



# Producing the Future

Understanding Watershed's Role  
in Ecosystems of Cultural Innovation



By Graham Leicester and Bill Sharpe  
International Futures Forum

**WATERSHED**





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Foreword: written by John Knell, The Intelligence Agency  
and Dick Penny, Managing Director, Watershed

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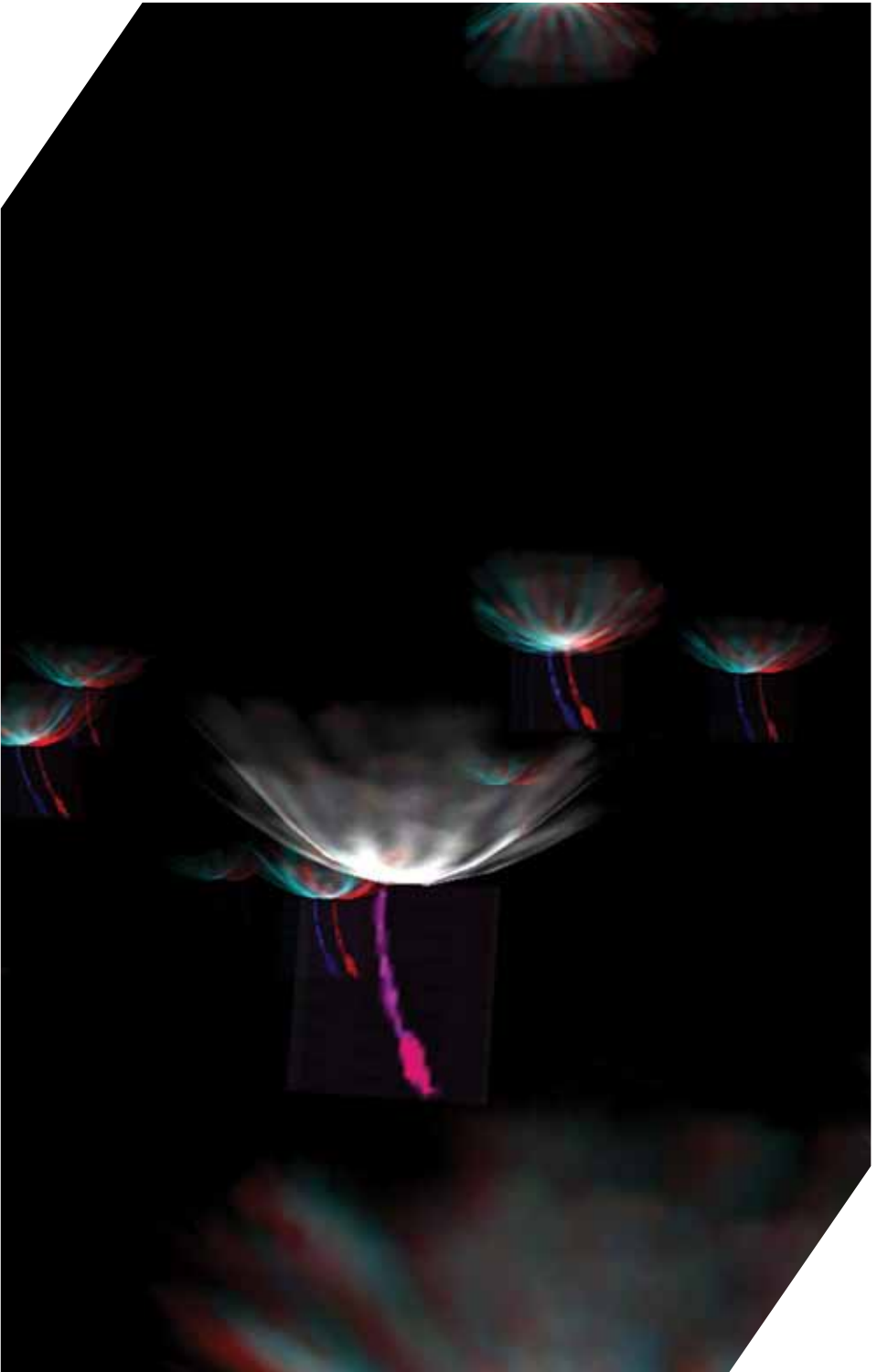
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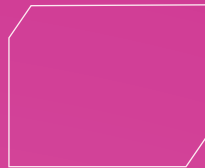
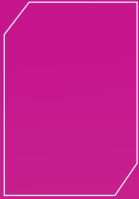


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# Foreword





Watershed is an uncomplicated organisation operating in a complicated space.

