

PEOPLE, SYSTEMS AND INFRASTRUCTURE

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“We ... urge an extension of capacity-building support towards ‘bridging professionals’ who are able to link technical expertise with particular social, ecological and economic contexts. We ... recommend capacity building investments focused on enhancing the ability of citizens and users to engage actively in innovation processes, not just as passive recipients but as active users, creators and inventors.” (STEPS, 2010)

“With its infrastructures, services, and local systems of power, the urban level works as a relay station between the far order and everyday life. Urban space under capitalism thus has a double character. On the one hand, it functions as a productive force, which helps trigger waves of industrialization; on the other, it represents a social relation, where human everyday life is organized and reproduced.” (Ronneberger et al., n.d.)

“Production is shaped by social structure and society organizes itself around production... For a technical system to become vernacular it must allow some form of control to all parties... In a way such a physical system, shared by a society, is like a language. It has its limitations of grammar, but one can tell any tale in it. The true language of form, if this too fashionable metaphor must be used, is technology, not architecture. (Habraken, 1985)



REFLECTIONS: NEIGHBOURHOOD IMMERSION AND THE MEANING OF COMMUNITY

You have spent a week trying to look beyond the easily-to-detect to uncovering the layers of meaning through a neighbourhood immersion exercise in Jeppestown. Your responses to this have varied with regards to the scale of the investigation, your focus of interest and your interpretation. However, it was also possible to detect recurring themes and overlaps in some of the projects. It may have become evident to you, through the input received from the diverse panel in attendance, that “...the meanings read by the [observer] ... may not necessarily coincide with those of the community under study. Some attributes of the context are seen as essential and others as incidental. Meanings read by the [observer] no doubt reflect the [observer’s] cultural framework and experience. Meaning is a matter of social

definition. Interpretation or ‘meaning-making’ includes subjective processes as a part of the academic enquiry.” (Osman, 2004)

You will probably have noticed that the context and its people do not reveal themselves immediately. And you will have also realised that tools used in data gathering, as well as the mechanisms used in capturing, documenting and communicating need to be conceptualised with sensitivity to the context under study. Consider these words:

“Any grading system is meaningless... There is one way to understand another culture. Living it. Moving into it... At some point understanding may come. It will always be wordless. The moment you grasp what is foreign, you will lose the urge to explain it. To explain a phenomenon is to distance yourself from it... I know that trying to figure things out leads to blindness, that the desire to understand has a built-in brutality that erases what you seek to comprehend. Only experience is sensitive.” (Høeg, 1993) Food for thought...

One of the recurring themes identified was most certainly that of “hardware” and “software” describing the relationship between urban structures and the people that inhabit the city. The second UJ_UNIT2 assignment will require you to conceptually explore the interface between people and infrastructure in the city.

CITY SYSTEMS AND INFRASTRUCTURE

The systems and infrastructure that cities rely on are energy, transport, communications, water and waste. Ideally, these systems should deliver safety, reliability, affordability, resilience, and lower environmental impact. There has generally been an assumption that sophisticated and modern systems are characterized by being highly centralized – think of municipal sewer systems and the delivery of electricity. With a move towards more independent, decentralized and on-site solutions being investigated as people become more aware of the environmental costs of conventional practice, the divide between people and technology is sometimes bridged, it is perhaps important to step back and consider: Is that the solution? And if not, would neighbourhood-level technologies not be the better option? Thus putting more emphasis on the interface between community/infrastructure rather than individual/infrastructure?

In inner cities in South Africa, you will sometimes be very aware of urban decay and neglect. You may at times have thought why would this be? You may even have, at times, blamed the residents for failing to repair and clean amenities and buildings. This may be an opportunity to re-visit “The Good, the bad and the ugly” by Rodney Hackney who refers to “official vandalism” where municipalities appeared to deliberately neglect certain neighbourhoods, wanting to impose particular forms of housing (Hackney and Sweet, 1990). “Focusing on infrastructure ... creates a conceptual space to examine the shifting boundaries between material and immaterial structures, and the shifting networks between assemblages of human and nonhuman actors. Furthermore, tracing infrastructure reveals power dynamics that transcend divides between public and private, state and NGO.” (Lockrem and Lugo, n.d.)

