

The economics of culture as capital

A critical survey of the idea and its abuse

Edmund O'Sullivan, MEED

Capital expressed in the form of culture is said to be an important potential factor supporting economic development.

This paper examines the validity of the idea of culture as capital. It argues that conventional economic theory fails to deal effectively with the concept of cultural capital and intangibles generally. The paper presents a theory of cultural capital as part of a broader theory of intangible capital. It shows that:

* culture and other forms of intangible capital are neither a product nor a commodity and hence cannot be manufactured, traded or stored as products and commodities can be. Culture can never be expressed as capital in the terms economists understand it.

* actions based on the idea that culture and other forms of intangible capital can be commodified or treated as a commodity can be value-destroying and often are.

* value in culture is created through spontaneous and constructive interaction at the level of the individual. Cultural industries will create and share more value in a context in which culture is not regarded as a form of capital.

This paper concludes by arguing that champions of culture and cultural industries should critically reappraise the foundations of policies and actions pursued by the state and the corporation in cultural industries.

The economics of cultural capital

A critical survey of the idea and its abuse

The concept of culture as a form of capital was developed to expand the notion of capital to include intangible factors that conventional political economy previously ignored. It was outlined in the work of Pierre Bourdieu, a French social scientist, initially in *Cultural Reproduction and Social Reproduction* jointly published with Jean-Claude Passeron in 1973. In Bourdieu's book *The Forms of Capital*, published in 1986, he argued there were three types of capital: economic capital which took the form of money and physical assets; social capital, which was defined as the sum of resource available to society through institutional and non-institutional networks, and cultural capital. The latter were forms of personal knowledge, skills, education and other skills.

Cultural capital, however, is now more closely connected with various forms of artistic and creative expression. The narrower idea of cultural capital has emerged with the European Capital of Culture Initiative launched by the EU in 1985. The European Capital of Culture is a city designated for a period of a year during which it organises cultural events with a strong European dimension¹.

The economic theory of capital

Capital is central to economic thought. Yet it is one of the most imprecise of all the concepts the discipline uses. The word originally denoted the principal of a loan in money. In the 12th-13th century, it was applied in Europe to describe a fund of money or portable property. What is considered to be mercantilist thought tended to define capital as money, which at that time took the form of precious metals and stones. Classical economists altered the definition and tended to see capital, with labour and land, as a factor of production. Bohm-Bawerk in 1888 reported that there were no less than 10 definitions of capital as a concept in economics². Alfred Marshall in *Principles of Economics* also had definitional problems. In the following extract, he uses almost 200 words to define capital:

“...the language of the market-place commonly regards a man's capital as that part of his wealth which he devotes to acquiring an income in the form of money; or, more generally, to

acquisition (Erwerbung) by means of trade. It may be convenient sometimes to speak of this as his trade capital; which may be defined to consist of those external goods which a person uses in his trade, either holding them to be sold for money or applying them to produce things that are to be sold for money. Among its conspicuous elements are such things as the factory and the business plant of a manufacturer; that is, his machinery, his raw material, any food, clothing, and house-room that he may hold for the use of his employees, and the goodwill of his business. To the things in his possession must be added those to which he has a right and from which he is drawing income: including loans which he has made on mortgage or in other ways, and all the command over capital which he may hold under the complex forms of the modern 'money market.' ”

Chapter IV, Principles of Economics, Alfred Marshall

Historians of economic thought argue that classical and early neo-classical economists were focusing on capital used for short-term purposes only³. But the imprecision continues to this day. Economics by Richard Lipsey and Alec Chrystal – a standard textbook in many UK universities – defines the capital as follows:

“The capital stock consists of all those produced goods that are used in the production of other goods and services. Factories, machines, tools, computers, roads, bridges, houses and railways are a few examples. Because capital is a produced input, it is a renewable resource though technical changes over time mean that the characteristics of capital change over time. Here we are always talking about physical capital, such as machines, and not about financial capital. Clearly, the two are connected, as firms need to raise finance in order to purchase capital equipment. But our focus is on the equipment itself and not on the way it is financed.”

Page 251 Economics, Lipsey & Chrystal, 11th edition, 2007.

Lipsey & Chrystal's definition is limited. It appears to exclude intangibles by stating that capital only comprises produced goods and the examples it cites are all of tangibles. The treatment of technology is imprecise. It implies that technology is externally applicable to capital and this will alter its productivity. One more example might help highlight the confusion within economics about capital. In *Price Theory* (1962), Milton Friedman says this of capital:

“From the broadest point of view, capital includes all sources of productive services. There are three main categories of capital:

- 1) material, non-human capital, such as buildings, machines, inventories, land and other natural resources;*
- 2) human beings, including their knowledge and skills, and ,*
- 3) the stock of money.*

The main distinction between human capital and the other items is that the existing institutional and social framework and imperfections in the capital market produce a different response of human capital to economic pressures and incentives than of nonhuman capital.”

