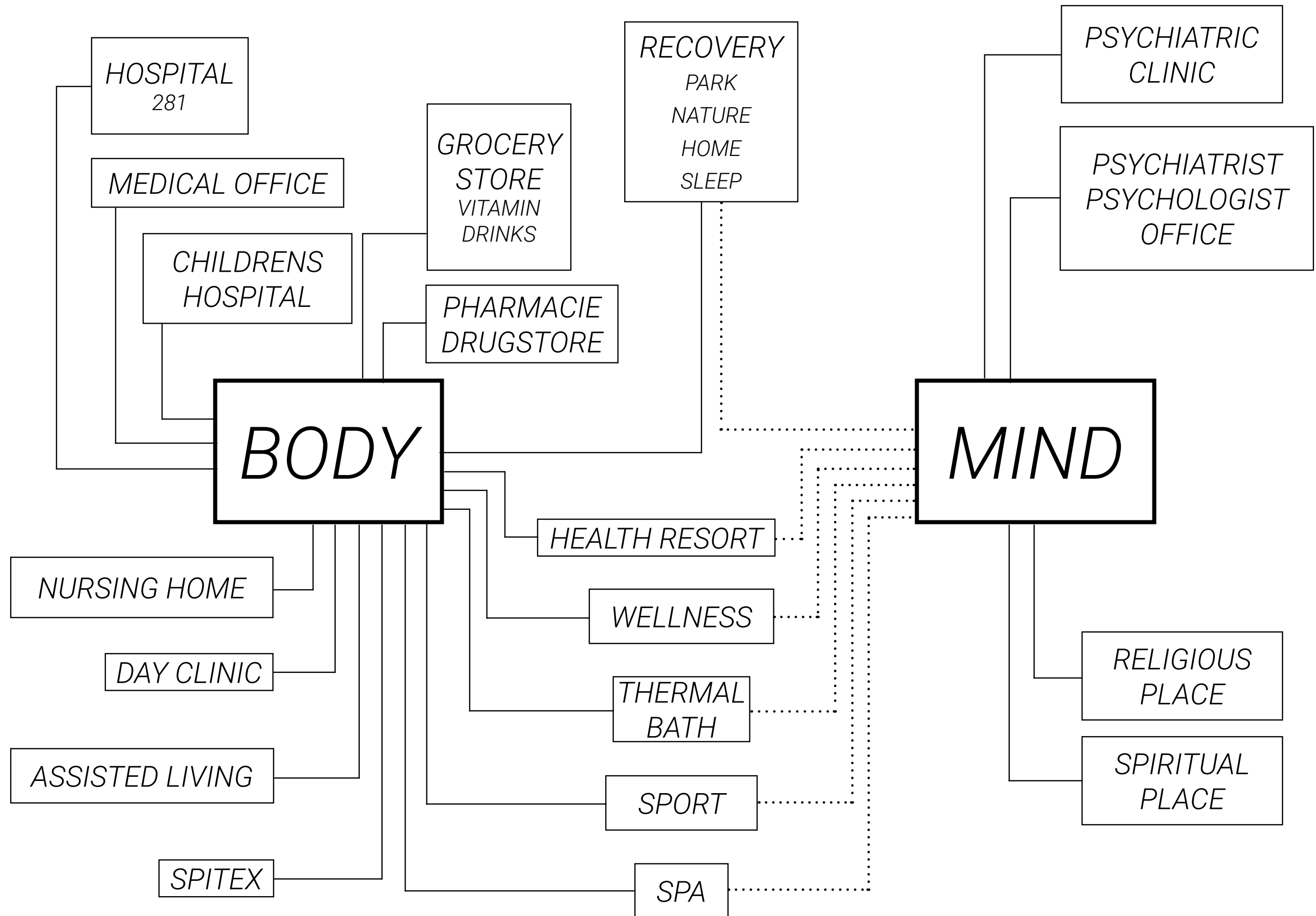
David Kochenbuch

Comparing the infrastructure for the body and the one for the mind, an imbalance stands out. Even though the body and the mind can not be separated from each other, acting on the body is more part of the everyday life. The access is simple, cheap and comes with high variety. Gyms became a natural part of the townscape, vitamin drinks can be bought in each store, while on the other hand, we have the invisibility of ‚homey‘, yet impersonal Ikea furnished rooms, where people talk to psychiatrists. Especially in the situation that we are now with the invisible threat of Covid-19, health became the topic number one, the internet is full with videos on how to stay or become fit and the amount of joggers in the streets has risen drastically. Since the effects are more visible, when someone works on its body and as we live in a society, where progress and performance are established values, the mind often gets neglected. With the individualization of society former authorities, such as the church, lost influence. With that, common places for spirituality got scarce, at least in the context of Switzerland. Religious institutions that partially replaced the traditional churches, such as ICF and other ‚free churches‘ are less about self-awareness and mental issues, than about worshipping and celebrating an exclusive community.

Looking back in history the Epidauros from ancient Greece provides a different picture. There mental health was imbedded visibly into a whole complex around the topic of health. More modern examples such as the Pioneer Health Centre in London from 1935 show, that there can be provided a different kind of infrastructure to tackle the issue of the mind. In this experiment only families from the close neighbourhood had permission to use the building. In exchange the condition was to subscribe for a health check once a year including discussions. Else there were no rules on what was allowed or not within the building. After a short period of chaos, a friendly togetherness and interest in ones physical and mental health, as well as in the social environment was established.

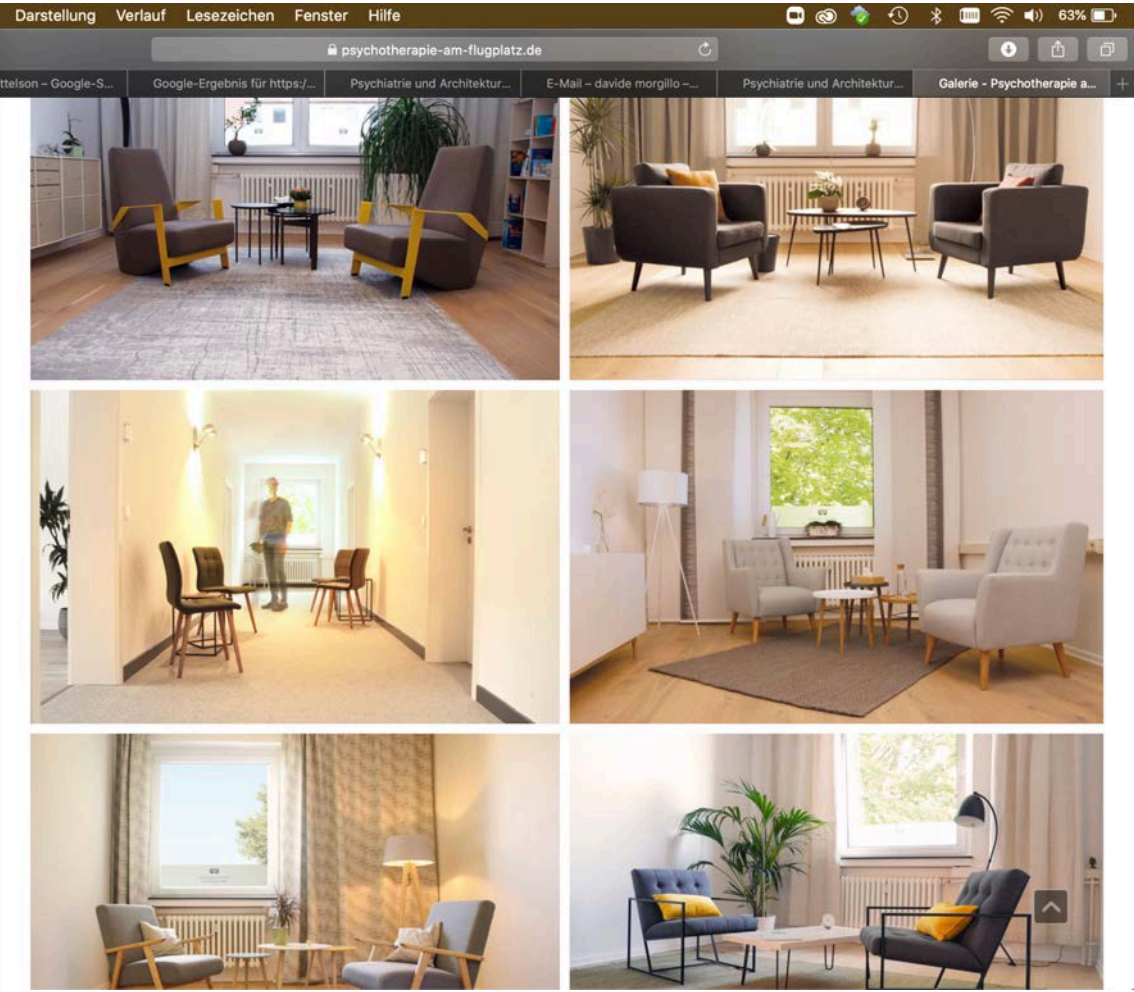
In China we can also find projects of centers that try to integrate mental health more into the everyday life, be that by cooking together or having a communal garden within complexes that are spread in the city fabric. As we see some spirituality lost in the Swiss way of living and do not want to institutionalize it in the way, religion has been institutionalized, our project aims to bring back an awareness towards mental health.



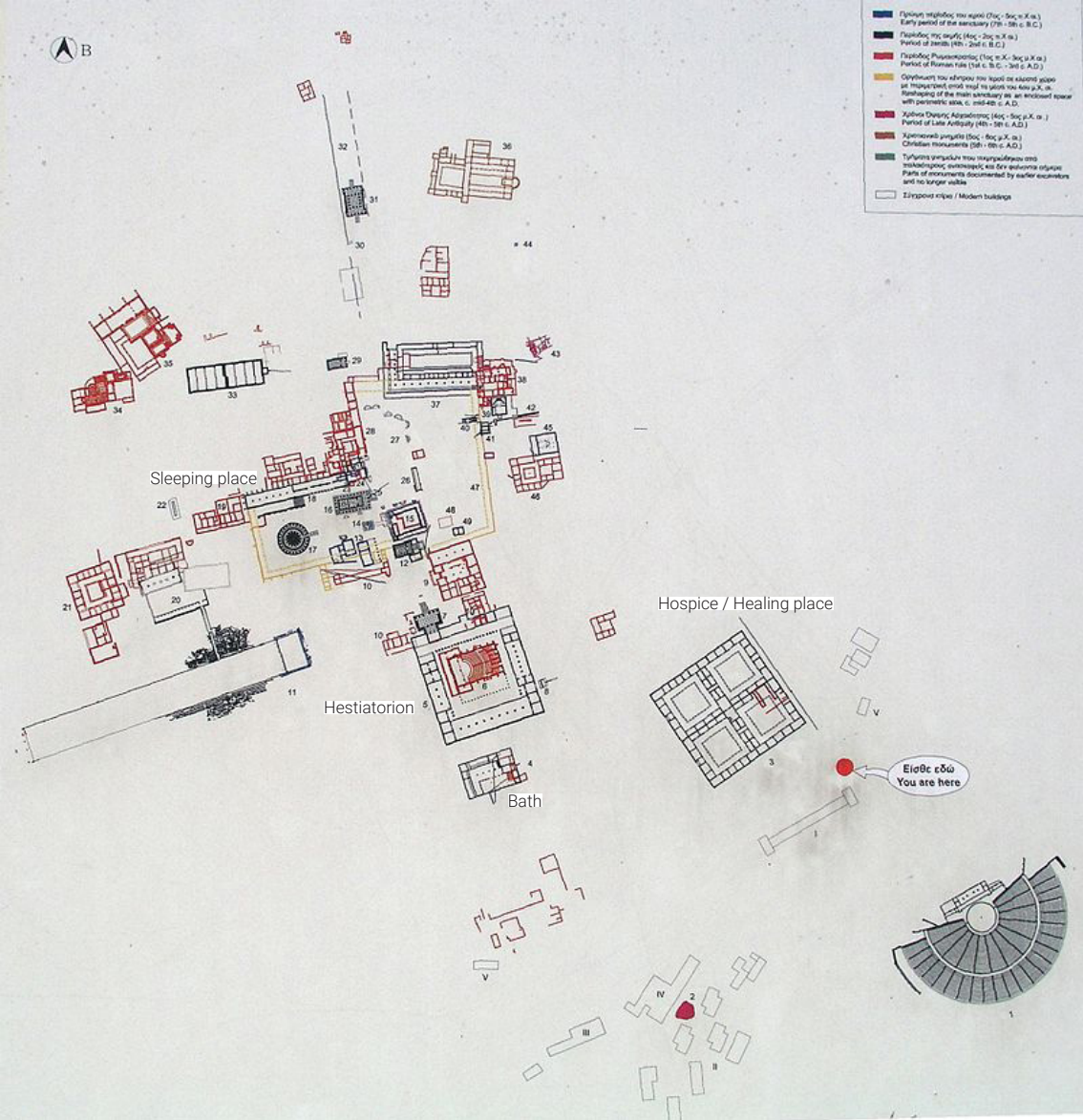




Advertising Gym
Vitamin WELL drinks



Consultation rooms
Psychotherapie am Flugplatz

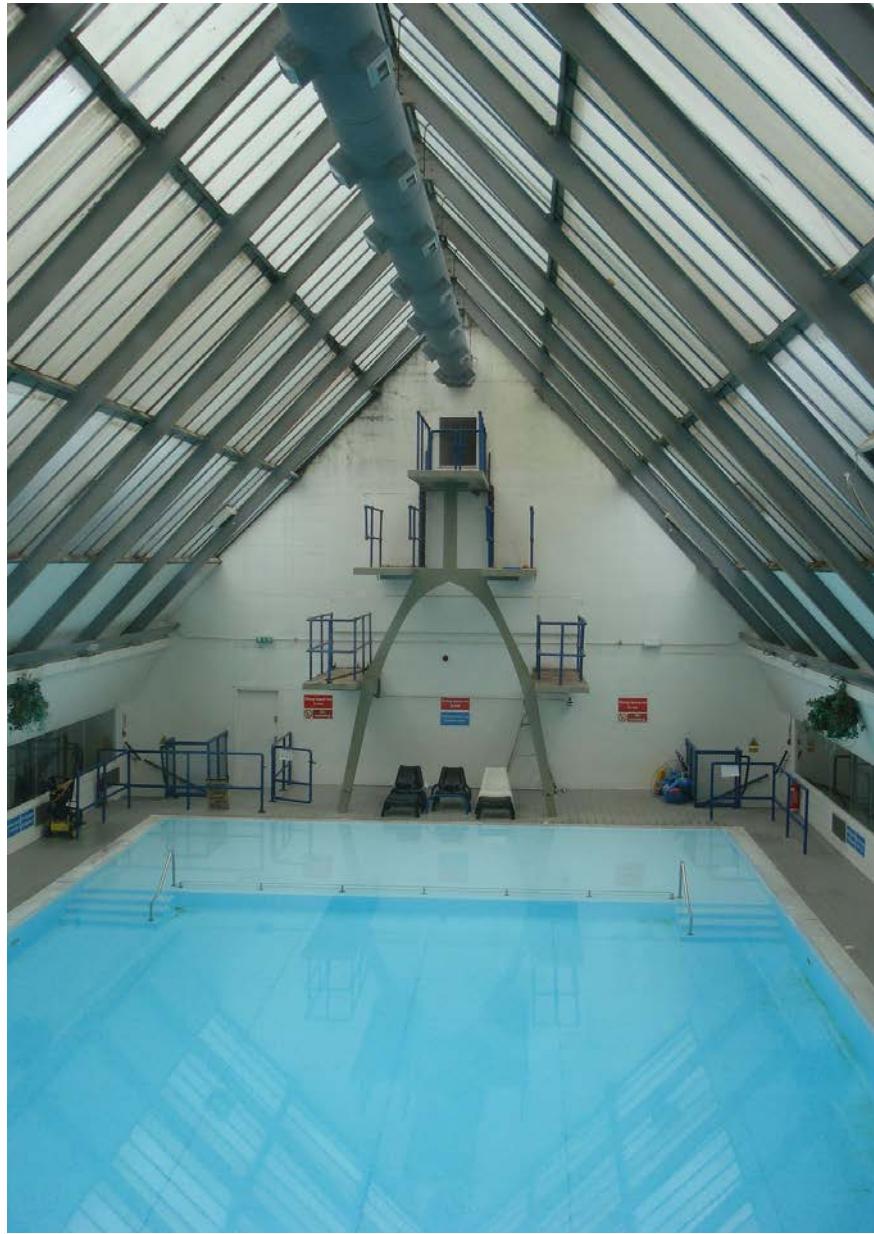


Plan of Epidauros with changes over time



Finsbury Health Centre
Berthold Lubetkin, London, 1938



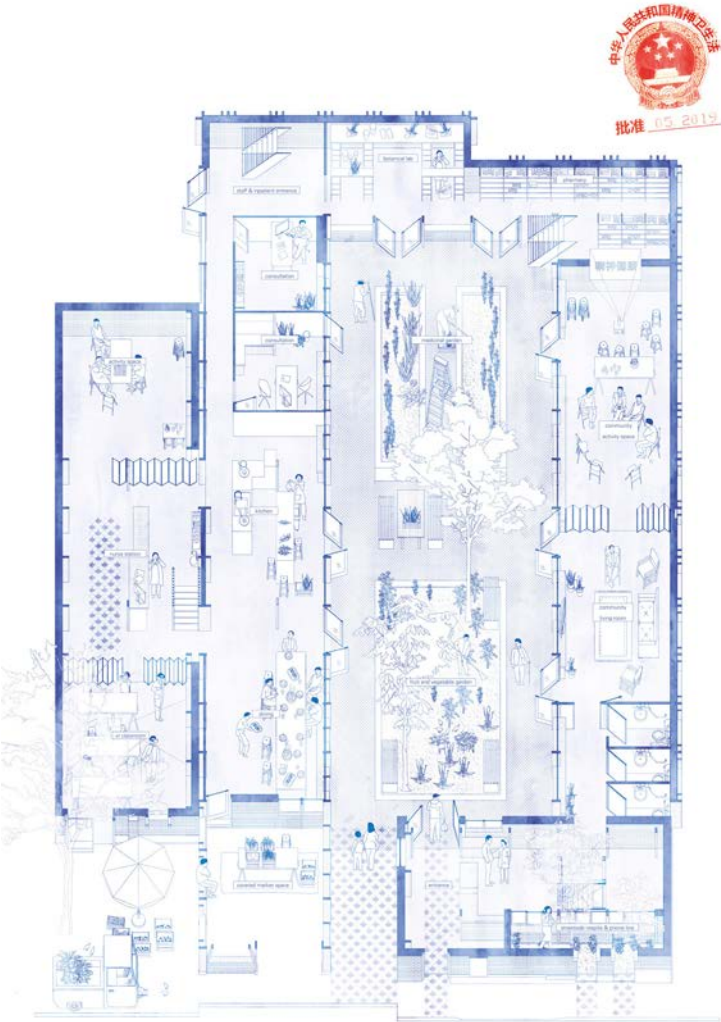


Interior Pioneer Health Centre
Sir E. Owen Williams, London, 1935

Cover of The centre monthly magazine
Published by the people of the Pioneer Health Centre, July 1950



