A new model for understanding global media and China: ‘Knowledge clubs’ and ‘knowledge commons’

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Abstract
The topic of this article and title of this journal are the same: ‘global media and China’. Although ‘global’ suggests a single universal unit, adding ‘China’ necessarily creates a difference, especially in the context of the ‘Great Firewall’, which creates a well-defined boundary between global media and China. Should our title read ‘Global Media versus China’, suggesting that the apparent universality of ‘global’ phenomena may be an illusion in a world marked by difference? We argue the contrary: that difference, produced along borderlines between different cultures – defined as those sociocultural groups whose boundaries require translation to cross, rather than simple transmission – is the productive energy that generates new knowledge (and thence, innovation) among large populations. We show that the peculiarity of current relations between global media and China is not evidence of exceptional ‘Chinese characteristics’, but of how culture deals with the globalisation of communication, and consciousness of that process among whole populations.

Keywords
Globalisation, global media and China, knowledge clubs, knowledge commons, cultural science, innovation processes

Following Yuri Lotman’s (1990) concept of the semiosphere, we argue that the system of interconnected cultures is planetary in extent, making a complex network of interacting groups distinguished by difference (Sloterdijk, 2014). Combined, these overlapping semiospheres are ‘global media’, but it’s a globe marked by multiple borders, making the cross-border translation of meanings a hazardous process. Borders may express conflict and adversarial hostility (warfare) as well as cooperation and an aspiration for universal openness (trade). In such a system, ‘global media and China’ not only...
make sense as a planetary unit (like tectonic plates), but also as ‘spaces of difference’, which, in their
dynamic interactions, produce new ideas that may be adopted or used by whole populations across
the globe. They are the place to look for evolutionary cultural change at planetary and population-
scale. In this model, creativity and innovation are cultural in origin, despite their centrality to eco-
nomics. They emerge most intensely along contested borders between different culture-made
groups, and here is where the growth of knowledge is most productive. Thus, cultural and creative
policy is not sufficient if based only on economics. Policy needs to understand the cultural sources
of newness (Hutter, 2015) and to look for them at population rather than individual scale.

In Part I of this article, we explore the global system of difference, focusing on China and the
West. In Part II, we elaborate a model for analysing that system, which involves a critique of
methodological individualism to make way for a new approach based on groups. In Part III, we
look at the implications of what we call ‘knowledge clubs’ and ‘knowledge commons’ for the
formation of policy settings that are alert to (cultural) systems and groups, as opposed to indi-
vidual self-interest.

**Part I: global media and China**

*Global media*

Since the emergence of the Internet and digital media as global game-changers in media, commu-
nication and the economy, scholarly opinion and public policy have been divided on the question
of their impact on creativity, innovation and culture. The Internet’s potential for further democrati-
sation of expression has turned whole populations from mere speakers or audience into publishers
whenever they post, tweet, text or chat, or upload an image, video or music online. But the growth
of self-organising creative communities has been constantly stymied by negative developments in
policy and practice, which mean that digital connectivity and media have only achieved part of
their potential. The open-future optimism of the early days, when the Internet was imagined not
only as a ‘virtual’ but also as a ‘virtuous’ community (Kroes, 2003, p. 238) may be gone for good.

Globally, it is not clear that the open Internet model inaugurated by Tim Berners-Lee’s World
Wide Web will prevail in the end: the numbers are against it. Some of the world’s most populous
countries are heading in a different direction. Threats to openness are different in different coun-
tries and across different types of regime. In the trading democracies, openness is under attrition by
corporate interests. In authoritarian countries, it is also constrained by state control and censorship.
And in theocratic states, religious considerations take charge. A challenge to the global open
Internet is its use as a new weapon of ‘information warfare’ in international relations. The Chinese
model of state-dominated Internet governance, where the multi-stakeholder model familiar in the
West is refused entry (Creemers, 2016), is itself being internationalised through the Shanghai Pact
(Shanghai Cooperation Organisation (SCO)), currently comprising China, Kazakhstan, Kyrgyzstan,
Russia, Tajikistan and Uzbekistan. Ostensibly concerned with security threats such as
terrorism, separatism and extremism, this organisation is designed as a counterbalance to North
Atlantic Treaty Organization (NATO) – the United States has been refused Observer status – but
has increasingly worked to resist the liberal-democratic model of online governance by extending
counter-terrorism and cyber-warfare measures to internal information-policing activities, in which
the Internet becomes an ‘information weapon’ under the control of the state, and signatory states
are free to share information about suspect activities, to block any content (or the entire Internet at
times of crisis), or to take action against any individual who turns that weapon against the self-
defined interests of the incumbent government.
Under the radar of most Western media commentators (perhaps because the SCO’s official languages are Chinese and Russian), the Shanghai Pact has enlarged to include India and Pakistan (whose full accession is set for 2017), while neighbouring countries Afghanistan, Armenia, Azerbaijan, Belarus, Cambodia, Iran, Mongolia, Nepal, Sri Lanka and Turkey hold Observer or Dialogue Partner status that may lead to full membership down the track. It is worth noting that while some of these countries are formal democracies, they are increasingly characterised by authoritarian governments, especially Turkey, a NATO member and an European Union (EU) applicant, which on present indications may in the end opt for SCO membership instead.

Thus, the militarisation of the Internet – both across and within national borders – is official policy in countries that represent more than three billion people, well over a third of the world’s population. The Shanghai Pact regards the Western Internet as a ‘security threat’, whose purpose is to ‘undermine’ their own ‘political, economic and social systems’, and they extend this threat to the dissemination of information ‘harmful to the spiritual, moral and cultural spheres of other states’, which refers to you, Google, Facebook, Twitter and Amazon, and also you, local human and minority rights activists. Thus, certain states take it upon themselves to enclose their own Internet and to take strong action against those at home or abroad who ‘undermine’ the ‘spiritual, moral and cultural spheres’ of their country, as defined by the state apparatus itself.

‘One network to rule them all’. The liberal democracies, for their part, have proven to be legislatively flat-footed in gearing up to the investment, regulatory and governance challenges of the Internet. Either they fail to invest in fast broadband (here, Australia is an egregious culprit), or they mistake their own elite’s anti-Americanism for high-mindedness, notably in the EU, which pursues global players such as Google and Apple in an anti-monopoly campaign that reminds observers that none of the global Internet giants originated in Europe. Such action is thinly disguised protectionism, designed to favour local commercial interests, which exert too much influence on their country’s legislative agenda through lobbying systems, just as they do in the United States itself and elsewhere (including China).