*Price Theory, Milton Friedman, Third Printing 2008,
AldinTransaction.*

In view of Friedman's reputation for concise argument, it is perhaps surprising that his definition of capital is so loose. By starting the definition with the phrase “From the broadest point of view,” Friedman implies that there is no agreed definition of capital at all. He describes three of the “main” categories of capital, which suggests there could be several further categories. The first is similar to everything encompassed by Lipsey & Chrystal's definition of the entire capital stock. But he goes further by adding land. The second category is not even mentioned by Lipsey & Chrystal as being part of the capital stock: knowledge and skills. Friedman, however, includes human beings as part of the capital stock, which might come as a surprise to those who believed ownership in property was made unenforceable in Great Britain from the 1770s and illegal in the US from 1865. The third main Friedmanite category is the stock of money, something which Lipsey & Chrystal exclude.

Two further definitions will help highlight the problem. They are expressed in shorter and simpler statements that help us understand what modern economics think capital is. A discussion paper published by the IMF that examines the impact of intangible capital on economic growth provided the following definition of investment, or what is normally considered to be an increase in the capital stock⁴.

“...any use of resources that reduces current consumption in order to increase it in the future qualifies as an investment.”

This definition is so all-encompassing it is close to being otiose. Another definition has been suggested by Dr Meghnad Desai, previously a professor at the London School of Economics⁵.

“Capital can be physical, monetary, abstract-human capital, talent. But it has to generate an income.”

The most glaring problem with this definition is that it elides the distinction between capital and labour. Human talent, which is embedded in everyone and is essential to an individual's capacity to exist, is classified as capital. The issue is exposed by asking the question: what is left of a human being if talent were extracted from him/her? The right answer is: nothing human.

The central challenge, which none of the economists cited acknowledge, is the handling of capital that is intangible, or the fruit of the human mind. Human knowledge operates on an economic system as if it were capital. It can be seen as a stock of productive capacity that lasts over several or many time periods. It can in principle be increased by investment in education and training. And it produces an income. But is it **actually** capital in the sense that economists should interpret the word?

Forms of intangible capital

Up to 80 per cent and more of employment in advanced economies is now due to services, but there is no evidence that conventional theories of capital have been significantly adapted to take this fact into account. The idea of goods and capital as intangibles has been absorbed into conventional economic theory with little comment. This is perverse. The idea of intangible capital constitutes an extraordinary divergence from what the pre-mercantilist, mercantilist and classical economic traditions would have considered to be legitimate.

The joint stock company and insurance The point cannot be precisely located at which the journey that has been made in overturning embedded attitudes towards what can and cannot be treated as if it were capital. The creation of the joint stock company where individuals exchanged specie money in return for a legal claim over the assets of that company is one of the earliest forms of what can be called intangible capital: an asset that has no physical existence. The specie money, which usually took the form of gold coins, was placed at the disposal of the managers of the joint stock company. In return, the provider of the gold received a document that stated he or she would be returned the amount supplied plus a share of the profits generated by the activity in which the company engaged. In the 17th century, this would probably have been trade through plantation and natural resource exploitation activities were also among the activities such companies engaged in which involved the production of cash products: skins, precious metals and stones, tobacco, sugar, rice etc.

The document – in which the claim over the money advanced and a share of the profits was asserted – could be kept until it was redeemed at the end of the life of the business activity the company was engaged in. An alternative was for the holder of the document to sell it to someone else for money. Such transactions established the document as a form of capital that was not money but could be exchanged for it. The value of the document was not inherent in the document. The document – conventionally called a share – instead was a written promise from the recipient of the original advance. So it was not money, but a *derivative* of money which was at the time defined as a real asset like land and tangibles. It was an expression of the commitments made between the parties of the original transaction which decisively moved away from the concept of property as the possession of a thing to one that where ownership was an essentially idea. Insurance, which emerged in the City of London in support of growing international trade involving ships originating in London, was a more advanced and sophisticated form of the simple process of reselling the original documentary promise. It helped facilitate the process of trading in bills of trade and inspired the growth of a new industry which was based on the existence of intangible capital.

What did economics then make of such transactions? To the extent that early economists even considered such matters, they would have been bemused. Economics focused on the exchange of things; tangibles with a scientifically measurable physical existence. But the trade in documents did not involve a tangible apart from paper with some ink and wax on it. The value

it mastered was not embedded in the document. What was being bought and sold was a promise; an intangible asset. All financial instruments – loans, bonds, bills, notes and other forms of raising finance – are descendants of these original forms of credit.

Copyright A second form of early intangible capital emerged from printing. Before the development of the mechanised printing press, books and other documents were produced by hand. This technical limitation guaranteed that the capacity to copy an existing document was circumscribed. The number of literate people was limited and the cost of reproducing documents was extremely high. The prohibitive cost of producing documents was reflected in the fact that much of the copywriting done before the printing press was done in monasteries, definitive non-profit institutions.