Mental health facilities Beijing's hutongs
Cameron Clarke, 2019



ART BRUT

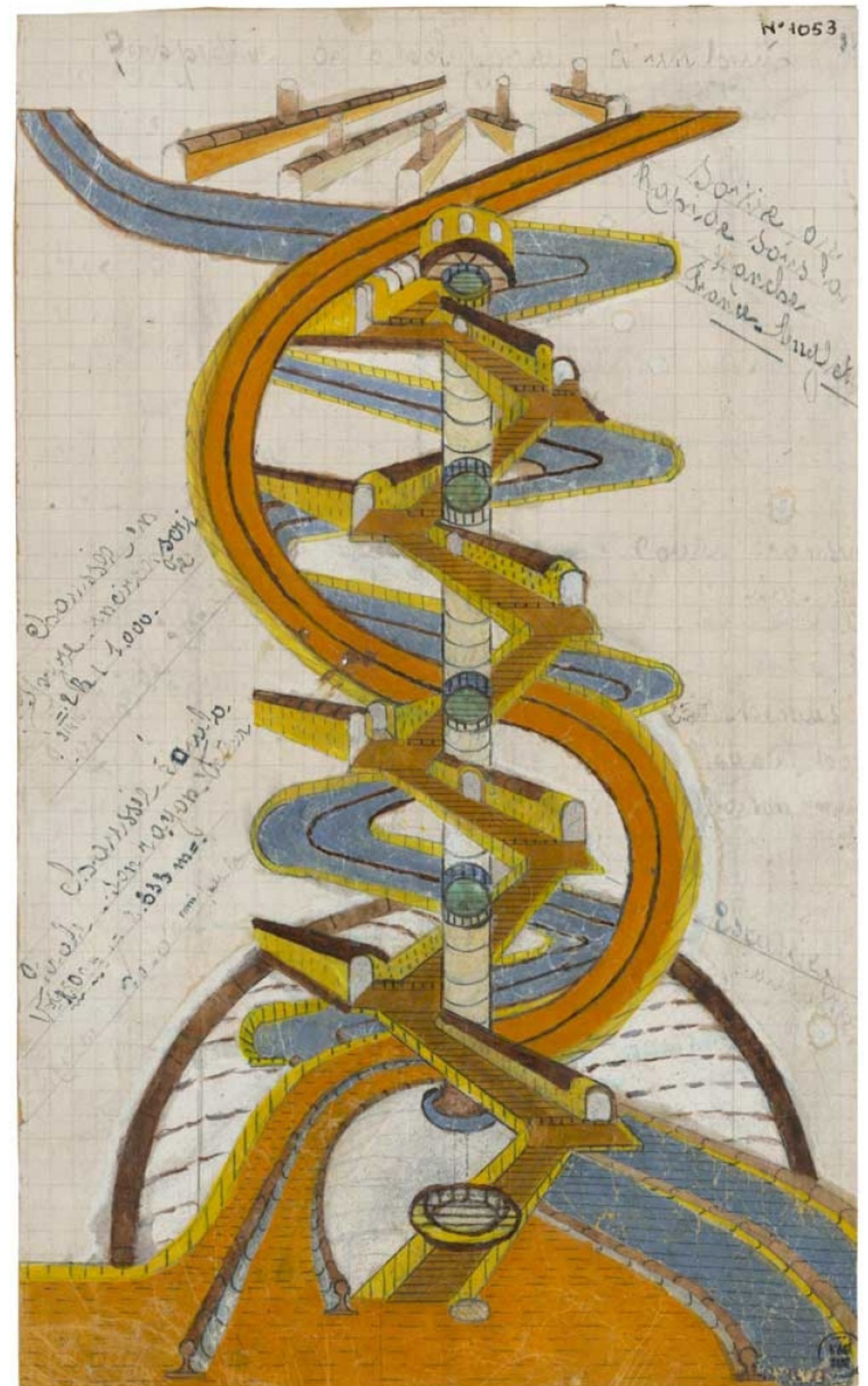
„The house is the extension of the soul.“

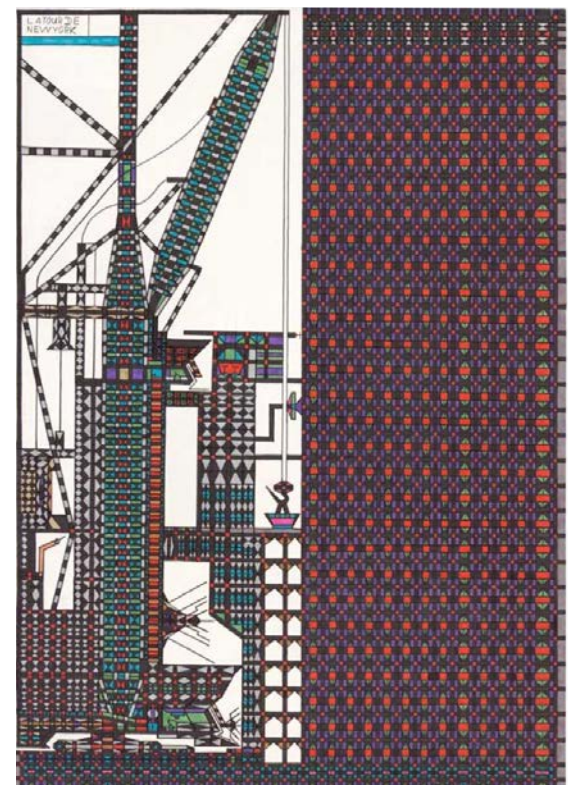
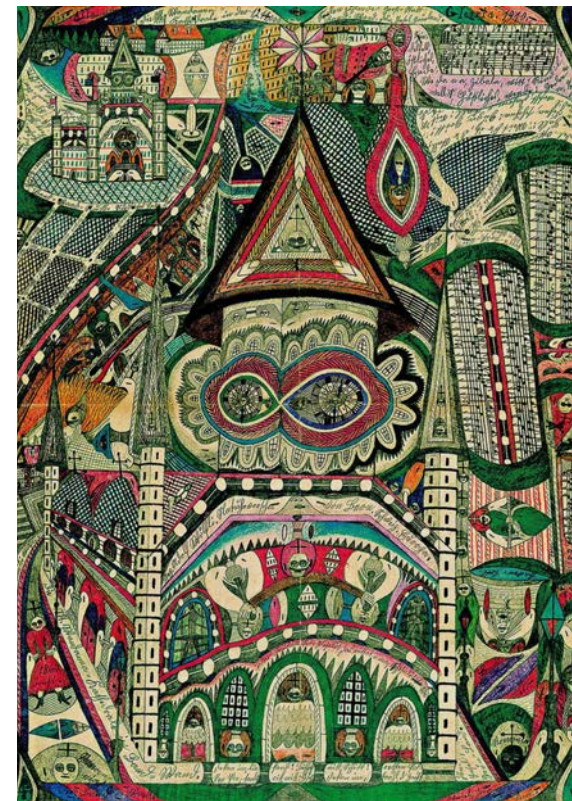
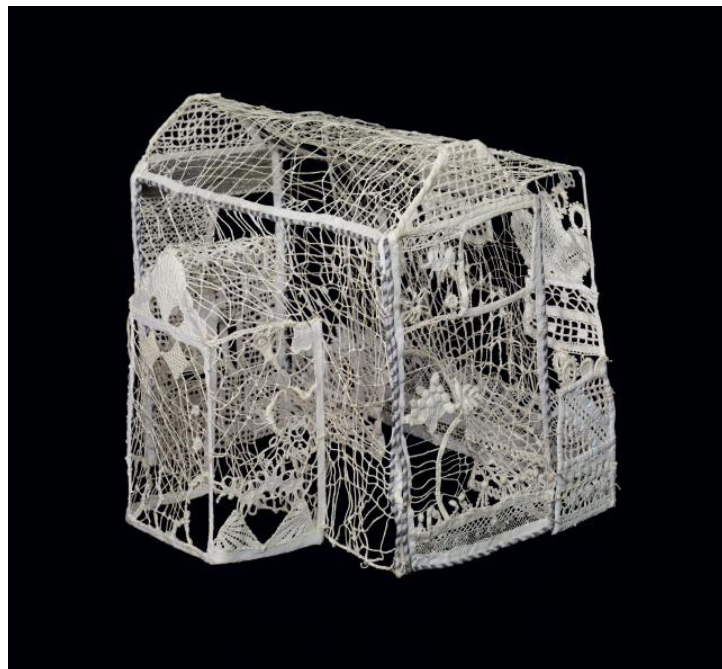
C.G.Jung

As our body gets sick, the inner perception of the body space changes and with that the space around us deforms. The same happens as we get a mental illness. The world around us does not seem to be the same and we don't feel to be a part of it anymore. As everything continues to be normal, we do not. In that state we are no longer a functioning member of the society and we feel extremely isolated. As the society can not integrate members, that deviate from the norm, the clinic provides them a vessel. But what if the division in healthy and unhealthy gets dissolved? What if we agree that all of us are somewhat crazy? How can we use the potential of the illness as a space creating factor? How can we bring a relief, to those, who feel „abnormal“ by integrating the abnormality into the normality? How can we give illness a space that does not deny its right to exist by trying to force it back into normality?

In language we find many spatial expressions when talking about emotions. Falling into a deep hole feels familiar to most of us, even if we have never fell physically into a hole. So how can an emotion evoke a spatial experience that is even felt physically?

Some answers we find in the book *Die Erkrankung des Raumes* by Koppen Vollmer: „Body and space are one, are merely two states of one and the same connection, which differ in the distribution of attention and the proportions of the conscious and unconscious, [...]. If the body deforms, the surrounding space deforms with it. If the body is infirmed, the space as a whole becomes sick. The more rigid the boundaries of the surrounding space, the more cemented, functional and impermeable the architecture, the more the individual spirit suffers from the cramped maintenance of the standardized reality.“ Without the intention of creating art, the authors of Art But are people from hindered circumstances. Be that a mental illness or a mental handicap. To deal with their sufferings they use art in an autodidactic manner, either in the context of a therapy or out of sheer necessity to express oneself. Very subjective visions of the world, including individual, distorted and phantasmasized views on architecture, reveal a glimpse into the minds, that see beyond the standardized reality. Hence our projects tries to see illness as an asset and finds many beautiful and interesting inspirations in the Art Brut.



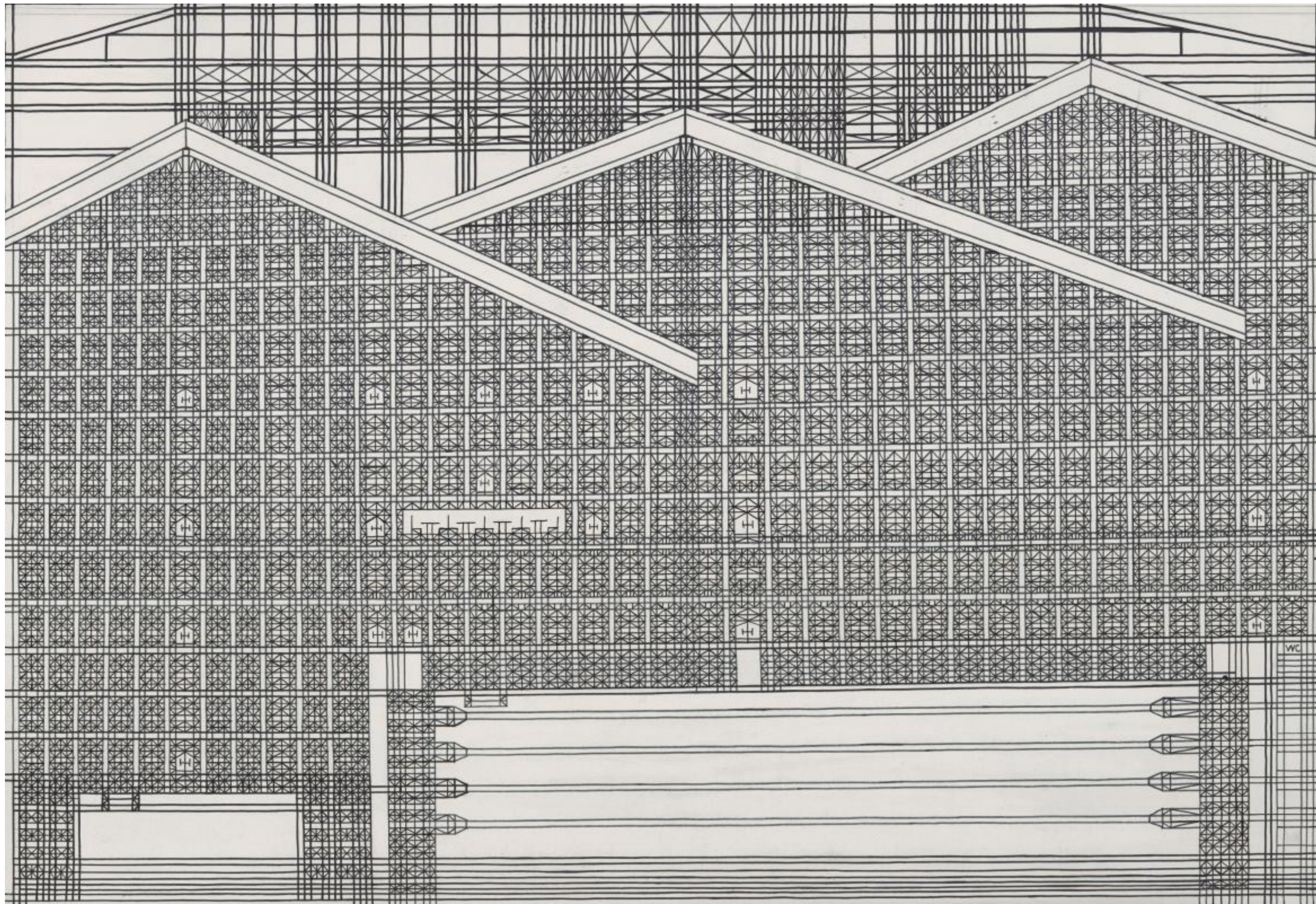


Marie-Rose Lortet, *Maison de fils*

Portrait of Alois Wey

Die Sankt Wandanna Kathedrale
 painted by Adolf Wölfli, 1910

La tour de New York
 painting by Diego



FORM FOLLOWS EMOTIONS

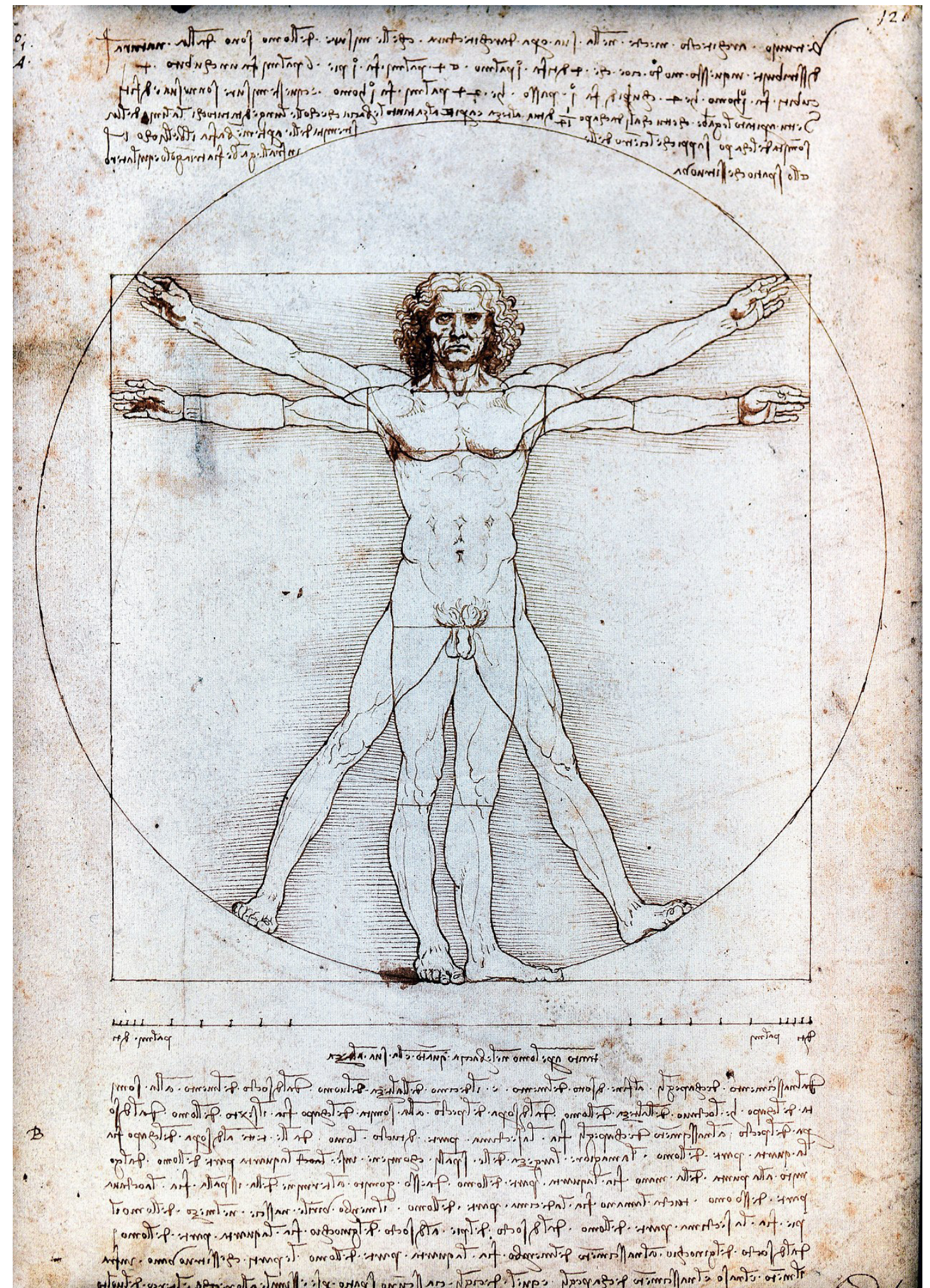
,We don't heal worlds with idyllic worlds. Rather, we should strive for a built environment in which mischief enjoys its *raison d'être* in a way that breaks the taboos, makes it visible and gives it a sense of identification.'

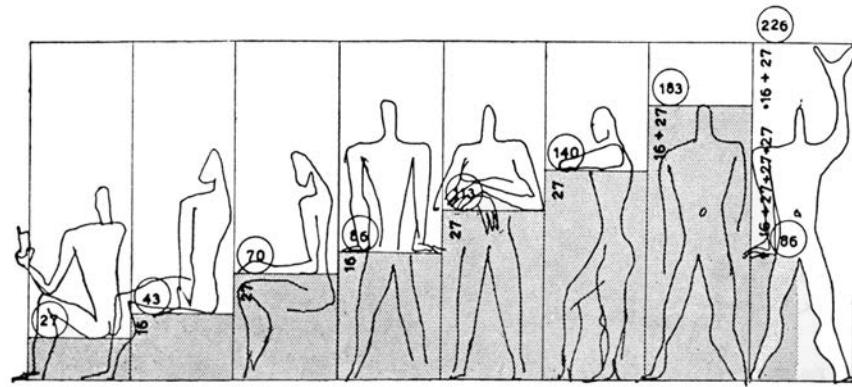
Koppen Vollmer

The human body has been used as a measure throughout time in various ways. Anthropomorphism was and still is an idea afflicted with all sorts of contradictions and controversies, but it has repeatedly played a role in relation to architecture - both as a form of thought and as an argumentative support. In the Ten books on Architecture by Vitruvius the perfect man is described and was later used in Leonardo da Vinci's drawing, depicting the ideal human body proportions. For architecture, however, this use of body as measurement focuses on the body as an organic, mathematical construction. This idea disappeared with Leon Battista Alberti's writings in which he bases architectural principles on proportions from music and harmony. Anthropomorphism has experienced a revival with Le Corbusier's Modulor, but again it is used as a mathematical figure and the human is not understood in a holistic manner. As all the ideal figures on which many scientific fields, including architecture, have based their principles on, are male, it has contributed a lot to the inequality between genders. Also with Joe and Josephine a normative body has been created. Their incarnation can nowhere be found in reality and as they do not include many, it can create great discomfort when interacting with objects

created based on this system.

Only a modest number of architects succeed in seeing the unlimited spatiality of the body without prejudice as a psychological quality and use it to create space. In art we see various examples of the permeation of body and space. Oscar Schlemmer for example uses the deformation of the body to experience space from anew and does not see architecture as a container, but more as a possibility for transformation. Also in the endless house by Kiesler the enclosing space is seen as an extension of the body and a new housing typology evolves by combining spirituality and practicality. Instead of striving for highest efficiency and performance in a functionalist way, our project tries to go further than the body's biological marginality, by understanding the holistic vitality of it and continuing it as such in the enclosed space. Therefore one could define the dogma „form follows emotions“ as one of the projects parameters.



