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SCARCITY + CREATIVITY IN THE BUILT ENVIRONMENT

17

SCARCITY, CREATIVITY AND THE CREATIVE INDUSTRIES

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A Working Paper for SCIBE[1]
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The notion of 'scarcity' encompasses a myriad of meanings [1]. The current debate around the scarcity is shaped by two major narratives: the limits-to-growth narrative, evoking neo-Malthusian frameworks of thought and calling for a reduction of demand; and the narrative of scarcity as defined in neoclassical economics, positioning one good in relation to another—hence suggesting the 'infinite potential to substitute abundant materials for scarce ones' [2]. Resources (goods and services) are generally considered 'scarce' when they are desired but not plentiful. Especially in consumer societies, scarcity is a driver for demand, production, and continuous growth. Furthermore, the value of a resource, service, or good, is often derived from the fact that is *considered* scarce (think, for instance, of status symbols, or so-called 'positional goods' [3]). In the social sciences, systems are seen to vary in their capacity to react and adapt to conditions of stress: when a system maintains its functionality, we speak of resistance; when a system exhibits 'a relatively transient but significant decrement in functioning, followed by quick recovery', we speak of resilience [4]. If we conceive of 'scarcity' as the experience of change that results from the shortage of one or more resources, we can assume that the type of the resource in question as well as the duration and severity of the resource shortage are crucial to the success of adaptive behaviour. The human ability to adapt is closely

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related to individual and collective creativity. This paper looks at the role of the creative industries in the construction and generation of scarcity, with a special focus on the architecture and the built environment. It will trace the transition of 'culture' to 'creative industries' over the past decades and examine how creativity was transformed into a driver of economic growth, and consequently subsumed into a capitalist formula for success, examining the role of the creative industries – or broader, of creativity – in the context of a Big Society Britain. Lastly, it will question common claims that the 'creative' is a 'green' economy.

Creative Activities and Creative Economy

The twenty-first century, it has been argued, has seen the birth of an 'creative economy […], an evolving concept based on creative assets potentially generating economic growth and development [on the] interface between creativity, culture and economics' [5]. The recent UN report on the creative economy [5] defines creativity as the 'inner characteristic of individuals to be imaginative and express ideas', which in combination with knowledge become 'the essence of intellectual capital' – the 'intangible cultural capital' in every society, expressed in 'identity' and 'values'. It is the

> formation of new ideas and […] the application of these ideas to produce original works of art and cultural products, functional creations, scientific inventions and technological innovations [5].

The creative economy 'embraces economic, cultural and social aspects interacting with technology, intellectual property and tourism objectives'; it is 'a set of knowledge-based economic activities with a development dimension and cross-cutting linkages at macro and micro levels to the overall economy', and a 'feasible development option calling for innovative multidisciplinary policy responses and interministerial action' [5].

> Intellectual property (or IP) law is the catalyst that transforms creative activity into creative industry. It protects the creator's

> ownership of ideas in the same way that other laws protect the
> right to the ownership of goods, land or buildings. [6]

Working from the understanding that creativity necessarily must lead to economic outcomes, the report considers creativity 'a measurable social process' in which 'creative capital' and the growth of creativity are based on 'the interplay of four forms of capital - social, cultural, human, and structural or institutional' [5]. The report further identifies four types of creative activities, namely 'artistic creativity'; 'scientific creativity'; 'economic creativity'; and the 'key element' common to all other categories of creativity, 'technological creativity' [5]. Within this framework, the creative industries 'produce tangible goods and intangible intellectual or artistic services with creative content, economic value and market objectives' [5].

'The creative industries', Newbigin [6] writes, 'pervade every aspect of our lives'; supposedly, however, they 'contribute to sustainable development', and especially to cultural sustainability, which 'implies a development process that maintains all types of cultural assets, from minority languages and traditional rituals to artworks, artefacts, and heritage buildings and sites' [5]. The necessary strategies to establish and grow a creative economy as defined above might not necessarily mean 'development' that is 'sustainable' in any other way than economically, however: in fact, the increase of tourism, for instance, may lead to the production of commodified art, the 'disneyfication' of space [7], the loss of unique cultural identity, the loss of biodiversity, and, of course, an enormous increase of CO_2 emissions resulting from increased air travel, etc. None of these arguments have been included in the discussion of the UNCTAD report.