Developments in the efficiency of printing eventually reduced the cost of producing books and documents to the extent that it became more profitable to copy an original work than to produce it from scratch. The original form of copyright protection was probably legislation enacted in Britain in 1662, though the motivation was at least partly to prevent the circulation of books and documents that the government disapproved of. Further legislation in 1709 more explicitly justified the restriction on copying by reference to the rights of authors. An expansion of the idea of state control over published works is found in Article 1 of the original US constitution of 1789. One of the most fervent advocates of copyright legislation and enforcement was Charles Dickens, who was exasperated by American publishers reproducing his works without payment. A further legislative breakthrough came in 1886 with the Berne Convention, one of the first international treaties. It stipulated that an author's rights over his or her work were automatically established on creation. Copyright legislation created a new type of intangible capital. Copyright can be bought and sold and is often held by people other than the original creator of the works in question. What are covered are not the materials from which the books and other documents are made; it is the words and ideas expressed in them. Nothing could be more intangible and yet legislation converted them into the equivalents of tangibles, things that could be bought, sold, held, lent and stolen. Copyright owners are now able to secure in the US copyright that is enforceable for the life of the author plus 70 years. For works of corporate authorship, copyright can be claimed up for to 120 years after creation or up to 95 years after publication, depending upon which endpoint is earlier.

Patents and trade secrets Patents – exclusive rights granted by a sovereign state to an inventor or their assignee for a limited period of time in exchange for the public disclosure of an invention – can be traced back to Ancient Greece. The legislation upon which much of future patent law derives was passed by Britain’s parliament in 1624. Today the system constructed to protect patents is one of the most complex pieces of international law. The acceptance of the need for patent protection is so embedded that it is a condition for membership of the World Trade Organisation (WTO). An extension of the ideas of copyright and patents is a trade secret. This is any confidential formula, device, or piece of information which gives its holder a competitive advantage so long as it remains secret. Trade secrets, which are generally not listed as assets in company balance sheets, are a derivative of patents and cover, for example, the recipe used by The Coca-Cola Company to make Coke.

Trademarks In the 19th century, manufacturers applied a mark or brand upon the goods they made to denote their superiority to similar products made by others. The idea of the brand gained special significance in the US where huge distances separated farms and towns and it was a factor in creating a continental market in goods. Those with brands could be sold at a higher price than goods without one. This allowed accountants to project a future stream of revenues and profits that could be converted into a present capital value. But for this to be possible, it was essential that the brand could only be exclusively used. That companies are able to secure such arrangements owes little to economics and most to the capacity of brand owners to persuade law-making and law-enforcement bodies to accept a brand as a form of property. Legislation protecting trademarks is now an embedded fact of every advanced economy.

Goodwill A further intangible that is significant in advanced economies is goodwill. This is an accounting concept that has allowed acquirers of a company priced at more than its reported book value to include that premium as an asset in their balance sheets. Accounting codes allow the present value of the projected income flowing from ownership of a brand to be capitalised and counted as an asset in balance sheets. Goodwill, in contrast, can only be counted as an asset when a company buys another one. Among its unintended consequences is that it provides an incentive for a company to buy another one at a price above the purchased company’s book value.

Intangible capital in contemporary capitalism

The importance of these concepts is reflected in the fact they now account for the overwhelming majority of assets of all companies in advanced economies. At the end of 2012, the aggregate value of the balance sheets of the 10 largest companies listed on the London Stock Exchange was £2.74trn. The value of assets that were not strictly tangible – property, equipment and inventories – accounted for 82 per cent of the total⁶.

Despite the fact that economics accepts the existence and validity of intangible capital – and all major companies now count them in their balance sheets as if they are identical to tangible assets – the rationale supporting their widespread acceptance is not located within economic thought. Defenders of intangible capital rely on two arguments⁸:

- Natural rights arguments. These assert that creations of the mind are entitled to protection as much as tangibles because they are product of a person’s labour and a person’s mind.
- Utilitarian arguments. These claim that ownership of ideas should be allowed if that leads to a high level of wealth and income.

Both arguments are flawed. Natural rights in ideas are invariably applied only to some of them. The distinction between ideas that can be protected – and therefore owned – and those that cannot is arbitrary. Patents can only be secured for “practical applications” of ideas but not abstract and theoretical ones. The distinction between creation – deemed to be the source of ownership – and discovery, which is not, is also unclear in ideas.

Economists are familiar with criticisms of utilitarianism. These include the immeasurability of utility and the invalidity of interpersonal utility comparisons. Even if these are set aside, there is no conclusive evidence that the net gains produced by establishing ownership of ideas outweigh the costs.

The fundamental validation of a person’s right to ownership over anything is that it peacefully deals with scarcity. Without the allocation of exclusive ownership of scarce resources to individuals, there would be perpetual conflict and the distribution of property to the winners. Property rights can only work, however, if they are visible and just.

“...in order for individuals to avoid using property owned by others, property borders and property rights must be objective; they must be visible. For this reason, property rights must be objective and unambiguous.”

