TELEVISION AS A MEANS OF TRANSPORT

Digital teletechnologies and transmodal systems

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In 1933 the art historian Rudolf Arnheim proposed that the new invention of television was best understood metaphorically, in relation to questions of physical transport – as a ‘means of distribution’ – but of images and sounds, rather than of objects or persons. To this extent, he argued, television is fundamentally related to modes of transport such as the motor car and the aeroplane – but in this case as a ‘means of transport for the mind’ (Arnheim 1933, quoted in Rath 1985: 199).

In making this argument, Arnheim, if inadvertently, comes close to Marx’s understanding of ‘communications’ as properly being understood to comprise the movement of objects, persons and messages. Marx’s analysis sought to combine the virtual with the actual: the analysis of the media industries with those of physical transport (De la Haye 1980). This multi-modal approach represents a link which has been underlined in the contemporary development of media studies, as a discipline which nowadays attends only to the symbolic dimensions of communication.1

Evidently, Arnheim’s argument works at the level of metaphor by transposing the function of physical modes of transport to the virtual sphere, where the entities being transported – images and ideas – are themselves immaterial. Indeed, if we trace the etymology of the word ‘metaphor’ we find that its original Greek meaning is precisely to ‘transport’ or ‘carry across’ – in this case to transfer significance, by using a figure of speech in which a name or descriptive term is transposed from one realm of meaning to another. My own concern here is simply to indicate, schematically, what kind of analytical benefits might accrue from the restoration of the broken linkage between the analysis of symbolic and physical modes of communication represented in this metaphor.
Digital teleotechnologies and the ‘death’ of geography

Over the last decade it has come to be widely presumed that one of the principal effects of the new digital teleotechnologies (technologies of distance) of our age is the ‘death of geography’ (Meyrowitz 1985; Wark 1994). According to this view, we all now live in a cyber world of placelessness, as these technologies have ‘overcome’ the problem of distance to such an extent that material geography now counts for very little as a determinant of social or cultural life.

However, a revisionist position has more recently been articulated which disputes these idealist presumptions (Hannam et al. 2006; Utty 2008) and argues that, while the new virtual dimensions of our world are of considerable consequence, material geography, far from being ‘dead’, still requires our close attention. This is so, not least because, in the first place, the internet itself has a very real geography (Crampton 2003; Zook 2005); moreover, rather than simply ‘bringing us all together’, these technologies both create new unities (‘technozones’) and divide them from others by inscribing them in technological form (Barry 2001). For example, statistically speaking, the principal use of email is not, in fact, for long-distance communication, but between people in the same organization who are already geographically proximate (often in the same building), and the most successful of the social-networking websites increasingly function by articulating the virtual with the actual world, rather than by substituting the former for the latter. Thus, in the light of these considerations, rather than thinking about cyberspace in the abstract, as some unitary new sphere, we might be better advised to investigate the specific ways in which the virtual is integrated with the actual in different material cultures (cf. Miller and Slater 2000).

Reinterrogating transport geography: ‘the box that changed the world’

If we understand a metaphor as a container for the transport of meanings, and if, following Marx, we are concerned to re-define the analysis of communications so as to include transport, we can also apply the metaphor in another context: in relation to the container box (known in the vernacular of the transport industry as a ‘can’ or ‘box’) which provides the basic form of that industry today. The box itself is a totally banal object: so simple in its standardized dimensions and construction, and so ubiquitous in the contemporary world, that it is almost invisible to us, precisely because we are surrounded by it. As one of the characters in William Gibson’s novel Spook Country, puts it, ‘he [had] read the name on individual boxes … Hanjin, Cosco, Tex, K-Line, Maersk Sealand’, but another character notes that ‘she’d never really thought about them before; you glimpse them

from freeways sometimes, an aspect of contemporary reality so common as to remain unconsidered, unquestioned. Almost everything, she supposed, travelled in them now’ (Gibson 2008: 294, 176).

The box functions (literally) as the foundation of the multi-modal transport system on which the time-space compression of the global economy depends, combining the great economy of water shipment with the speed and flexibility of methods of overland transport, while minimizing handling costs. It has had tremendous economic impact, in so far as it has enabled the drastic reduction in transport costs which has been the key driving force in the expansion of international trade and the process of globalization over the last 50 years. By reducing these costs, containerization radically expands the geographical scale of markets – allowing products to be carried vast distances at such low costs that they can still be sold more cheaply than comparable goods made locally (Cudahy 2006; Donovan and Boney 2006; Levinson 2006).