Uncomplicated in the sense that Watershed's essence has always been clear – well clear to the host of collaborators at least – namely a cross-artform curator, producer and venue seeking to generate exemplary cultural experiences.

That essence has animated all of the commissioning, exhibiting, producing, and participation activities, rooted in the spirit of co-production with artists and audiences.

But the more defining feature of Watershed is that it has always sought to create value by occupying a 'complicated space' – acting as a bridge between new ideas, talent and practice emerging from the arts and a host of new innovations within participatory technologies.

Holding open and bridging these creative ecologies has required Watershed to tentatively learn how to curate ideas, talent, and inter-disciplinary collaborations so that artistic visions and novel collaborations can flourish. As the pace of development in the Watershed model has accelerated so Watershed has placed increasing store in continuously seeking to understand where and how value is created, and for whom.

However, it is only with the benefit of some sober reflection, some genuinely fresh thinking and the focused use of the rear view mirror that Watershed has begun to piece together the value story in this complicated space.

**John Knell**  
***The Intelligence Agency***





In looking to the future we've had to review what it really means to be an open innovation hub, connecting ideas and individuals across a wide range of creative, cultural and commercial constituencies. And we've had to reflect on what we've learned in trying to build a cultural programme that showcases talent and rewards the curiosity of all our collaborators and audiences.

A vital partner in our efforts to better understand these questions has been the International Futures Forum, who have brought to the party some deep and innovative thinking on the question of value creation both in the arts and much more widely. This study, the result of a two year inquiry by the IFF, began as we opened the Pervasive Media Studio, another gear change in our innovation and talent development practice. It follows on from earlier studies such as *Watershed: Partner Value Review* by Peter Boyden Associates (2004)<sup>1</sup> and *Crossing Boundaries: the role of Cross-Art-Form Venues in the age of Clicks not Bricks* (2008) by Tom Fleming Creative Consultants.<sup>2</sup> We have also commissioned a number of short reflections from collaborators to offer further insight on the ways in which we work.<sup>3</sup>