The World Wide Web was invented by an English scientist working in France/Switzerland, but the United States continues as the commercial engine of the Internet. However, its vaunted values of freedom and free speech, net neutrality and universal access, fairness, equality and democracy all seem like mere sales gimmick talk, applicable only to certain people and groups (themselves), while others are treated to tax evasion, corporate crackdown, superpower cyber-surveillance and bullying international agencies, where ‘soft power’ soon hardens into ‘American interests’. The ‘Californian’ ethos of open access is transferred from the user community’s self-organising membership to the branding and marketing strategies of self-serving multinational companies. After Facebook CEO Mark Zuckerberg posted a thank you note to Sir Tim Berners-Lee ‘for making the world more open and connected’, John Naughton of the United Kingdom’s Open University satirically awarded him the first ‘Nobel prize for hypocrisy’, writing,

Facebook is what we used to call a ‘walled garden’ and now call a silo: a controlled space in which people are allowed to do things that will amuse them while enabling Facebook to monetise their data trails. One network to rule them all. If you wanted a vision of the opposite of the open web, then Facebook is it. (Naughton, 2016)

The universalism inherent in the idea of the World Wide Web is hedged about by commercial and state adversarialism on all sides. The interests of citizens in open knowledge are routinely undermined by their own governments and by corporate heavyweights.
There is plenty here to worry the astute observer, but for most practical purposes, even in authoritarian states and monopolistic economies, the everyday benefits of digital media, mobile connectivity and access to more data than can humanly be imagined are valued among ordinary populations, whose enthusiastic uptake of the Internet’s affordances is evident across the world, for business, education, culture, entertainment and community or personal identity-work. But old allegiances persist and new challenges emerge to threaten the once optimistic mood that greeted the Internet and now seems to be turning, in turn, into its own opposite. Pessimism is the new black.

As for old allegiances, there is a new version of a longstanding tension between public and private in the organisation, access, costs and uses of both the Internet (technology) and the creative and cultural industries (content). There is an ideological division between advocates of public culture, understood as progressive, radical or critical (Oakley & O’Connor, 2015), and advocates of private enterprise, understood as commercial and neoliberal (Springer, Birch, & MacLeavy, 2016). A stand-off is performed in journalistic and policy forums alike between two camps: one convinced of ‘market failure’, the other relying on ‘market forces’; one in favour of access to the arts, the other of business growth; one in favour of the welfare system, the other in favour of the innovation system (Potts, Cunningham, Hartley, & Ormerod, 2008; Quiggin, 2016). However, it is clear that these ideologically motivated opposites cannot result in a ‘winner’ in practice; they are thoroughly mixed up in contemporary societies: all developed countries have ‘mixed economies’ where public and private enterprise coexist, including in media systems.

New challenges to openness and the ‘virtuous community’ arise in all directions. They come from the ‘bottom up’: abusers, sexual predators, criminal fraudsters, nationalist or religious extremists, child-saving vigilantes, security agents hovering somewhere between enforcement and entrapment, libertarian activists hastening ‘creative destruction’ of established structures, hackers, comic tricksters and pranksters, and the daily parade of trolls peddling sexism, racism and hate speech against any group perceived as outsiders, running rampant across social media and news commentary sites. New challenges come from the ‘top-down’, via the rampant corporatisation of the Internet, with the erection of paywalls, predatory law-firms trawling private citizens’ activities looking for actionable copyright infringement, the Internet’s division into brand-name bailiwicks where big players such as Facebook seek to be ‘the’ Internet (or, what we used to call a ‘walled garden’) for most users, or its territorialisation to assist international companies in their efforts to maximise their returns from copyright enforcement while minimising their tax returns. And new challenges come from the government camp, where ‘top-down’ command-and-control management is second nature, resulting in the web’s territorialisation into national walled fortresses in countries such as China, Russia, Iran, Turkey and Ethiopia. This approach facilitates government surveillance of citizens’ activities and allows occasional shutdown of the Internet across a whole country at times when the government feels itself under threat. It may even result in what amounts to a separate Internet system, such as has been developed in China, where the writ of ‘global’ commercial Internet giants does not run; or no system at all, as in Ethiopia, where the only way to access the Internet is through the government-owned Ethio Telecom, and only 3.7% of the population have access (2015), except at times of protest, when the government is apt to block social media entirely.

It would be all too easy to use up the word-limit of this article on such divisions and worrying trends. But that would simply perpetuate the oppositions and antagonisms, without seeking an integrative model that might explain how both poles are co-present in any real situation (whatever the advocates from either extreme may wish to prevail), and furthermore that each pole seems to
live off the energy of the other, while new ideas emerge at the ‘cutting edge’ between them. In short, we direct analytical attention beyond the immediate clamour of opposing approaches, values, meanings and findings in relation to both the technological (the Internet) and the cultural (creative industries) aspects of global media. Instead, we seek to account for the productivity of such oppositions in a larger dynamic system. Instead of being caught up in moods, ideologies and camps, what is needed is a conceptual model that accounts for both poles, and for the context of uncertainty that propels their mutual tension. The goal is to develop an integrated model that accounts for both culture and enterprise, public and private, ‘bottom up’ self-organising systems and ‘top-down’ control mechanisms, to develop a new set of policy ambitions and settings that do not rely on policymakers ‘picking winners’ from their own side.

This new model focuses attention on the dynamic interface between culture and enterprise as an intensely productive zone of conflict and cooperation. Here, culture is the source of knowledge, innovation and creative productivity, while enterprise and technologies are the scaling and accelerant mechanisms, enabling systems to work simultaneously at personal and planetary scale. We show what links (as well as what divides) culture and economy, consumer and producer, informal and formal knowledge systems, corporate and critical imagination. Creativity and enterprise are seen not as an ‘either/or’ choice but as a zone of intense creativity, driving the growth of knowledge.

China as an experiment

Among the most important contemporary oppositions is that between China and ‘the West’, following China’s emergence as a global economic powerhouse and now increasingly a cultural and political heavyweight too. Instead of the old Cold War ‘West’ versus ‘East’ scenario, we are witnessing the construction of a global but still not smoothly integrated economy, where China emerged first as an economic locomotive in low-cost manufacturing, next as a financial power in international investment and property, and now increasingly as a leader in services and creative industries, not only for its giant and fast-growing domestic market but also for export around the world. At the same time, China maintains a very different political system from that of the old trading democracies, and it remains a rival that is viewed with suspicion even while its products, services, talent, investment and money flow ‘Westwards’.