At the same time, the basic concept – a standardized container capable of being moved across different systems of transportation – is so simple that this humdrum object might be thought barely to qualify as a significant form of technological advance. The ‘invention’ of containerized transport systems is sometimes attributed to the ‘hero figure’ of Malcolm McLean of Sea-Land Transport, who first used containers in ports on the east coast of North America in 1956. But containerization was not a new idea, and McLean did not invent it. He was simply the first to see that a whole new transport system could be built around the simple concept of goods being transported from door to door, from origin to destination, across a variety of modes of transport, in a closed box – and he constructed a whole industry around this pre-existing technology.

However, besides its practical purposes, the box also functions, metonymically, as one of the key symbols of the age, to ‘represent’ the whole process of long-distance transportation which lies at the heart of the global economy. To this extent, we need to address not only its practical functions (or, in technical terms, its ‘affordances’) but also its symbolic significance as a ‘global icon’ of our era. Alan Sekula has noted that, if Marx saw the commodity as the container of ‘dead labour’, and if the slave ship was perhaps the first ‘container ship’ – functioning, literally, as a floating means of transport for potential labour power – then the container box itself perhaps be seen as the ‘coffin’ of remote labour power performed elsewhere, in dispersed long-distance production chains, and delivered to markets anywhere across the globe. A number of commentators have recruited the container box to a similar status to that given by McLuhan to electronic technologies of communication. Thus they argue that today’s ‘rapidity and low cost with which shipments can now be moved around the world is doing for goods and materials what the electronic media did for visual and aural representations … McLuhan’s global village of images of information and
introduced a series of revealing ‘microcosmic’ glimpses of the complex macrodynamics which determined the path and speed of its journeys. As Michel Callon and Bruno Latour note, even the longest journey is ultimately built out of — and dependent on — the effective functioning of an indeterminate number of micro-linkages (Callon and Latour 1981). The slightly fortuitous element in the narrative was that the experiment took place in remarkable circumstances: as the global economy collapsed during the box’s round-the-world journey, the project was able to dramatize the dynamics of global trade more effectively than can possibly have been imagined in advance by its planners.

In mid-September 2008, just as the Credit Crunch began to bite in the UK, the box began its journey by train from Nunneaton Station in the British Midlands. It was then transferred by truck to a warehouse in Paisley, near Glasgow, where it was loaded with a consignment of 15,120 bottles of 12-year-old Chivas Regal whisky. At that stage, with their exports in the first half of 2008 having gone up 14 per cent, the Scottish whisky manufacturers were still very optimistic about their prospects, despite the overall downturn in the global economy. The next stage of the box’s journey took it, again by road, to the Greenock Ocean Terminal, where it was loaded on a container ship, the Vega Stockholm, which took it to Southampton. There it was reloaded, along with about 1,500 other boxes, containing everything from German chemicals to frozen pork, onto the MV Copenhagen Express, whose ultimate destination was Shanghai.

The ship travelled down through the Irish Sea, across the Bay of Biscay, through the Gibraltar Straits, and across the Mediterranean to the Suez Canal. This was a crucial stage of the journey, as the canal route saves the 20-days’ sailing time otherwise involved in the circumnavigation of Africa. However, even as the box passed through the canal in early October, serious concerns were beginning to emerge that shipping going this by route was increasingly threatened by Somali pirates operating at the southern end of the Gulf of Aden. The significance of this story was well confirmed in subsequent months, in which the re-emergence of piracy in this region led to a series of international crises. As a result of these developments, the cost of insuring ships passing through the Gulf of Aden has increased to the extent that some shipping companies are now even considering taking the long route around Africa, via the Cape of Good Hope, rather than running these risks. As we see from this example, the path of globalization can never be assumed to run smooth: even the decreases in journey times facilitated by a nineteenth-century invention such as the Suez Canal cannot necessarily be assumed to hold good for the future.

The box then made its way down the Red Sea, across the Indian Ocean to Singapore, arriving in mid-October. By the time the box arrived there, the global economic slowdown had cut into shipment volumes across the industry, with Singapore especially hard hit, freight rates falling to six-year
The exporters have developed particularly close linkages with American
mass retailers such as Wal-Mart, whose logistics of ‘just-in-time’ supply
mesh very effectively with the computerized inventory-control systems
of containerization.

