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# The City in Cinema: How Popular Culture can Influence Research Agendas

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## Abstract

This session at FET11 explored how the cinematic city could inspire researchers who are working on the transformative applications, concepts and infrastructures that will characterise the next decade. A series of film clips were shown under three broad categories: City as a System; Individual and the System; and Artefacts of the System. After each session a discussion took place among the participants and the emergent themes were recorded on notecards. These were photographed and displayed in a slideshow format for the remainder of the discussions. At the conclusion of the session it was agreed that the portrayal of future cities and the lives of their inhabitants in the cinema can reveal many enduring personal, societal and cultural concerns. These concerns must form the basis of requirements if technologies are to successfully integrate into our private and public lives.

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## 1. Introduction

The explicit challenge of the FET programme is to predict the future. Currently, researchers are working on the transformative applications, concepts and infrastructures that they believe will characterise the next decade. But where do they look for inspiration? One approach is to reflect on the visions of the future that have been proposed in the past, and question how these visions are actively shaping our present.

The power of cinema is that it has the capacity to immerse an audience in worlds that do not yet exist. Film can act as a provocation by projecting us into different possible futures, causing us to focus, and reflect upon, current concerns and their potential trajectories. These concerns can be personal, societal and cultural, causing us to question how our lives will unfold in years to come.

Initiatives such as the various Smart Cities projects (MIT's Smart Cities [1], IBM's Smarter Cities [2] and the ERDF's SmartCities [3]) and also the Internet of Things [4], demonstrate that one of the major challenges facing the scientific community is the rise of global urbanisation. Today, for the first time in human history, more than half the world's population lives in cities - the city has become an integral part of human existence. Technologists have responded to this shift with the promise of resources such as pervasive computing, emotional interfaces and sensor-rich

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environments. However, technologists must collaborate with broader society in order to integrate these technologies successfully into our public and private lives.

Since its early development film has reflected the trend of increasing urbanisation and scientific advancement. Cinema's portrayal of the future city has been a source of inspiration for scientists, technologists and commentators. It is in the 'cinematic city' where we find some of the most potent embodiments of our concerns about this emergent environment. Film allows an exploration of what it might mean to exist in a particular place and time. Indeed, Vidler [5] has stated that film is 'a sort of laboratory for the exploration of the built world . . . of architecture and the city'.

Cinema has the capacity to compel an audience, to show worlds that are both exciting and unfamiliar. It can also reflect new aspects of the places that we think we know or, in extreme cases, take the familiar world and turn it upside down. It is through such techniques that cinema allows us to better understand our world and our place within it. Whether it is the nightmare of the film noir cityscape or the distorted but prescient futurescapes of science fiction, cinema can create worlds. But where does the cinematic world end and the real one begin? The portrayal of the city in cinema has a profound influence on our perceptions of those cities and reciprocally it is in the cinematic city where we find some of the most potent on screen reflections of our environment. In a similar manner to Dunne's Critical Design [6] which characterises design as a provocation for thought, this session presented cinema as such a catalyst. Through such fictions, cinema has the capacity to humanise the future enabling researchers to focus on the minutiae of behaviour and the subsequent questions that are revealed through the exposure of our needs, desires, habits, rituals, values and priorities.

## 2. The Session

The session began with an introduction to the rationale behind the workshop. The participants were then shown three sets of short film sequences, selected from popular films of the past century, demonstrating contrasting visions of the cities of future and the lives of their inhabitants. After each themed set there was discussion around reaction to the films. The workshop organisers recorded the debate on notecards, which were photographed and presented to participants in a slideshow format, as the session progressed. These images were used to summarise the debate topics and emergent research ideas.

### 2.1. City as a System

The city as a system is a familiar theme in many films, in this case clips from both Metropolis and Blade Runner were chosen as they explore aspects of the layering of the cityscape. In Metropolis it is the workers who toil in the bowels of the city while it is the rich who inhabit an idyllic world on the surface. The city is portrayed as a 'living being' while in Blade Runner the characters inhabit a similarly stratified society, but in this case one in which the boundaries are collapsing. This is reflected in the architecture of the city, which is both futuristic and ancient . . . it is like today, only more so [7].