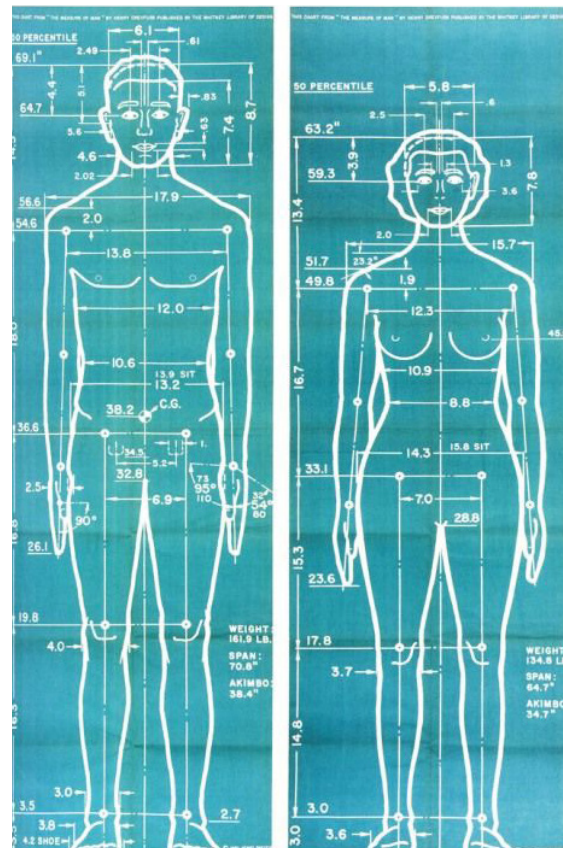
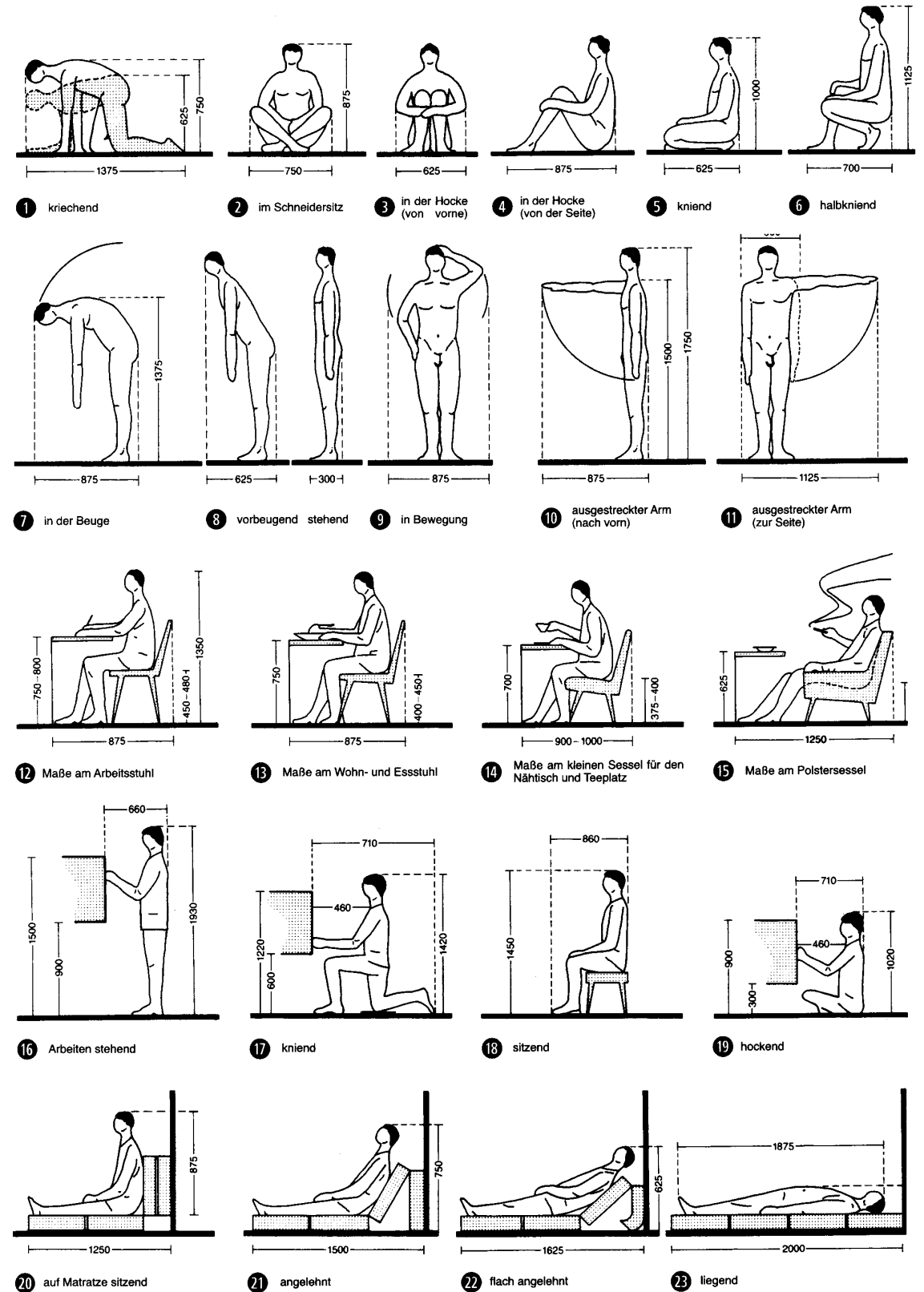


Bautenwurfslehre
Ernst Neufert 1936

MASSGRUNDLAGEN UND MASSVERHÄLTNISSE KÖRPERMASSE UND PLATZBEDARF

Grundlagen

Der Mensch als Maß und Ziel
Das Maß aller Dinge
Körpermaße und Platzbedarf
geometrische Maßverhältnisse
Maßordnungen im Hochbau



Modulor
Le Corbusier 1948

Joe and Josephine
Henry Dreyfuss 1955



„It is a miracle that we as parasitic invaders do not go crazy in it [the house] and because of it. Maybe we have to bring some form of insanity into it first.’

Frank Lloyd Wright

Clearly differentiated from the healthy, the sick body forms its space. Dark, narrow and oppressive, it deforms it and awakens the desire to move to a new bodily home, which offers identification, refuge and a perspective in the middle of the realization of being fragile, defenseless and finite. We make little use of this knowledge to shape our living spaces. Although we accept our body as a space, as a cavity, birthing chamber, living space for bacteria, we deny our built spaces their corporeality. Although the space is a product of our perception and an incorporated part of our touchability, we do not want it to „suffer with us“. Only the radical change in the perception of space by its creators and the unleashing of the aesthetics of „healing and beauty“ will achieve that the future structure, dynamics and quality of life of built environments will be oriented towards the limitless consciousness of people and the permeability of their physical boundaries, instead of remaining limited in the normal state. Suffering is an interior designer with a prohibition to work. Spatial anthropodysmorphism the keyword of modern times. When our efforts to create space for the sick come to an end and we finally begin to give space to illness, a new era will arrive. It then consciously draws from the deviation from the normal state and finds in the room-anthropodysmorphic architecture the escape from the dialectic of our experienced space, which until now has always stood on two secure legs, black and white, ill-healthy, terribly beautiful. To abolish dysmorphism as an anomaly makes it possible to gain it as the third pole of architectural design. We do not yet know - perhaps never with certainty - whether this pole can be represented and proven as the „madness of the house“ of Frank Lloyd Wright, as the „sadness of the buildings“ of Alain de Botton or as the „body-space symbiosis“ of Rem Koolhaas. Possibly even the

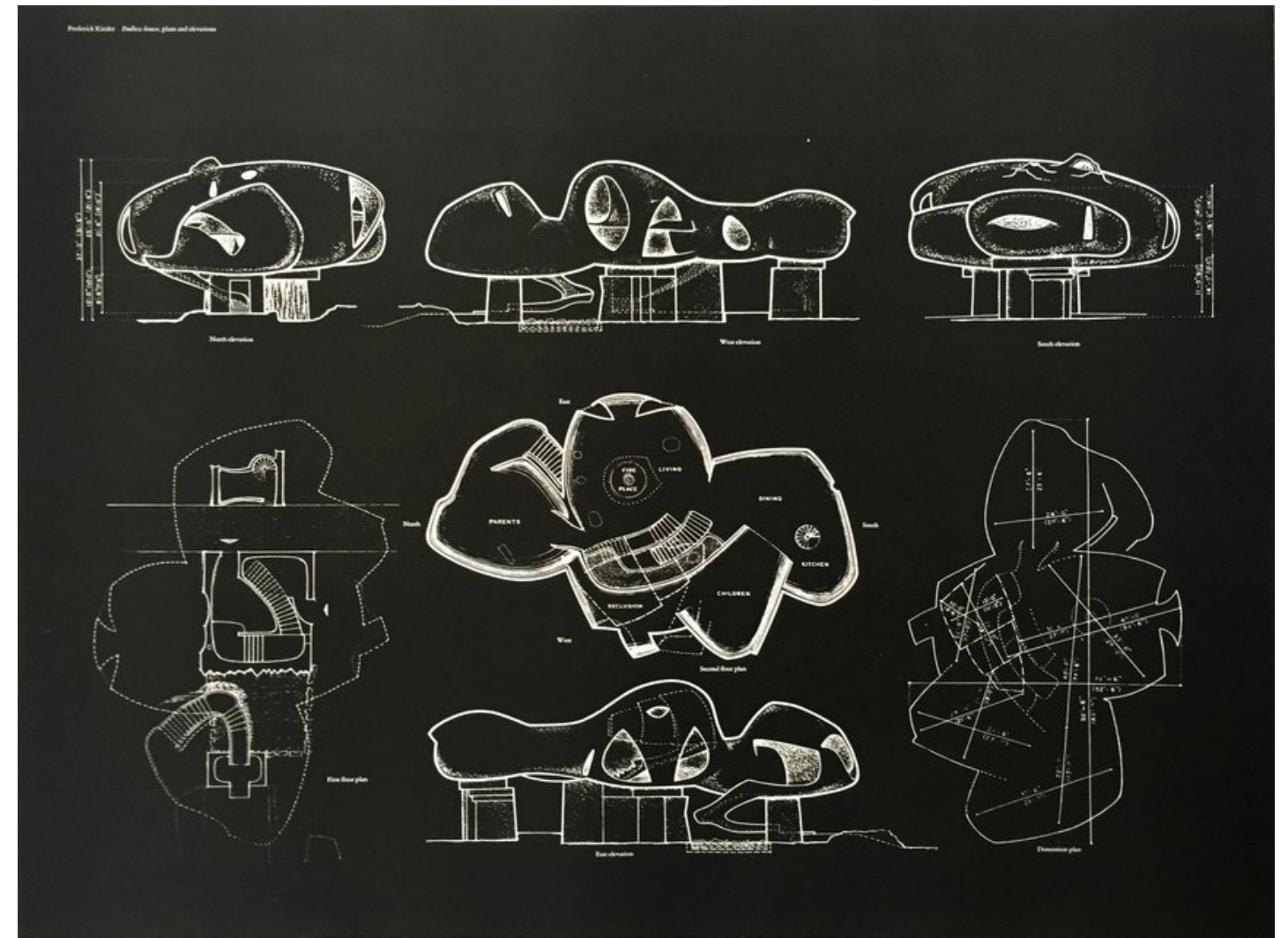
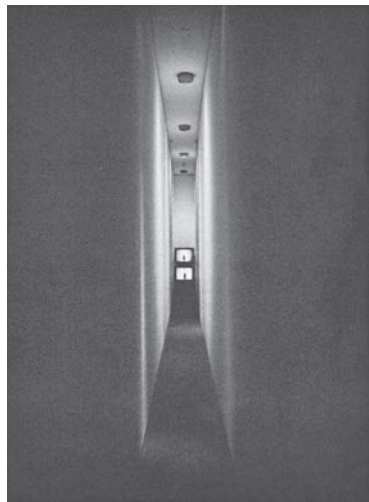
Mediterranean cheerfulness of a „healing architecture and beautiful living culture“ outlasts the temporal in the eternal claim of human doings. With the recognition of the ability of space to become diseased, however, the loss of physical integrity and the confrontation with one’s own transience and omnipresent threat to existence now reminds the creators of future spaces to commit themselves not to healing but to alleviating it. Relief that we do not find in the simple enlightening of darkness, but in the illumination of the ominous, the inhabitable access of the night side of our existence. For the case from normal reality deconstructs the house of the cancer patient at the drawing table of the spiritual representation of his space. A space that, in its potent and homely external appearance, knows how to use scars, crusts and double membranes as an enticement to the architecture with its affective anthropodysmorphic tone, and as such could well have promised relief to Goethe, who was less in love but life-threateningly ill:

„Shaped by my contemplation
the corner helps me to love what is sick,
because in him, space and time infinite
(meaningless) appear“





Corridors
Bruce Nauman 1969



Endless House
Frederick Kiesler 1940



Plaster your Head and one Arm into a Wall
Paul McCarthy 1973

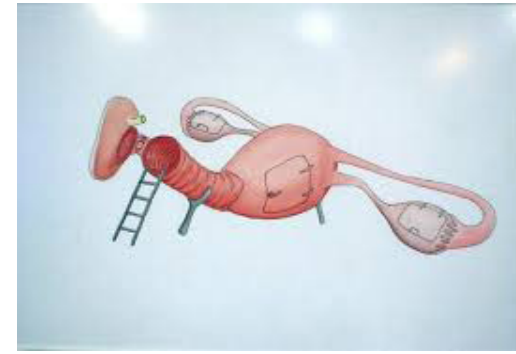


La Maiso de la celle-saint-cloud
Jean-Piere Raynoud 1974

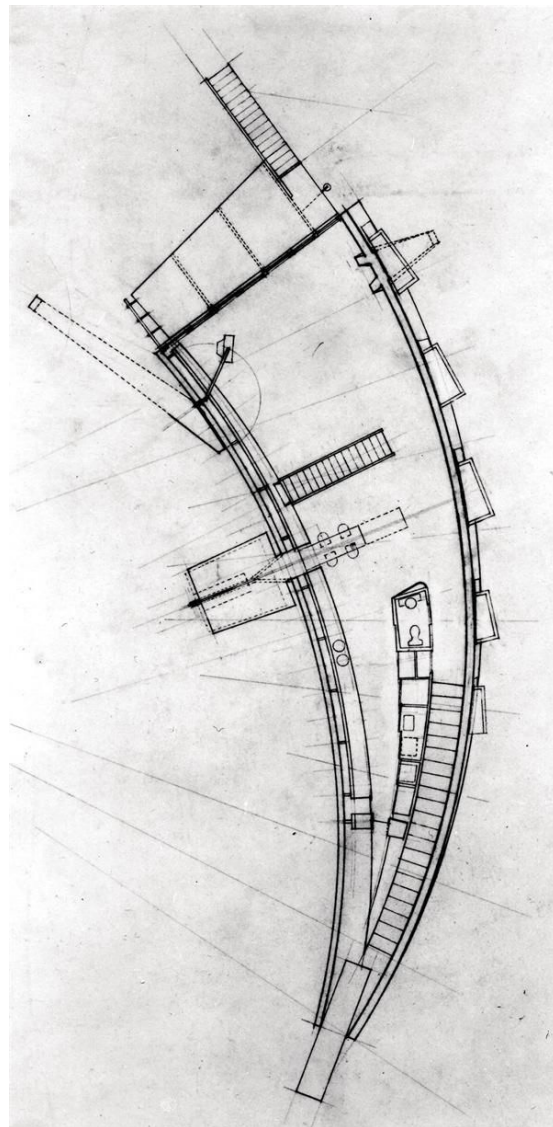




Maison à Bordeaux
Rem Koolhaas 1998
The Slow House
Diller Scofidio 1991

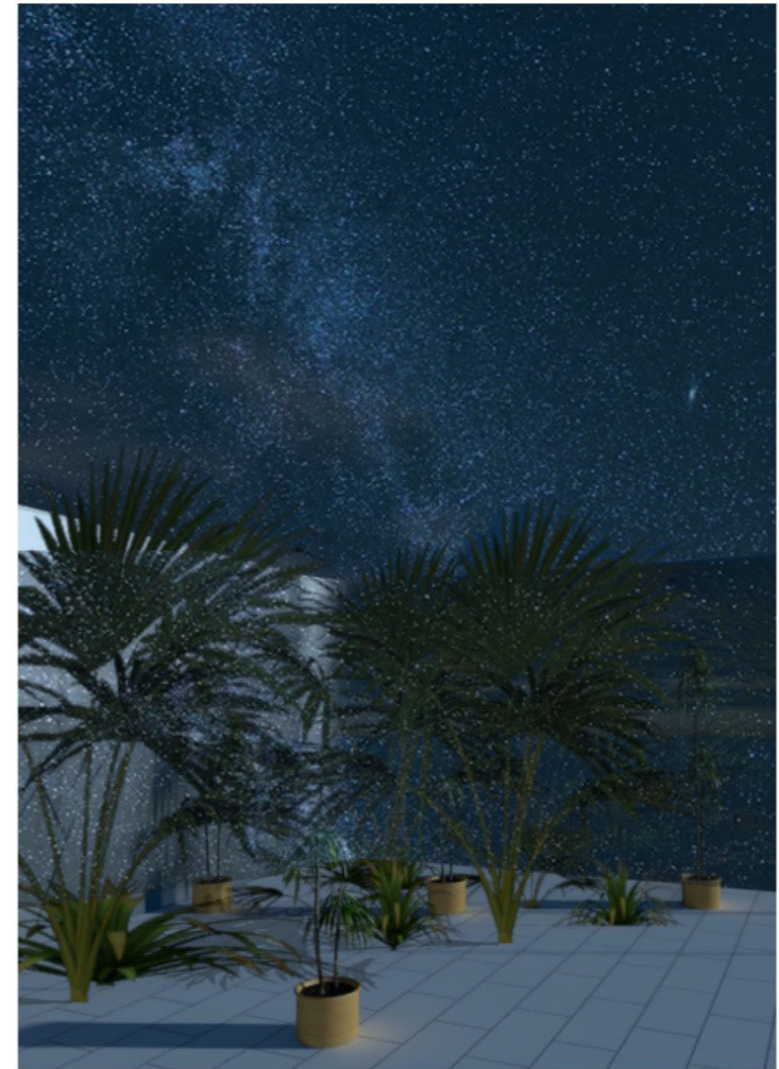


Wombhouse
Atelier Van Lieshout 2004





Santa Monica House
Frank Gehry 1978



Wie erleben Sie Ihren Wohnraum?

„Ich habe alles, was dunkel war, raus geworfen!

Alles vom Dunkel ins Hell verwandelt. Im Wohnzimmer mussten die dunklen Gardinen weg. Die Wände hab ich neu, sonnig angemalt. Die Möbel, die dunkel waren, habe ich weiß gestrichen, weil das Dunkel mich erdrückt hat. Mein Traum wäre, alles nur noch aus Glas zu haben, die Wände, das Dach. Nur Glas, ganz viel Glas, ganz hell, dass überall die Sonne rein kommt. Dann würden die Pflanzen einziehen, ganz viele Pflanzen, ganz viel Grün! Wenn ich schlafen gehen und mein Bett würde mitten im Raum stehen, könnte ich durch das Glasdach abends direkt in den Sternenhimmel sehen. Die unendliche Weite. Jeden Abend.