It also seems to be a broadly appropriated understanding that the 'creative industries are environmentally friendly', because creative activities require 'creativity' rather than 'natural resources' as a primary input [5]. This understanding, however, does not at all consider 'creative products' as tangible assets which, unfortunately, in most cases require the input of natural resources; the statement in the UNCTAD report that 'policies for

enhancing creative capacities are in principle compatible with objectives of environmental protection' [5] – no mention is made of e-waste, of the role of fashion as a driver for overconsumption, or the need for ever-new hardware to keep up with ever-new software, etc. - carries consequences: more recent reports conclude that the world can only hope for a 'growing and sustainable global economy [...] by growing the creative economy' [6], referring further to Wikipedia as a source especially, the following entry: 'Unlike most resources that become depleted when they are used, information and knowledge can be shared, and actually grow through application'; citied in [6] to underpin the unsupported claims.

> The world is shifting to an economy that depends more on human creativity and knowledge than on any other single raw material, even oil [...]In fact, as the oil runs out and as other natural resources are depleted, the value of creativity is only going to go on rising. It will not just be a desirable element in economic activity - it will be the crucial factor in our ability to adapt and survive as a species [6].

It is curious that the creative industries and the creative economy are simultaneously seen as viable 'sustainable' development frameworks *and* important drivers of economic growth and 'business as usual'. The rise of the creative industries and, naturally, the rise of the creative class [8, 9] are even accepted as an indicator of raised living standards:

> The development and exploitation of novel products, processes, services and systems, and the constant upgrading of those already available, will be increasingly vital in ensuring that high wage economies like the UK can maintain and increase their relative high levels of economic wellbeing – both as a response to the evolution of increasing demand at home and the growth of competition abroad. [10]

Raised living standards, however, have been linked with raised greenhouse gas emissions [11] and less environmentally friendly 'life-styles'. Referring to Lodziak [12, 13], Maycroft claims that because of the

> over-emphasis on consumption and its associated symbolic pleasures […] life-style can be taken as something different to a life: almost as something undertaken, instead of an autonomous, self-directed attempt to live a full and rounded life. [14]

The creative industries are contributing to the further and extensive promotion of 'consumerism as a way of life' [15] and continuously fuelling the desire for 'more' – and, more importantly, for 'new'. Creative industries such as advertising, where the 'prime purpose is to simply persuade people to buy more' and has little to do with the 'freedom of human expression' [16], contribute to the conscious invention and support of cultures of waste (and, implicitly, cultures of scarcity) and habits of disposal for the sake of newness and innovation at a massive scale and pace. 'When adaptation [to better standards] creates ever more wishes,' Luks [17] writes, 'and when supply of certain goods cannot by definition meet the demand, there can be no end to scarcity. The promise of modernity with its emphasis on development, growth, progress and abundance *cannot* be fulfilled'. We can see that the common propaganda narratives about the 'sustainability' and 'greenness' of the 'creative economy' and the 'creative industries' is intrinsically flawed.

Creative Industries in the UK

> Capitalism is animated by the principle of unlimited accumulation at the expense of all other values. [18]

In the UK, the commodification of culture and creativity began early. The post-war state saw a need to support the arts because cultural market were seen as rather prone to market failure due to culture creating both private

and non-private values; the Arts Council of Great Britain was established with this in mind [16]. As O'Hagan [19] notes:

> the arts do provide a service that can be bought and sold in the market place [but] they also provide another benefit, a non-private benefit that cannot be sold in the market place [19].

The public sector accepted the commercial framework for the development of arts and cultural production. In 1997, when Labour took over again, culture and creativity were celebrated as major contributors to the nation's resurgence. Cultural economists, government officials, and cultural policy-makers regard creativity as a major driver of regional economic growth, job creation, and the development of consumer markets [20]. The literature has attempted to distinguish 'cultural' from 'non-cultural' production based on the production methods; Galloway and Dunlop [16] argue that production 'methods don't define what culture is, but are crucial for explaining why these industries must be considered part of cultural and not just economic policy'; they suggest that the cultural industries can be defined 'as those that generate symbolic meaning'. Most importantly, they argue, 'the UK approach [...] fails to consider the nature of cultural creativity and so [...] loses sight of the distinctive public good contribution of culture' [16]. Hartley [21] acknowledges the distinction between the notions of cultural economy (rooted in the academy and public institutions) and creative industries (rooted in 'the street, the market and private enterprise'), but warns that although we might tend to 'defend' public culture from market forces, both are necessary for 'productive opposition'. Galloway and Dunlop [16] argue that the definition adopted by the British government 'is ill conceived in relation to culture', because it 'confuses or conflates culture and creativity' – the conceptual shift from the 'creative' versus the 'cultural' industries following the earlier shift from the cultural 'industry' to cultural 'industries'; [18] had been introduced by the New Labour government in the late 1990ies in order to bridge the gap between 'high' and 'low' culture, a

