

A Cognitive Vernacular for the Internet of Things?

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Abstract

As the spread of engineer culture is embossed upon the minds of those increasingly ordering and interacting with their lives and that of the lives of others (for the current zeitgeist of technology is to mediate and interpose in rather than directly enable communication between people) the world is walking to the beat of a new drum of cognitive hegemony.

Just as there is a vernacular in architecture, an awareness of the value of difference, locality and diversity in our shaping of our physical world. This paper proposes I that we can look to a future we would like, that we may prefer, that we may want to have the option to choose for our future environments. That we can conceive of a vernacular for the interaction design of the future of smart objects.

Keywords

Internet of things, vernacular, design, user experience, culture, interaction design, Human Computer Interaction, Conceptual modelling

Introduction

Vernacular:

NOUN: Usually '*the vernacular*'. The language or dialect spoken by the ordinary people in a particular country or region.

Informal with adjective or noun modifier: The terminology used by people belonging to a specified group or engaging in a specialized activity.

Mass noun: Architecture concerned with domestic and functional rather than public or monumental buildings.

ADJECTIVE (of language): Spoken as one's mother tongue; not learned or imposed as a second language.

Oxford English Dictionary,

As the broad autism spectrum and neo liberal capital focus of the rarified atmosphere of the valley remakes the new normal it also trains and transforms the processes, views, thinking and basic ontology of the minds that engage with, and are engaged by a cognitively monocultural landscape of interaction design. I mean interaction as that space inside a computer system that without shape, form, rules, structure or patina. That space where any suitably cognisant person can engage in what I would call '*abstract space engineering*'. That pursuit of shaping mind palaces and 'users conceptual models' to help people get things done, to communicate things to and with them, to facilitate the mental gymnastics of interacting with a nonmechanical machine.

As we are trained and remade by the view of this narrow focus of world view I think it reasonable to ask, and subsequently propose a new view.

Just as there is a vernacular in architecture, an awareness of the value of difference, locality and diversity in our shaping of our physical world. As Dunne Notes (1999 pg 137-138) technology often conspires to isolate us from the extant world with its uniformity rather than engaging with the vernacular of our location. Of the celebration of equivalent difference, of culture and identity shaped in, of, by and with the physical and mental architectural environments we inhabit so I propose that we can look to a future we would like, that we may prefer, that we may want to have the option to choose for our future environments.

As the discussion of smart city, city as process, as distributed system, as service nodes for a future connected environment grows. And as we look to the forward rolling internet of things, whatever we think it to be, it is becoming increasingly apparent that the specifics of any individual piece of hardware is less and less relevant and the notion of the internet of things as distributed services is more and more important. As these distributed services become entwined and entrenched in the version of our future environments I think it is time to ask.

Can we find, see, recognise, build or describe a cognitive vernacular for the internet of things?

As William Gibson says.

"We can't see our culture very well, because we see with it"

but if we are to avoid the monoculture of the carbon copy, cookie cutter high streets and soul-less architecture of our town shopping sheds that was the, thankfully now abandoned, legacy of 1990s rural and suburban decimation the we might actually look to a future we might want. Generated from our own homes, our own distinct towns, cities communities and countries. Rather than one designed for none of us but rather than for the convenience of serving all of us, as one.

Can we imagine a future where our legacy, ageing, smart cities gain UNESCO protected status as a world heritage system?

What might the alternative be? We as scientists, researchers, designers, engineers can use observation and reverse engineer the present to make reasoned and informed assumptions of the future.

We will trade in our smart cities and smart homes for newer models that do the same in slightly different less effective ways every 12-18 months. Without realising fully that we no longer own them, we are merely provided a limited license to access them, on terms we don't understand. Where algorithms with biased reasoning work on biased data to create not just the much vaunted 2000's digital divide but a real physical divide. Depriving some inhabitants of equal access to buildings, of areas of a city, of access to types of transport, healthcare, education, services, food, heat, light, power, or water?

We understand the Rittel and Weber (1973) argument on the wicked problem and its challenges for design, (Buchannan 1992), we brought the problem from city planning and social sciences into HCI. Perhaps we should hear loud the message that single, straight, linear solutions rarely exist to situations with people in them. That design is generative and that there are often many, equivalent appropriate, but diverse, answers to a question.

A vernacular for the internet of things?

A UNESCO world heritage smart city?

What's so wrong in that vision of a possible future?

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BLANK FOR SUBMISSION is a media artist, interaction designer, researcher and senior lecturer in Digital Media and Creative Technologies in UK, Netherlands and Hong Kong. BLANK is a founder member of the LEFT BLANK lab at the University of LEFT BLANK and a program leader in the Master program in Creative Technology.

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BLANK publishes and presents widely and BLANK work has been shown at international exhibitions, galleries and conferences including; Digital Futures with Victoria and Albert Museum, London. Computer Art Congress, Paris. International Symposium of Electronic Art (ISEA) Colombia. DataAesthetics at ACM MultiMedia, Amsterdam. SIGCHI Montreal, GENART XX, Italy and Carbon Silicon at Oriol Sycharth Gallery.