SICK CITY REHAB
Toxicity and Health in the 21st Century City
Intermediate 13 investigates the changing nature of public institutions and their role in the cultural production and formal organization of the city. Typically, an institutional order consists of a “vertical” structuring of society, traditionally associated with concepts of commonality, stability, depth, historical continuity and symbolic meaning, but also more recently with problems of bureaucracy, inefficiency and hierarchy. What is the role of institutions today in our networked, flattened, spontaneous, “horizontal” society, preoccupied with capital and quantities, rather than quality which is rendered relative?

In need of transformation, the unit will investigate the continued relevance of institutions - as public organizations, customs, practices and laws - and seek to revolutionise them from within.

We refuse the easy critical stance of “withdrawal,” which considers institutions as the administrative infrastructure upholding the current hegemony. Instead the unit will analyse, engage and activate institutions, using them as terrain to challenge the status quo, create new modes of identification and cultivate dissent, inspired by political philosopher Chantal Mouffe. The unit will attempt to salvage the institution as a site of “agonism” and a breathing space for criticism, participation, responsibility and historical awareness, re-conceptualising their role and representation in the contemporary city, in a way that engages both horizontal and vertical frameworks.
How do we treat sickness in the 21st century? Each one of us spends hundreds of hours of our lives in hospitals or healthcare centres as visitors or patients. These are places where we contemplate the fundamental questions of existence: birth, death, fragility, pain. Why are the designs of healthcare facilities so alienating?

This year the unit will focus on health-care programmes. Spaces of health, and hospitals in particular, are often places of intense environmental control: governed by hyper-functional super-cleanliness. The typologies of health need to adapt as concepts of health-care, disease prevention, and institutional structures change.

Michel Foucault (1926-1984), a key reference and point of critique for the unit, discusses how the institutional hospital and its architectures construct power relationships in society, where self-monitoring “active patients” are subjected to the clinical gaze of the expert doctor and urged into civil obedience by the medicalisation of everyday life.

The unit will take a wide ranging approach to health care, addressing wholistic treatments of both the body and city. We will look at how human health conditions are mirrored in the built environment. Do IBS and air pollution share symptoms? What do eating disorders and ultra-skinny skyscrapers have in common? Could the way we treat depression have relevance in the housing crisis? The unit will combat these late-capitalist disorders by proposing architectural typologies of health-related programmes that critically reassess the health of both the public and the city, transforming SICK CITY REHAB into CITY OF CARE.
The city of investigation will be London, and the unit will research the history of health institutions in parallel to the development of the city.

Historically the city and health have been intricately linked. A healthy population contributes to a healthy economy, explaining invested interests by the state and corporations in medicine and the state of our public space.

The connection between the health epidemics of the past – cholera, typhoid, yellow fever, typhus, scarlet fever, diphtheria, influenza, and tuberculosis – and poor housing eventually led to the evolution of new residential typologies such as terrace housing that could affordably provide compartmentation, adequate infrastructure and improved sanitation.

During the Industrialisation process, the 1858 Great Stink (Miasma), caused by a combination of untreated human waste and pollution, went so far as to affect the work of the House of Commons, prompting Parliament to build a large sewer system through London, marking a shift from privately managed to public interventions in the city.

The turn of the 20th Century marked a shift towards the recognition of the health benefits of nature and the outdoors, in contrast to the smoky industrial 19th Century city, leading to new urban and health typologies, such as Ebenezer Howard’s Garden City (1902). Subsequently, much of modern architecture focused on the positive impact of sunlight, air, and white reflective surfaces. Following the Second World War, the creation of the welfare state introduced the concept of good health as a social right of every citizen, founding the NHS providing free health care for all. Today the NHS is the 5th largest employer in the world, with a 1.7 million workforce, but is increasingly compromised through budget cuts, privatisation and increasingly costly equipment.

Under what circumstances can public healthcare survive and reinvent itself?
New health conditions are emerging: chronic diseases are on the rise, often linked to complex environmental factors of the city, requiring multi-faceted long-term treatment programmes; as populations live longer, the burden on public healthcare facilities increases and introduces new medical requirements; global epidemics such as Swine flu and Eboli seem increasingly threatening, requiring measures of quarantine, policing and surveillance.

Recent studies demonstrate the benefits of complimentary and wholistic medicines such as nutritional therapy, talking therapies and massage. This relates to a developing sense of how we see our human bodies as small ecologies, for example, understanding that the balance of bacteria and flora in our guts can effect both our physical and mental states. We are becoming more conscious of our biological make-up, defining the human body as composed of 90% symbiotic microbes cells. In an interesting symmetry, we are also becoming less biological with technological prosthetics or drugs to both combat disabilities and increase capabilities far beyond a ‘normal’ level.