To take-up the challenge of these developments, the desirable approach is not one where ‘Western’ theories and policies are then ‘applied’ to a developing or emergent economy. Rather, study of the two poles needs to be integrated, because of the ‘butterfly effect’ – small actions ‘here’ can have big consequences ‘there’ (Ormerod, 2001). In short, no one knows where the epoch-making changes are coming from, and the future of the planet is in the hands of those who innovate, whether they are ‘here’ or ‘there’ from a particular observer’s perspective. The rapidly growing and increasingly affluent middle class of internationally oriented, educated young people in China may be supplying the intellectual, artistic and entrepreneurial energy (the energy of difference) that drives the next phase of the global economy.

Shanzhai culture. We can ‘read’ the theories and concepts that underpin the creative economy and creative industries literature against both Chinese and Western (chiefly Anglophone) developments. The advantage of comparing Chinese and Western developments (rather than simply contrasting them) is that this helps us to test various taken-for-granted positions and axiomatic ideas
on both sides – to destruction if necessary. An example is the problem of intellectual property. China’s international expansion was powered by that country’s accession to the World Trade Organisation (WTO) in 2001, a move that performed a crucial signalling function for China’s leadership, but which required it to adopt policies related to Intellectual Property Rights (IPR) and copyright that were in line with those already established in existing international agreements, and overseen by international agencies such as World Intellectual Property Organisation (WIPO).

However, these organisations were themselves driven by the ‘enforcement’ lobby of Western media, communications, creative and entertainment corporations, for whom ‘freedom’ only meant freedom to consume their copyright-protected products. While they welcomed the emergence of China as a high-growth economy with the promise of lots of new consumers for their intellectual property (IP) goods, they were aghast at its characteristic mode of expansion. This entailed copying existing products until they were well enough established to invent their own.8 China’s economic miracle was accomplished without regard to the apparatus of intellectual property regulation (including copyright, patents and trademarks) that had built up in the West over a long period. Led by the recorded music industry and its IPR lobbyists, followed by audio-visual media, publishers and other creative industries whose business plans were based on copyright enforcement, Western agencies saw Chinese ‘shanzhai’ or ‘copycat culture’ not as rapid innovation and market expansion (good for business in general), but as counterfeiting and piracy (bad for particular businesses), to which the new WTO member must put a stop.

China dutifully put in place an enforcement regime, to the benefit of domestic providers, but the crackdown on shanzhai activities was selective at best. Chinese ‘copycat’ production became a metaphor for China itself; its commercial makeover was so rapid that even its own authenticity seemed fragile. Western commentators were quick to see ‘fake’ as a symptom of wider problems. Here’s the London Daily Telegraph reviewing a book from one of China’s new ‘public intellectuals’, Yu Hua, novelist and author of China in 10 Words (Yu, 2012):

Of all 10 words, the most resonant is shanzhai. … The word mostly refers to fakes, from contaminated milk powder to counterfeit Gucci, but Yu Hua connects it to a wider lack of authenticity felt throughout China, the corollary of the brash new confidence. Officials reflect this concern about spiritual emptiness with their talk of reviving Confucianism, fearing that China has abandoned too much of its traditional culture. Yu Hua playfully illustrates the ultimate shanzhai response to this wider fear: Chairman Mao impersonators have become big business in China, complete with octagonal caps and carefully stuck-on fake moles on their chins.9

At the same time, commercial solutions to the ‘piracy’ problem were trialled, including micro-payments for music sent to mobile devices (‘ringback tones’). Meanwhile, the fashion industry, which had never relied on copyright, provided a different model for coping with copying as competition, such that emulation (copying) was a driver of innovation across the haute-couture system, which remained both evanescent (designer labels come and go) and corporately profitable. For example, market leader LVMH (Louis Vuitton Moët Hennessy), based in France and conjoining fashion, liquor, perfume/cosmetics and retail services, employed 120,000 people in 2015 and enjoyed an operating profit of €4 billion from €35.7 billion in sales,10 by focusing on celebrity and brands, not content. Their brands include Céline, Dior, Fendi, Givenchy, Kenzo, Marc Jacobs, Louis Vuitton, Thomas Pink and Australian country-wear label R.M. Williams. It’s the same model that has driven broadcasting, the film industry and publishing (the creative industries, in short) where supply precedes demand. Instead of relying on demand for and profit from every
individual product, a *repertoire of novelties* is offered to a ‘social network market’ (Potts et al., 2008), where consumer choices are based on the choices of others, where status determines price, and where and repetition, copying, talk and take-up among consumers, especially ‘entrepreneurial consumers’ (Hartley & Montgomery, 2009) and ‘influencers’ (Abidin, 2015) – signals success, not piracy.

At present, China has no brands with such global cut-through recognition power and scale, but the writing is on the wall. Iconic Italian fashion brand Krizia, once as renowned as Armani or Versace, was bought in 2014 by Marisfrolg, owned by Shenzhen-based millionaire businesswoman Zhu Chongyun, who wants to make Chinese style a little more Italian and the world a little more Chinese (Hartley, 2015). Telecom giant Huawei has internationalised its design appeal by linking up with iconic camera lens-maker Leica to launch the Huawei P9 mobile device. Chinese company structures and semiotic allegiances alike are integrating with those of world fashion, celebrity and media. Soon enough, Chinese global brands will be circulating under their own name.

These are the trends we want to follow. How does systemic newness emerge?

**Part II: how to narrate the cultural origins of the increase in social complexity in humans?**

**Agency**

To understand where innovation comes from, we have to start from the source of *agency*: the source of doing. *Who* does innovation come from? This is not a straightforward question because, in this kind of cultural-economic analysis, the identity of what can be counted within the ‘who’ of agency may include a ‘natural person’, a ‘juridical person’ (an actor recognised by law) or a group or institution (such as a company, say, or a school, or ‘our family’) which can ‘do’ things in its own right. For example, a company can act by releasing a product (containing intellectual property that it owns as if it were a collective-person, as opposed to any employees, including those natural persons who may actually have invented and made the product), by charging a price for it or making a profit or by suing other agents (firms, people) who use its IP without paying. So ‘doing’ can be an individual, social or legal ‘act’ extending to sizeable groups. The law has evolved to include corporations and other collective entities within the definition of personal agency. Action and agents, then, are a bit different in economic analysis from what they are in everyday talk.

**Methodological individualism.** However, notwithstanding this, in the social and behavioural sciences, including economics, it is an axiom – a taken for granted starting point – that ‘agents’ of choice, decision and action are individuals, understood as natural persons. Their actions are observable by means of their behaviour (not their speech, which is dismissed as unreliable, in a persistent prejudice that sees action as objective but meaning as subjective). In turn, behaviour can be explained by reference to various individual (psychological) motivations, incentives, desires, fears, influences and so on. These motivations can be affected by other agents, for instance, through force or persuasion (marketing), whose ‘effects’ can be measured by observing changes in ‘behaviour’ (e.g. more or less consumption), and they can have effects on other agents via ‘influence’.