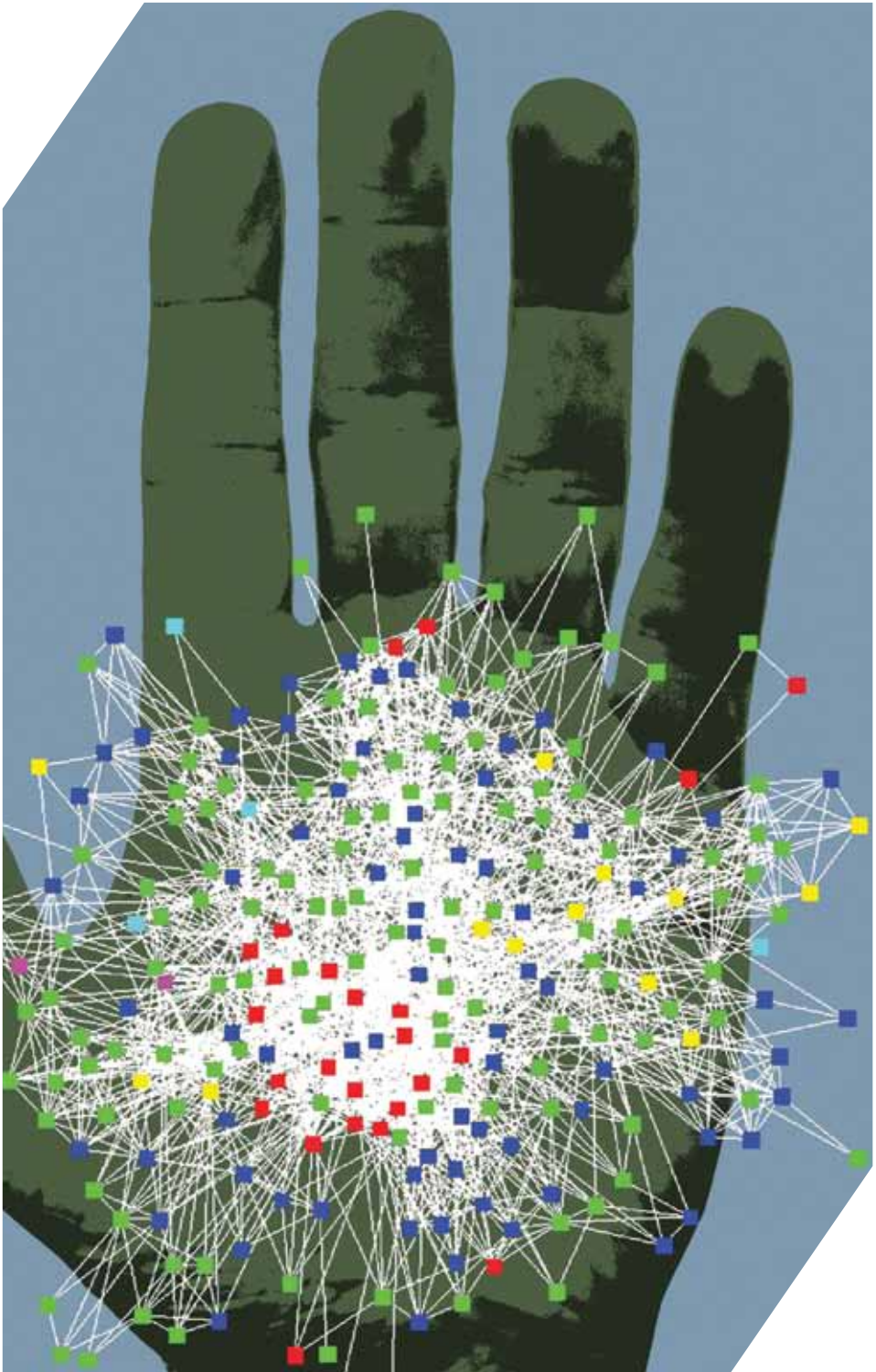
## What have we learned as a result?

With the increasing integration of digital technologies into our creative practice, we gained a reputation as a digital innovator, but this is only a small part of the Watershed story. We have come to fully understand how much we value our central role as a producer and developer of talent; the high degree to which collaboration and innovation have become central to our practice; and perhaps most importantly that Watershed has a key role to play within a broader creative ecology, which we have helped build, but which ultimately sustains us. However much Watershed gives to the creative ecosystem which it inhabits, it receives much more back in return.

We hope the study engages your curiosity and we look forward to your feedback on our ongoing journey of exploration and development.

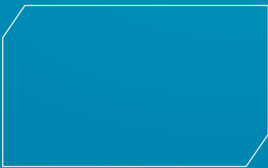
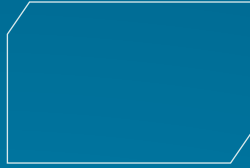
We thank everyone who has participated in the many sessions that fed into this work, Bill Sharpe and Graham Leicester of the IFF for their continuous probing, codification and testing, John Knell for helping us shape our response and Arts Council England for their financial support.

**Dick Penny**  
*Managing Director, Watershed Bristol UK*  
April 2010





## Introduction and Summary



## Introduction and Summary

Can we help people who fund the arts develop better policies if we use ecological thinking to understand how the arts work in society and in the economy?

That is the disarmingly simple question International Futures Forum took on several years ago. We have worked since with a wide variety of partners to address it: to understand what makes for a healthy, creative, innovative ecosystem, and how such a system can be better supported by government and others.