democratising move see [22] for a brief history of this shift, and the complex and confusing management of the reconceptualisation.

In the UK, the creative industries were first officially defined as

those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creating through the generation and exploitation of economic property, [including] advertising, architecture, the art and antiques market, crafts, design, designer fashion, film and video, interactive leisure software, music, the performing arts, publishing, software and computer services, television and radio [23].

Similarly, NESTA, the National Endowment for Science Technology and the Arts, defines the creative industries as

those businesses in the economy which focus on creating and exploiting symbolic cultural products (such as the arts, films and interactive games) or on providing business-to-business symbolic or information services in areas such as architecture, advertising and marketing and design, as well as web, multimedia and software development [24].

NESTA uses the Creative Trident to determine who belongs to the creative economy. In essence, the Trident modes include the 'specialist mode' (those 'in defined creative occupations employed within the defined creative occupations'); 'support mode' (those 'employed within the defined creative industries who are not working in defined creative occupations'); and 'embedded mode' (those 'employed in defined creative occupations' but 'working outside the defined creative industries'; the 'creative workforce' is the group of all people employed in the Creative Trident [24].

Furthermore, analysts have found the creative industries to operate with very different business models, according to their nature. There are 'creative services' (including the architecture industry, 'defined as building

design, planning approval and production information. Its related activities include structural environment, landscape and other specialist design, urban planning, construction cost planning and control and construction monitoring' [10]); 'creative experiences' ('selling access for consumers to specific activities, performances or locations'); 'creative originals' (value in labour and 'perception' of exclusivity); and finally, 'creative content': the intellectual property (IP) producing sectors [25]. This categorisation is related to the disparate embedded 'expressive' values in the creative industries, namely aesthetic value (reflecting beauty, harmony, form); spiritual value; social value (capacity to connect otherwise separated individuals); historical value; symbolic value and authenticity value [26].

The UK measures the contribution of the Creative Industries to the economy through Gross Value Added ('the amount that individual businesses, industries or sectors contribute to the economy' - GVA), employment, the number of businesses, and exports. It is estimated that in 2008, the Creative Industries accounted for 5.6% GVA (Architecture accounted for 0.3%); that in 2010, 8.7% of all enterprises were in the Creative Industries (with about 11,500 enterprises, or about 0.5% of the total, in Architecture); and that 'creative employment' totalled about 2.3 million jobs about 130,000 in Architecture; [27]. In London – 'the UK's "creative hub"' – 'the size of London's creative industries sectors is as much a symptom of [the city's] broader economic success as it is a driver'; 12.2 per cent of all jobs here were located within the creative industries in 2007 [25].

However, despite the broad acceptance of three creativity indicators which signify properties that draw the 'creative class' to particular cities, namely ethnic diversity; proportion of gay residents; and the number of patent applications per head [8], is difficult to see a direct link between diversity and creativity in this case. It appears that the creative industries in London are a highly segregated sector in terms of gender and ethnicity. In 2004, only little more than a fifth of London's employees in architecture

were female, compared to over forty per cent of the total workforce; and only little over ten per cent fell within the Black, Asian and Minority Ethnic (BAME) group, compared to about 23 percent of the total workforce [28]. A look at the 'Mean Annual Incomes' of 'creatives' in the UK in comparison with the UK Mean reveals further clear differentiation in terms of the 'value' of creative work: Software, Computer Games and Electronic Publishing Specialists are paid highest at about £39,000 (86% above UK Mean), followed by Advertising and Marketing Specialists at about £36,000 (70% above UK Mean), Film, TV, Radio and Photography Specialists at about £31,000 (46% above UK Mean), Architecture, Visual Arts and Design Specialists at about £26,000 (23% above UK Mean), and Music and the Performing Arts Specialists at about £25,000 at the bottom 18% above UK Mean; [24].