It is important to notice that what is going on here is itself a *representation* of action. It is a *story* by which social scientists try to account for ‘causal sequence’ (what/who causes what action among which others, and how can we know?) by reference to something objective that can be observed: behaviour rather than meanings (which cannot be observed empirically using this method). This
representation of action has a name: *methodological individualism*. It underlies great industries (e.g. marketing) and the commercial-industrial set-up (capitalism) more generally, and is the method used in public policy formation (neoliberalism), guiding the actions of government and political parties (‘representative’ agencies) too. Individualism, at least in the West, is the ‘method’ of analysing entire social systems by reference to individual choices and acts only, without reference to collective entities (culture-made groups) such as class, race or gender at the macro-level, or to the peculiar status of corporate and state agency at the institutional level, or to the contingent indeterminacy of the entity recognised as an ‘individual’ at micro-level.

The individualistic lens is only strengthened by contrasting it with its opposite pole, which is conveniently located in a system that is an ideological opponent as well as economic competitor. Unsurprisingly, then, analysis of China, especially in the United States, may go to the other extreme, emphasising collectivism and macro-approaches (the state as agent), rather than on individual choices and acts (e.g. Winfield, Mizuno, and Beaudoin (2000) and social psychologist Geert Hofstede’s 6-D Model analysis of China). More convincing is the approach recommended by evolutionary economist and sinologist Carsten Herrmann-Pillath (2011), who argues against the ‘standard dualism of individualism vs. collectivism in favour of a more detailed view on the self in social relationships’. He sees *culture* as an ‘exceptionally useful tool to help understand fully the current picture of the Chinese economy’ (Herrmann-Pillath, 2016).

Meanwhile, individualism has spilled out of the academy into everyday knowledge and speech, not least through media representations of how the economy works; it works, according to this method, because individuals make rational choices about their own self-interest. This in turn is said to drive the economy, which becomes a sort of fictional aggregate of the current state of tension/agreement between the equally ‘rational’ choices of opposing agents ‘producers’ want to *sell dear*: ‘consumers’ want to *buy cheap*. The tension between them is said to be resolved by ‘market forces’ and the result is ‘equilibrium’. Note that the price is not determined by the cost of production or the ability of consumers to pay, but on ‘what the market will bear’.

*Caveat emptor!* Nowhere in methodological individualism does the ‘agency’ (causal force) of *groups* play an explanatory role, with the result that most forms of collective identity – most senses of ‘we’ – are discounted for the purposes of analysis. Psychological behavioural approaches lead to studies and experiments where the ‘subject’ (individual agent) is regarded as universal, whatever their race, colour, creed, class, gender, nationality, sexual orientation, ability, age and so on, much less their sociocultural and political affinities or passionate allegiance to a cause, from class, ethnic or gender solidarity to company loyalty, fanship and social networking, all of which require the prior existence of a group before individual choices can be understood.

But individualism (which might equally be called ‘group-denialism’, especially among ideologically motivated free-marketeers) is not the only way to understand action and agency.

**Science, culture and knowledge**

We are trying out a different model of agency. Instead of starting from individual persons as the (fictionally ‘rational’) agents of causation, we start from something that necessarily precedes, shapes and connects those individuals: *groups*. Unfortunately, methodological individualism has not only achieved the status of common sense in the public discourses of advanced capitalist societies but also become a political shibboleth; individualism is raised to the level of ideology, regarded
as the defining characteristic of a ‘free’ society, which is opposed to supposed ‘collectivism’ in societies regarded as hostile to ‘truth, justice and the American way’ (as Superman himself once famously put it), whether it takes the political form of socialism and communism, or the cultural form of collectivism so often attributed (in Western discourse) to China, Japan and ‘Confucianism’. The politicisation of individualism has been taken to extremes – the Cold War, neoliberal-libertarian ideology – which makes it all the harder to see an alternative.

However, following rapid advances in the biosciences, where cooperation has emerged as a causal agent in evolution, and communication has been traced down to the nano-scale of cells and even molecules, to such an extent that it can now plausibly be claimed that life and semiosis are one and the same phenomenon, it has become possible – and crucial – to reassess methodological individualism in social affairs.

Everyone brings to their ‘rational choices’ something that is not theirs, whether conferred on them by birth (genes) or by law (property), and that is knowledge. Knowledge is carried in language, in customary know-how and sociality, learned by copying, experimentation and intellectual effort over a lifetime, and inherited from innumerable previous lifetimes through institutions of language, via stories, rituals, codes, customs and ceremonies that ‘speak’ us even as we act autonomously in the here and now, or in ‘ways of doing things’ (like building square houses rather than round ones or no houses at all) that seem ‘natural’ or commonsensical but which are entirely path dependent. Knowledge, communication and meaningfulness require a group or system within which individuals can operate.

Economics gets around this problem by ‘assuming’ knowledge out of the equation; it routinely ‘models’ economic agents as having perfect knowledge on which to base their choices, and frowns on the use of knowledge by one agent that is not available to others (e.g. insider trading, con jobs, fraud, improper labelling, lying). Knowledge is right at the centre of ‘economic rationalism’, but it is only ‘counted’ as a psychological condition: as ‘what individuals have between their ears’.

There are two completely different ‘models’ of knowledge that can be set against this one. The first is science (ironically, since economics counts itself as a science). The second is culture (again, there’s some irony here because culture is commonly regarded as the opposite pole of science, especially in academic disciplines where the social ‘sciences’ are claimed to be the realm of facts while cultural studies and the humanities are deemed to be the realm of values).

But science – formal, correctable knowledge using tested protocols to achieve reliability – is itself understood as a collective enterprise, founded on an ‘invisible college’ of agents who commit to the ‘scientific method’ (falsifiable knowledge) and to the self-correction of the knowledge system as a whole. Culture, on the other hand, is the home of informal knowledge: what we know via discursive or meaningful systems and texts, or from social intercourse and sociocultural institutions as varied as family, religion, nationality, ethnicity, gender, age-group and their ‘institutional’ forms: home, church, school, workplace, media (etc.), where we learn how to be the individuals we become and where ‘path dependent’ choices are guided by familiarity, custom, peer-pressure and language-codes. They can only be regarded as ‘rational’ within that highly contextual, contingent, changeable and local situation. Although ‘cultural’ rather than scientific knowledge has been the survival vehicle for humans since the species evolved (and earlier), in modern times ‘cultural’ has come to signify unreliable knowledge in contrast to science. But the causal agency of groups has not been properly modelled or studied in the prejudicial dismissal of culture-bound knowledge, with the inevitable result that the importance of groups in science itself – as a community and a method – is not properly understood, and the importance of culture as a self-organising and
adaptable ‘system of systems’ is understated. Human society, knowledge and technology have all evolved in complexity through culture.