However, while the flow of exports from China across the Pacific to
the west coast of America has been the fulcrum of global trade over the last
10 years, China too was, by the spring of 2009, also experiencing the
effects of the global downturn in terms of falling orders (reduced by 70 per cent
in some cases) for exports to the United States, Europe and Japan. This, of
course, also turned out to have major ramifications for China’s internal labour
market, in so far as many of the workers in the factories making these con-
sumer goods were migrants who had arrived in the cities during the boom,
but were now themselves fearful of losing their jobs because of the global

Having spent approximately a month in China, the box left Shanghai
in late November on a ship bound for Sendai in Japan, and then on to
Los Angeles, a journey of around 12 days. By the time of its arrival in
Los Angeles, the world economy was in even deeper trouble and, within the
shipping industry, charter rates for container ships had plummeted further.
In the boom years, companies had built bigger and bigger ships in the
expectation that demand for transportation was set to continue to increase
indefinitely. However, in the context of the economic downturn, the indus-
try now faced a crisis of oversupply. Moreover, if the port of Los Angeles had
in those years been the crucial nexus between the emerging systems of Asian
mass production and American mass consumption, that relationship itself
was clearly in crisis, one of the signs of which was the mountains of empty
containers now growing along the portside in Los Angeles. Given that
America has very little to export that Asia wants to buy, rather than send the
containers back empty, as had been done for some time, they were now
simply being abandoned at the port — and the long shadows which the
mountains of empty containers cast brutally symbolized the crisis which had
marooned them there.

From Los Angeles, the box travelled by rail across to the west coast, via
Pennsylvania, arriving in mid-December at the aptly named ‘Big Los’
import company, on Long Island just outside New York, which has a
chain of more than 1,300 stores across the United States, and specializes in
selling cheap imported goods from the Far East to working-class American
consumers. The company’s hope was that, even in a collapsing market, these
‘good value’ cheap goods would hold their own better than most.

However, at this point in its journey, the economic crisis meant that the
box was marooned in a container park in Trenton, New Jersey for a con-
siderable period before acquiring a viable load for its onward journey. At
the same time, the GPS tracking device fitted to the box malfunctioned and
needed to be returned to England for repair. As is so often the case in stories

loans and local shipping companies seeing their share prices in freefall.
Further anxieties, at this stage of the journey, concerned the fact that the
Malacca Straits, like the Gulf of Aden, have, in recent years, also seen an
increasing number of ‘ship-jackings’ by hi-tech pirates, who themselves
make very effective use of exactly the same GPS transmitters installed on the
box for the purposes of the BBC project — evidently, GPS itself, like any
technology, is a double-edged sword, which can be used for a variety of legal
and illegal purposes.

At this stage the project also ran aground on the classic experimental
dilemma, whereby the experimenter’s methods begin to affect the results of
the study. The normal situation on board a container boat is that the
crew are largely ignorant of the specific contents of the boxes on board.
However, in this case, the situation was transformed by the fact that relatives
of the crew, monitoring the BBC website, had informed them that one of the
boxes on board contained a large quantity of very high-quality whisky — a
revelation which the ship’s captain took in good humour, although he did
maintain that, as a result, he would institute ‘extra security’. However,
despite the captain’s levity, it should be remembered that pilfering —
especially of alcohol and tobacco — was such a serious problem in the
previous era of ‘break-bulk’ loose cargo transportation that the savings
enabled by containerization of cargo were, in fact, a substantial motivating
force in the abandonment of the old, more vulnerable methods of shipment.
Indeed, before containerization, the standing joke in the port of New York
was that a longshoreman’s wages were ‘$20 a day and all the whisky he
could carry home’ (Donovan and Bonney 2006: 111).

From Singapore, the box travelled up through the South China Sea,
arriving in late October, at the end of a journey of 10,000 nautical miles
from Greenock, at Yangshan port in Shanghai, which is already one of the
biggest ports on the planet (though soon to be exceeded in size by the
terminal now being built on an artificial island in the East China Sea).
However, only a month after leaving Southampton, the extent of the global

crisis was now becoming clearer. Within the shipping industry itself, falling
demand meant that the costs of box transport, for any given journey, had
fallen by a third compared with the previous year. Moreover, within China,
while companies such as Marks & Spencer had just opened their first large
stores, targeting China’s emerging middle class, in the hope that export sales
there might support their falling profits at home, it was already clear that
Chinese consumers were also reining in their spending, given their anxiety
about their own financial futures.