In terms of shrinking governmental support and funding cuts, which may lead businesses to turn increasingly to banks for finance in the future, it seems that creative businesses 'are no more likely to apply for finance' than other business, 'but that they are more likely than average to experience problems getting finance' – which is seen to be mainly due to the their vested value in intangible assets and often irregular payment cycles [29]. Architecture seems particularly well equipped to cope with emerging conditions of scarcity, mainly because businesses in the field seldom apply for finance, and because architectural practices are accustomed to irregular and uncertain payments and used to coping with situations of uncertainty [29].

The CBI – the UK's leading business organisation – recently released a report that explores the current economic downturn as having created a pool of opportunities, including 'the potential for new business models, bigger international markets for creative products and greater audience participation in the production and distribution of content' [30]. 'Audience participation' already hints at the increasingly blurred line between production and consumption: where creativity produces 'objects', the processes involved in their production include manufacture, materials,

technologies, marketing, advertising, and distribution, and consumption includes a number of post-purchase processes. Designers, producers, and consumers, however, often overlap in their roles and coexist [31]. 'Co-production', 'co-design', 'co-creation' and an array of other buzz-words incorporating the 'co-'prefix are currently fashionable and often overly celebrated see, for instance, [32, 33]. However, as Thrift [34] suggests, the process of blurring the dividing line between production and consumption can be understood as yet another form of capitalist commodification, 'deepening [...] the lure of the commodity' through the 'co-creation of commodities with consumers', and hence amplifying the inherent mode of capitalist exploitation.

Related to the blurred boundaries between producers, consumers, and, most recently, citizens, are the newly introduced paradigm of the Big Society and its main characteristic: 'empowering communities, redistributing power and promoting a culture of volunteering' [35]. It is expected that accompanying governmental funding cuts will see a reconfiguration of the national economy requiring communities to adapt rapidly in order to survive and flourish; the Big Society, it has been claimed, will bring about a cultural shift toward people who feel powerful enough to move things for themselves and their communities, instead of relying on the government to fix things. This has been critiqued as unfair and socially unjust, as it turns to 'ordinary citizens to shoulder the burden [caused by the banks which induced the latest economic crisis], through increasing taxes, cutting public spending and encouraging citizens to do their "duty" by running services themselves wherever possible' [35]. In the Big Society, 'social and financial gains will come from replacing paid with unpaid labour'[36] – in essence, replacing government jobs with voluntary services. Middle class communities may be well prepared to act philanthropically, it has been argued, but what about the 'members of less advantaged and less well-networked communities'[35]? New scarcities will require communities to develop and activate the skills necessary to adapt to change. And whilst

creativity is common to all human beings, expressed in their ability to adapt, invent, and innovate, today's cultural and creative economy are rendering creativity just yet another commodity, serving the sole purpose of capital accumulation. When the purpose of creativity is limited to driving economic growth, can we still think of it as complementary to the evolutionary process?

> [We] need to re-skill people as gardeners, we also need to examine how we use the spaces in our cities to ensure that we have a chance of freeing ourselves from our current almost total dependency on multinationals who have only their shareholders' interests at heart – not the most basic needs of a nation, and of a planet [37].

The above applies to food security as much as it applies to the invention of creative industries, the in-vitro-fertilisation of creative clusters, and the commodification of the most basic of all human skills: creativity, and the human ability to constantly adapt and transform in response to ongoing change.

Creative Cities

> Currently, the Government runs according to the politics of Tesco. [38]

> The lifeblood of the world's creative industries – art, music, fashion and more - flows out of London, the true capital of street style. [39]

It has been argued that the majority of design and other creative activities take place in cities, and that hence 'the culture society' [40] is located in cities. The shift from 'culture' to 'creativity' in the UK had two major consequences: it offered a model suggesting that if 'creativity' were an innate quality waiting to be released, 'any city, town or rural area could look to develop the creative industries as part of its economic regeneration'; it

offered the opportunity to mobilise creativity within 'socially excluded groups' in areas of regeneration, suggesting creative entrepreneurialism as an 'economic and social agenda delivered through cultural policy' [18]. Interestingly, research on the cultural industries has picked up on developments in complexity studies, and so we see suggestions that the cultural industries self-organise and self-regulate on both the local level ('Villages') and the global level ('Groups'); these systems allow for future-oriented adaptability [41].