**Groups.** What does culture do that is so special? Culture makes groups (Hartley & Potts, 2014). Individual choices are produced by the group (as a TV show is produced by a team) to which individuals belong at the moment and place of choice. This is our starting point. Culture makes groups and groups make knowledge, using communication to maintain (or extend) the group and to transmit itself through time to the next generation. In our model, groups are an evolutionary adaptation for *Homo* species, especially *H. sapiens*, which have survived and colonised every continent by finding ways to cooperate in purposeful groups, and to share knowledge, technologies and cooperation across increasingly large communities (while hiding the same from adversaries). Thus, individuals do not survive, but their knowledge does – embedded in language, cities, institutions, ways of seeing and doing, and in competition, cooperation and conflict with other groups and with environmental challenges.

Everyone enters the ongoing narrative of their culture at some random point along its historical trajectory (i.e. not at the beginning, this can never be recovered or experienced, there is always a time before this story). As a result, humans need a long time to mature their energy-guzzling ‘social brain’, to learn the codes and conventions by means of which they can ‘read’ and operate the cultures of the groups to which they belong, whether these are small-world social groups (family, friends, village) or globally distributed social networks (markets, media, movements). Everyone belongs to multiple groups, which are constantly forming and reforming, and one such group may ‘interfere’ with the knowledge system of another (e.g. religious ‘truths’ may be at odds with scientific ones, especially for persons who ‘believe’ in both). Where and when you enter the stream of culture determines what languages you speak and what you know, so your individuality is a product of place, time and history. In this model, identity and knowledge and thus individuals and their choices are features of dynamic processes, not properties of entities.

Trying to understand dynamic processes (history) and the specificities of culture, representation, knowledge and identity (meaningfulness) has traditionally been the work of the humanities, not least because none of these contingent facts seems to be universal: how they work seems better suited to the mode of storytelling (representation, symbol, fiction) than to the methods of science.

**Systems science.** However, in recent years, this situation has changed to a remarkable extent. The humanities are converging with the sciences. For instance, the emergence of complexity theory from the information and computational sciences has enabled new insights into how individual ‘behaviour’ and ‘choices’ can be analysed using mathematical models and very large-scale data. Going in the opposite direction, the sciences are finding a place for stories, narrative and reflexivity (where the analyst-storyteller is a conscious participant in the processes under analysis). The time has passed when sciences confined themselves to the material world and the humanities to the ‘immaterial’ world of representation, language, culture, knowledge, art and identity. Each can assist in the analysis of the other.

Thus, some of the prejudices that have grown up within the ‘regime’ of methodological individualism can be revisited using new approaches to culture. These prejudices follow from too great a dependence on the *physics* model of science, borrowed in the 19th century when the smallest unit of analysis was thought to be the atom (of course ‘the’ atom has since fragmented into an array of
much smaller particles), which suited the existing idea of the human ‘individual’, itself a leftover from religious ideas about the indivisibility of ‘the’ soul, and also fragmented into much smaller ‘particles’, since every ‘individual’ human is also trillions of cohabiting organisms, some of them essential to the life of the person, others a threat to it. The reductive method of physical science attempts to explain entire systems in terms of their individual (indivisible) constituent parts (particles) and their interactions. As for atoms, so for humans, it was thought. Following this method, the observable interactions of the smallest particles were held to explain the whole system (this is ‘upward causation’); thus, by analogy, individual rational choices explained the economy.

‘Downward causation’. More recently, however, evolutionary and complexity sciences, especially in the synthesised biosciences (following the integration of botany, zoology and evolutionary theory in the 1940s), have offered a new insight into very large-scale patterns of causation. Here, what looks like ‘downward causation’ occurs – where the system exerts influence on the particle, rather than vice versa. How can a system influence a particle? In evolutionary theory, the object of study is the population not the individual, and the object of study is change not choice. In the biosciences, attention to systems has resulted in the discovery that ‘living beings are open systems exchanging matter, energy, and especially information with their environment’ and that this requires modes of explanation at system-level (complex organisation and action) rather than at the subatomic (individual choice):

In particular, biological systems have a history that physical systems do not; they store knowledge that allows them to be cognitive systems, and they process information at a very fine (atomic/molecular) level. Information is neither matter nor energy, but it needs matter for its embodiment and energy for its communication. (The Information Philosopher)

Evolutionary and complexity sciences have focused scientific attention on the emergence of self-organising communication systems, on how such systems process information, and on how information or knowledge are communicated within a system or from one to another. Knowledge, information, communication and complexity have entered mainstream science through the biosciences, and thence have begun to influence other disciplines, including hybrid sciences such as evolutionary economics (for important applications, see Beinhocker, 2006; Potts, 2011).

**Part III: knowledge clubs and commons and the growth of knowledge**

**Clubs and commons**

We seek to extend that influence still further, across the ‘great divide’ between the sciences and humanities, to help explain the biggest and most complex systems ever devised by humans: language, cities, culture. Here is where groups are important, for it turns out that knowledge ‘survives’ (through time) only in groups – families, tribes, cities, nations, speech communities – not in individuals, whose subjective knowledge dies with them. It is culture that forms what bioscientist Mark Pagel (2012) has called the ‘survival vehicle’ for knowledge and technology. It follows that necessary adaptations to changing environmental conditions have to be generated within cultural processes, allowing cultures to renew themselves (change) even as they reproduce themselves (stay the same). Thus, to understand ‘creative innovation’, our quest is to understand the cultural
sources (Hutter, 2015) of dynamic adaptation and renewal. The account of creative innovation arising from this approach pays heed to population-scale changes, and changes over lengthy time spans. It is based not on the genius of artistic or entrepreneurial individuals who own the intellectual property in their inventions and imagination, but on group action. An ‘innovation’ designed for one agent’s commercial advantage is not enough; it needs to matter to users, changing the rules of the possible for the group, not just changing the bottom line for a given firm, however powerful.

Group action may be seen in two stages or levels. First, groups form purposefully to achieve some common aim where a ‘good’, in this case knowledge, is shared among the members of a group. Such goods are known in economics as non-rivalrous, where my use of it does not impinge upon yours (e.g. if I ‘consume’ a TV show, it is still there for you to enjoy), but at the same time they can be held exclusively by those members, requiring payments or licences to be paid for using them (this is called ‘artificial scarcity’). These non-rivalrous but excludable goods are called ‘club goods’ in economics (Buchanan, 1965). By extension, knowledge can be seen as a ‘club good’ because it is both non-rivalrous (you and I can both know the same thing and ‘knowledge shared is knowledge gained’, as they say) and excludable (I can make you pay copyright fees or for a licence to use my knowledge). Groups whose purpose it is to produce knowledge (within or alongside other aims) can therefore be called ‘knowledge clubs’.