*Against Intellectual Property, N Stephan Kinsella, published by
the Ludwig von Mises Institute, 2008*

Using this argument, property rights can only apply to resources that are both scarce and objectively definably. Intellectual property and intangible capital generally (the economic form of intellectual property) are neither. An idea is infinitely reproduceable since it can be copied without the need to use scarce resources. For example, you might invent a new way of cooking an egg. The fact that someone copies that method in no way reduces the scarce resources (eggs, pans, cooking oil) that you own. Establishing property rights over the method of cooking you've developed will artificially create scarcity, probably reduce aggregate welfare and, in effect, establish your right to determine the way everyone else uses eggs they own.

The most compelling argument in favour of establishing rights in ideas and other forms of intangible capital is that unless people can assert property rights over them, they will have no incentive to create them in the first place. There is some truth in this argument but it ignores the fact that human beings were inventing things before intellectual property rights were defined in law. The profitable exchange of ideas is possible without intellectual property rights. An individual who develops an idea can share it in a single transaction for which a payment is received. Musicians are paid for a single performance and will have to perform again to secure a further payment. An inventor can sell an invention in a single transaction for which he or she is paid in the way a manufacturer of a tangible would manufacture and sell a product. This provides an incentive for creation and trade without the application of intellectual property rights or the existence of intangible capital.

These are profound objections to the idea of intangible capital that should encourage economists to think more deeply about how they treat the concept. In contrast, and as practically economic texts show, economics has treated intangible capital as if it were a product rather than an *artificial* construct that has developed as the result of legislation and adjustments in accounting codes not coherent economic thinking.

The reason why profit-making organisations count intangible assets and capital as equivalent to tangible assets and capital is comprehensible: it is to increase both the profits and the economic worth of their organisation in accounting terms. When treated as equivalent to tangible capital, intangible assets and capital raise the wealth and income of the managers and owners of such

organisations. Intangible assets can be used as collateral for debt-raising, just like tangible assets. Whether it is right for economists to treat intangible assets and capital as identical to their tangible equivalents is, however, debateable.

A familiar objection rooted in economic thought to treating categories of intangibles as assets is that copyright and patents allow monopoly power to their owners. They increase their income and wealth but these are transfers, at best. More robust critics of copyright and patents argue that copyright and patents suppress innovation and risk-taking by other individuals and organisations. They argue, for example, legal protection of the recipe used to make Coca-Cola discourages more efficient makers of carbonated drinks. A more serious criticism is of patents in pharmaceuticals. Anti-AIDS medicines have been made more expensive and effectively unavailable to millions of sufferers as a result of patents laws. Companies making low-cost copies of such medicines can be, and often are, subject to litigation. The argument that intellectual property (IP) *always* leads to economic inefficiency lacks evidential support, but IP advocates nevertheless have a case to answer.

A more comprehensive attack on the argument that intangible assets and capital exist as economic categories and should be accepted by economists broadens the target to include brands and goodwill. Originally, brands were physically imbedded in the thing over which ownership was asserted: for example on an animal or a bottle. The idea of superiority attached to a brand was a subsequent development.

Critics argue that advertising designed to establish in the mind of consumers that a branded good is better than a non-branded or generic equivalent undermines competition and leads to socially and technically-inefficient outcomes. Defenders of brands say consumers will through experience decide whether a brand merits a premium or a discount. Failure to deliver on a promise of quality implied by a brand lead to profits falling to the level enjoyed by the manufacturers of generic and non-branded alternatives. Ultimately, the defenders argue, advertising will fail if that promise is unfulfilled.

The legitimacy of recognising brands applied to tangible assets as real assets is, nevertheless, open to challenge. It is even more questionable when brands are applied to intangibles such as healthcare, education, consulting and entertainment. It is impossible to apply a brand on a thing that has no physical existence. In fact, it is impossible to define what an intangible is. All intangibles are by definition things that only exist in the minds of those involved in a

transaction involving intangibles. How then can a brand association ever effectively be applied to an intangible? This is a legitimate subject for economists to study. But do conventional economic theories help?

A microeconomic theory of intangibles

Calling something an intangible defines what it isn't. It can't be seen, touched, smelt, tasted or heard. If it can be, then it must have a physical or tangible characteristic, which would mean it's not an intangible. An intangible's invisible and, consequently, unquantifiable in the way that a tangible is.

Put a cup in the palm of your hand and you can sense its weight and texture. You know how to use and maintain it. There are other tangibles to store them in. A consumer can discern the variations in the design of cups. Their colour, shape and size are obvious after a few seconds' examination. Companies know how to make them, the cost of the materials used in their production and the amount of labour needed at every stage of manufacturing. Each tangible is differentiable in the eyes of buyers and, normally, replicable by producers after a bit of study. We know where we are with tangibles.

But can that be said about intangibles? They share with tangibles the capacity to create a powerful impression and they are apparently exchanged just like things you can see. But the essential characteristics of intangibles are invariably mysterious. They are, by definition, difficult to describe. If they can be identified by a human sense, then they must be a tangible or have a tangible origin. The problem that economics has with intangibles can be understood at its simplest at this point.

