

Research 2 - Actor Network Theory

INTRODUCTION

In my curation, I decided to focus on Actor Network Theory (ANT), largely because it is a topic which I had categorised as “interesting, must learn more about this” some years ago, a category from which it has not moved since! The course materials gave me a basic grounding, and I pulled out some of the ideas I found interesting: that objects, abstract ideas or “texts”, and people all have agency according to ANT; that networks are mutable, and can grow, shrink or be conserved; and that power can be conceived of something that flows through networks. I chose 6 artefacts: a stone axe, a public table near my flat, a portable pizza oven, noise cancelling bluetooth headphones, a beer advert and abandoned religious relics represented in the Densi Arcand film “the Barbarian Invasions”.

For this project, I’m aiming to produce some sort of intervention which affects network around me: for this reason I think the picnic table, pizza oven and bluetooth headphones are the most relevant to consider, as they are all immediately involved (metaphorically or literally) in networks I’m part of, whereas the other examples I had included more as abstract ideas (that advertising and religious icons are media that manipulate networks, and that objects can embody cultural knowledge from a wider network).

My first aim was to find comprehensible texts which explained to me what ANT is, in a way which I could understand. (My previous encounters with sociology texts have not been happy experiences). This week I have been pleased to find a few articles from other domains which include reasonable introductions: Cresswell et al’s 2010 article “Actor Network Theory and its role in understanding the implementation of information technology developments in healthcare” and Fenwick & Edwards’ (2011) article “Reclaiming and Renewing Actor Network Theory for Educational Research” both gave good summaries of the strengths and weaknesses of ANT, and let me see how it might be applied in a less abstract way. Others such as Cvetinovic (2017) covers the topic of Urban Development which relate to, for example, the urban picnic table, but the article was less readable.

I then looked for something more artistic. Searching the internet for “Actor Network Theory art” found very little of interest, perhaps unsurprisingly, but I did find an interesting article on the networks involved in Rembrandt’s art: Michael Zell’s 2011 “Rembrandt’s gifts: A case study of Actor Network Theory”. This historical example I hope will compensate somewhat for my lack of interest in smartphones and other modern media-technology inventions this week!

I have also done what might be classified as participant research this week: related to the flame powered pizza oven, I have visited the back gardens in my neighbourhood and attended fires with food and drink, a pandemic-restriction-friendly means of socialising in winter with reasonable warmth; and also in recent weeks I have used the pizza oven on the picnic table, and gifted pizza to nearby strangers.

The interest in street furniture - particularly the picnic table and its effect on various urban tribes, such as dog walkers, skateboarders and cyclists - I have also developed by contacting the company “Cycle Hoop”, whose products I have previously studied, and whom I found to be active in making network connections that make it easier for people to have their products installed.

From this research, I have sought to draw some abstract ideas which I can use to produce an intervention of my own. I think I am most likely to try installing some experimental street furniture in my neighbourhood and document the effects: but other ideas may emerge. While I’m often skeptical of digital projects - especially because often they are not seen - an interesting idea may emerge! The most interesting idea is to identify various human actors of tribes in the area, and try to produce interventions which encourage or facilitate them - or perhaps to work on the more abstract idea of producing physical interventions which

can be easily duplicated - a notion of power in networks perhaps.

For the remainder of this submission, I will cover in more detail the Cresswell article on ANT applied Information Technology in healthcare; the Rembrant article; and my observations of Cycle Hoops' design, product and services and how they can be interpreted in relation to ANT.

I've collated the references required below.

REFERENCES

CRESSWELL, K.M., WORTH, A. & SHEIKH, A. (2010) "Actor-Network Theory and its role in understanding the implementation of information technology developments in healthcare." *BMC Med Inform Decis Mak* 10, 67 (2010). <https://doi.org/10.1186/1472-6947-10-67>. Available at <https://link.springer.com/article/10.1186/1472-6947-10-67>

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ZELL, Michael (2011) "Rembrandt's Gifts: A Case Study of Actor-Network-Theory," *JHNA* 3:2 (Summer 2011), DOI: 10.5092/jhna.2011.3.2.2 Available at <https://jhna.org/articles/rembrandts-gifts-case-study-actor-network-theory/>

Text 1 Cresswell et al.'s (2010) "Actor Network Theory and its role in understanding the implementation of information technology developments in healthcare"

This article introduces Actor Network Theory as a "useful but contested" methodology, and suggests that it has a useful contribution to make to the study, implementation and understanding of healthcare system. It suggests that ANT's insisting upon human agents and objects being treated equally is a strength of this method. It also highlights that the contexts of healthcare systems can be complex, and that ANT helps to draw out these complexities, even if knowing how much detail - or how broad a scope - to include in the networks is difficult.

The article ends with two useful tables (tables 3 and 4) which cover the benefits that ANT can bring to a study, and what might be missed if it is not used. This relates to the notion I had in my curation that the efficacy of a theory or philosophical viewpoint is best measured by the differences it makes in actual outcomes: it may be useful to me to refer to these tables in considering my eventual project.