Hartley [21] argues that the creative industries are not just a sector of the larger economy, but adaptive, complex, open systems; he defines the purpose of creativity as innovation - the emergence of new ideas that can result in change and renewal of complex environments; creative activities can then take place within the 'creative industries', where creative clusters form a closed expert system; within the 'creative services' in a closed innovation system; and lastly, they can manifest through 'creative citizens', forming an open innovation network and a demand-side (user-based) definition of 'creativity'. In Hartley's [21] 'creative citizens' model, 'everyone's creative potential can be harnessed for innovation, which can come from anywhere in the system' - 'creativity becomes a property of complex systems'; he writes: 'It is the domain of experimentation and adaptation, where *individual* agency may have *network-wide* effects: thus it is the dynamic "edge" of systemic *emergence*'. Similarly, Zamenopoulos and Alexiou [42] argue that design can be understood as a mode of intentionality which acts at the individual and collective scales and 'exists at different levels of reality'.

Hartley [21] points at the 'unproductive ways' in which 'global flows' and 'local complexity' sometimes clash: despite its portrayal as an 'eyesore', Mumbai's largest slum, Dharavi, is a 'thriving – indeed a creative – community, producing its own self-organised solutions to complex problems' – a type of bottom-up, unplanned creativity see [43 for elaboration]. We need to consider that, as Harley suggests, innovation 'proceeds not only

from incremental improvements within an expert-pipeline process, but also from the clash of different systems, generations, and cultures' – from this perspective, cities are clusters of 'clashing and competitive complexity'; but if they are to implement the 'creative citizens' model, an open network of innovation, creative clusters can only be regarded as the first stage before 'rapid adaptability is required for survival in a dynamic system, and innovation needs to be modelled as "scale free" in order to link individual agency [...] to global applications [...] via digital media and online socials networks' [21]. Based on their study in the field of cognitive neuroscience, Zamenopoulos and Alexiou [42] argue that cities can be regarded as examples of design capacity distributed among a collective ('collective intentionality'), similar to the type of 'phase transition' that happens in the brain during design tasks: design thinking involves both bottom-up and top-down processing of information and execution, an 'underlying interconnectivity and communication between different brain areas'.

> In the most general sense the "phenomenon of design" arises with the formation of organisms whose survival depends on their capacity to construct or adapt their environment for their own benefit. [...] Along these lines, the phenomenon of design can be understood as the product of an evolutionary pressure that leads to the formation of organisms with the capacity to construct and recognize functional objects [42].

Bell and Jayne [44] distinguish design-led urban regeneration associated with urban planning and architecture (such as 'landmark' and infrastructure projects and projects aiming to design crime out), practices and processes related to the creative industries which 'can contribute to an ecology of innovation and creativity that is symbolically central to the economic profile of towns and cities', and links between the work of 'creative design businesses with manufacturing, engineering, advanced technology and other industries to encourage design-led production'. Regardless of their type – 'design-led strategies can have considerable impact on local

economies', and especially so if the 'three strands are strategically implemented in unison' [44]. However, the close connections between culture and urban real estate 'have begun to cause real tensions as culture-led urban regeneration drives out spaces of cultural production' [18].

A good example is Boxpark, a 'pop-up mall' for London's hippest neighbourhood, Shoreditch. Here, the 'creative industries', advertisement and architecture in particular, come together to create a 'catalyst to the wider economy' [45]. The pop-up mall will appear on a site slated for redevelopment (but activities were halted owing to the recent economic crisis) for the duration of five years; it will be made of recycled shipping containers, individually outfitted for each of the brands they will house. Recycling used shipping containers is not a particularly new strategy: it has been repeatedly used by brands such as Freitag and Puma; it is also a very common practice in 'developing' countries, where containers offer a welcome (and less easily removable) alternative to the usual make-do shack [46].. What Boxpark, unfortunately, shows, is how brilliantly capitalism works to exploit genuine creativity: the developers in charge are imitating the spontaneous strategies of the 'poor' who use creativity in order to make do with whatever is available. In five years' time, the pop-up mall will be removed to make space for up to 2000 new homes, office space for both large organisations and start up enterprises, retail and leisure facilities, and up to 1.7 hectares of new public open space' [39].