Can the existence of an intangible be proven? Popperian epistemology suggests that they can only be accepted if they are open to falsification. But how can you test whether something that has no physical properties exists? It's impossible. Popperian thinking, therefore, tends to dismiss an intangible as a meaningful category from a scientific point of view. Something can only have scientific validity if it has tangible characteristics. Conventional economics, based as it is invariably on the principle of falsifiability, as a result, effectively dismisses intangibility as a matter of principle.

But even if this issue is ignored, conventional economics fails to deal coherently with intangibility. In economics, aggregate demand for a product is equal to the demand for that

product expressed by individual consumers. To understand aggregate demand, you have to understand demand at the level of the individual. The theory of consumer preference, though now not the first idea taught in economics, is, nevertheless, seminal and essential if economics as a body of thought is to have any meaning⁹. But any examination of the texts used to teach economics shows that they assume all products are either tangible or effectively tangible. You don't have to look far to find examples of the first type. The thought that there could be a difference in rational human behaviour when making a choice between things that can be seen, touched, tasted, smelt or heard and in circumstances where the thing being bought and sold can't was either dismissed as irrelevant or had not even occurred. Once that thought is taken seriously, the consequences for microeconomics are profound.

The concept of a demand curve for tangibles is based on the idea that an individual is able to make coherent judgments about distributing his or her income among a wide range of options. This entails envisaging rational consumers organising their consumption of goods in such a way that no other arrangement of what they consume will make them happier. This in turn is based on the idea that individuals are subject to diminishing marginal utility: that they derive less enjoyment from consuming an additional unit of a particular product than they did from the previous one. No command of economics suggests that this argument makes sense. Owning a third pair of identical shoes increases your happiness by less than owning the first pair. But how can that idea be translated into a concept that has scientific validity?

Utility, as it is understood by economists, is a subjective category. It can't be measured and you can't compare the utility enjoyed by one person by their consuming a product with that of another person consuming an identical one. If economics was based on attempting to measure and compare utility, it would stand accused of being an exercise in metaphysics or psychology. It escapes this charge by creating a bridge between a person's subjective preferences and the real world through the concept of equimarginal choice, a brilliant insight distilled in the second half of the 19th century. This idea is so powerful it has survived everything that experience has thrown at economics since. The concept of equimarginal choice is embedded in all basic microeconomic texts.

It is most easily understood by examining how a rational consumer might allocate his or her consumption between two products: say bananas and biscuits which are assumed to be things

that the consumer desires. For example, if he or she had bananas and no biscuits, he or she might be prepared to sacrifice three bananas for one biscuit without becoming more or less happy. If 17 bananas and one biscuit are possessed, the idea of diminishing marginal utility suggests that he or she might be prepared, for example, to give up two bananas for one more biscuit. At the other extreme, if all the consumer had was 10 biscuits, the idea of diminishing marginal utility suggests that he or she might give up two of them, or more, to get one banana without any change in his or her happiness. So there is a trade-off, or preference curve, between biscuits and bananas, but this trade-off changes according to the relative quantity of the things possessed.

Economists originally illustrated this concept by devising a two-dimensional relationship between two products which tracked the combinations where happiness was constant. This was called an Indifference Curve, a concept defined in early years of the 20th century. It is generally presented as being concave to the origin. Modern economics has long abandoned this approach and uses mathematical symbols instead. But the idea has remained intact though students of economics have to master algebra to grasp it.

Having plotted an individual's indifference curve, the bridge between the subjective and the objective, the next step is also entirely logical. This involves inserting a price ratio between the two products examined. The price ratio is taken as being given and one that cannot be influenced by the consumer. It is expressed in the form of a ratio, in this case between bananas and biscuits. So if the price of one biscuit is twice the price of one banana, a straight line can be drawn between the axis showing the number of bananas and the axis showing the number of biscuits. It can be demonstrated logically and mathematically that a consumer will allocate his or her spending on bananas and biscuits in such a way as to equalise the price ratio and the ratio between the marginal utility of a biscuit and the marginal utility of a banana. With these assumptions, a rise in the relative price of something will often lead to a fall in consumption of it, regardless of which pair of products is used.

The fact that the overwhelming majority of output in advanced economies takes the form of intangibles has encouraged no fundamental review of basic consumer theory. But this is obviously overdue. For a consumer to choose between bananas and biscuits, he or she must be capable of distinguishing between them. But how is this done? By sight, touch, smell, taste and

sound. But for these to be discerned, the thing in question must have at least one physical characteristic. Intangibles, by definition, don't. Not only is it impossible for a consumer to define a coherent trade-off between intangibles. It is impossible for him or her actually to distinguish between them in any objective way. There is, consequently, no logical reason to accept the existence, let alone the shape, of the utility curve when applying basic consumer theory to intangibles. Without a utility curve, there can be no individual demand curve. And without that, there can be no market demand curve.