More recently we have worked closely with Watershed in Bristol to put our emerging ideas into practice.<sup>4</sup> We have used our new-found understanding of ecosystems and economies and their relationship to address the following more specific, but equally fundamental, questions:

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*What value does Watershed generate as a whole, as a creative ecosystem?*

*How does Watershed generate this value in practice, in its own terms?*

*How can Watershed increase the value it provides?*

*How can government or other investors best support or invest in Watershed as a creative ecosystem?*

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This report offers a case study of Watershed in these terms – where Watershed stands proxy to some extent for all kinds of other creative organisations. Using the new conceptual framework derived from our in-depth study it outlines an understanding of what it is that Watershed does that people so admire, how it does it, and how it might be supported. We find that Watershed is a producer of producers, and an ecosystem of cultural innovation.

## One Ecosystem, Many Economies

Ideally this report should be read in parallel with the comprehensive description of our thinking in Bill Sharpe's set of essays *Economies of Life: patterns of health and wealth*.<sup>5</sup> But it is also written so as to make sense on its own, and therefore shares some material in common.



To summarise the central thesis, we have found that everyone in the arts and cultural sector is struggling with talk about 'value'. It is no good trying to relate all the value of the arts and culture to monetary valuations, and equally unhelpful to try to justify the arts as some kind of special case, different from all other spending priorities and subject to unique criteria.

We believe we have come up with some fresh concepts and language to tackle this dilemma. We find the problem lies precisely in the default assumption that there is only one economy in our lives – 'the' economy which is the one based on money.

Our position is that there are *many* economies, of which the one based on money is just one, and that they all contribute to the health and sustainability of our shared lives; each one supports a pattern that combines individual and shared valuation in a unique way.

Our habit of taking 'economic value' to mean 'monetary value' is at best misleading and in general nonsensical – most value has nothing whatever to do with money. No one economy should be elevated into the sole determinant of value; they must all be kept individually healthy, with currents of value passing between them in mutually sustainable ways. This is what it means to think economically.

The essence of ecological thinking is to see the pattern of life as a connected whole. There is just one overall eco-system of our lives, and within it there are many economies that support different ways of sharing and exchanging things, knowledge, and experience.

The monetary economy is all about alienable value – it rests on the idea of moving around ‘property’ – things we own and can give to other people. We have no simple way of describing the opposite – things that we own but cannot give to other people. What things mean to me in my own life is inalienable – I can share my taste in music but I cannot give it to you. It is proper to me; a quality of my life.



So, making meaning for ourselves stands at the other economic pole of our lives; the economy of meaning is the economy of inalienable value. We find we can discuss art as the currency of this economy; art is the currency of experience, putting our unique individual experiences into motion amongst us as shared meaning.

This approach has several benefits. As soon as the money economy is dethroned from its position as the arbiter of all ‘economic’ value, we can start to bring ecological concepts into the heart of economic thinking, understanding economies as patterns of shared life. We can explore what keeps each economy healthy, what sort of wealth each one accumulates, what sort of policies are most supportive of innovation and sustainability and so on. We can also explore boundaries, and how resources should move between economies in ways that are mutually sustainable and do not corrupt them. We can make distinctions between ‘outcomes’ that are intrinsic to an economy and its proper functioning, and those that entail using its resources for other purposes in other economies.

We find this new way of thinking breaks free from the eternal cycle of arguments about intrinsic value, instrumentalism and so on and speaks to the reality of the world of producers who are constantly reconciling meaning and money as an active creative process itself. It also brings into the foreground the role everyone in society plays as co-producers of every sort of value, and helps us focus on enhancing the artistic potential of every individual in our shared cultural life.

## Watershed: an Ecosystem of Cultural Innovation

Whilst this all sounds rather theoretical, and indeed does betray our high intellectual ambition, we have also been concerned with finding concepts and language that relate usefully and immediately to the world of practice.

We have been fortunate to enjoy a close relationship throughout this work with Watershed in Bristol. In the past year in particular we have been able to work closely with Watershed to see whether these new ideas offer a better understanding of its successful practice that might enable it to be enhanced and extended – and made more transparent to funders and other supporters.



But the questions raised in our study of Watershed also lie at the heart of a more general inquiry into what makes for a healthy creative ecosystem of innovation. As such we believe this work has relevance for other organisations, other cities, other regions seeking to stimulate the creative economy and to enhance the role of the arts and culture.