The themes that emerged from the discussion that followed clips from these films raised the following themes (Fig. 1):

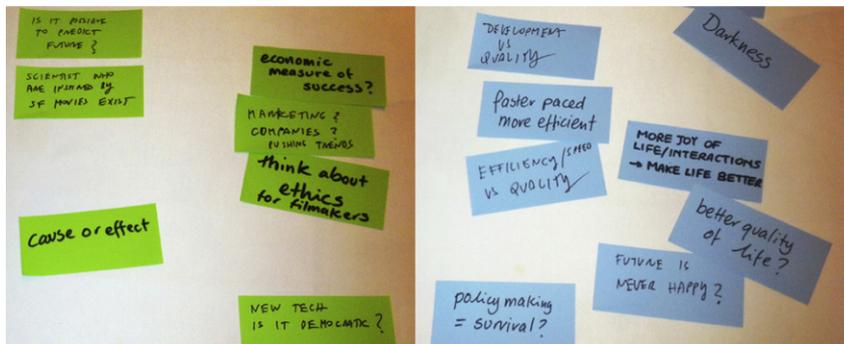


Fig. 1. A selection of notecards generated after the Artefacts on the System (left) and City as a System (right) sessions.

- The prevalence of built environments – no natural world, too artificial
- Pace of life is faster – efficiency and speed dominate quality of life
- Interfaces to devices and systems reveal technological gaps
- Can we design cities or do we evolve and survive?

## 2.2. Individual and the System

The clips in this section were selected as they illustrated aspects of how the individual might respond to a city that is sentient. In THX 1138 a society is portrayed where the identity of citizens has been sacrificed for the protection and surveillance of the city-state. The film explores what happens when one individual begins to question that relationship. In a similar manner Alphaville portrays the city as a computer that controls the lives of its inhabitants and it takes the ‘outsider’ to question the nature of this relationship. The clips taken from Minority Report illustrated some of the potential for interaction associated with pervasive technology in the urban environment.

The following themes emerged from the subsequent discussion among the participants:

- Technology will always be desirable and personalisation will be important
- We are fascinated by heroes who are trying to beat the system
- Robots in the future may be our interaction media
- The role of technology and the norms of society – manipulation of emotional states
- What are our expectations and how will we design to accommodate these?
- The future is coming fast

## 2.3. Artefacts of the System

The film clips selected for this session focused on the most tangible aspect of future research agendas, that of artefacts and their usage while interacting with the city and its inhabitants. Logan’s Run illustrated how devices were used to both hunt and identify the ‘runners’ and how this was viewed as a spectator sport by society. While the clip chosen from The Fifth Element explored the use of artefacts to enforce state control. Finally the scene chosen from the beginning of Blade Runner showed a device for distinguishing between replicants and humans, reflecting the theme of the breakdown of boundaries.

In the discussion that followed the following themes emerged (Fig. 1):

- Cinematic devices act as a narrative device for the filmmaker but not necessarily what we want in the world
- Film simplifies life but is it possible to predict the future?
- Scientists are influenced by science fiction
- Concerns of society stay relatively stable it is just the technology and the activities around it that change
- The ethics of cinema – how much is it marketing companies pushing trends?
- Is the technology democratic – still the gap between requirements and technology.

## 3. Conclusion

What this session demonstrated is that cinema can act as a powerful catalyst for thought concerning the nature of future technologies. At the level of the artefact it can enable researchers to focus on the detail of future interactions, while at a more general level cinema reinforces the more enduring societal concerns that elevate above specific technology. In a similar manner to the ‘design fictions’ of Bleecker and Nova [8], cinematic fictions have the power to challenge our assumptions and preconceptions about the role that products and services play in everyday life.

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