To illustrate this point, consider the following example. An individual is offered a choice between two intangibles. He or she could be taught French or be taught to play the guitar. The individual has an income constraint which fixes the maximum number of hours of French tuition he or she could afford at the given price ratio and, at the other extreme, the maximum number of hours of guitar lessons. From this perspective, it seems the choice is the same as if the consumer were choosing between bananas and biscuits. But the lack of tangibility in the music and French lessons complicates the decision to a degree that makes it qualitatively different to choosing between the fruit and the cookie. The decisive factor is the feelings he or she might have to the teacher, which can change in the course of a lesson. And the quality of what is being imparted depends critically on the attitude of the teacher, or the supplier of the service, to the person he or she is teaching. To what extent can it be said that the student actually consumes an hour of French lessons in the way he or she might ingest a banana and a biscuit? In tangibles, something is produced, exchanged and consumed. But in intangibles, production, exchange and consumption are subsumed into an interaction where value is created to validate the amount paid and demanded for it.

The value that a consumer might attach to a particular service might also not diminish as the amount of it consumed increases, as logic suggests it must in tangibles. A student, impressed by the quality of the French teaching, might even decide to consume more of it as he or she progresses through a teaching programme. Demand for guitar tuition might disappear as a result. The logic of diminishing marginal returns, the cornerstone of equimarginal choice and the demand curve in tangibles, begins to founder.

If the idea of diminishing marginal utility collapses when it comes to intangibles, then it can make no more sense at an aggregate level. There is no reason why the consumption of a

particular service by a collection of rational individuals will take a predictable pattern when plotted against price. A demand curve showing what the quantity of a service might be at any particular price is an impossibility. Identical service transactions might involve wildly different prices. Varying the price of a particular service, consequently, has unpredictable consequences. People might buy the same amount, less or more for no apparent reason. Changes in income levels will have a foreseeable effect on service consumption. The richer you are, the more likely you are to use an expensive restaurant. But the income impact on intangible consumption only suggests that individuals tend to spend more on services when they feel richer. It provides no help in understanding how much of a particular type.

With the demand curve invalidated, can analysis of supply side factors help us in deciding what the right price of a service should be? Microeconomists approach the relationship between price and supply in two ways: one is subjective and the other is objective. The objective cost tradition, which echoes the arguments of classical economic thinkers from Smith to Marx, defines the value of what is produced as being equal to its cost of production. Costs can be seen as either the price paid for an input or the objective value of what has been foregone by buying that input, or the opportunity cost. This approach is followed by most economic text books.

The subjective tradition, which is upheld by modern Austrian economic thinkers, regards supply as being an entirely subjective category. Regardless of what the objective costs of production might be, someone is only going to sell something if he or she will be made happier by doing so. Something won't be offered to the market unless this action increases the utility at the margin of the person supplying it.

The logic of both approaches is coherent when applied to tangibles. But it collapses when it is applied to intangibles. As has already been demonstrated, a marginal utility-based theory for choices can't work when a thing is intangible. It's consequently impossible, therefore, for a supplier, using the Austrian or subjective, line of thinking to make coherent choices about what he or she is supplying to a market.

Intangibility also invalidates the objective, cost-based approach to supply. How can you work out the cost of producing a particular service when there is no way of measuring its constituent parts as you can with tangibles? A cup is made with clay, paint, ceramics, heat, machines and labour. But what is good service at a restaurant made of? Should the amount invested in a

chef's education be calculated? And what exactly was the opportunity cost of the waiter's charming smile that helped you enjoy your meal so much? Was it the tiny amount of additional energy involved that could have been used for other purposes or the lengthy parenting that made the waiter such a nice person? Or is it in the waiter's genes? How do you price that, exactly?

With an intangible, unlike for a tangible, there can be no scientific way of working out the cost of each unit of production. And if it is impossible to devise a coherent production function for an individual service producer, then it is impossible to prove a stable relationship exists between services and prices at an aggregate level. As with the subjective approach to supply, objective thinking cannot prevent the disappearance of the concept of the supply curve when it is applied to intangibles.

Value in intangibles is the product of constructive human interaction

In tangibles, price is the result of the interaction, at an aggregate level, between demand for a particular product and the costs involved in producing it. Consumers make choices between goods in a coherent manner. Producers compete with each other using price for a share of the market for those goods. But with intangibles, there is no demand curve connecting the levels in the price of a service and the quantity of it consumed. There is no supply curve between price and the quantity supplied. There are, instead, a multitude of individual transactions, each involving a particular consumer and a particular producer at a particular moment that cannot be systematically compared.

When it comes to intangibles, the market not only doesn't work. It actually doesn't exist. It's the reason why it is so hard for people supplying services to devise a coherent pricing strategy and for consumers to work out what they should in fact be paying for them.