Schon jetzt sind die Sterne mein Trost und meine Zuflucht, wenn körperliche Schmerzen und die nächtlichen Ängste mich wieder verfolgen und mit mir ins Bett steigen wollen ...“

Rendering under the stars
Davide Morgillo & Jana von Wyl



Film Still
Jeanne Dielman 1975

HAPPINESS

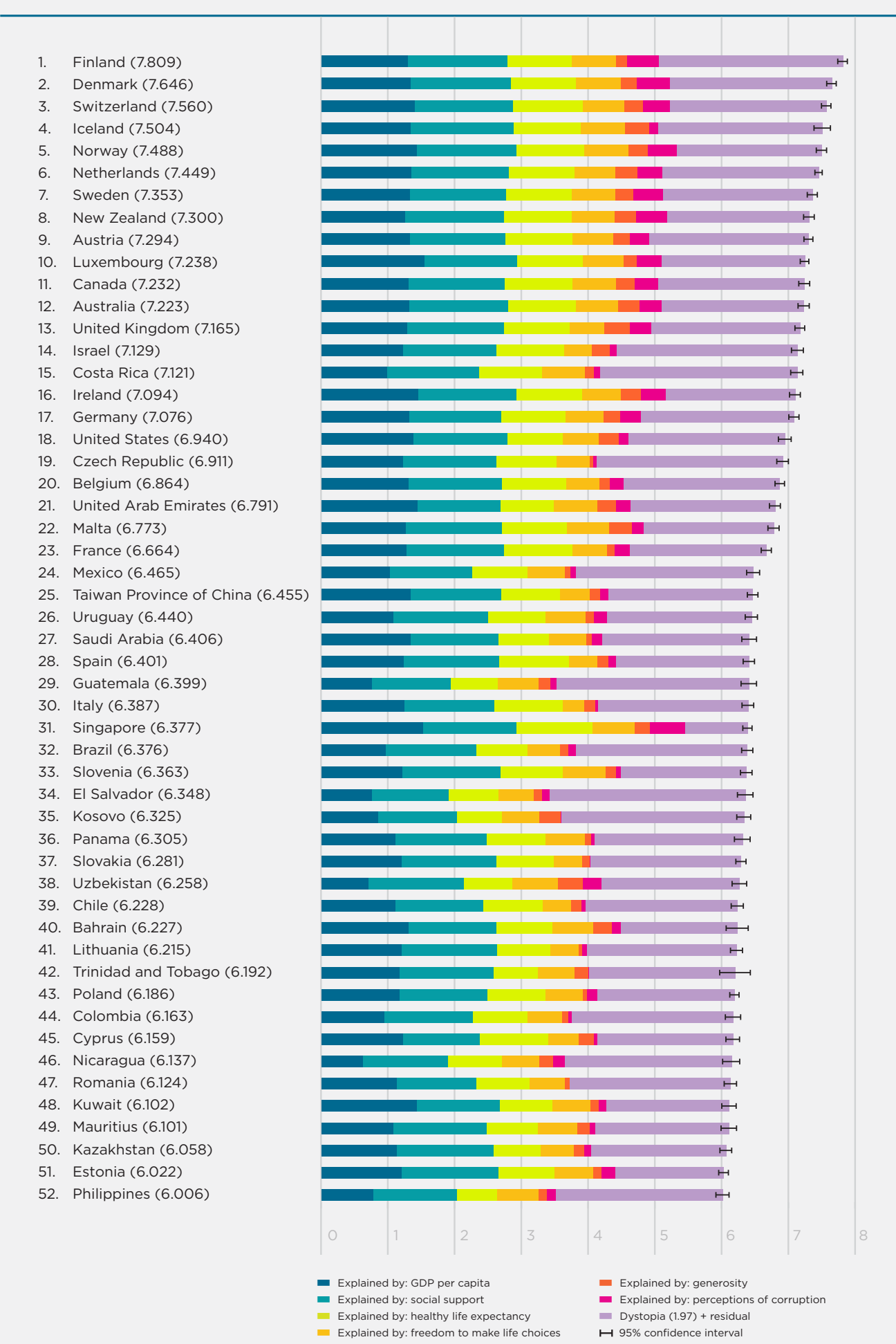
After the financial crisis in 2008 the means and values for measuring our life quality have shifted. The pure economic gross domestic product got questioned by global politics.

The question came up, how to measure well-being or the life quality of a country or city. The GDP got tackled by Indexes focusing more on Happiness. The government of Buthan is guided by the differently minded philosophy of the Gross National Happiness, in short GNH. The goal is to measure well-being in an alternative way and achieving happiness, defined as the „fundamental human goal.“

The American analytics and advisory company Gallup Inc. collects in surveys a huge amount of data related to happiness. Questions like „How did you feel yesterday overall?“ with an answering range from 0 to 10 result in the yearly published World Happiness Report, placing countries and cities in a ranking, which commodifies happiness and generates competition amongst the nations. Income, social support, values (generosity), freedom to make life choices, trust in government and health are the defined criteria and with that the key points of the definition of well-being.

The list of happiness by activities published by George MacKerron and Susana Mourato finally finds an implementation in architecture to a certain degree. The Water Street Tampa district is the first project that is going to be certified by the WELL building institute as a whole neighborhood, fulfilling given requirements of a point system. Collecting points in all the different criteria like air, water or light results, depending the reached amount, in different certifications. Despite the positive statement of this certificate the result leaves much to be desired due to questionable demands.

Figure 2.1: Ranking of Happiness 2017-2019 (Part 1)





Exhibition „our happy life“ CCA
Collages made by Bovenbouw Architects



George MacKerron: "Happiness Quantified" | Talks at Google

Happiness by activity

Happy (0 – 100)				
Activities (in rank order)	coeff	t		
Intimacy, making love	14.20	(44.4)	Drinking tea/coffee	1.83 (18.4)
Theatre, dance, concert	9.29	(29.6)	Reading	1.47 (13.3)
Exhibition, museum, library	8.77	(25.0)	Listening to speech/podcast	1.41 (9.62)
Sports, running, exercise	8.12	(45.5)	Washing, dressing, grooming	1.18 (11.5)
Gardening, allotment	7.83	(22.8)	Sleeping, resting, relaxing	1.08 (11.4)
Singing, performing	6.95	(17.5)	Smoking	0.69 (3.16)
Talking, chatting, socialising	6.38	(75.2)	Browsing the Internet	0.59 (6.13)
Birdwatching, nature watching	6.28	(11.4)	Texting, email, social media	0.56 (5.64)
Walking, hiking	6.18	(37.0)	Housework, chores, DIY	-0.65 (-6.59)
Hunting, fishing	5.82	(3.98)	Travelling, commuting	-1.47 (-16.2)
Drinking alcohol	5.73	(54.0)	In a meeting, seminar, class	-1.50 (-9.01)
Hobbies, arts, crafts	5.53	(22.5)	Admin, finances, organising	-2.45 (-14.2)
Meditating, religious activities	4.95	(11.2)	Waiting, queueing	-3.51 (-22.7)
Match, sporting event	4.39	(15.2)	Care or help for adults	-4.30 (-7.75)
Childcare, playing with children	4.10	(19.4)	Working, studying	-5.43 (-44.0)
Pet care, playing with pets	3.63	(17.1)	Sick in bed	-20.4 (-67.9)
Listening to music				(-5.43)
Other games, puzzles				(-13.6)
Shopping, errands				(978)
Gambling, betting				279
Watching TV, film				6
Computer games				
Eating, snacking				
Cooking, preparing				

THE ECONOMIC JOURNAL

ARE YOU HAPPY WHILE YOU WORK?*

but how are you doing today?

Using a new data source permitting individuals to record their well-being via a smartphone, we produce within-person variance in individuals' well-being measured at random points in time. We find that work is ranked lower than any of the other 38 activities individuals can choose.

mappiness
Dr George MacKerron and Dr Susana Mourato



Part 1
Provide Access to Nature
Verified by Professional Narrative

For All Spaces

A narrative describes how projects integrate and encourage occupant access to nature within the building and project site (external to the building) through the following:

- a. Direct connection to nature through at least two of the below:
 - 1. Plants.^[32,38]
 - 2. Water.^[32,38]
 - 3. Light.^[32,38]
 - 4. Nature scenes (e.g., scenic views, nature views).^[35,39]
- b. Indirect connection to nature through use of natural materials, patterns, colors or images.^[32,38]
- c. Space layout, addressing placement of natural elements along common circulation routes, shared seating areas and rooms (e.g., conference rooms, common spaces) and workstations (as applicable) to enhance occupant exposure.

Part 2
Facilitate Thermal Adaptation (1 point)
Verified by Policy Document, Photographic evidence

For All Spaces except Commercial Kitchen Spaces & Dwelling Units

Projects meet the following requirements:

- a. All occupants have access upon request to blankets. Used blankets are washed at minimum on a weekly basis.
- b. A flexible dress code policy allows for individual thermal preferences.^[51]

Verification

Annotated Documents:

- Policy Document

Photographic Verification

WELL Core Guidance:

To earn this optimization, the requirements should be met for direct staff. To earn this optimization, the requirements should be met for direct staff.

This part needs to be verified by providing photographic evidence.



Visualisation, Aerial view of Water Street Tampa

ENVIRONMENT

The environment affects human experience and behavior, while humans shape and influence the environment according to their experience and behavior.

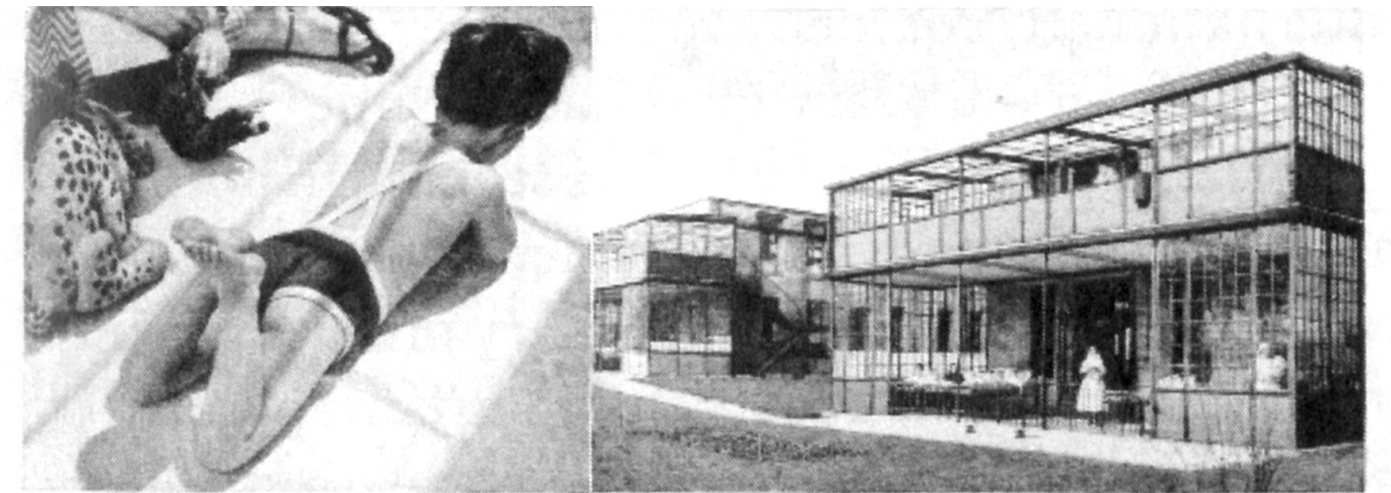
Mental illness is something natural. It has always occurred throughout human history; first documentations date back into ancient times. As simple as it sounds, nature gives and nature takes. Therefore the beneficial factors, that natural phenomena have on our mental health, are well researched and find their implications in the environmental psychology. Environment has to be understood as a system and as we live in the age of anthropocene a new thinking has to emerge, facing the challenge of undoing the nature and culture dichotomy and thinking about a non-human architecture.

As many clinics in Switzerland take advantage of the beneficial factors of nature, such as greenery, unobstructed view and animals, they are located outside of the city. Also with the garden city movement an attempt was made to counteract the harmful consequences of industrialization and improve the living conditions of people. On the downside Suburbia was created.

Sunlight invokes the production of vitamin D and serotonin, which smoothens feelings of aggression, fear and sorrow and induces in return feelings of calmness and satisfaction. It also has an impact on sleep

and the body's temperature regulation. The slow movement of fishes for example has a calming effect on humans and caring for an other living being, be that a plant or an animal, can reduce the feeling of loneliness and rise social competence.

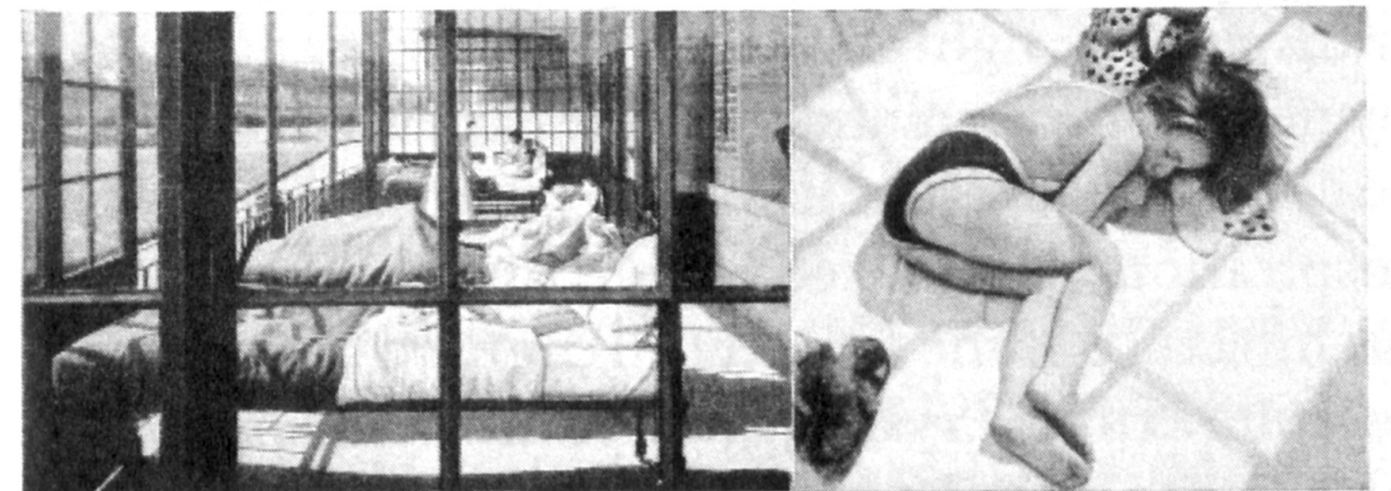
As we see a fundamental connection and awareness with nature having been lost, our project wants to reconnect humans with the 'natural' environment. Having a conscious interaction with ones surrounding would not only benefit the climate but also our mental health.



LET IN THE HEALTH RAYS OF



DAYLIGHT PERMANENTLY THROUGH



"VITA" GLASS WINDOWS

Ordinary window glass shuts out the ultra-violet health rays of daylight. "Vita" Glass admits them permanently. The properties of "Vita" Glass do not fade away in a year or two; they are guaranteed permanent, and that guarantee has been confirmed by tests made by the Building Research Station. (Write for copy of report 62/B.R.S. 36/12/4—Nov. 1933.) Two views are shown above of the "Vita" Sun Balconies at Harrogate Infirmary. Roof glazing in $\frac{1}{8}$

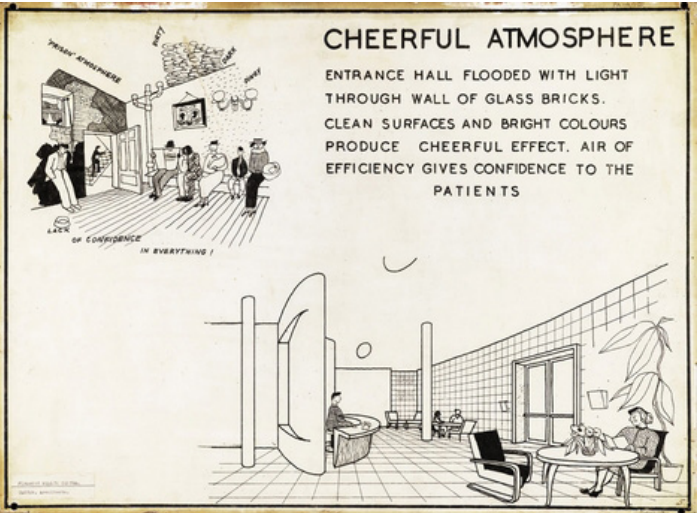
"Vita" cathedral by Mellowes & Co. Ltd., Sheffield. Side glazing in $\frac{3}{8}$ plate "Vita" Glass. "Vita" Glass is obtainable from local glass merchants, plumbers, glaziers and builders. "Vita" is the registered trade mark of Pilkington Brothers, Limited, St. Helens, Lancs, whose Technical Department is available for consultation regarding properties and uses of glass.





Man in the microcosm within the universal macrocosm
Robert Fludd, 1617

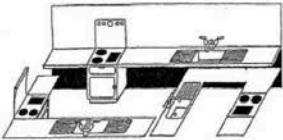
Poster of Letchworth Garden city, 1925



Parker Morris Committee: Homes for today & tomorrow, 1961

Adverstising for the Finsbury Health Centre
Berthold Lubetkin, London, 1938

- 20 The minimum provision should be an installation capable of heating the areas used for work and circulation to 55° F. and the living and dining area to 65° F., when the outside temperature is 30° F. Wherever family requirements will demand it, a more expensive installation capable of heating the bedrooms as well to 65° F. will represent the greater value for money. (69)
- 21 Whether the minimum installation is provided or something capable of heating more of the house, there is a clear trend of demand towards systems which are clean and have little or no work associated with them. (70)
- 22 It is desirable that the occupier should be able to control the expenditure on heating (71)
- 23 The costs of various ways of heating houses are considered in Appendix 2.
- 24 Thermal insulation practice should be brought up to at least the level of the new Model Byelaw 51A. (74-75)



B KITCHENS

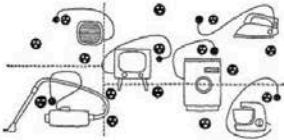
- 25 Kitchens must be designed for efficient working and equipped with adequate drainers and worktops. A sequence is commended for general use. (79-81)
- 26 The design must provide for the housewife to keep washing machinery near the sink and space in or near the working area for additional machinery in the future. (83-86)
- 27 Kitchens must have adequate storage, which we put at 80 cu. ft. for family houses. Almost as much is required in smaller homes. (87)
- 28 Accommodation for the storage of food should be reconsidered. A cool cupboard is nevertheless required. (88-90)
- 29 Condensation in kitchens is a widespread and serious problem to which there is no inexpensive answer. (91-92)

C STORAGE

- 30 The requirements for general storage are given in full in the Table on page 35.
- 31 Storage for garden equipment, bicycles, and other purposes is required for 4 and 5 person houses at the rate of 50 sq. ft. per dwelling, clear of refuse containers, fuel bins and access ways. The storage space need not all be on the same floor, so long as there is at least 25 sq. ft. on the ground floor. (97)
- 32 Flats and maisonettes should have storage comparable to that in a house. Four or more persons require 15 sq. ft. of general storage within the flat. There should be a separate store elsewhere of 20 sq. ft. for each flat, whatever the size of family. If the dwelling has a garden, additional storage is required for garden tools. (98)
- 33 The storage arrangements in private enterprise dwellings should be improved upon. (101)
- 34 The roof space should be put to wider use. (102)
- 35 For all except the main bedrooms (and preferably these as well) there must be clothes cupboards at the rate of 2 ft. of rail per occupier, not less than 21 ins. deep internally to allow for clothes on hangers. (103)

51

- 36 There should be space for hats, coats and outdoor footwear near the main entrance of the dwelling. (104)
- 37 Every home must have a cupboard for the storage of linen that can also be used for airing or keeping dry. (105)
- 38 Storage for solid fuel can remain at 12 sq. ft., 20 sq. ft. for two appliances or in rural areas, and 9 sq. ft. for flats. (107-109)

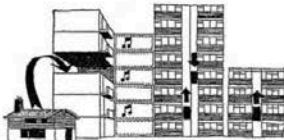


D ELECTRIC SOCKET OUTLETS

- 39 To cope with the increasing ownership of electrical appliances and to avoid the dangers of trailing flexes, we recommend at least 15 electric socket outlets for the 5 person house. A scale is recommended which is applicable to dwellings of different sizes. The installation should be planned so that it can conveniently service future outlets. Research is needed into methods of doing this. (110-115)