Another notion I found interesting was the idea of the power or efficacy of a manager coming from the objects around him, such as the computer, office and phone, rather than being an intrinsic part of the person:

The central idea of ANT is to investigate and theorise about how networks come into being, to trace what associations exist, how they move, how actors are enrolled into a network, how parts of a network form a whole network and how networks achieve temporary stability (or conversely why some new connections may form networks that are unstable) [13,19,20]. The aim is to gain detailed insights into how social effects such as power come into being [20,21]. This is vividly illustrated by Law through a parable in which he describes how objects such as a big office, a computer and a phone can serve to create the manager in an organisation as the source of power [22]. The manager studied in isolation (as a person or "naked ape" as Law calls him i.e. without objects), as opposed to as part of a network, is viewed as relatively powerless.

A corollary of this might be that objects in the public domain can increase or decrease the power of their users: so, perhaps, the table (or the fire in the back yard in times of Coronavirus) increases the social power of its users, allowing social connections to be made.

There is also an idea of fluidity of relations explored, which is worth considering further. An interesting example is that software practice can make social systems less functional by codifying them: the example of doctors pre-signing authorisation for x-rays, such that nurses can easily request them, is contrasted with health-care software not giving nurses such rights explicitly, which has the effect of increasing the workload on the doctors in that part of the system.

Text 2: “Rembrandt’s Gifts: A Case Study of Actor-Network-Theory,”



This article focuses on gifts made or Rembrandt’s work, by the artist or otherwise, in the 17th century. The article argues that these gifts shine light upon the kinds of temporary network which is very frequently involved in gift giving, and gives a series of examples of these, based on documentation available. Such gift exchange - a quotidian ritual - is perhaps a more interesting way of looking at art than considering the art work as rarified and special commodity (with “aura” and so on....)

The article offers this useful summary (paragraph 3):

*The central distinguishing feature of Actor-Network-Theory is the role that objects play in its redefinition of the social realm. The method embraces objects as participants or actors in creating, sustaining, and extending social ties, and thus is an effort to overhaul notions of society as being constituted exclusively of human interactions. In his 2005 book *Reassembling the Social*, Bruno Latour, leading spokesman for ANT, writes that “face-to-face interaction is not a plausible departure point to trace social connections.... because they are being constantly interfered with by other agencies.”¹ Conversely, as he has elsewhere insisted, “things do not exist without being full of people,” and so the study of humans must also entail the study of objects.*

The idea that face-to-face interaction is not the only way of considering social relations is interesting. In terms of the objects I have looked at, we could consider the bluetooth headphones as denying face to face relations to some extent, but perhaps as creating other possibilities for more distant or chosen relationships (with podcasts, music or dance?). We might also consider the hidden forces that encourage the use of such devices: who benefits from knowledge of what goes into people’s ears?

The notion of gifts is interesting in relation to the pizza oven too: when using it on the picnic table, my friends and I gave pizza to passers-by in the street, and this created some temporary relations (such that, for example, I was recognised as the “pizza guy” the next week). We might also ask what the benefit to the person who installed the table was, and who the actors were that made this gift to the community possible.

Text 3: Cycle Hoop website



From cyclehoop.com/about/cyclehoop :

Cyclehoop specialise in innovative cycle parking solutions and infrastructure. We are committed to making cycling safer, secure and convenient by breaking down the barriers to people cycling.

Our award-winning products are designed by cyclists, for cyclists and have been installed around the world helping cities become more cycle friendly, healthy and sustainable.

Since 2008 we have worked with local authorities, schools, universities, and other organisations in the UK and internationally.

Our Cycle Parking Rentals Schemes– where we install and manage secure on-street cycle parking – are used by councils throughout the UK. To date we have created 6,417 cycle parking spaces across London.

Cycle Hoop's original product was a metal hoop which attaches to a sign post, giving somewhere for a bicycle to be attached. An example is pictured above, in the form of a red love heart, an interesting example of polyfunctional communication, or creative medium creation! This object is fascinating, because on the one hand it seems unnecessary: you can still chain a bike to a signpost without it. But as well as a small increase in stability and security, it has an important function in providing legitimisation to the act of parking a bike in public.

I have since researched their products more, with a view to getting better on street bicycle parking in my neighbourhood, and noted that their approach can be understood from the perspective of ANT. Not only do they make a bike shelter (which is installed in a normal car parking space on a street), but they run the scheme to rent space in them to the public, and cover the maintenance. This takes a complex job away from the local council which would generally be involved in installing and giving permission for the installation of the cycle parking. More interesting still is that they provide explicit instructions to the public on how to get cycle storage installed (see at <https://www.cyclehoop.rentals/howtoget>), including email links to council representatives, which makes campaigning easier.

This very holistic approach makes the network around their product part of their service, and express-

es the idea considering the network you operate in is as important as your actual product.

The theme of permission is also relevant here. The pizza oven is small enough that it can be used without permission, but the picnic table is a kind of installation that generally does require permission (or perhaps, precedent: once it's installed, its network is stable, and it is accepted without question). But cycle storage generally needs permission, which is given by one of the actors in the network, here the council.

It's also worth noting the presence of a "find bike storage" map on the cycle hoop website (see image below). The relates to a geographical network, but also a social one: areas where cyclists are present: a whole which may not otherwise been easily seen.