In Shanghai, the box was loaded with a variety of cheap Chinese consumer
goods (manufactured in a factory in nearby Ningbo) such as plastic spray
bottles, digital bathroom scales and metal measuring tapes, for sale in a
chain of DIY stores in the US. In recent years, most of China’s export trade
in manufactured goods has travelled in container boxes along this route and

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Globalization, convergence and standardization

However, beyond detailing the journalistic output and originality of the BBC project, I also want to make this ‘box’ the grist to a rather different mill by returning to some of my earlier themes concerning the definition of the field of communication studies. The principal issues here are how we should understand the relations of communications and transport and, more particularly, how we might re-integrate the material dimension of communications into the field, which, as I indicated earlier, presently tends to be conceived of as if ‘communications’ should refer exclusively to the symbolic realm of the movement of information and messages.

If we begin with the question of globalization, it is worth observing, with Alan Sekula (1995), that most people talk as if globalization is all about email and air transport, and that in most conceptions of globalization, maritime space is a forgotten area. However, the long-distance production and supply chains on which the global economy is now premised entirely depend on the transport of both ‘intermediate’ (parts) and finished goods over long distances. From the point of view of media and communications studies, one of the most interesting things about the container industry is that the transformations it has gone through, over the last 50 years, since the standardized container box was first invented, offer an uncannily exact ‘preshadow’ of the more recent transformations of the communications industries in the era of digitalization.

The key point about containerization in the transport industry is that, just like ‘convergence’ media in the digital era, it is a transmodal system, in which the same unit (the containerized box of a standard size and shape) can readily be moved across different systems of transportation – rail, road or sea. To this extent, the experience of the coming of the container box in the transport industry has clear parallels with the more recent transformation of the communications industries, since they too began to move to a transmodal, multi-platform configuration, based on a standardized form – in their case, digitalized units of information which can readily be transposed across different media platforms. Furthermore, this means that when we speak of convergence, as we have done within media studies in recent years, we must recognize that we have much to learn from the previous experience of ‘transmodality’ of the transport industries.

By the 1950s, it was already clear to many people in the shipping industry that, just as Henry Ford had revolutionized motor manufacturing by standardizing the assembly process, they now had to standardize the process of handling goods on ships, crucially by loading all goods into containers of a uniform size, so that machinery could then be developed to automate the process (Donovan and Bonney 2006: 74). The key to efficient shipping clearly lay in standardizing the unit of transport, but different shipping companies had opted for boxes of different sizes, leading to bitter conflicts,
which were only resolved in 1965 when the International Organization for Standardization established the cross-industry standard box sizes which still dominate the industry today.

In this context, Andrew Barry (2001) has detailed the crucial role of the establishment of technical standards in the creation of entities such as the EU's 'single market' and has highlighted the inevitable political nature of the battles which have preceded the establishment of agreed standards in many technological fields. In the media field, one might think of parallels with the 'standards wars' between Betamax and VHS formats for control of the home video market – or of contemporary struggles over different possible standards for the next stage of high-definition TV and Blu-ray technology.

Technological innovation and regulatory contexts

However, if the analysis of technical forms of standardization benefits from consideration of these parallels between different industries' experiences of the same basic processes, the further issue concerns the relationship between technological innovation and the changes in regulatory contexts which make particular technologies both feasible and (potentially) profitable.

Within transport studies, the story of containerization is sometimes constructed as a matter of technological determinism – in which, as I noted earlier, this 'invention' is held to have 'changed the world'. However, the crucial issue was not simply the invention of the box itself but, rather, the new context provided for that invention by the deregulation of the transport industries, which increasingly allowed cross-industry forms of ownership that had previously been outlawed under monopoly legislation. It was not the container box alone, as a particular technological innovation, which created globalization. Rather, it was the development of multilateral trade frameworks such as the General Agreement on Tariffs and Trade, designed to lower trade barriers across the globe, which created the deregulated context in which containerization became viable as the technology at the base of the freight transportation system – which then did transform the global economy (Donovan and Bonney 2006: 209).

If, today, transmodal transport systems are established all over the world, in the USA, where the containerization revolution began, freight transportation has always been heavily regulated by the Interstate Commerce Commission. The commission saw its task as defining and policing the boundaries that separate rail, truck and water transportation. Each of these modes of transportation was to concentrate on providing the services for which it was best suited. To this extent, 'in transportation, modalism became the industrial equivalent of nationalism in international politics' and the ICC saw an important part of its anti-monopoly role as blocking emergent ownership structures which attempted to straddle different modes

of transport. However, McLean famously saw the ship as 'just another piece of highway to transport goods on' and regarded the regulatory roadblocks that then separated different transport modes merely as temporary obstacles to be overcome. Nonetheless, these obstacles stood for a considerable time, until the final deregulation of the American transport industries in the Reagan years. Although various forms of intermodal service were gradually developed, throughout the sixties and seventies, it was not until the eighties that the Interstate Commerce Commission's regulatory grip on the transport industries was decisively loosened.11