How then can exchange be explained in intangibles and what determines the price of the intangible being exchanged? Value-creation in intangibles involves an interaction, not an exchange. Individuals – whether they are teachers or musicians – can't create value unless there are other individuals reacting to their education or their art. This value is only intuitively obvious and is shared between the individuals involved in the interaction. The price sought and paid by the parties to such interactions is also intuitively determined, though reference will be made to identical or similar interactions perceptible to those parties.

This approach to intangibles also delivers important insights into the validity of intangible capital. Value in intangibles is created solely through interactions. These interactions cannot be physically stored, only remembered, and they cannot be exchanged as tangibles can be since they have no physical existence. In intangibles, capital is conceptually impossible. Attempts can be made to quantify the value of knowledge and experiences stored in the minds of everyone operating in a single market or economy. But these are bound to be imprecise to the point of uselessness. If value created in intangible interactions can only be intuitively perceived at the level of the individual, it follows logically that any attempt to measure it in aggregate would be misleading and probably foolish.

The invalidity as culture as capital

This paper has set out a range of objections to the idea of intangible capital, including capital in the form of culture.

- 1 Conventional concepts of capital are imprecise to start with.
- 2 Ideas and other forms of intangible capital are non-scarce and objectively non-definable. This invalidates the concept of property rights in them.
- 3 Ideas and other forms of intangible capital cannot be stored or traded and are not products in the sense economists should understand and analyse them.
- 4 Property rights in ideas and other forms of intangible capital are legal and accounting constructs that lead to inefficiency and unfair outcomes that reduce human welfare.
- 5 Conventional economic theory, the intellectual foundations upon which the concept of intangible capital is constructed, founders and fails when applied coherently and consistently to intangibles

Conventional economists fail to address these issues and have applied a defective and largely redundant concept of capital to culture. In line with their treatment of tangibles, they have distilled the idea of cultural capital even though this is indefinable, non-scarce, non-storable and non-measurable. In other words, conventional economists are trying to apply economic ideas to a critical source and expression of human activity which they have don't understand.

Cultural expressions – music, paintings, sculptures, theatrical performance etc – are intangibles to which the analysis in this paper can be applied. In culture, as it is in all intangibles, value is

created through interaction at the level of the individual. It is intuitively not objectively obvious. It can't be stored, traded or manipulated like tangibles can be. *Capital in the form of culture doesn't exist*. Attempts to capitalise culture entails the imposition of legal and accounting concepts that are intellectually invalid and are as likely to deter creation as stimulate it. Its most likely consequence is to transfer the value and wealth from the participants in a cultural exchange to the owners of cultural capital. It also exposes culture to unwarranted and unnecessary intervention by the state.

The consequences of decades of misconceived economic analysis are reflected in the behavior corporations deemed to own cultural capital and the state, which has assumed the role of regulator and, in some instances, monopoly owner of some forms of cultural expression. The transfer of wealth and value is reflected in the highly unequal distribution of income and wealth within most cultural industries. Owners and managers of cultural companies enjoy privileges unimagined by culture creators. Low pay, underemployment and unemployment are endemic in many cultural industries. Culture is seen as being largely of interest to high-income people¹¹.

The enforcement of property rights in culture has led to the emergence of artificially large culture companies. These are mainly based in metropolitan centres which disproportionately account for cultural employment, thereby stripping cultural talent from non-metropolitan and rural areas. Government action to address low incomes and high unemployment in culture has tended to reinforce these trends. Much of the public investment in culture industry infrastructure has been concentrated in metropolitan centres. Government policy-making has been distorted by the influence of profit-seeking culture corporations – the main champions of extending still further intellectual property rights – and bureaucracies. This is to the detriment of spontaneous, non-metropolitan and non-corporate forms of cultural activity.

These deficiencies are the result from the application of conventional economic thought to intangibility. That culture, the fruit of natural and spontaneous human capacities, should have become subject to corporate and state control is perverse. The internet and low-cost digital storage provide a unique opportunity for culture creators and workers to break free from the grip corporations and the state exercise over the sector. The threat to their potential to support growth in value-creating human activity is the application by business and government of misconceived policies promoted by the false idea that there is such a thing as capital in the

form of culture. The arguments against cultural capital and intangible capital expressed in this paper provide the intellectual foundations for an alternative approach to supporting growth in cultural creativity, employment and income.

The first step is to halt and reverse the trend for ownership to be extended and enforced over ideas and creation. The second is to recognise that value in culture, and in all intangibles, is the product of spontaneous interaction between and among participants in an intangible transaction. Associations of culture creators and workers interacting with minimal intermediation by the state and the corporation with the communities they serve offer the best way of increasing creation, employment and income in the sector. The government, instead of trying to define and regulate culture, should focus on investing in the infrastructure the sector needs: low-cost and widely-available culture education and vocational training; the means by which cultural communities can interact and the basic physical infrastructure culture creators and workers require in the places where the communities they serve reside. But such investment should follow spontaneous interaction within cultural communities themselves, one they are liberated from the misplaced attentions of the state and the corporation that are rooted in a profound failure of economic thought.