Exploding building costs, shrinking household sizes (and hence increasing numbers of households) and 'unprecedented levels of immigration' over the past decade have supposedly contributed to the UK's housing shortage of 100,000 homes in 2008 [47]. Currently, the media expresses fears that half of building registrations made were for social housing, and that building 'may not [remain] sustainable if budgets are cut' [47]. The government just announced that publicly owned land will be released to developers to build homes – possibly on a 'build now, pay later' deal [48]. Just what this means in the context of continuous privatisation and

commodification remains to be seen. But claims to 'find ways of weakening or even cutting the link between home ownership and wealth acquisition' [37], appear difficult to realise in a country with a mostly privatised housing industry, such as the UK, where home ownership stands above 70% and social/public/council housing is generally regarded as something to loathe [49].

Housing has become a positional good [3], a status symbol, often tied to the concept of 'lifestyle'. As Maycroft brilliantly points out, certain presumptions, such as the ways in which the 'market' is generally seen as an 'opportunity, rather than constraint or imperative', do not hold true; for many, it is something that 'has impelled them to turn their backs on other forms of social and economic organisation in order to secure the necessities of life' - 'if there's only Coca-Cola to drink, then drinking Coca –Cola should not be interpreted as a life-style consumption choice' [14]. This is profoundly linked to the intentional construction of various consumption desires away from the traditional, material 'object' and toward immaterial 'visions' or 'ideals', such as leading an 'urban lifestyle', for instance, as if the city is tied to a particular lifestyle.

> Consumption can […] be seen increasingly as a form of self-expression and the exercise of individuality of which cultural, creative and artistic expression are core elements. [10]

> [Lifestyle is] reflexive, biographical project of identity-formation and self-presentation, based upon the consumption of the symbolic dimensions of consumer commodities, particularly cultural products, services and experiences. [14]

Conclusions

Individual and collective creativity is closely linked with the human ability to adapt to adverse conditions or events, such as scarcity. However, as the notion of 'culture' transitioned from 'high' culture to 'mass' culture, and as 'creativity' began to be organised within capitalist frameworks and

exploited according to the principles of the capitalist system. Once used to adapt to conditions of scarcity, the creative, when turned into an industry, acts as a driver in the generation of artificial scarcity, which, following the logics of neoclassical economics, increases demand and hence the value of scarce goods or services.

The creative industries use creativity to generate desire – this is especially true for the advertisement sector; they use creativity to generate scarcity – manifest, for instance, in the workings of architecture and the production of the built environment, where architectural objects often contribute to the increase of land value; where 'regeneration' takes often place in order to 'mop up' capital surplus and maximise profit; and where we paradoxically speak of 'creative destruction' [50, 51]. Once creative activity takes place following the logics and aiming for the goals of the market, it serves the sole purpose of reproducing the capitalist mode of production from within the system, and no longer works to serve alternative, or original, values. It is not surprising that the creative industries seem to show similar levels of segregation in terms of ethnicity or gender to other industries. It is also not surprising that the line between the 'producer' and 'consumer' of creative products is continuously blurred, given that it promises the exploitation of an additional, entirely unpaid work force (consumers), who even pay for the 'right' to be exploited and to contribute to the profit of the 'producer'.

The notion that the 'creative industries' and the 'creative economy' are innately environmentally friendly or that they contribute to 'sustainable' development of any sort cannot be sustained. Creativity, indeed, is not a material resource to be depleted; however, most outcomes of creative activity are linked to some material product, even within the domains of creative services or creative performances. The 'digital' industries, often praised for their minimal impact, are one particularly good example: one needs only consider the amount of energy needed to run computers, the amounts of waste produced to keep up with the latest available hardware

(from iPhones to computers), the amounts of CDs and DVDs needed to distribute software, music, and films. In architecture, creative activity results in the continuous re-production of buildings, often linked to the waste of large amounts of resources (let alone that the building sector contributes about 50 per cent of overall green gas emissions).

Creativity, when working as an industry to maximise profit, will likely generate various new forms of scarcity, rather than contribute to the solution of problems arising from scarcity. In short, once transformed from a skill common to all human beings turned into a commodity – creativity can no longer be regarded as a means of adaptation or evolutionary skill.