E SAFETY IN THE HOME

- 40 A list of points against which a design can be checked for safety is given in Appendix 4. (116)



Section III

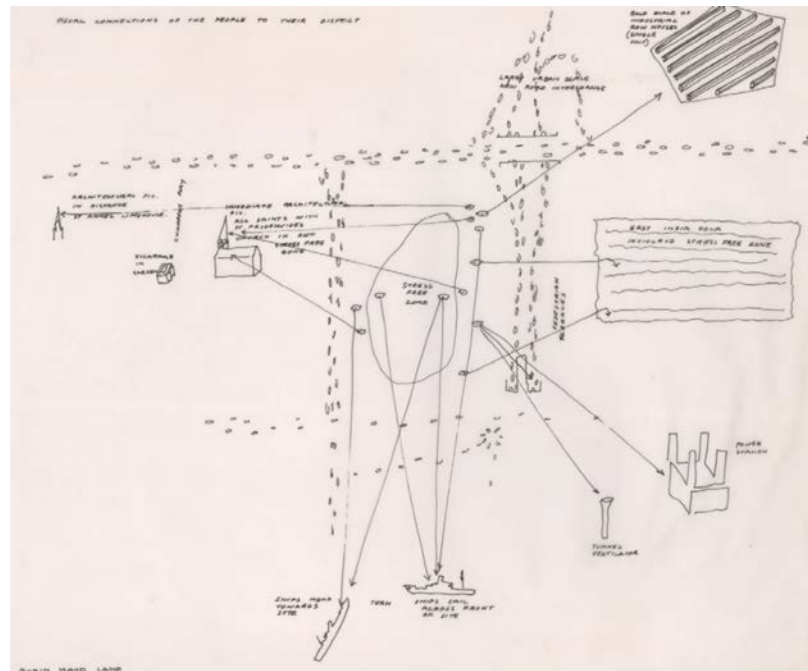
Aspects of living in flats

- 41 The human problem for the future in the design of flats and maisonettes is to provide for people who live in them an environment as workable and as satisfactory as for people who live in houses. The economic problem is to reduce the costs. (117-120)

A LIFTS

- 42 Present practice indicates that a lift service should be provided in buildings in which the entrance to any dwelling is on the fourth storey or above. In buildings of more than 6 storeys two lifts should normally be provided. (125)
- 43 At least one lift should be large enough to take eight persons. (128)
- 44 Lift installations should be designed having regard to the capacity of the lift, the speed of travel, the arrangement of stops, the number of people living in the building, the peak traffic times and the frequency of maintenance. Insufficient information is available. (129)

52



safe,
comforting
calm, light,
bright, gentle,
non clinical

Robin Hood Gardens London
Alison & Peter Smithson, 1972

Mural on a building in Kiev, 2018
Leonie Fuhrer



Keywords for the Maggie's centre Manchester
Foster + Partner, 2016

Light therapy



Housing the non-human trailer, station plus

Photograph by Andreas Gursky

Paintings by Nomata Minouru

CONNECT (SOCIAL BONDING)
the quantity and quality of social connections

KEEP ACTIVE
physical activity

TAKE NOTICE
being aware of thoughts and feelings

KEEP LEARNING
participation and modification

GIVE
pro-social rather than self-centred behaviour

SPACES FOR SOCIAL INTERACTION

SPACES FOR ENCOUNTERS

ORGANISATION

MOVEMENT

SUN / LIGHT

GREENERY / NATURE

ISOLATE / PRIVACY

NOISE

COLOUR

ADAPTABILITY

SMELL

ATMOSPHERE

MEMORY

AIR

TEMPERATURE

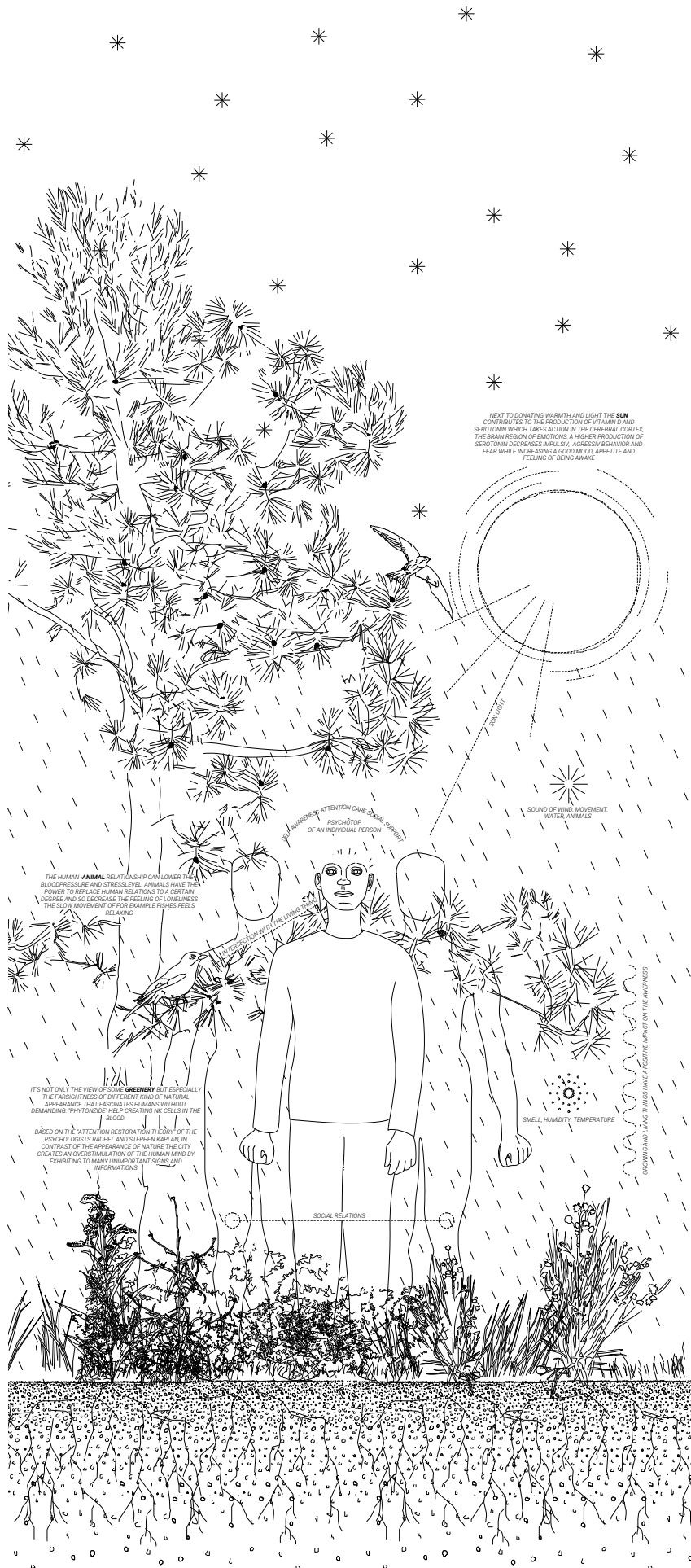
HYGIENE

SAFETY

VIEWS / TRANSPARANCY

CONTROL

ACCESSIBILITY



PSYCHOLOGICAL ENVIRONMENT

WEATHER CONDITIONS

SUN
Light
Warmth
Serotonin and Vitamin D
Shadow
WIND
Speed / Intensity
Duration
Temperature
TEMPERATURE 20-23°C
HUMIDITY 40-60%
AIR PRESSURE 101'325 Pa
RAIN
SNOW.

MOON

LIVING THINGS

HUMANS
ANIMALS
PLANTS.

AIR CONDITION

SOCIAL SPHERES

SELF-AWARENESS
FAMILY
RELATIONSHIPS, FRIENDS
WORKPLACE
COLLECTIVE, CLUB.

CULTURE

MUSIC
DANCE
THEATRE.

ECONOMY

INCOME

POLITICS

POLITICAL SYSTEM, STABILITY.

NATURE

DIVERSITY; SHAPE, SIZE, COLOR,
SMELL, USE.

NUTRITION

HEALTHY NUTRITION.

SLEEP

QUALITY
DURATION
PRODUCTION OF MELATONIN

ACTIVITIES

HOBBY
SPORT
LEARN NEW THINGS
PARTICIPATE
RELAX
TALK

SMELL

VISUAL

SHAPE
COLOR
FARSIGHTNESS.

FEEL

SOUND

NOISE < 75dB.

TASTE

NEXT TO DONATING WARMTH AND LIGHT THE **SUN** CONTRIBUTES TO THE PRODUCTION OF VITAMIN D AND SEROTONIN WHICH TAKES ACTION IN THE CEREBRAL CORTEX, THE BRAIN REGION OF EMOTIONS. A HIGHER PRODUCTION OF SEROTONIN DECREASES IMPULSIV, AGGRESSIV BEHAVIOR AND FEAR WHILE INCREASING A GOOD MOOD, APPETITE AND FEELING OF BEING AWAKE. FURTHER ON SEROTONIN REGULATES THE TEMPERATURE OF THE BODY.

DAYLIGHT / SUNLIGHT

JUNE 15.9h
DECEMBER 8.6h

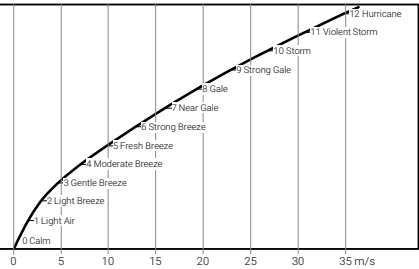
JULY 6.9h
DECEMBER 1.4h

UV-INDEX
JUNE AND JULY UV-INDEX 8
JANUARY, NOVEMBER AND DECEMBER UV-INDEX 1

WIND

AVERAGE IN THE CITY OF ZÜRICH: $\pm 4.5 - < 5.0$ m/s

UNCOMFORTABLE STARTING FROM BEAUFORT SCALE 7, 13.8 m/s, TREES SWAY & RESISTANCE TO WALK AGAINST THE WIND.
DRY AND WARM FOREWIND HAVING A NEGATIVE INFLUENCE ON HUMANS WELL-BEING DUE TO PRESSURE FLUCTUATIONS.



TEMPERATURE

AIR TEMPERATURE AVERAGE 10.5 DEGREE
JULY 24°C
JANUARY -2°C

HEAT IS FELT AS A BURDEN, COLD AS IRRITATION. HEAT CAN CONTRIBUTE TO A RESTLESS SLEEP AND A POOR CONCENTRATION

HUMIDITY

NOVEMBER AND DECEMBER 84%
APRIL 69%

HEAT IS FELT AS A BURDEN, COLD AS IRRITATION. HEAT CAN CONTRIBUTE TO A RESTLESS SLEEP AND A POOR CONCENTRATION

ATMOSPHERIC PRESSURE

938.3 - 987.3 hPa QFE
989.6 - 1040.8 hPa QNH

RAIN

SUM IN THE YEAR 2019: 1041.2 mm
JUNE 128mm
JANUARY 63mm
JUNE 12.7 DAYS
FEBRUARY 9.3 DAYS

SNOW

FEBRUARY 220mm
MAY, JUNE, JULY, AUGUST AND SEPTEMBER 0mm
-10dB of noise

GREENERY FASCINATES HUMANS WITHOUT DEMANDING. THE 'PHYTONZIDE' HELP CREATING NK CELLS IN THE BLOOD.

BASED ON THE 'ATTENTION RESTORATION THEORY' OF THE PSYCHOLOGISTS RACHEL AND STEPHEN KAPLAN, IN CONTRAST OF THE APPEARANCE OF NATURE THE CITY CREATES AN OVERSTIMULATION OF THE HUMAN MIND BY EXHIBITING TO MANY UNIMPORTANT SIGNS AND INFORMATIONS.

ADDITIONALLY TO THE VIEW OF GREENERY, THE FARSIGHTNESS OF DIFFERENT KIND OF NATURAL APPEARANCE PLEASURES THE HUMAN BEING.

THE HUMAN -ANIMAL RELATIONSHIP CAN LOWER THE BLOODPRESSURE AND STRESSLEVEL. ANIMALS HAVE THE POWER TO REPLACE HUMAN RELATIONS TO A CERTAIN DEGREE AND SO DECREASE THE FEELING OF LONELINESS.
THE SLOW MOVEMENT OF FOR EXAMPLE FISHES FEELS RELAXING

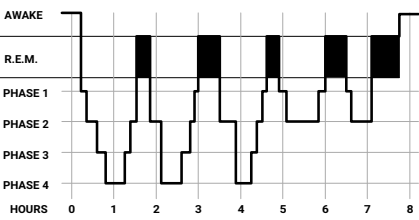
DARKNESS

THE HORMONE MELATONIN REGULATES THE SLEEP-WAKE CYCLE. IT GETS CONVERTED OUT OF SEROTONIN. THE PRODUCTION GETS STIMULATED BY DARKNESS.

FOOD SUCH AS BANANA, PINEAPPLE, ORANGE, RICE AND CEREALS CONTAIN MELATONIN

A LACK OF MELATONIN LEADS TO DRIVELESSNESS, TIREDNESS AND LISTLESSNESS

SLEEPING PHASES



SOCIAL

DIFFERENT SOCIAL SPHERES CONTAINING VARIABLE RELATIONSHIPS AND AMOUNT OF PEOPLE. SPHERES SUCH AS FAMILY, PARTNER, PEOPLE FROM WORK, CLUBS

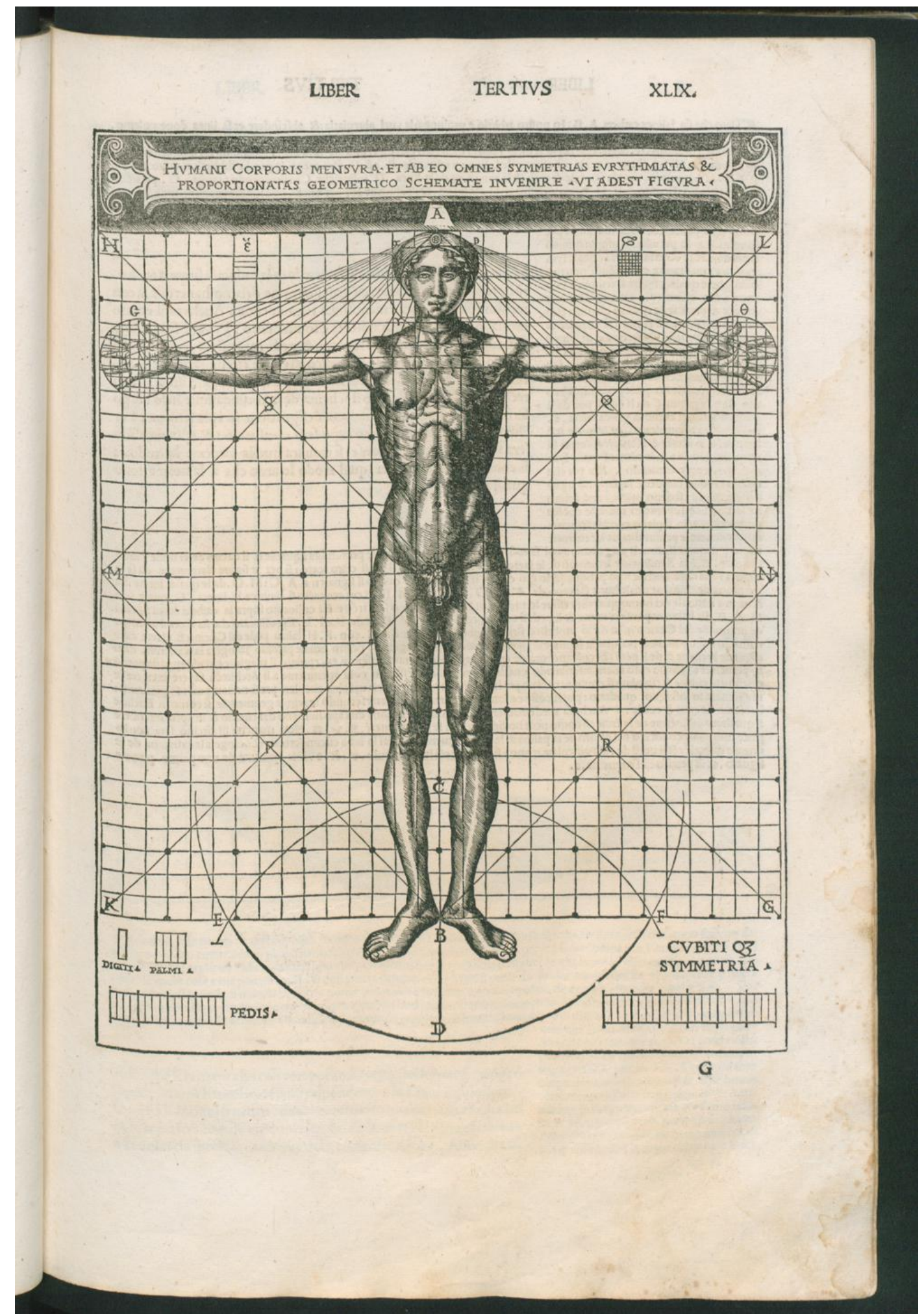
Environmental drawing
Natural phenomena and their influences on mental well-being
Davide Morgillo & Jana von Wyl

METHOD

Several outdated building guidelines need to be questioned by implementing the human being as a holistic living thing.

As an encyclopedia today we understand a reference work, representing all kind of knowledge of one or several disciplines in an alphabetic or other systematic order. This basically means to collect, order and share knowledge. The word encyclopedia is composed out of two greek words, the first one γκύκλιος *enkýklios* which means comprehensive or general and the second παιδεία *paideía*, signifies breeding and education. The purpose of the *Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers* published by Denis Diderot and Jean Baptiste le Rond d'Alembert was to gather all the current knowledge, to make it available to everyone and thereby motivating to autonomous thinking, striving for the separation from religious and absolut images of masteries. 142 so called *encyclopédistes* worked on the finally 38 volumes, which are a fundamental artefact of the Age of Enlightenment.