Notes

1 The initiative is designed to celebrate Europe's cultural diversity and to promote cultural activity. The impact of the initiative was assessed in the third European Cultural Capital Report which covered a range of issues including examples of failure and the increasing cost of the bidding process associated with the programme. City of Culture initiatives have now been launched at the national level. The UK City of Culture programme was launched in 2010. Londonderry/Derry is the first host city and its programme of activities is running this year. The second City of Culture programme will be held in 2017. The growing interest in culture as a source of output and employment is reflected in the creation of the Institute of Cultural Capital (ICC) as a strategic collaboration between the University of Liverpool and Liverpool John Moores University (LJMU) to assess the long-term impact of Liverpool being the European Capital of Culture in 2008. It aims to improve policy-making around cultural innovation and practice. The institute defines itself as an academic research institute "and our work aims to promote a cultural society for all, shifting the general perception that 'culture' is simply about ideas and artifacts or venues and performances, but is more about everything we do together."

2 Book I, Chapter III, *The Positive Theory of Capital*, Eugene Boehm-Bawerk, 1888.

3 "The history of capital theory after Ricardo, through Boehm-Bawerk and up to Wicksell, was confined...to the examination of working capital not fixed capital..." *Economic Theory in Retrospect*, Mark Blaug, 5th Edition, Page 93. "...capital is an input whose use necessarily involves the passage of time and, conversely, that any output whose production takes time must necessarily employ capital as an input as a direct consequence of the time-consuming character of the production process." *Economic Theory in Retrospect*, Mark Blaug 5th Edition. Page 489.

4 *Intangible Capital & Economic Growth* by Carol Corrado, Charles Hulten and Daniel Sichel. The authors were then employed by the Federal Reserve Board, the University of Maryland and the NBER respectively. The report is one of a growing number that argues that intangible is an economic concept and that more should be done to make it possible to create intangible capital.

5 From private correspondence with the author in 2011.

6 The 10 largest companies quoted on the LSE on 31 December 2012 in terms of market capitalization were Shell, HSBC, BP, Vodafone, GSK, BAT, SAB Miller, Diageo, BG Group

and Rio Tinto. HSBC's intangible balance sheet assets accounted for 99 per cent of the total. Rio Tinto, a mining company, had intangible assets that accounted for 30 per cent of the total. The fastest growing companies of the modern era have generally been those with the highest proportion of intangibles in their balance sheets: Microsoft, Google and Facebook. An example of the importance of intangible assets is the Guardian Media Group (GMG), which reported in its financial statement for the year ending 1 April 2012 that it had total non-current assets of £538.4 million. Of this figure, only 6.1 per cent took the form of tangible assets: property plant and equipment. The rest comprised goodwill and other intangible assets (15.4 per cent of the total) and long-term financial investments (78.4 per cent). The GMG's balance sheet treats all three groups as equivalent despite the fact that its intangible assets are the only ones on its balance sheet directly related to its core activity, which is publishing The Guardian and The Observer.

7 The author would like to acknowledge that the discussion of the defence of intangible capital is based Against Intellectual Property by N Stephan Kinsella published by the Ludwig Von Mises Institute in 2008. It can be downloaded from the Institute's website.

8 Economists are more than a little uncomfortable with the idea that the demand curve, without which economics cannot exist, is based on the concepts of utility and marginal utility. Most basic economics text books start with a discussion of aggregate demand and supply and only examine the utility foundations of that idea later. It is as if they already know that the foundations are shaky and prefer to sell the complete building first. Some thinkers within the marginalist tradition have been prepared to denounce indifference as being an impossible concept. *“Every action necessarily signifies a choice, and every choice signifies a definite preference. Action specifically implies the contrary of indifference....If a person is really indifferent between two alternatives, then he cannot and will not choose between them. Indifference is therefore never relevant for action and cannot be demonstrated in action.”* Page 225-226, *Towards a Reconstruction of Utility and Welfare Economics* by Murray Rothbard, in *The Logic of Action, Volume 1, Cheltenham, UK*. This is an articulation of the fable of Buridan's Ass which died of starvation because it couldn't decide which of two equally desirable balls of hay to eat. Rothbard, an American anarcho-libertarian, defined himself as being an adherent of the Austrian tradition of economics which originated with Kurt Menger and was passed on through Bohm-Bawerk, Von Mises and Hayek. The Austrian challenge to

indifference is, however, a debate within neoclassical economics, not an attempt to demolish it. Austrian thinkers, who are influential within American libertarianism, also go further than conventional neoclassical economists by arguing that value is utility.

9 The low levels of pay and high levels of underemployment and unemployment among cultural workers is a key factor deterring people from working class and low-income backgrounds developing cultural skills. In many cases, only people with sufficient income and leisure time can afford to develop cultural skills and participate in cultural industries. This is creating a class divide among culture consumers, as anyone studying those queuing for low-cost tickets to any artistic performance will observe. Tickets for the London Promenade concerts are set at bargain levels. Practically everyone buying them are, however, middle class.