As a reaction to these new concepts, economics, and technologies, new healthcare typologies are emerging: mega urban scale campuses; small luxurious individual-oriented environments; health spaces hybridised with other programmes such as hotels or entertainment centres; your own home, through through online and telephone advice and self-diagnosis kits.

What will be the new health-care institutions of the future, and how can their architectures improve them?
Unit Structure

Reflecting a patient’s journey through the medical system, Intermediate 13 will consist of five briefs:

A. SYMPTOMS : NEW BODY INFRASTRUCTURES

B. TESTS : A HISTORY OF HYGIENE

C. DIAGNOSIS : URBAN STRATEGIES

D. TREATMENT : DESIGN STRATEGIES

E. PREVENTION or CURE? : TECHNICAL PROPOSAL

F: AFTERWARD: TOWARDS A CITY OF CARE
Brief 1.2

A. SYMPTOMS: NEW BODY INFRASTRUCTURES

Duration: 1 Week

Following an introductory discussion of the concept of “institutions”, we begin our interrogation of health institutions with our own bodies.

In the first week, each student will be assigned to research a separate health condition that chronically affects 21st Century populations, from panic attacks to Sick Building Syndrome.

For this fast-track one-week brief, students are asked to produce one three-dimensional object - a “body infrastructure” - that ameliorates or exacerbates their assigned health condition. This body modification device should mediate between the internal and external conditions of the body, considering the environmental atmosphere around the body (potentially a social, physical, or political atmosphere), as well as the personal experience of wearing this technology. Drawing techniques will be developed that internalise the symptoms experienced by the patient, and reveal how their sickness is altered by the body infrastructure.

The body infrastructure must:
- clearly relate to the student’s assigned health condition, the body and the cause
- consider the body and its flows in space, and the flows through the body (air, bacteria, liquids)
- use one material: plaster, felt, foam or paper/card
- one colour: white
- processes: cutting, scoring, lazercutting, milling, folding, casting, embossing, sewing etc.
- scale: 1:1, may vary from small object scale to small enclosure
- final body infrastructure must be beautifully crafted - detail is essential!
Possible Health Conditions

- Vertigo
- Claustrophobia
- Agoraphobia/panic attacks
- Insomnia
- Madness/hysteria/schizophrenia
- Depression
- Amnesia/Alzheimer's
- Drug/alcohol addiction
- Phantom limbs
- Infertility
- Abortion
- Terminal illness
- Obesity/diabetes
- Anorexia
- Deafness
- Visual impairment
- Deafness
- Teeth decay/orthodontistry
- Children's speech disorders
- Hayfever/asthma
- Sick Building Syndrome/allergies
- Cancer
- Hair Loss
- Genetic modification
- Irritable Bowel Syndrome

A. OUTPUTS

- 1x A2 page of research into the health condition and cause
- 1x A2 page of relevant references (artworks, medical instruments, architecture, etc)
- 1 x A2 page of representational drawings describing the object through the experience of the health condition, scale 1:2, 1:5 or 1:10 depending on dimensions
- process and documentation including models, photographs and sketches (note: this is an iterative process and will require multiple attempts at design and fabrication)
- Final "body infrastructure" (crit will include demonstrations)

SEMINARS:

Medical Institutions and Their Discontents
Humanity 3.0 The Networked Prokaryote (the transhuman: between technology cyborg and bacterial conduit)
Representing disease: drawing techniques/examples

SITE VISIT:
Visit Maggie Centre (half day)
B. TESTS: A HISTORY OF HYGIENE
Duration: 1 Week

Through a historical examination of health typologies (ranging in scale from hospital campuses to online self-diagnosis), the unit will catalogue a history of hygiene’s impact on architecture, thus contextualising different attempts to purify society, especially during the Modern Movement through precedents such as Le Corbusier’s Venice Hospital and Alvar Aalto’s Paimio Sanatorium.

In order to understand the pragmatic and symbolic requirements of a traditional health institution, each student is asked to research the typologies of treatment for their specific health condition. For example a student studying drug addiction could begin by investigating rehabilitation centres, which may lead them to secondary building types and apparatuses used in the treatment. In addition to the historical, political and medical context, the architectural plan will be an important resource to study the interaction of the building externally with its surroundings, and internally through public and private organisations. Figure-ground relationships will be challenged through updated Nolli plans that incorporate atmospheric notations.

In this way, students will build their own histories, preparing to situate, calibrate and map their own work.
B. OUTPUTS

The students’ collective work produced in this section will be collated together to form A History of Hygiene.