In Vitruvius ten books on architecture we find the first encyclopedic work in the field of architecture. In all the volumes he describes the field of architecture precisely, deepening topics like the education of architects, fundamental principles of architecture, urban planning, proportions, symmetries and roman infrastructure. In the mid 16th century Sebastiano Serlio's work contributed explicitly to the contemporary needs of architects and builders. Even tough Leon Battista Alberti in 1486 published the first unillustrated reference work of the renaissance in Latin, Serlio added high quality illustrations to the text, written in Italian and sometimes French, which allowed him to reach a much broader audience. His work called *Tutte l'opere d'architettura et prospetiva* is also known under the title of *I*

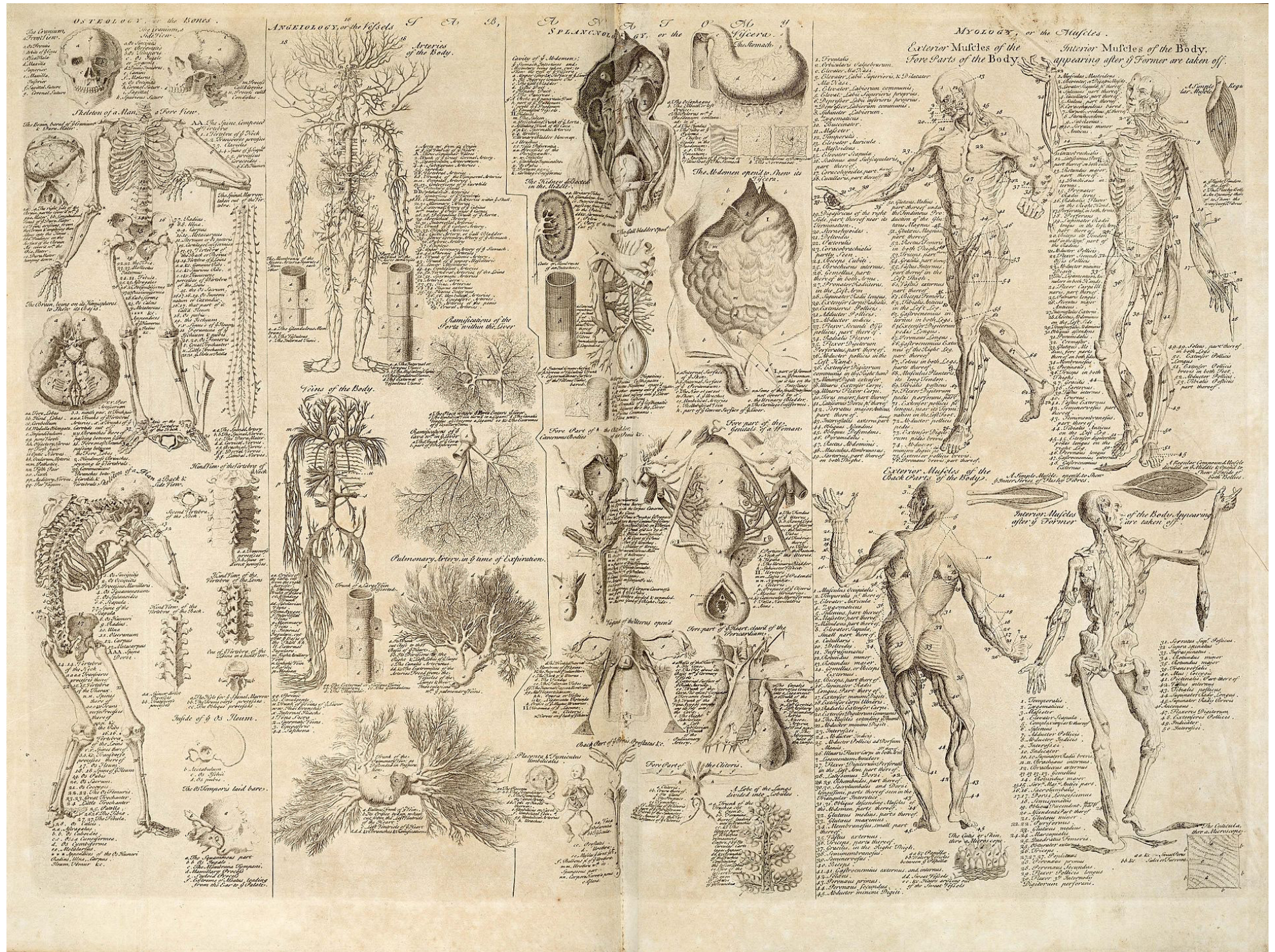


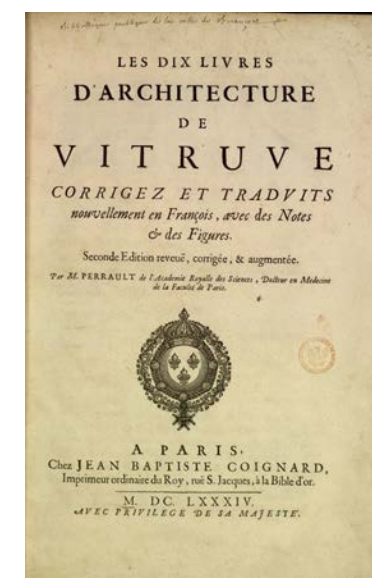
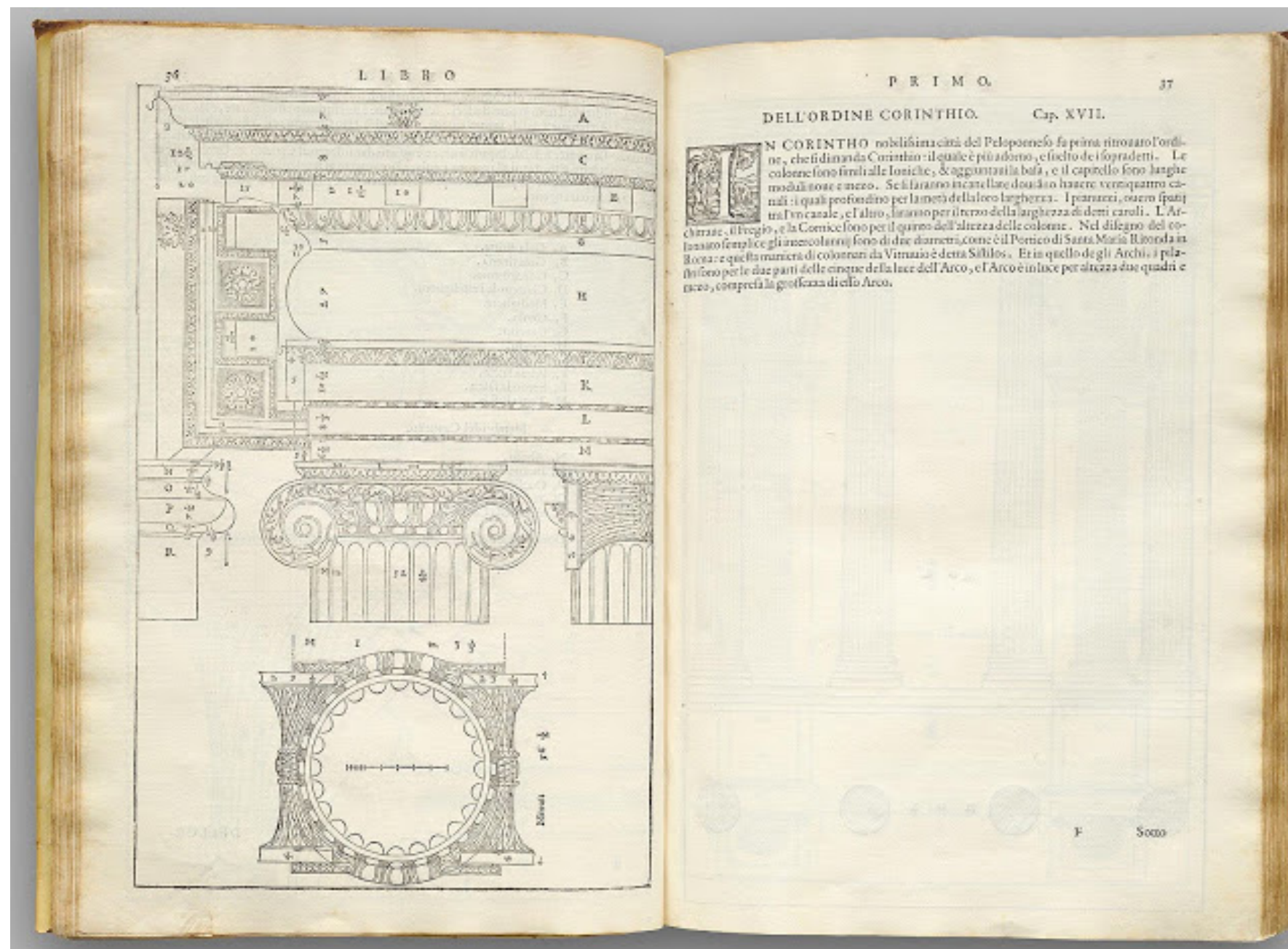
sette libri dell'architettura.

The idea and principles on how to build changed continually with time. During modernism there was a strong will of change, which consequently guided to new statements of what contemporary architecture should accomplish. Le Corbusier published a book called *Vers une architecture*, in which he illuminated some modern principles of his architecture. Within that the creation of the modulator, a normed measurement tool of the human body came up, referencing architectural space with all its components to an ideal dimensioned person. This can be brought back to a general standardization and mass production of industrial times. In 1936 the German architect Ernst Neufert published the book *Bauentwurfslehre*, which is a reference book focusing completely on standards and norms in the wide field of architecture. In 18 chapters, reaching from the very basics to building installations, it provides help to design functional buildings by providing extensive information about spatial requirements. The clear visualization of normality in dimensions, functions, habits and building process, ignore that the field of architecture is much more manifold. It should not reduce itself on definitions of norms when adressing human matters.

The human is not considered as a holistic living being in architecture building manuals. Through the natural selection derived continuously over millions of years from his own sense of beauty, man forms himself into an ideal of the beauty that dwells in him [...]. Beyond this, this proportion series seems, in the sense of Greek thought, to represent the general law of nature's germination [allgemeine Sprossungsgesetz der Natur] independent of man and his feelings.'

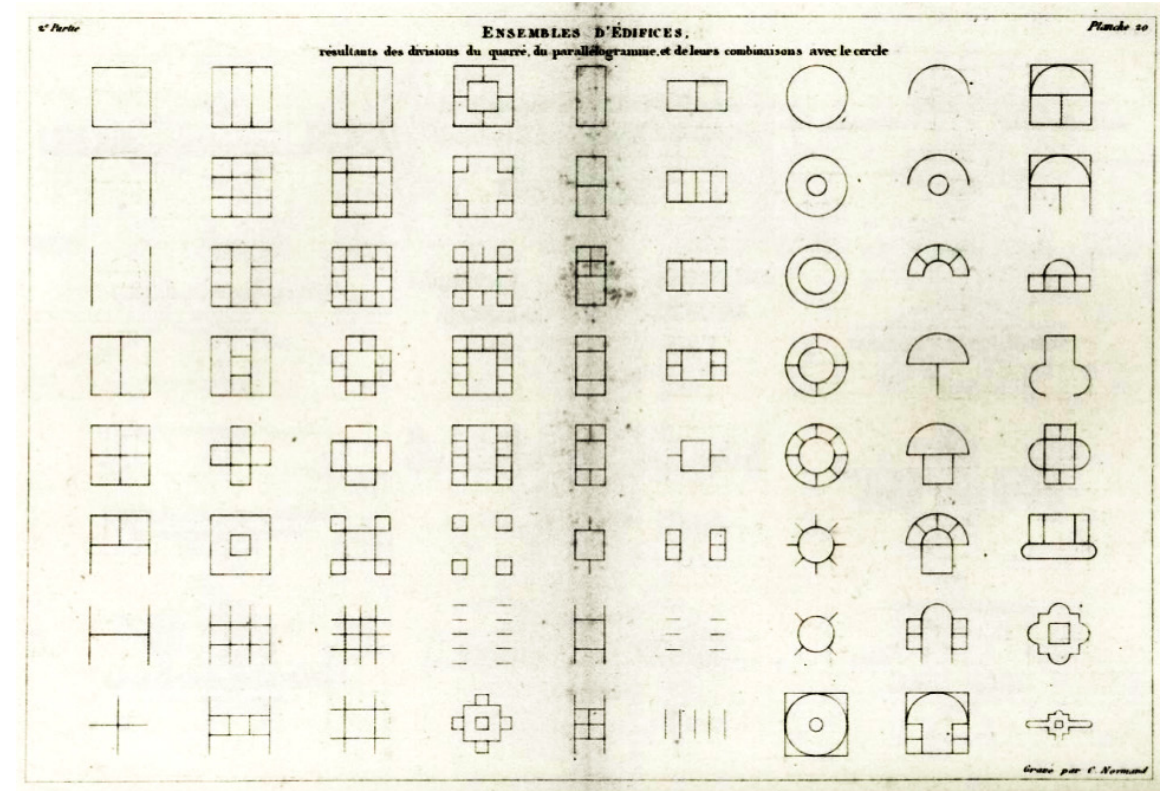
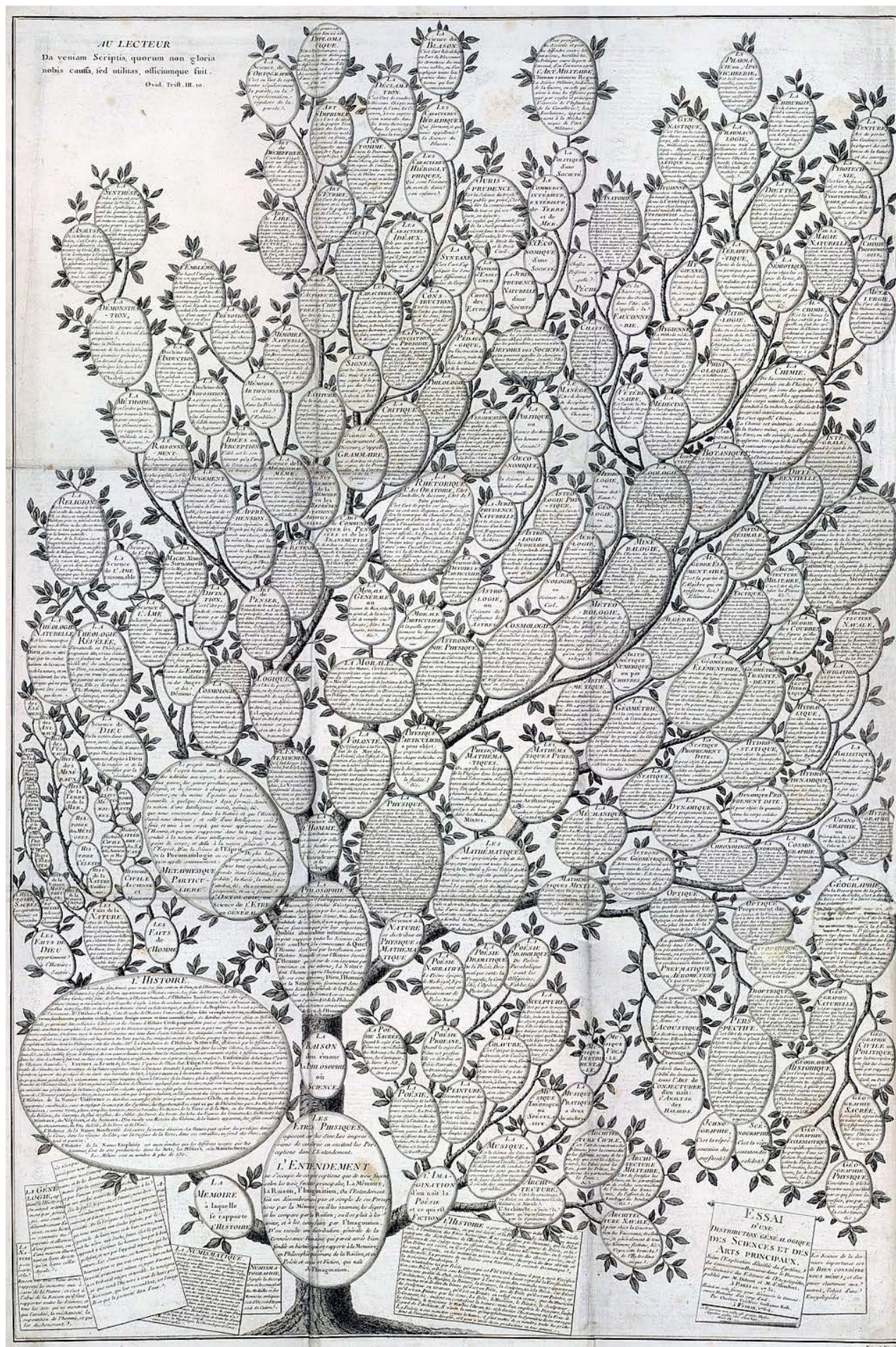
Ernst Neufert, *Bauordnungslehre*, 1943





The four books of architecture
Andrea Palladio, 1570

Vitruvius' Ten Books on Architecture, corrected and newly translated in French with notes and pictures
Claude Perrault, 1673



Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers
Denis Diderot and Jean Baptiste le Rond d'Alembert, 1780

Recueil et parallèle des édifices de tout genre
Jean-Nicolas-Louis Durand 1800

BOOK I
PREFACE
THE EDUCATION OF THE ARCHITECT
THE FUNDAMENTAL PRINCIPLES OF ARCHITECTURE
THE DEPARTMENTS OF ARCHITECTURE
THE SITE OF A CITY
THE CITY WALLS
THE DIRECTIONS OF THE STREETS; WITH REMARKS ON THE WINDS
THE SITES FOR PUBLIC BUILDINGS

BOOK II
INTRODUCTION
THE ORIGIN OF THE DWELLING HOUSE
ON THE PRIMORDIAL SUBSTANCE ACCORDING TO THE PHYSICISTS
BRICK
SAND
LIME
POZZOLANA
STONE
METHODS OF BUILDING WALLS
TIMBER
HIGHLAND AND LOWLAND FIR

BOOK III
INTRODUCTION
ON SYMMETRY: IN TEMPLES AND IN THE HUMAN BODY
CLASSIFICATION OF TEMPLES
THE PROPORTIONS OF INTERCOLUMNIATIONS AND OF COLUMNS
THE FOUNDATIONS AND SUBSTRUCTURES OF TEMPLES
PROPORTIONS OF THE BASE, CAPITALS, AND ENTABLATURE IN THE IONIC ORDER

BOOK IV
INTRODUCTION
THE ORIGINS OF THE THREE ORDERS, AND THE PROPORTIONS OF THE CORINTHIAN CAPITAL
THE ORNAMENTS OF THE ORDERS
PROPORTIONS OF DORIC TEMPLES
THE CELLA AND PRONAOS
HOW THE TEMPLE SHOULD FACE
THE DOORWAYS OF TEMPLES
TUSCAN TEMPLES
CIRCULAR TEMPLES AND OTHER VARIETIES
ALTARS

BOOK V
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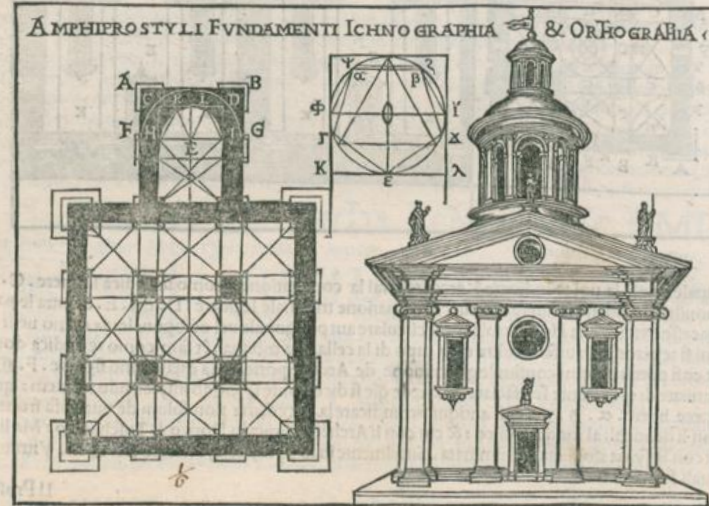
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Di Lucio Vitruvio Pollione de architectura libri dece
1521

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Bauentwurfslehre
Ernst Neufert

Lo Amphiprostylos: deriva da αμφι, q est circum & στῦλος, id est columna quasi habens non modo totum corpus sed præcipue angulos antatos & circum columnatos: Questa æde dice Vitruvio habere tutto quello che halo profilos excepto quelle colonne che ha in lo postico: cioè como la mediana parte posteriore signata. E. L. M. N. G. quale e como tribuna postica: Ma Vitruvio uole Tantummodo per breuita sia como quini ti pono la figura signata. A. B. E. F. G. Antata & si como e. C. D. H. I. nel como e la figura symmetriata del panquadrato. Ψ. 3. φ. 1. γ. 2. κ. ε. λ. Il cui diametro e. 9. Ma uolendo excipere il pentago no: poi hauere il lato Téperato più o mancho: como uedi da α. & β. aur como el Trigono γ. 2. Et qsta habiamo posito più per dimonstratione cha per necessaria satisfatione: per che a li dochi saria satisfatio la figura Prostyla.

Lo Amphiprostylos ha tute quelle cose quale ha lo Prostilos: excepto quelle che ha in lo postico a quel medemo modo le colúne & il fastigio.