Second, knowledge produced in the cooperative and competitive interactions of clubs is shared among larger groups of users, commonly organised around a more abstract common identity, such as nation, market, language-community. Thus, knowledge commons are established among what Hartley and Potts (2014) call demes or knowledge-sharing subpopulations, which themselves are ‘natural’ evolutionary groups, bound together by their knowledge actions and their difference from other neighbouring demes, which may be seen as adversaries, competitors, or as collaborators (often all at once).

We want to call ‘knowledge-sharing subpopulations’ commons. ‘The commons’ is a term with a long history (Haiven, 2016) and some novel applications: to the knowledge commons (Ostrom & Hess, 2007) and now to the innovation commons (Allen & Potts, 2015; Potts, 2012; Potts & Hartley, 2015). Of course, the term also designates the Creative Commons – a worldwide alternative to IP and copyright enforcement. Commons are shared but bounded ‘communities’ (groups), which individuals may identify with very strongly without personally knowing other members (in the same way that we can all be members of audiences, the public or citizenship without personal acquaintance). Commons are shared knowledge spaces. They are characterised by high-trust, low-surveillance dealings among members, and low-trust, high-surveillance dealings with ‘others’.

Simultaneously with the production and circulation of knowledge among bounded ‘clubs’ and ‘commons’, there are counter-processes in play that seek to restrict the spread of knowledge (to stop others benefitting from it) at both levels, within clubs (trade secrets, copyright) and between demes or knowledge commons (state secrets, war). Thus, within a demic knowledge commons, ideas can be shared for the common good; but each such commons is constitutionally adversarial, organised internally to distrust other demic knowledge commons, with distinct codes, language and knowledge stores (in the form of stories, myths, well-known facts etc.) that constantly signal the difference between friend (member of the ‘we’-group) and potential foe (‘they’-group). This is important because it means that no one group has access to or use of all knowledge: there’s no such thing as ‘open access’ and no such thing as comprehensive knowledge. Instead, knowledge forms within and between groups, which try hard to stop other groups gaining access to advantageous knowledge, while simultaneously trying to find out what outsiders know, by whatever means. The action (‘creative destruction’) is in the tears and fissures and rifts and eruptions between groups – as in tectonic plates.
Abstraction (and War). The very slow growth of abstract, scientific, universal knowledge over millennia, together with the ‘social technologies’ and protocols that may test specific ideas and self-correct knowledge systems, has never completely escaped the competitive, secretive, adversarial origins of culture-made knowledge-making. The greatest strides in scientific understanding of the material world have commonly come about as a result of warfare (Turchin, 2011, 2015): perhaps most spectacularly exemplified in the development of nuclear physics as part of the arms race of World War 2.

Thus, creative innovation – making new ideas emerge and stick – is a thoroughly conflicted concept because it combines in equal measure the ambition to be ‘universal’, wanting knowledge to be shared for the benefit of all, and for discoveries to be applicable to all (this being the claim not only of physics and cosmology but also of evolutionary psychology and studies of ‘the’ brain), and to be ‘adversarial’, wanting it to benefit ‘us’ (whoever that may be for the time being) as opposed to ‘them’ (‘they’ can be any group, from enemies and ‘extremists’ to astrologers and pseudo-sciences).

Universal-adversarial (demic) knowledge. In a planetary system of interconnected countries, corporations and communities, the universal-adversarial ambitions of creativity, innovation, knowledge and culture are played out differently from the way they may have been in the past when cultures were more localised and unaware of their global interconnectedness. Now, groups – be they clubs or commons – continue to display their culture-made ‘universal-adversarial’ tendencies, but when ‘we’-groups expand to planetary scale to include everyone on earth, the notion of an ‘adversary’ becomes very problematic. Competitiveness, secrecy and restrictions to knowledge now appear as impediments to rather than guardians of social wellbeing, while knowledge previously regarded as ‘foreign’ and therefore discountable impinges jarringly on ‘home’ communities, most notably along the fault-lines of multicultural, multi-racial, multi-faith and globally mobile communities. The knowledge-sets of next-door-neighbours can be mutually incommensurable, while a family or whole community may feel more affinity with people far away than with those with whom they live cheek by jowl day-to-day.

As a result, ‘clubs’ and ‘commons’ can no longer be identified as coterminous with national cultures (say, China’s), or even with language communities (say, English), religions (say, Judeo-Christian, Moslem) or ideologies (say, Western): all of these are thoroughly interpenetrated; across each of them intrude globalised systems with their own burdens of knowledge (e.g. science, media, social media, journalism, works of the imagination, entertainment), and individual people may belong to idiosyncratic mixtures and amalgams of such ‘identities’. Thus, knowledge and demic selfhood are separated, diffused and distributed, and may be in conflict with other systems both nearby and far away. Knowledge is mobile and global, even if people are not allowed to follow it to the places where it may have greatest value.

Knowledge across borders. In these circumstances, we have moved beyond the historic ‘dialogue’ or turn-taking of national cultures described by Yuri Lotman (1990, p. 146), where a national culture may be a powerful generator and transmitter of new ideas for some decades, but then in turn become a receiver and consumer of innovations coming from another national culture. Such was France compared to Russia in the French Revolutionary period of the 1790s, when French ideas spread like wildfire across Europe (to be followed frequently by French armies), including to Russia. But during the 19th century, French influence waned until, at the turn of the 20th century, it was revolutionary Russian ideas – artistic (futurism) and political (Bolshevism) – that took Europe by storm, not least in avant-garde Paris.
Now, though, it is unwise to claim such cultural hegemony on behalf of one country, even the only remaining nuclear superpower. Of course, American ideas did span the world in the post World War 2 era, boosted by Cold War competition (which included a ‘cultural front’ overseen by the Central Intelligence Agency (CIA)), when the US brand of managerial-commercial individualist capitalism carried all before it in technological and media advancement. But that was not the ‘end of history’; instead, a mosaic pattern of global and local interactions has emerged. It is no longer wise to consign any new phenomenon to one of the familiar large-scale abstractions: creativity, knowledge and culture are no longer only ‘American’, ‘Chinese’, ‘Western’, ‘capitalist’ (commercial) and so on. Instead, these values are dispersed across a mixed social fabric, in which locally generated knowledge clubs and commons emerge, self-organise, mature, compete and decay in a dynamic process of local turbulence within a global but also shifting system of systems. Where this differs most markedly from previous times is that mobility of ideas matches that of technologies and media: an idea generated ‘here’ may be taken up ‘there’ (in another continent), while a ‘single’ national culture hybridises and multiplies beyond recognition. Tensions, as well as ideas, are globalised too, not least because populations adapt unevenly to ‘multicultural’ admixture internally and to the challenge of new ideas from beyond their own demic boundaries. Thus, we are living in an era not of dialogic turn-taking in the production and dissemination of influential ideas but in a globalised simultaneity of connected and contending voices and influences: in a network of networks.