Capturing the origin, development and current structure of the specific health centre, the selected precedents should be analysed as follows:

- 5 primary precedents + any ancillary ones
- Basic context: name, architect, date, location
- Black and white Nolli Plan at 1:100 for each precedent. Hatches may be used to differential programs or atmospheric conditions
- Urban framework: if part of a network of other institutions around the city, the associated parts should be mapped out, showing its location in the centre or periphery.
- Cultural framework: contextualise the architecture through parallel artistic, philosophical, socioeconomic, technological, political, medical disciplines.
- Collate photographs and sketches of special details if appropriate.
- At least one precedent to be located in London and visited – to be agreed with tutors
- Colour: Black and white line drawings only

SEMINARS: Typology / History: Body-Institution-City
Drawing Techniques (Diagramming: from Nolli to Notation)
Meeting with Health consultant

Charles Jencks’s revision of the “Evolutionary Tree for the Year 2000”
What is a sick society? Does our society need to be cured or cared for? Within Greater London, each student will identify their own site, according to their specific health condition of study. The first step in finding the sites will be for the student to diagnose and map their symptoms’ causes across London, be they the media or pollution, to discover the sources of the problem. For example a student studying agoraphobia might select a network of crowded public spaces as a site of interest. At the same time, the student will critique the city as if it were a patient of the disease: such as the privatisation of public space for agrophobia. Once these locations have been identified, the student will focus on a particular site of investigation to develop further.

The second part of this stage will involve writing a brief as a polemic/manifesto convincing the Sick City how it can be saved. It is the intention that the proposed health institutions, as urban and landscape strategies, will ‘care’ for aspects of the ecological, political and social problems of the city. The size and type of health centre will ultimately depend on the site conditions. Briefs may range in scale from single buildings such as hospitals, medical surgeries, counselling centres, mental care facilities, to integrated, hybrised and diffused programmes but must be embedded in an urban context, and must relate programmatically to the student’s initial health condition. This manifesto will form an instruction manual for design strategies to be implemented over time on the site/s, mapping out phases of incubation and remediation for both the city and the patients.
C. OUTPUTS

In the following drawings, ecological, historical and other mappings of the site should appropriately medical representational techniques to represent factors such as clean vs dirty, toxicity indices, pollution gradients:

- A1 mapping of London at a scale of 1:10000 using representational technique appropriate to health condition. Colour may be introduced in a conceptually rigorous manner.
- A1 mapping of existing selected site at a scale of 1:500 using representational technique appropriate to health condition.
- A1 proposed urban strategy of selected site at a scale of 1:500 using representational technique appropriate to health condition in drawing and model format.
- 1x A4 page of written manifesto inc. Parti diagram based on Unger’s “City Metaphors,” prepare a Parti Diagram showing relationship between:
  bodily health condition – city site – institutional strategy

SEMINARS:

- Synthetic Aesthetics – Daisy Ginsburg
- Landscape Urbanism - Plans, Strategies and Tactics (urban mapping)
- Urban Utopias
- Modernism and Hygiene (history)
Study Trip

DESTINATION: EUROPEAN HEALTH INSTITUTIONS
Duration: 1 Week (3.11.14-7.11.17)

During Open Week in Term 1, the unit will visit:
- BRNO, CZECH REPUBLIC: Disabled Youth Care Institute, District Sickness Fund Outpatient Care Centre, Institute of Forensic Medicine of Masaryk University, Jubilee traumatology hospital, Kopecná Municipal Spa, Oncology Hospital, House of Comfort, Public Spa in Zábrdovice, Silhán Sanatorium, + Tugendhat House (http://www.bambrno.cz/en/object/?filter=type&type=14)
- Day trips to nearby spa towns and salt caves.
- Optional detour to FINLAND: Alvar Aalto’s Palmiro Sanatorium
Brief 1.9-12, 2.1-3

**D. TREATMENT:**
ARCHITECTURAL STRATEGIES

Duration: 7 Weeks

Does the city need a metaphorical dose of wrinkle cream, botox, or vitamin supplements? For this stage architectural strategies will be prescribed for the city's healthcare programme, ranging from generic surface treatment (mat urbanism), targeted invasive insertions (monuments and voids), to sensitive urban acupuncture (small-scale localised interventions).

Students will select a portion of their urban strategy to be developed at an architectural scale, according to a clear set of practical, technical and qualitative requirements set out in the manifesto. This portion will be typical of the rest of the urban proposal. Students will pay special attention to the social and political infrastructure necessary to create their proposed institution. The unit will tend towards hybrid typologies, resulting from the selected site. The practical and symbolic functions of the proposal must become evident at this stage, manifest in the materiality, form and programmatic organization of the proposal. The architectural proposal must relate to its context and create new types of public space in relation to their polemic.