Ma il Peripteros: cioè lo cir- cum: a lato, da περι, q est cir- cū: seu: dei & πτερος, q est alate: ala latine ideo dicitur circum: seu de alatum: seu ex- tense alatum: questa æde alata si chiamata tanto in la fronte quan- to nel postico: effere hexastylla. le quale distributione commodu- late le hauere in lo sequente capo. Chi fuisse Metello uedere lo poi da molti historici che de li præclari Romani hano scripto: nò solum da Plutarcho: Ma etiã da Luitio per qual modo fuisse di- cto Ioue statorio per che el fece con una certa uisione stare tir- mo & cōstante lo Romano: ex- cito contra lo tradimento che fe- ceno li Sabini ut de muliere de- cepta diximus. Vnde Luitius i pri- mo libro ad urbe condita sic ait Romulus & ipse turba fugienti- um actus anna ad cœlum tol- lens Iupiter tuis inquit auibus ius- fishic in Palatio prima urbi fun- damenta ieci: Arcem iam sceleris empta Sabini habent. Inde huc armati superata ualle media tendunt: At tu Pater decem hominumq; hinc saltem arce hostes: dene terrorem Romanis: fugam- q; fœdam fuisse hie ego tibi templum Stator- i fœui: q monumentum sit Posteristua præsentis ope seruata urbem esse: uoueo hæc præcatus: ueluti si sensisset auditas pre- ces hinc inquit Romai Iupiter Opt. Max. resistere atq; iterate pugnam iubet. Resiste- re Romani tanquã cœlesti uoce iussi: ipse ad primiores Romulus uolat. Et Henno- dio, fu nominato Mercurio p che e dicto interpre de li Dei. q gra. hermes dicif. Et a li Marianiben che in uno margine de uno texto e sta scripto Mariana ma molti dicēo Mariana: id est loci che sono cōsi da Mario denominati de li honori di quale Mario le- gerai de la uita di epso in Plutarcho & uederai li gradi honori & le aureæ statue che gli fece apsentare Caio Casare nel Capitolio: ma Vitruuo dice che questa Aede era si como quella de la Dea del Honore in lo quale templo nò era licito ad alcuni intrare se prima nò passaua per lo templo de la Dea Virtute: ad euidente cognitiōe quisti dui templi fũno facti: per indicare a le persone: nò effere licito potere consequere honore senza Virtute. questa cosa si ha da molti digni auctori: cōsi nò solum in Roma erano cōstituiti li templi a queste forte de Deæ: ma a molte altre: como templum Pacis & sic de multis aliis consimilibus secundum diui- nos effectus: Et perho Vitruuo dice questa æde fu facta da Mutio: cioè quello eccellente & cōstantissimo Mutio dil quale narra Luitio libro secundo ab urbe condita dil quale diro qualche cosa breuemet: Quello nò hauendo potuto occidere il Re Porfena & in cambio di quello hauendo occiso uno suo Cancellero: in præsentia di Porfena si brusò la mano: minazido asai epso Re: dicendo che etiam 300. Gioueni Romani sono di cōcordia iurati occidere epso Porfena: Et non hauendo potuto lui occiderlo che certo nò scampara da quacuno de epi soi compagni. Per la qual cosa hauendo ueduto Porfena tanta cōstantia durata per il fœdo abitando si per altri nò effere occiso subito per questo libero lo assedio de la Ciuita di Roma: Questo tẽplo aduncha era como uedi in la figura: ma circumalato: cioè in Circo facto in uolte seu fornice cōsi de piu grande forma facile entro che concludo- deno la cella: si como uedi per la signatiōe de le littere: & doue sono le littere. F. sono le porte de la fronte & postico: laltre fo- no de le ante exteriore: & doue. G. H. pono effere etiam le porte. uel doue. Y. & Z. ma doue interiore e. Q. R. P. sono la eleuatione de li Archi contentuti in una: como da. M. ad. X. li altri sono minori si como e. T. & cōsi tutti li altri sono eleuatione de le iunete si como. K. L. A. B. C. sono procurentia de li Anguli.

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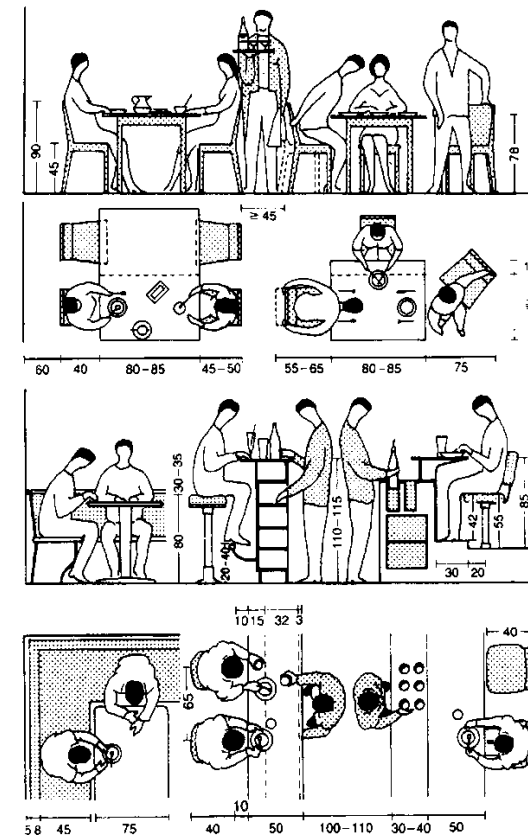
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GASTRONOMIE

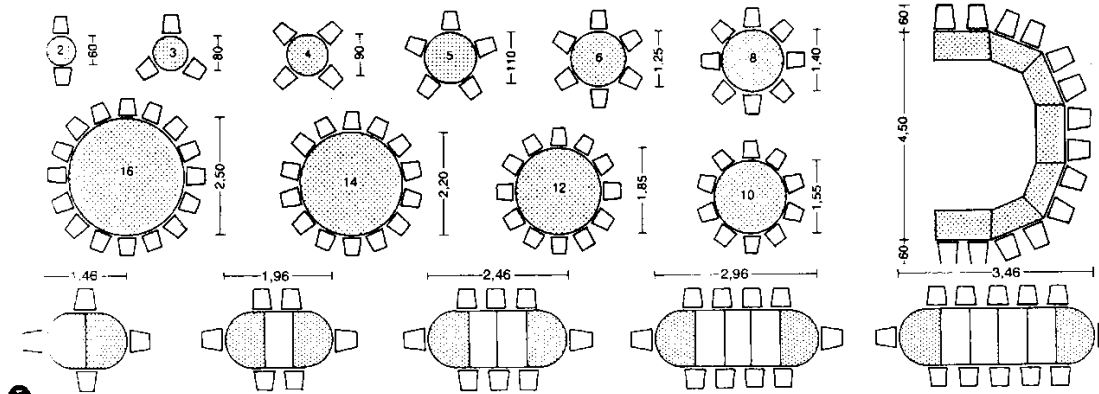
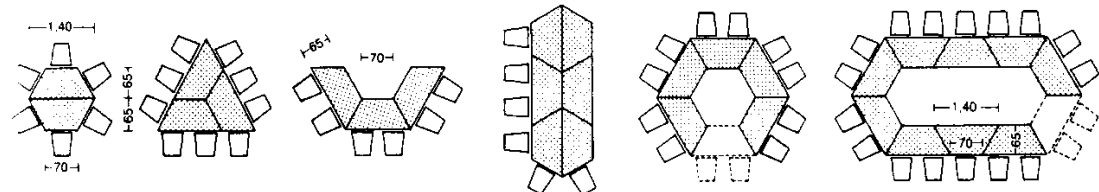
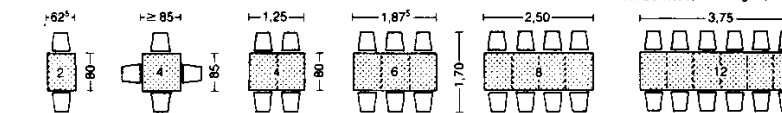
GASTSTÄTTEN

Um bequem essen zu können, braucht eine Person Tischfläche von rund 60 cm Breite u. 30–40 cm Tiefe. → ② – ④ Dadurch genügend Abstand zum Tischnachbarn. In der Tischmitte wird ein 20 cm breiter Streifen für Schüs- seln, Schalen und Terrinen benötigt, so dass eine Gesamtbreite von 80–85 cm für einen Esstisch ideal ist. Bei Teilerservice reichen 70 cm und bei Schnellgastronomie 60 cm Tischtiefe aus.

Abstand zwischen Tisch und Wand ≥ 75 cm → ①, denn schon der Stuhl braucht 50 cm Stellfläche. Dient der Raum zwischen Tisch und Wand auch als Durchgang, sollte der Abstand ≥ 100 cm betragen. Runde Tische brau- chen etwas mehr Stellfläche, Unterschied bis zu 50 cm.



① Platzbedarf Bedienung und Gast



⑤ Tische/Sitzplätze

Beherbergung

GASTRONOMIE

Gaststätten
Gasträume
Schnell-
gaststätten
Restaurant-
küchen
Großküchen
Beispiele

siehe auch:
Essräume
S. 154

- ② Frühstück ③ Essen ④ Fest
- ② Frühstücksgedeck 1: Tee- o. Kaffeekanne; 2: Milchkanne; 3: Marmelade- o. Butterdose; 4: Zuckerdose; 5: Dessertgabel; 6: Dessertmesser; 7: Kaffee- bzw. Teelöffel; 8: Dessertteller; 9: Serviette; 10: Unterlatte; 11: Kaffeetasse;
- ③ Einf. Essgedeck 1: Speisegabel; 2: Speismesser; 3: Bouillon- o. Nachtischlöffel; 4: Esslöffel; 5: Bierglas; 6: Wein- o. Dessertweinglas; 7: Suppenteller; 8: Essteller; 9: Serviette
- ④ Festgedeck 1: Dessertgabel; 2: Fischgabel; 3: Speisegabel; 4: Bouillon- o. Nachtischlöffel; 5: Esslöffel; 6: Speismesser; 7: Fischmesser; 8: Dessertmesser; 9: Suppenteller; 10: Essteller; 11: Serviette; 12: Bierglas; 13: Rotwein- oder Weißweinglas; 14: Likör- o. Dessertweinglas

Tischlänge
mit Kopfsitz
5 Pers. = 1,65; 7 = 2,15;
9 = 2,90; 11 = 3,52

THE MANUAL OF THE DWELLING

Demand a bathroom looking south, one of the largest rooms in the house or flat, the old drawing-room for instance. One wall to be entirely glazed, opening if possible on to a balcony for sun baths; the most up-to-date fittings with a shower-bath and gymnastic appliances.

An adjoining room to be a dressing-room in which you can dress and undress. Never undress in your bedroom. It is not a clean thing to do and makes the room horribly untidy. In this room demand fittings for your linen and clothing, not more than 5 feet in height, with drawers, hangers, etc.

Demand one really large living room instead of a number of small ones.

IKEA 1985

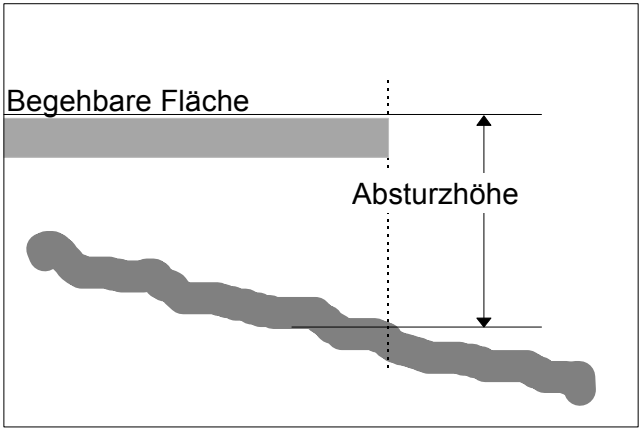
Läs om Moment soffan på sid 8-9



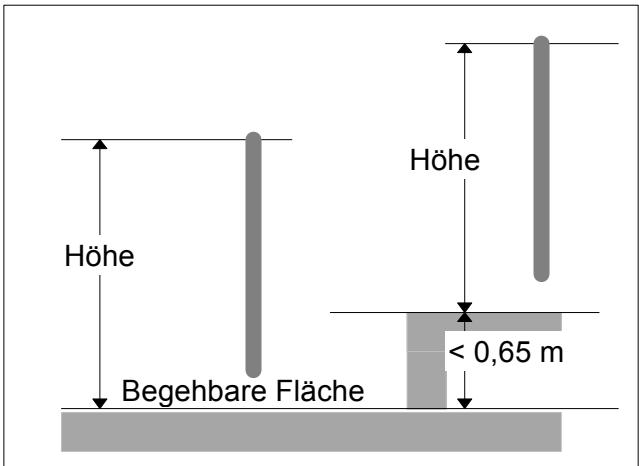
Varsågod, 300 sidor heminredning med Moment-soffan i spetsen för alla nyheter, med starkare erbjudanden än någonsin och priser som gäller ett helt år. Lägg fram den! Låt den ge dig nya idéer och spartips året runt. Katalogen gäller från den 30 juli 1984 t o m den 28 juli 1985. **IKEA**

PRIS 10:-

Ziff. 2 11 Absturzhöhe



Ziff. 3 11 und 3.12
Höhe Schutzelemente



Ziff. 3 22
Offene Geländer und Treppen

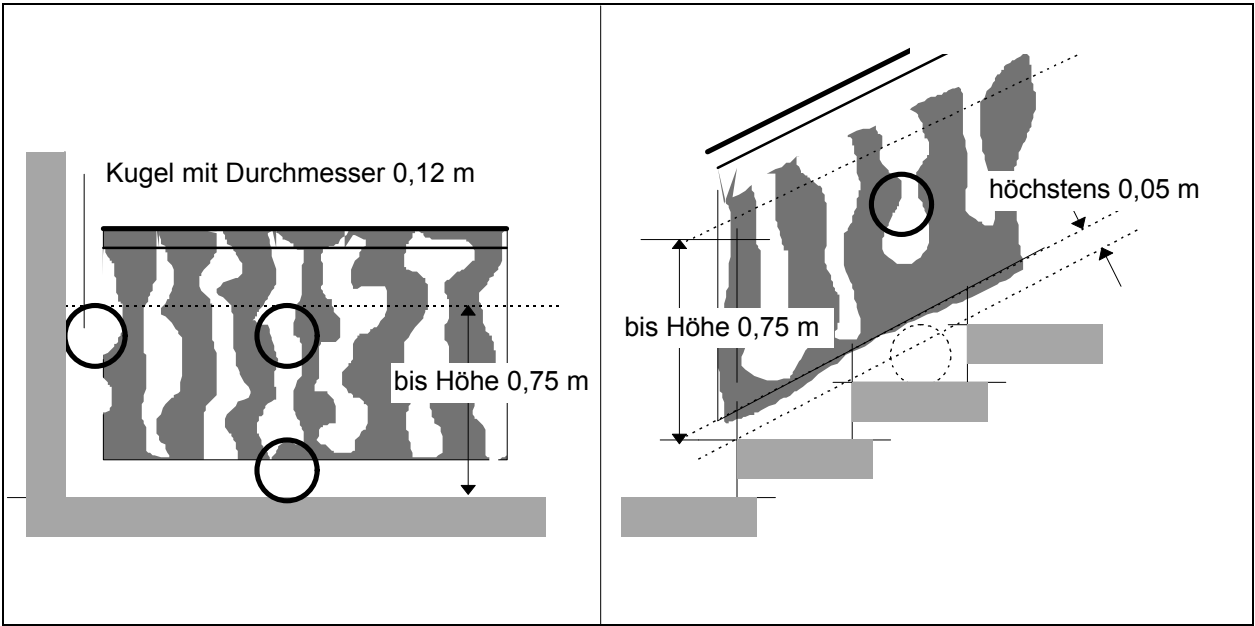
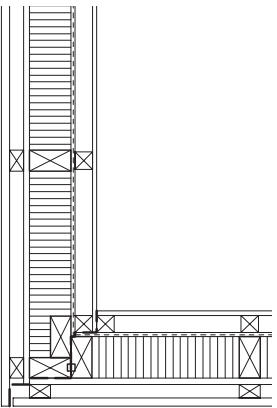
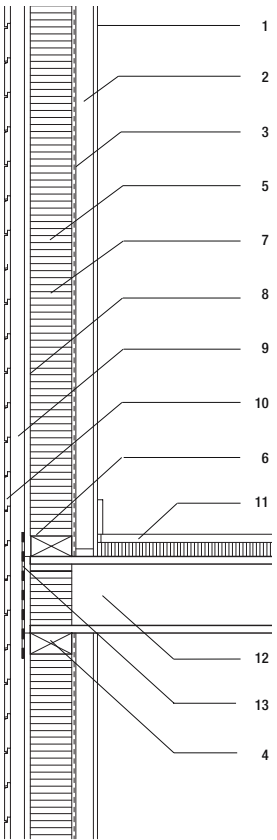


Fig. 51: Timber platform frame element, layers and sheathing

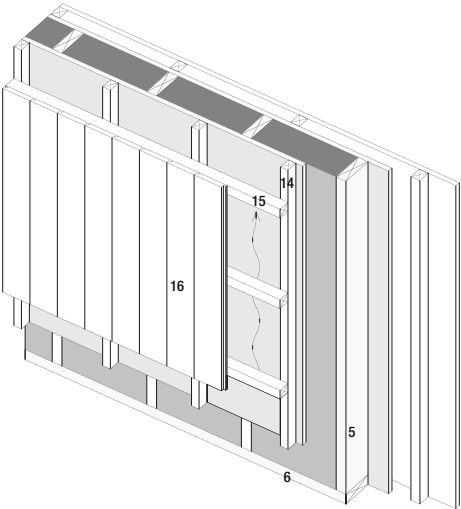
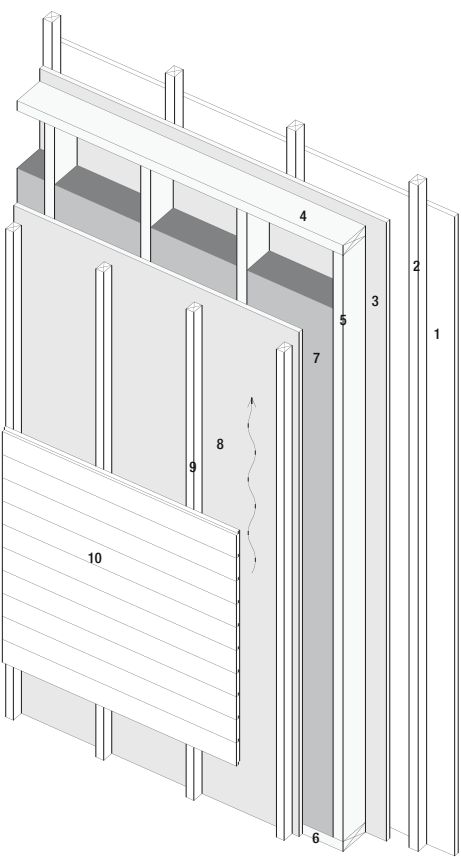
- 1 Internal lining, 12 mm
- 2 Vertical battens (services), 50 mm
- 3 Wood-based panel (vapour-tight), 12 mm
- 4 Frame: head binder, 60 x 120 mm to 60 x 200 mm
- 5 Frame: stud, 60 x 120 mm to 60 x 200 mm
- 6 Frame: bottom plate, 60 x 120 mm to 60 x 200 mm
- 7 Insulation, e.g. ISOFLOC, 120-200 mm
- 8 Bitumen-impregnated wood fibre insulating board, 18 mm (airtight)
- 9 Vertical battens, ventilation cavity, 40 mm
- 10 Horizontal sheathing, 24 mm
- 11 3-ply board with tongue and groove, impact sound insulation
- 12 LIGNATUR box element
- 13 Airtight membrane over butt joint
- 14 Counter battens, 40 mm (needed to guarantee vertical continuation of ventilation cavity)
- 15 Horizontal battens, 40 mm
- 16 Vertical sheathing, 24 mm



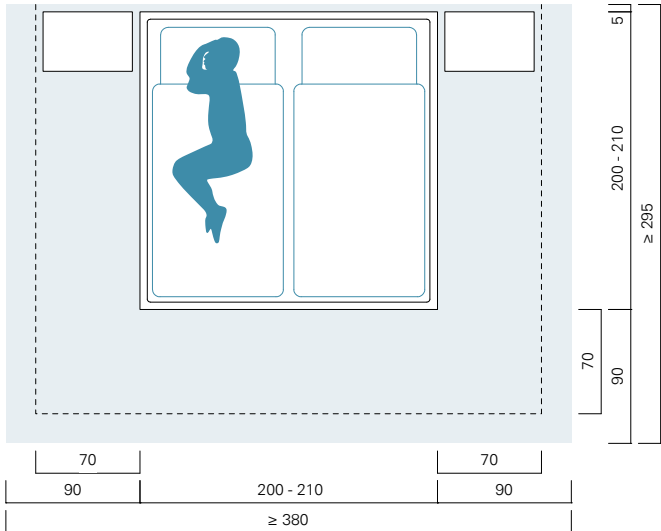
Horizontal section through corner joint
Horizontal sheathing



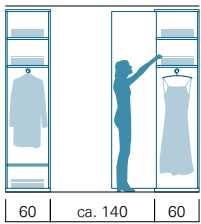
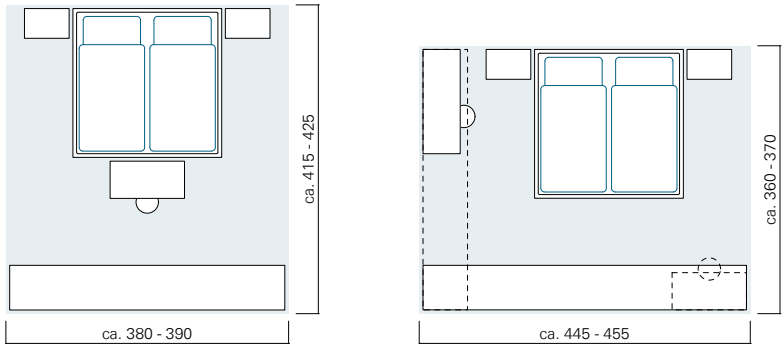
Section through wall-floor junction
Horizontal sheathing



Axonometric view of layers
Horizontal sheathing (top) and vertical sheathing (bottom)



Stell- und Bewegungsfläche beim Doppelbett. Gestrichelt dargestellt ist die Mindestbewegungsfläche (70 cm) und zusätzlich die empfohlene Bewegungsfläche (90 cm) um das Bett und der daraus resultierende Platzbedarf, M 1:50



Ankleideraum, empfohlener Bewegungsraum etwa 140 cm, M 1:100

Orientierung

Individualräume sollten Besonnung erhalten. Für die Orientierung der Räume ist daneben die Abschirmung von störendem Lärm und anderen Umwelteinflüssen zu beachten.