The parallels with our concerns in media and communication studies of the relation of digital technologies of 'convergence' to the deregulation, during the same period, of the structures within which the media had until then developed, are clear enough. To put it more concretely, in relation to the UK, rather than thinking about how technologies of digitalization 'caused' the development of convergence media we might perhaps better look to the deregulation of these industries from the 1980s onwards as the key causal factor. That process of deregulation permitted forms of cross-media ownership which would previously have been outlawed by anti-monopoly legislation. Without that transformation, the 'economies of scope' now available to multimedia companies (to deploy the same content across a variety of media platforms) would simply have been illegal, whether or not the technology necessary for the task was available. In short, what is needed here is a more complex model of the dynamics of the interactions between technical innovation, invention and implementation, in the broader context of the role of regulatory structures in setting parameters to what technologies can be profitably developed at a given moment (Winston 2006; Curran forthcoming).

Redefining media and communication studies

Evidently, one of the main burdens of my argument is to criticize any narrowly focused, technologically deterministic approach which concentrates its attention on the history of the 'internal logics' of technological progress, whether in the realm of material transport or the media. Regrettably, a number of contemporary accounts of the development of 'digital media' display exactly this deficiency. Evidently I would support the arguments many of the other authors in this collection, who critique perspectives which regard digitalization as the harbinger of some 'Year Zero' in matters of communication. Centrally, we must attend to the contemporaneities and symbioses achieved in the relations of older and newer media (the obvious example being a person on a train, looking in a newspaper, to see what they might watch on television when they get home ...).

As indicated earlier, my own main interest lies in the better integration of the analysis of physical transport with that of symbolic communication
and my key point of reference lies with Marx and Engels’ definition of communications as the study of the movement of ‘information, people and commodities’ (De la Haye 1979). However, in closing, I would like to push things one stage further, by also arguing in favour of what I would call a ‘non-media-centric’ form of media and communication studies (cf. Morley 2009). A communications studies with a narrow focus on the latest technological developments is clearly inadequate; one with a longer historical perspective, which attends to the articulation of the older, material technologies and the newer, virtual ones is clearly better; one which attends to both the virtual and material dimensions of the movements, not only of messages and persons, but also of objects and commodities – and to the disjunctures between these different regimes of virtual and actual mobility (Appadurai 1997, 2006) – will surely serve us best.

Notes

1 But see the work of Parks (2005) and Larkin (2008) as well as Morley (2009) for an emerging focus on questions of communications infrastructures.

2 C.f. Rosenstedt, quoted in Donovan and Bonney 2006: 51. For a fascinating account of one of the precursors of ‘containerization’, systems of transport based on the barrel (‘the perfect marriage between high art and utilitarian function ... beauty and strength’) see Chapter 8 of Murray (2007).

3 C.f. Barches (1972) and Ross (1996) on the ‘superlative objects’ of an age – e.g. the motor car, the TV set and the fridge as the key symbols of post-war modernity.

4 Alan Sekula, verbal contribution to discussion at ‘The Travelling Box: Containers as a Global Icon of our Era’, University of California Santa Barbara Conference November 2007.


7 Full details of the box’s travels, as well as short reports and videos, can be found at the web address in the subheading. In the narrative account given in this section, I rely heavily on the various reports on the project posted on the BBC website by, among others: Jeremy Hillman, Hugh Pym, Nils Blyth (all at the BBC’s London offices), Christian Frazer (Middle East Correspondent), Jonathan Gordon (Singapore), Quentin Somerville and Chris Hogg (Shanghai), Matt Frei (Los Angeles), Greg Ward (North American Correspondent), Gary Duffy (San Paulo) and Roland Buerk (Tokyo). This account also draws on an interview conducted as the project was nearing its conclusion (in September 2009) with

Jeremy Hillman who, as Head of BBC Business News, conceived the original idea and managed the project throughout.

8 See also McKenzie Wark’s Dispossession (2002), in which he traces the narrative of his own movements over a nine-month period, not only through time but also across space (using a personal GPS device), which offers an interesting parallel to the BBC project.


10 As Marc Levinson notes, the majority of the containers imported through Californian ports are carrying ‘intermediate goods’ – ‘factory inputs that have been partially processed in one place and will be processed further somewhere else’ (Levinson 2006: 268).


References