References

1   Lyla Mehta, ed., *The Limits to Scarcity: Contesting the Politics of Allocation*. ed. by Steve Rayner, *Science in Society* (London & Washington, DC: Earthscan, 2010), p. 270.
2   Steve Rayner, 'Foreword', in *The Limits to Scarcity: Contesting the Politics of Allocation*, ed. by Lyla Mehta (London & Washington, DC: Earthscan, 2010).
3   P. Brickman, and Donald T. Campbell, 'Hedonic Relativism and Planning the Good Society', in *Adaptation Level Theory - a Symposium*, ed. by M.H. Apley (New York: Academic Press, 1971), pp. 287-302.
4   Christopher M. Layne, Jared S. Warren, Patricia J. Watson, and Arieh Y. Shalev, 'Risk, Vulnerability, Resistance, and Resilience: Towards an Integrative Conceptualization of Posttraumatic Adaptation', (New York, London: The Guilford Press, 2007), pp. 497-520.
5   UNCTAD/UNDP, 'Creative Economy Report 2008: The Challenge of Assessing the Creative Economy: Towards Informed Policy-Making', (Geneva: UNCTAD, 2008).
6   John Newbigin, 'The Creative Economy: An Introductory Guide', in *British Council's Creative and Cultural Economy Series*, ed. by Pablo Rossello and Shelagh Wright (Lonon: The British Council, 2010).
7   Sharon Zukin, *Landscapes of Power: From Detroit to Disney World* (Berkeley, CA: Univ of California Press, 1993).
8   Richard Florida, *The Rise of the Creative Class* (New York: Basic Books, 2002).
9   ———, 'Cities and the Creative Class', *City & Community,* 2 (2003), 3-19.
10   The Work Foundation, 'Staying Ahead: The Economic Performance of the Uk's Creative Industries', (London: The Work Foundation, 2007).

11   Jorge E. Hardoy, Diana Mitlin, and David Satterthwaite, *Environmental Problems in an Urbanizing World: Finding Solutions in Africa, Asia, and Latin America* (London and Sterling, VA: Earthscan, 2001).

12   Conrad Lodziak, 'On Explaining Consumption', *Capital & Class,* 72 (2000), 111-33.

13   ———, *The Myth of Consumerism* (London: Pluto Press, 2002).

14   N. Maycroft, 'Cultural Consumption and the Myth of Life-Style', *Capital and Class,* 28 (2004), 61.

15   Steven Miles, *Consumerism: As a Way of Life* (London: Sage Publications Ltd., 1998).

16   Susan Galloway, and Stewart Dunlop, 'Deconstructing the Concept of 'Creative Industries'', in *Cultural Industries: The British Experience in International Perspective*, ed. by Christiane Eisenberg, Rita Gerlach and Christian Handke (Berlin: Humboldt University Berlin, 2006), pp. 33-52.

17   Fred Luks, 'Deconstructing Economic Interpretations of Sustainable Development: Limits, Scarcity and Abundance', in *The Limits to Scarcity: Contesting the Politics of Allocation*, ed. by Lyla Mehta (London & Washington, DC: Earthscan, 2010), pp. 93-108.

18   Justin O'Connor, 'The Cultural and Creative Industries: A Review of the Literature', in *Creative Partnership Series* (London: Creative Partnerships, Arts Council England, 2007).

19   John W. O'Hagan, *The State and the Arts: An Analysis of Key Economic Policy Issues in Europe and the United States* (Cheltenham: Edward Elger, 1998).

20   Jim Shorthose, 'A More Critical View of the Creative Industries: Production, Consumption and Resistance', *Capital and Class* (2004), 1-10.

21   John Hartley, 'Connected Communities and Creative Economy: Clash, Cluster, Complexity, Creativity', in *AHRC Research Development Workshop on the role of the Creative Economy in Developing & Sustaining Vibrant & Prosperous Communities in the UK* (Birmingham, UK: Unpublished, 2010).

22   Simon Roodhouse, 'The Creative Industries: Definitions, Quantification and Practice', in *Cultural Industries: The British Experience in International Perspective*, ed. by Christiane Eisenberg, Rita Gerlach and Christian Handke (Berlin: Humboldt University Berlin, 2006).