The growth of knowledge

A ‘club’ (purposeful group) may take the form of producers; and ‘commons’ (knowledge-sharing group) may include consumers. But neither can be reduced to that abstract economic relation alone because the organising principle of the groups involved is not individual self-interest, but the interest of the group, encoded and embedded in knowledge forms and language-institutions whose source is cultural, not economic. Producers are also ‘consumers’ of cultural innovations; consumers are also ‘producers’ of new ideas.

Thinking along these lines can be illustrated by considering the ‘cost’ of an automobile. Does that include the cost of the road system upon which the car travels, and the waste disposal system required to manage the ‘output’ of accidents, scrap tyres, metal and exhaust emissions? One way to ‘socialise’ the cost of a car is to charge tolls for the use of roads and bridges. Toll roads are classic ‘club goods’. But this has only ever been a partial solution to the problem of cost. Individuals pay for their own car, but typically the cost of transport systems is born publicly, by the fictional ‘collective individual’ known as ‘the taxpayer’. As for the cost of waste, it is rarely calculated at all, with predictable consequences for pollution, safety and sustainability. Here, the ideology of individualism has been used to manipulate a particular economic choice; individuals may be induced to buy a car if the price is right, but if that price included all the relevant costs, then no one could afford a car.

Furthermore, the culture of selling private cars to individuals has had a disastrous impact on public transport, by bus and particularly by train; and, it has impeded the ‘socialisation’ of cars themselves, which are notoriously competitive rather than cooperative, showing an individual’s status, preferences and taste (and often their aggression and ‘selfish genes’), even as cars en masse behave rather as corpuscles do in blood: they are components of a ‘liquid’ stream over which they have no individual control. Car-use only began to be socialised at scale when digital technologies
enabled car-sharing beyond the category of the taxi (either by car-sharing ‘clubs’ or distributed taxi-schemes such as Uber). Interestingly, the push for automation of personal transport, often funded by tech-sector millionaires, where cars may evolve into self-driving ‘pods’ which themselves may be linked into ‘trains’, thus making cars cooperative rather than competitive on the roads, is also a direct consequence of Internet thinking.

‘Individuals’ are now much more reflexive and self-aware about the systems they use and are more willing to bear social and environmental costs, or at least to experiment with high-tech/low-cost solutions to those system-level problems. It is evident that the old simple categories of producer and consumer, individual choice and market forces, need radical overhaul. The problem is solved when culture is added to economy in the productivity calculus. The ‘survival of the fittest’ means the survival of culture-made knowledge-bearing groups, not that of individual producers. Just look at the shifting identity and location of the world’s biggest and most powerful firms over time: One century they are all in Europe, the next in America and after that in Asia. This century they all make things (trains and cars!), next they make information (where most of the value of vehicles now resides), after that – perhaps – creative innovation systems, enabling knowledge clubs and commons to thrive in transport as in other social activities. All the while knowledge is growing, shared among ever-larger commons, even as individual ‘agents’ (persons, firms, etc.) wither and die.

Working from this position, we argue that knowledge is re/produced in cultural groups (‘demes’ or ‘commons’, and ‘clubs’): that this is the source of creative productivity, and thence, that ‘creative innovation’ is as follows:

1. Generated in system-level cultural interactions among competing demes,
2. Produced by enterprise-agent-level ‘clubs’, and
3. Distributed via knowledge commons, which in turn ground new club-formation.

As an evolutionary-complexity approach, we are concerned not with ‘individual choice’ but with system dynamics and change (adaptation under uncertainty), and we focus not on command-and-control of systems from ‘above’ or ‘the centre’ or some other such imposed metaphor, but on how systems self-organise (a process known as ‘autopoiesis’ – ‘self-creation’) to communicate with their component parts and with the environment, for specific purposes (security, energy, reproduction, increase) or for general sustainability (survival of the system).

**Purposeful and spontaneous groups.** You can see that there is a difference between what we may call ‘purposeful’ groups (clubs) and ‘spontaneous’ or ‘natural’ groups (‘commons’) that form imperceptibly over time via cultural processes of which individuals may not be explicitly conscious. For both types, economic activity is most intense around their boundaries and interactions. In contemporary knowledge-based creative societies, purposeful groups – ‘knowledge clubs’ – play a generative role in accelerating creativity (novelty-generation) and innovation (adaptive uptake of new ideas in a larger group), across all levels of analysis. This is the process of self-organising emergence in action, within and among an indefinitely large number of clubs, commons, demes and groups, all of which are interrelated to form an overall planetary cultural-economic system, along the lines of Lotman’s semiosphere and Vernadsky’s noösphere (Lotman, 1990). Hence, we analyse creativity and innovation at population (system) level within an uncertain play of inter-group dynamics and constant change among unstable groups (Metcalfe & Ramlogan, 2006), in which
there are three large-scale fields of inquiry, which we’ve called the ‘Three Bigs’: everyone, everything, everywhere (Hartley, Wen, & Li, 2015).

The future-forming

One of every three Internet users in the world is a child. The Internet is becoming the main medium through which children collaborate, share, learn and play. … the Internet can help transform a child’s learning opportunities by increasing their access to knowledge and online resources at new and unprecedented rates, and can provide new opportunities for civic engagement or individual expression through content creation and social media. (Global Commission on Internet Governance, 2016)

We argue that to understand the processes of networked creative innovation that drive change, across the knowledge economy, it is necessary to think about groups. In the context of digital networks, groups are a driving force of knowledge innovation and are achieving what individuals by themselves cannot. Networked, often competitive groups are pushing against the boundaries of what is possible: generating powerful new knowledge about the possibilities of collaboration within global digital networks and about the capabilities of technology. By testing and exploring the global digital landscapes through both work and play, as competitors and entrepreneurs, groups are realising the potential of networked affordance. In so doing, they are shaping the future of the creative economy.