The interior-exterior interface of the building with the surrounding urban landscape, its biotic and abiotic flows, will be a crucial point of study. The architectural facade and thresholds should aspire to operate practically and symbolically for the public, indicating where items penetrate and exit bodies and buildings, including both living organisms and environmental elements such as get-well flowers and medical refuse.
D. OUTPUTS

This stage will be structured according to detailed outputs. Generally it will include:
- Complete architectural proposal in drawings, models, renders and other media. Model making will be emphasised.
- Phasing Strategy for implementation

SEMINARS:
- Ruptured public space
- That furry fuzzy feeling: Atmospheres and Architecture
- Landscape: process for progress
- Colour - Contrast vs. Gradient
- Meeting with Health Consultant
Brief 2.4-9

**E. PREVENTION or CURE?: DETAIL STRATEGY**

Duration: 5 Weeks

The relationship between the facade and landscape at a 1:1 scale will be significant as students define material strategies and desired atmospheric effects. We will investigate how light, temperature, touch, topography, smells, can be used to enhance patients experience and their physical and psychological well being. Details of enclosure and environmental control must be resolved to a high degree, and should consider porosity, dirt and transparency. Concepts of weathering and adaptation over time must be considered as we take into account the long term maintenance of the healthy site/city.

Technical drawings of the facade detail will be accompanied by evocative drawings that reveal the experience of that detail through the eyes of the patient. Following on from the first brief, drawing techniques will be further developed to convey the symptoms experienced by the patient, and represent how their sickness is altered by the architectural proposal. This stage comprises the core of Technical Studies for Third Years.
E. OUTPUTS: REMAINDER OF TERM 2 AND 3

- Technical studies report (3rd Years)
- General detailing strategy, consistent with each student’s previous urban and architectural argument.
- 1:1 detail prototype – to mediate between interior and exterior conditions - in 1:1 model/installation, drawings, documentation, images.

SEMINARS:
- Architectures of Time (adaptive reuse + material aging)
- Relational Aesthetics: the Alter-modern Post modern
- Performative Architecture: Effect and Affect
- Resilience Urbanism: Sustaining Beauty: Ecological design in landscape
Brief 3.1-5

**F. AFTERWORD: Towards a City of Care**

Duration: 4 Weeks

With treatments devised by the unit underway, what are the long-term implications of these new architectures of health?

How can they transform the city fabric?

How can they inform the current institutions of health-care in the UK?

Students should be able to demonstrate the possibilities of architecture as a medicine to transform the future city and its public. Final designs will clearly demonstrate the symptoms - tests - diagnosis - treatment - prevention methodology at an urban, architectural and detail scale. We cannot just be excellent at critical analysis and diagnosis. We must also have the courage to care for the future!

Following on from the drawing techniques developed in brief 1.1 and 2.6, we will look back at the scale of the Sick city and see how the architectural proposals have altered its symptoms. What does the new City of Care look like, how does it feel and function, and how can we make sure it lasts? This final stage will seek to represent the temporal transformations of the proposal at the urban scale, through developed drawing techniques, which assess the viability of the institution in the future as a place for creativity, collectivity and care.
F. OUTPUTS:

- Complete portfolio including all previous work
- Large scale axonometric drawing, render or model of the urban proposal distorted according to the experience of each student's specific health condition, capturing the proposed institution's impact on the city over time and its associated infrastructure.
INSTITUTIONS/CITIES/DEMOCRACY:
- Chantal Mouffe, *On the Political* (Routledge, 9 May 2005)
- Jacques Ranciere, *Dissensus* (Continuum; Tra edition, 6 May 2003)

HEALTH
Noor Mens, *Cor Wagenaar, Health care Architecture in the Netherlands* (NAi Publishers) 2010
Cor Wagenaar (ed.), *Abram de Swaan, Stephen Verderber, Charles Jencks, Aaron Betsky, Roger Ulrich et al., The Architecture of Hospitals* (NAi Publishers)

ARCHITECTURE, ENVELOPE AND AMBIENCE
-Amy 23: Diagram Work: Data Mechanics for a topological Age, June 1998
-Robin Evans, *Translations from Drawing to Building* (AA Documents 2)
-ed. Sean Lally and Jessica Young, *Softspace: From a Representation of form to a Simulation of Space* (Routledge, NY 2007)

NETWORKED HUMAN/NETWORKED AESTHETICS
-Steve Fuller, *Humanity 2.0, What is means to be Human, Past, Present and Future* (McMillan 2011)

LANDSCAPE

OTHER
Films: *Safe, Wall-E, Welcome to Wellville, Contagion, Rabid, Dead Ringers, The Century of the Self* (TV Adam Curtis)
Art/Artists/Art historians: Natalie Jeremijenko, Mel Chin, Krzysztof Wodiczko, Rosalind Krauss (“Sculpture in the Expanded Field”)
Reference: WHO healthy cities project.