23   DCMS, 'Creative Industries Mapping Document 1998', (London: Department for Culture, Media and Sport, 1998).

24   Peter Higgs, Stuart Cunningham, and Hasan Bakhshi, 'Beyond the Creative Industries: Mapping the Creative Economy in the United Kingdom', (London: NESTA, 2008).

25   John Knell, and Kate Oakley, 'London's Creative Economy: An Accidental Success', in *Provocation Series*, ed. by The Work Foundation (2007).

26   David Throsby, *Economics and Culture* (Cambridge: Cambridge University Press, 2001).

27   DCMS, 'Creative Industries Economic Estimates (Experimental Statistics) - Full Statistical Release', (London: Department for Culture, Media and Sport, 2010).

28   Alan Freeman, 'London's Creative Sector: 2007 Update', (London: Greater London Authority, 2007).

29   IFF Research, 'Appendix 2: Access to Finance for Creative Industry Businees: Qualitative Survey', (London: Department for Business, Innovation and Skills (BIS), Department of Culture, Media and Sport (DCMS), 2011).

30   CBI, 'Creating Growth: A Blueprint for the Creative Industries', (2010).

31   Guy Julier, *The Culture of Design* (London: Sage Publications Ltd, 2000).

32   Ann Thorpe, 'Design's Role in Sustainable Consumption', *Design Issues,* 26 (2010), 3-16.

33   Ezio Manzini, 'New Design Knowledge', *Design Studies,* 30 (2009), 4-12.

34   Nigel Thrift, 'Re-Inventing Invention: New Tendencies in Capitalist Commodification', *Economy and Society,* 35 (2006), 279-306.

35   Ben Kisby, 'The Big Society: Power to the People?', *The Political Quarterly,* 81 (2010), 484-91.

36   Anna Coote, 'Big Society and the New Austerity', in *The Big Society Challenge*, ed. by Marina Stott (Cardiff: Keystone Development Trust Publications, 2011), pp. 82-94.

37   Adam Samson, 'Wobbling Foundations: We Need More Diverse Models of Home Ownership', in *Triple Crunch: Joined-up Solutions to Financial Chaos, Oil Decline and Climate Change to Transform the Economy*, ed. by Ruth Potts (London: new economics foundation, 2008), pp. 25-26.

38   Rosie Boycott, 'Food: London's Achilles Heel Has Lessons for Us All', in *Triple Crunch: Joined-up Solutions to Financial Chaos, Oil Decline and Climate Change to Transform the Economy*, ed. by Ruth Potts (London: new economics foundation, 2008), pp. 23-24.

39   Boxpark, 'Boxpark Shoreditch', (London: Boxpark Ltd, 2011).

40   Angela McRobbie, *In the Culture Society: Art, Fashion, and Popular Music* (London: Routledge, 1999).

41   Gernot Grabher, 'Ecologies of Creativity: The Village, the Group, and the Heterarchic Organisation of the British Advertising Industry', *Environment and Planning A,* 33 (2001), 351-74.

42   Theodore Zamenopoulos, and Katerina Alexiou, 'A Complexity Theoretic Views of Cities as Artefacts of Design Intentionality', in *Complexity Theories of Cities have come of Age* (Delft: 2010).

43   Eric D. Beinhocker, *The Origin of Wealth: Evolution, Complexity, and the Radical Remaking of Economics*. Vol. Random House Buisiness Books (London: 2007).

44   David Bell, and Mark Jayne, ''Design-Led'urban Regeneration: A Critical Perspective', *Local Economy: The Journal of the Local Economy Policy Unit,* 18 (2003), 121.

45   Robert Pike, 'Boxpark: The World's First Pop up Mall', in *Boidus:Blogs* (2011).

46   MM Jones, 'Container Stores', in *BauZeitGeist.* (2011).

47   Francesca Steele, 'How Do We Fix Our Housing Shortage?', *The Times*, 30 April 2010 2010.

48   Kate McCann, '100,000 New Homes to Be Built on Surplus Public Land', *The Guardian*, 8 June 2011 2011.

49   Lynsey Hanley, *Estates: An Intimate History* (London: Granta Books, 2007).

50   David Harvey, 'The Right to the City', in *New Left Review* (London: Verso, 2008).

51   ———, 'Neoliberalism as Creative Destruction', *The ANNALS of the American Academy of Political and Social Science,* 610 (2007), 21-44.

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