The future-forming is a cultural, economic and technological process that can be observed in many different social contexts, where any attempt is made to change some aspect of present arrangements, whether intentionally or as an unintended consequence of doing things in a certain way. The future-forming as a concept is focused on the dynamics rather than on the structures of large-scale social processes. It shows how humans make themselves up as they go along. The trouble for humans, though, is that they are social animals, and therefore ‘themselves’ inevitably means ‘making up’ group identities and actions within which an individual may have meaning. So, although only individuals can have intentions, motivations, desires and purposes, these are absolutely worthless if the individual in question doesn’t take their group with them into the desired future. Indeed, the future-forming – we shall argue – is the outcome of group actions of various kinds.

At macro-system level and over the long-term timeframe, consumers and culture turn out to be much more active agents of change than they are usually given credit for. As a group, ‘the people’ – consumers, audience, public, citizens, the population – are the source of whatever ideas, knowledge, desires and aspirations that organised, purposeful groups may then seek to represent, exploit or serve, that is, firms, political parties, media organisations, educational institutions and informal or voluntary social movements.

Although there are plenty of purposeful groups in the world (millions and billions of them), the importance of purposelessness should not be underestimated. For instance, ‘popular culture’, including media entertainment and the arts, leisure pursuits and sport, everyday culture, customs and heritage, are all purposeless, in that their users and consumers, as a whole, are not aiming to make a profit for themselves (on the contrary, they are usually construed as ‘paying customers’ rather than makers of anything, even sense) or to take over the country or ‘change the world’. Popular culture is a prime site for the non-utilitarian production and enjoyment of knowledge. Playing with available systems, ideas and things is a good way to explore their unexpected capabilities and potential. Popular culture as a whole can be seen to have this future-forming effect, the more so in a democratising and modernising era, when the choices of the many – ‘the popular’ in
that numerical sense – become the currency of success for politics, culture and economics alike, a process whose consequences have barely begun to unfold.

Conclusion

China has been criticised for restrictive media regulation policies, the Internet control and censorship, and failure to enforce IPR. And yet, there can be little doubt that China is now a global hotspot of innovation, entrepreneurship and creative and playful experimentation with technology and culture. Experience in China challenges Anglo American narratives that assert that both an open and free society and high levels of copyright protection are necessary to the growth of the creative economy (Herrmann-Pillath, 2011, 2016; Montgomery, 2010). As such, China’s rapidly evolving creative and cultural industries make a particularly interesting lens through which to explore tensions between the realities of value production in the context of highly networked, increasingly global creative communities, and the theoretical frameworks underpinning policy and practice in the United States and Western Europe. In this article, we regard these tensions as opportunities to reflect on the currency of accepted paradigms. We also propose a new approach to understanding creative innovation in digital contexts, focusing on the role of groups, rather than individuals. From this perspective, China as ‘a space of difference’ may also be ‘a space of opportunity’ for knowledge generation, in general, and theoretical innovation in particular.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. See: https://en.wikipedia.org/wiki/Shanghai_Cooperation_Organisation.
2. See: https://cpianalysis.org/2016/08/12/xi-jinping-ramps-up-his-crackdown-on-the-chinese-media-both-online-and-off/#more-98625.
3. In addition – and perhaps as a portent of the future blocs – Egypt and Syria have submitted applications for Observer status, while Egypt, Israel, Maldives and Ukraine have applied for Dialogue Partner status (Wikipedia, 2016).
4. Source: NPR, the United States: http://www.npr.org/templates/story/story.php?storyId=130052701.
5. The influence of the protectionist lobby in the European Union (EU) is set to increase following Brexit: http://www.ft.com/cms/s/0/235ff2da-3bbe-11e6-9f2c-36b487e0d0a.html?siteedition=intl#axzz4Lb5NYEpU.
6. And ‘American companies are taking notice’: see the interesting video essay on how ‘China is Changing Your Internet’ by Jonah Kessel and Paul Mozur (New York Times, 9 August, 2016): http://www.nytimes.com/video/technology/100000004574648/china-internet-wechat.html.
7. Sources: http://motherboard.vice.com/read/the-tragedy-of-ethiopiias-internet; http://qz.com/757824/how-the-ethiopia-protests-were-stifled-by-a-coordinated-internet-shutdown/; https://www.washingtonpost.com/news/worldviews/wp/2016/07/13/ethiopia-shuts-down-social-media-to-keep-from-distracting-students/.
8. Sometimes this process was assisted by the regulatory agency. State Administration for Radio, Film and TV (SARFT), the relevant ministry, notoriously banned the Oscar-winning Australian/US film Babe (1995) on the grounds that viewers in China would be confused by a talking pig. This was widely seen as code for protectionism designed to reserve the domestic market for home-grown animatronics. A subsequent SARFT decision (2006) banned the mixture of live-action and animation (as in Who Framed Roger Rabbit?). The same motives were suspected: ‘China is keen to restrict competition from abroad, favouring promotion of home-grown Mandarin-language features’ http://www.digitalspy.com/movies/news/a29483/china-cracks-down-on-animated-characters/.
9. Source: http://www.telegraph.co.uk/culture/books/non_fictionreviews/9398357/China-in-Ten-Words-by-Yu-Hua-review.html.
10. Source: LVMH (Louis Vuitton Moët Hennessy) 2015 Annual Report: https://r.lvmh-static.com/uploads/2016/01/2015-financial-documents.pdf.
11. For Krizia, see: http://europe.chinadaily.com.cn/epaper/2014-03/28/content_17385402.htm; for Huawei, see: http://petapixel.com/2016/05/31/review-huawei-p9-phone-camera/.
12. There is another difference here that may be mentioned: ‘agent’ can denote the status of one who acts on behalf of another or ‘principal’ actor. For instance, lawyers are agents of companies when they issue ‘cease and desist’ or ‘take-down’ notices; bureaucrats are agents of government with concomitant powers to compel compliance.
13. Christopher Reeves in Superman (1978): https://www.youtube.com/watch?v=3GflKh9jlCg.
14. ‘Downward causation’, from The Information Philosopher Website: http://www.informationphilosopher.com/knowledge/downward_causation.html.
15. Some Indigenous groups restrict knowledge by age (elders may know what youths may not), by gender (‘men’s business’ and ‘women’s business’), or by ceremony (‘sorry business’), distinctions that may be binding upon government agencies as well as in-group members. See: https://www.datsip.qld.gov.au/resources/datsima/people-communities/protocols-aboriginal/aboriginal-protocols-for-consultation.pdf (for Aboriginal people); and https://www.communities.qld.gov.au/resources/childsafety/practice-manual/prac-paper-working-cald.pdf (for ‘CALD’ – people from culturally and linguistically diverse backgrounds).

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