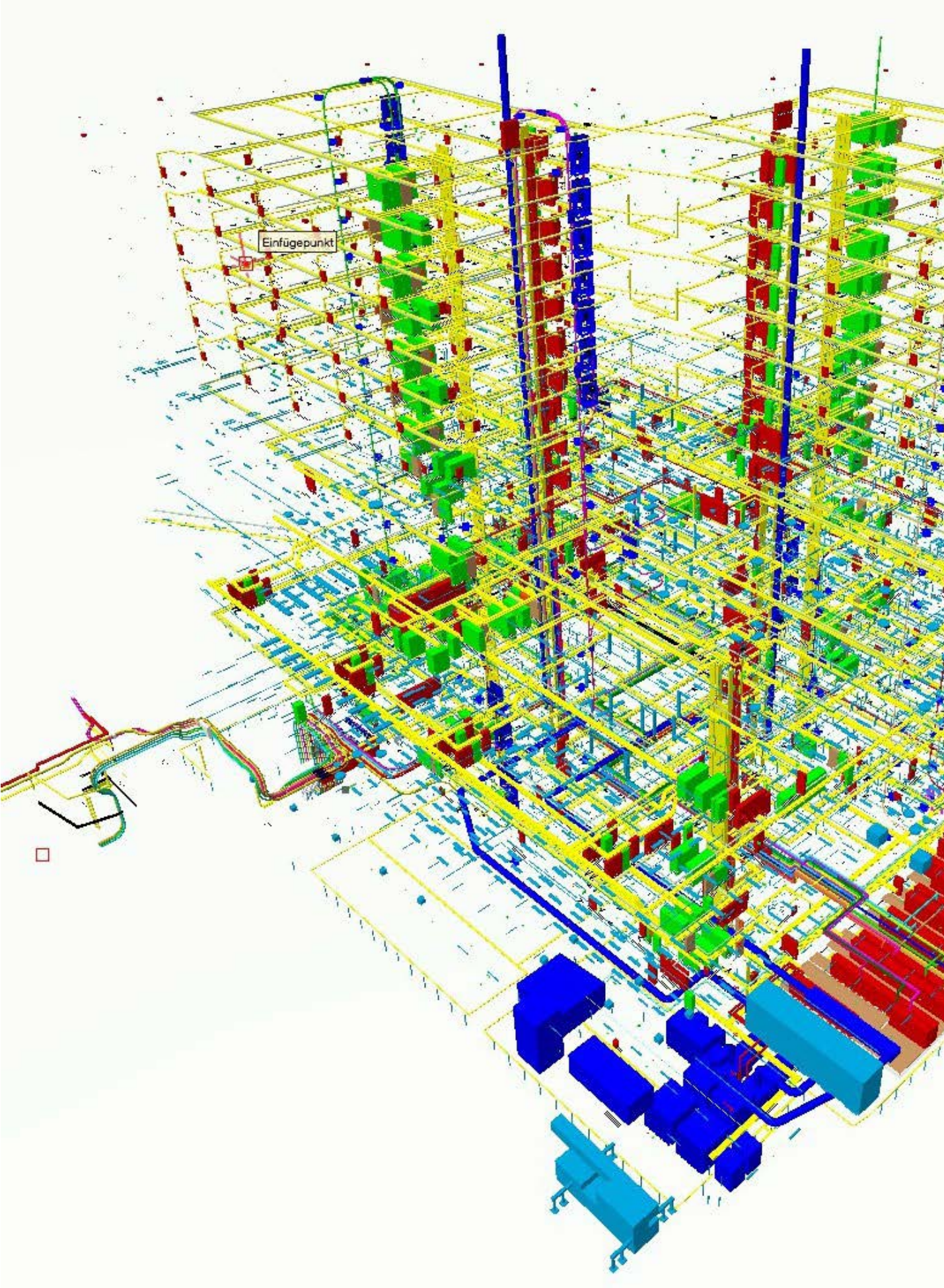
Raumdimensionierung

Für Individualräume sollte möglichst eine nutzungsneutrale Raumgröße mit mindestens 14 m² bis 15 m² eingeplant werden (siehe Kapitel „Nutzungsneutral“).

Eine Verkleinerung um circa 2 m² ist möglich, wenn die Flächen für Kleider- und Wäscheschränke und für das Ankleiden an anderer Stelle vorgesehen sind (zum Beispiel in einem getrennten Ankleideraum).

Flächenbedarf bei unterschiedlicher Anordnung der Möbel, M 1:100

Wohnen



HAUSRÄUME KÜCHEN

Arbeitsablauf

Die Anordnung der Kücheneinrichtung soll einen **rationellen und kräftesparenden Arbeitsablauf** ermöglichen. Neben einer sinnvollen Reihenfolge der Geräte, Stell- und Arbeitsflächen → S. 150 können Arbeitsabläufe auch durch gegenüberliegend angeordnete Arbeitsflächen optimiert und verkürzt werden → ①.

Die Küche kann darüberhinaus durch entsprechend versetzte Anordnung der Arbeitsflächen und Geräte bei gleichem Platzbedarf von zwei Personen gleichzeitig benutzt werden → ②.

Hochschränke und Ablagefächer sollten den entsprechenden Arbeitsbereichen sinnvoll zugeordnet werden und müssen problemlos zu erreichen sein → ③.

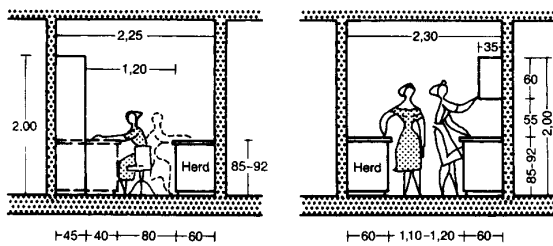
Arbeitsflächen mit auf die jeweilige Tätigkeit abgestimmten Höhen können die Küchenarbeit nicht unerheblich erleichtern → ④.

Küchen sind häufig benutzte Bereiche innerhalb der Wohnung und müssen deshalb bequem und einfach zu reinigen sein → ⑤.

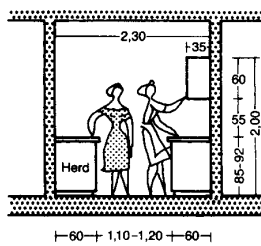
Die Beleuchtung sollte durch unter den Oberschränken angeordnete Lampen erfolgen → ⑦.

Es ist sinnvoll, Fensterbrüstungen in ausreichendem Abstand über den Arbeitsflächen festzulegen, um ein Abräumen der Flächen zum Öffnen der Fenster zu vermeiden → ⑧.

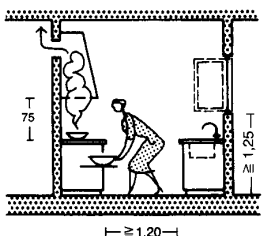
Die Anordnung von Schaltern und Steckdosen sowie der zusätzliche Platzbedarf von Vorwandinstallationen, Heizkörpern und deren Rohrleitungen sollte bereits bei der Planung der Stellflächen und Abstände berücksichtigt werden.



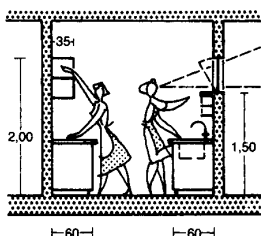
① Küchenquerschnitt mit 2 Arbeitsplätzen



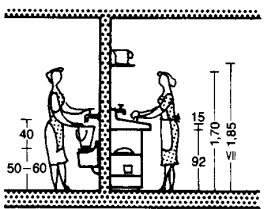
② Küchenquerschnitt mit Platz für 2 Personen



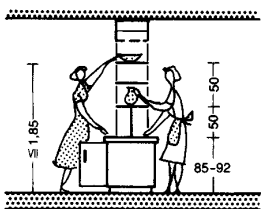
③ Tief liegende Herdzüge beanspruchen angemessenen Bewegungsraum; über Kochstellen Abzug anordnen



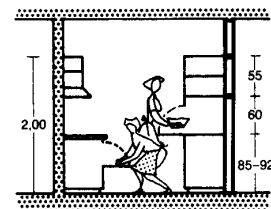
④ Arbeits- und Ablagetische 60 cm tief



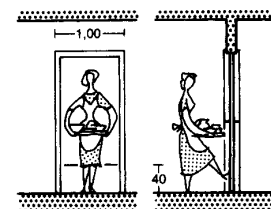
⑤ Übliche Höhe für Ausgüsse und höchste Höhe für Spültische mit höherer brauchbarer Bordlage



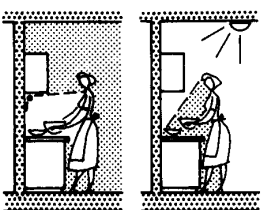
⑥ Durchreiche zwischen Küche und Essplatz mit darüber liegenden Geschirrfächern; nach beiden Seiten zu öffnen



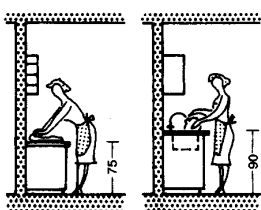
⑦ Arbeiten nebeneinander



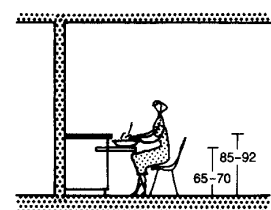
⑧ Zwischen Anrichte u. Speisezimmer am besten in Tritthöhe beschlagene Tür



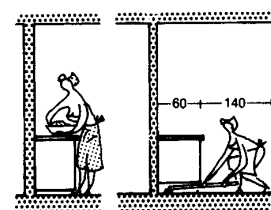
⑨ Richtige und falsche Küchenbeleuchtung



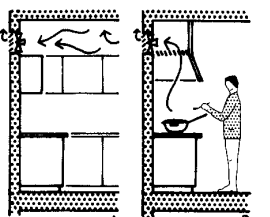
⑩ Übliche Tischhöhe von 85 cm liegt zwischen günstiger Arbeitshöhe für Backplatz und Spültisch



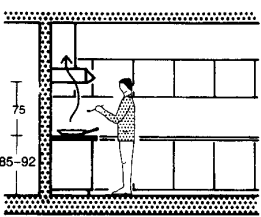
⑪ Ausziehbare Arbeitsplatte für Tätigkeit im Sitzen vorsehen



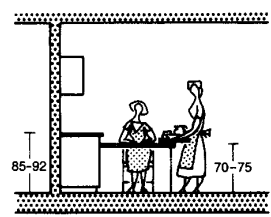
⑫ Richtige Anordnung der Schranksockel für bequeme Reinigung und Arbeit ≥ 10 cm



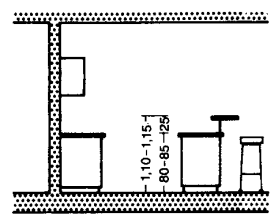
⑬ Künstliche Entlüftung durch Ventilator (A) oder Wrasenabzug (B)



⑭ Dunstabzugshaube



⑮ Auszug-, Ausschwenktisch



⑯ An der Essbar

the modern kitchen by Schütte-Lihotzky contributed to the isolation of housewives, despite its good intentions

HAUSRÄUME KÜCHEN

Arbeitsablauf

Die Anordnung der Kücheneinrichtung soll einen **rationellen und kräftesparenden Arbeitsablauf** ermöglichen. Neben einer sinnvollen Reihenfolge der Geräte, Stell- und Arbeitsflächen → S. 150 können Arbeitsabläufe auch durch gegenüberliegend angeordnete Arbeitsflächen optimiert und verkürzt werden → ①.

Die Küche kann darüberhinaus durch entsprechend versetzte Anordnung der Arbeitsflächen und Geräte bei gleichem Platzbedarf von zwei Personen gleichzeitig benutzt werden → ②.

Hochschränke und Ablagefächer sollten den entsprechenden Arbeitsbereichen sinnvoll zugeordnet werden und müssen problemlos zu erreichen sein → ③.

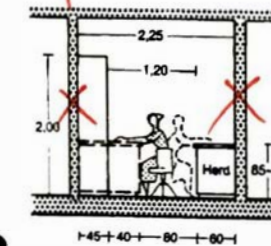
Arbeitsflächen mit auf die jeweilige Tätigkeit abgestimmten Höhen können die Küchenarbeit nicht unerheblich erleichtern → ④.

Küchen sind häufig benutzte Bereiche innerhalb der Wohnung und müssen deshalb bequem und einfach zu reinigen sein → ⑤.

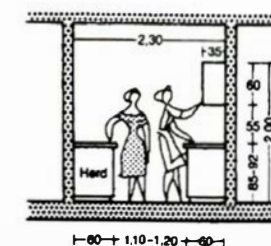
Die Beleuchtung sollte durch unter den Oberschränken angeordnete Lampen erfolgen → ⑦.

Es ist sinnvoll, Fensterbrüstungen in ausreichendem Abstand über den Arbeitsflächen festzulegen, um ein Abräumen der Flächen zum Öffnen der Fenster zu vermeiden → ⑧.

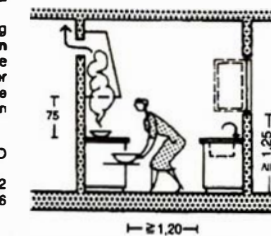
Die Anordnung von Schaltern und Steckdosen sowie der zusätzliche Platzbedarf von Vorwandinstallationen, Heizkörpern und deren Rohrleitungen sollte bereits bei der Planung der Stellflächen und Abstände berücksichtigt werden.



① Küchenquerschnitt mit 2 Arbeitsplätzen



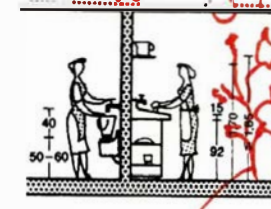
② Küchenquerschnitt mit Platz für 2 Personen



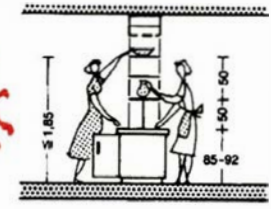
③ Tief liegende Herdzüge beanspruchen angemessenen Bewegungsraum; über Kochstellen Abzug anordnen



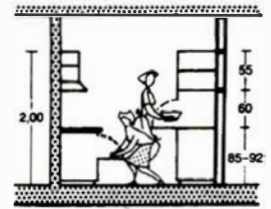
④ Arbeits- und Ablagetische 60 cm tief



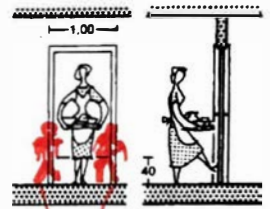
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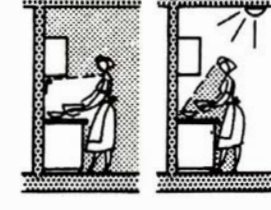
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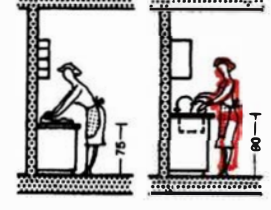
⑦ Arbeiten nebeneinander



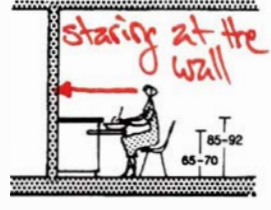
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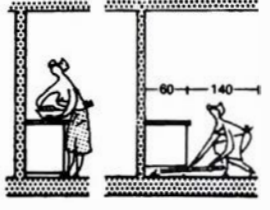
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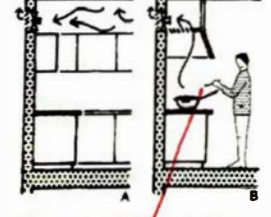
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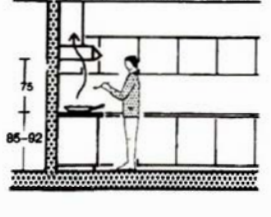
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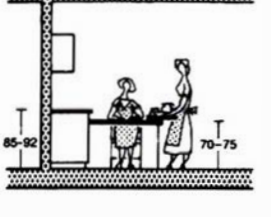
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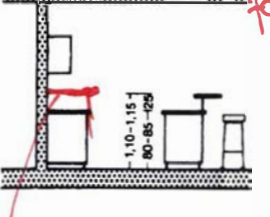
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⑭ Dunstabzugshaube



⑮ Auszug-, Ausschwenktisch



⑯ An der Essbar

CAN WE CHALLENGE ARCHITECTURAL METHODOLOGIES AND MANUALS BY IMPLEMENTING THE HUMAN AS A HOLISTIC LIVING BEING?

Our work starts from the premise that today's building standards are outdated as they originate from a stigmatizing definition of normality. Moreover the work wants to bring the human mind into the architectural discussion of creating space. Within that, different manuals like the *Bauentwurfslehre*, which had an enormous influence as it was printed in 42 German editions and translated into 18 languages, will be revisited. We see those documents as the nucleus of modern building practice, and its result is widely visible in the built environment. The question now is, if we can create a more „subjective-Neufert“ by bringing in all the above determined parameters, such as collectivity, environment, emotions. The building guidelines will be adapted and complemented by considering mental well-being as a fundamental human need, that contemporary and future architecture should provide. It will then be tested out in an active design. Imagining an alternative design method based on subjectivity and emotions implies a fundamental reassessment of western architecture norms and codes as a core design tool.