Questions to ask are: Can the city service network be upgraded or should the area aim to become a “closed-loop” system where minimum resources are drawn from the grid and minimum waste sent back into the city? McDonough and Braungart suggest the idea of ‘technical nutrients’, material which, like a biological nutrient, stays within a closed-loop system. (McDonough and Braungart, 2002)

PEOPLE, INFRASTRUCTURE INTERFACE

An ecosystemic understanding of the city implies that all city systems are interlinked – and an holistic understanding of the built environment demands that social and economic goals are integral into technical decision-making. Habraken explains how, historically, sophisticated technologies, embedded in artifacts, were the result of immediate interaction between people and artifact (Habraken, 1985)

In addition to the above factors, the concept of “people as infrastructure” is a pertinent one. Simone writes of “...the ability of residents to engage complex combinations of objects, spaces, persons, and practices. These conjunctions become an infrastructure – a platform providing for and reproducing life in the city.” (Simone, 2004) He explains how “... the livelihoods of residents and their transactions with one another is consolidated precisely because the outcomes of reciprocal efforts are radically open, flexible, and provisional.”

And while people sometimes attempt to carve out space in the city, fence it off and protect it, the integrated nature of the city is inescapable: “... even—or especially—when we own our homes, we continue to depend upon others: others who may or may not share our dreams.... that is what makes every house a form of housing, a piece of infrastructure linked up to other infrastructures...” (The Temple Hoyne Buell Center for the Study of American Architecture, 2011) To further elucidate this topic, when presenting a new vision for sustainable human(e) settlements (Osman et al., 2011), at the Union Buildings, to members of a committee working on the National Development Plan, the presenters were asked: “Are you messing with Sandton?”

THE PROCESS

This is a conceptual, studio-based assignment. Your objective is to challenge conventional understanding of “infrastructure” – as “hardware” influencing “software” – and develop and communicate concepts that open your thinking to other ways of “doing” with regards to the interface between people and infrastructure. You are asked to interrogate the systems and technologies used and suggesting alternatives. You are encouraged to use text, images, drawings, digital formats, models or any other methods relevant to your envisioned approach. This assignment allows you to reflect on current practice and trends – exploring with great freedom, with no restrictions on imagination, an alternative future practice. Be inspired by Pieterse who claims that, what South African cities suffer from is: “A lack of imagination” (Pieterse, 2014)

THE TASK

Your task is to design a concept for infrastructure delivery in a “Johannesburg neighbourhood”. This maybe imagined or real. Your proposal must encourage deep analysis and interrogation on current practice and must communicate some message with regards to concepts of infrastructure in cities – at neighbourhood level. The outcome of the exercise should therefore be a highly engaging interaction that activates people to participate in the debate and contributes towards a changed understanding with regards to the topic. The brief is a conceptual one – but asks you address highly relevant and pressing issues. If you chose to concentrate on only one aspect of multi-faceted definition of infrastructure, you must demonstrate that you have an understanding for the context of the problem.

OUTCOMES

The task may be explored through various media and your thinking process is to be documented as notes, sketches, scans, photographs or any other products of assignment on your personal blogs (selected entries will later be included in the student blog at uj-unit2.co.za) – from Wednesday 18th till Friday 20th February – the final day showcasing final outcomes – which will be “visited” by the unit coordinators prior to presentations which commence at 11.30 on Monday 23rd February 2015. Your 3 blog entries may direct the user to other online platforms where additional information may be shared. Remember to use the hashtag #uj_unit2 in all your entries. The students are asked to help develop a hashtag for this particular investigation. This will be discussed in the studio.

OUTCOMES

Your submissions will be assessed based on the following criteria:

- To what extent have you engaged with the concepts introduced in the brief
- To what extent have you managed to interrogate, challenge and interpret the concepts and apply them to your proposal in an interesting and provocative manner
- Quality of the online submissions and the studio submissions and presentations, based on innovation and originality of your response to the brief
- Visual style, clarity, and depth of the submissions

RESOURCES

Habraken, N.J., 1985. *The appearance of form: four essays on the position designing takes between people and things*. Awater Press, Austin, Texas.

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