There are implications too for policy. Watershed and innovative creative ecosystems like it are likely to thrive whatever the policy landscape. But there are ways in which policy might adapt in light of our findings to become more successful in realising its stated intention to use public funding to 'stimulate creativity'.

The report falls into four parts.

**Part 1** provides an outline of the current policy context – and the ways in which it struggles to support in practice the creative activity it advocates in theory;

**Part 2** summarises the insights into this conundrum that arise from thinking more rigorously about what makes a healthy creative ecosystem tick in its own terms and the ways in which it can interact with different economies, including the monetary economy;

**Part 3** applies this new thinking to Watershed. It introduces a three horizons framework to understand Watershed's role in cultural innovation (moving the culture forward over time). And reveals making money and making meaning as a central dilemma that needs to be creatively resolved every day, in the moment, case by case and decision by decision;

**Part 4**, finally, offers our learning from this exercise. It suggests ways in which Watershed might both improve and become more explicit about the value that it offers. And it outlines the policy transition needed in the arts and cultural sector towards providing enabling conditions for cultural innovation: a healthy creative ecosystem, liquidity of meaning providing a rich source for new relationships, and a sustainable relationship between the commercial economy and culture as an abundant resource, between money and meaning.

This is very much work in progress. There is a lot more work to do to turn the ideas here into working policy and management tools. But we hope that the story told in this report will help to stimulate that debate. It certainly convinces us that this is work that needs to be done, for which these ideas provide a useful start.







*Part 1:*  
**Today's Policy Context**



## Today's Policy Context

Watershed is a cross-artform organisation and venue, based in Bristol. We cannot make sense of it except in context. Part of that context is the pattern of recent policy thinking linking arts and cultural organisations with the creative economy and the wider concept of a creative ecosystem.

Watershed is in theory well placed to benefit from this trend in policy thinking. But in practice the translation of policy into practice, via a diverse set of funding instruments and agencies, leaves Watershed and places like it either falling between the cracks or bending behaviours to satisfy funding criteria rather than the creative needs of the wider ecosystem.

This first chapter therefore briefly reviews the major threads of current policy, the place they assume for the arts, and the more fundamental questions that must first be addressed if government is to realise its aim of effectively using public funds to 'stimulate creativity'.

## Creative Ecosystems

Since the rise of Silicon Valley through the 1980s and the birth of the digital age there has been a fascination with the characteristics of highly creative, innovative regions.



This thinking has helped shift traditional industrial innovation policy away from the approaches of the 1970s and 1980s – picking winners, investing in specialist entrepreneurs, improving training etc – towards a more systemic approach. Policy is now increasingly about creating the enabling conditions for innovation in chosen places and spaces, hotspots, clusters, cities, regions. It is about fostering creative ecosystems.

The core characteristic of such spaces is that they enable innovation – the capacity not only to invent new ideas, but to put them into practice. In the words of Geoffrey Crossick they are simply 'spaces in which something can happen.'<sup>6</sup>

Bristol is such a place. The World Economic Forum recently developed a 'heat map' index of 100 creative environments combining innovation talent with a culture of collaboration and willingness to source ideas outside traditional boundaries.<sup>7</sup> The analysis identified Bristol in the UK's South West as a 'hot spring' of innovation – 'a small and fast-growing hub' that has already established itself as 'a relevant world player' and that has the potential to develop further. In other words it is already gaining global attention as a space where things can happen.

## Creative Economies

There is also increasing interest in innovation as part of a 'creative economy', loosely defined as that part of the economy involving the cultural and creative industries. This has attracted a lot of attention in recent years in the UK because, as a succession of government and think tank reports have highlighted, this sector of the economy seems to be doing rather well, and the UK seems to be rather good at it.

*Creative Britain*, the UK government strategy document for the creative industries published in 2008<sup>8</sup>, sets out a comprehensive government strategy to develop and grow the creative industries: nurturing more creative talent in the classroom, improving business support services and – inevitably – growing creative clusters and promoting the UK as 'the world's creative hub'.



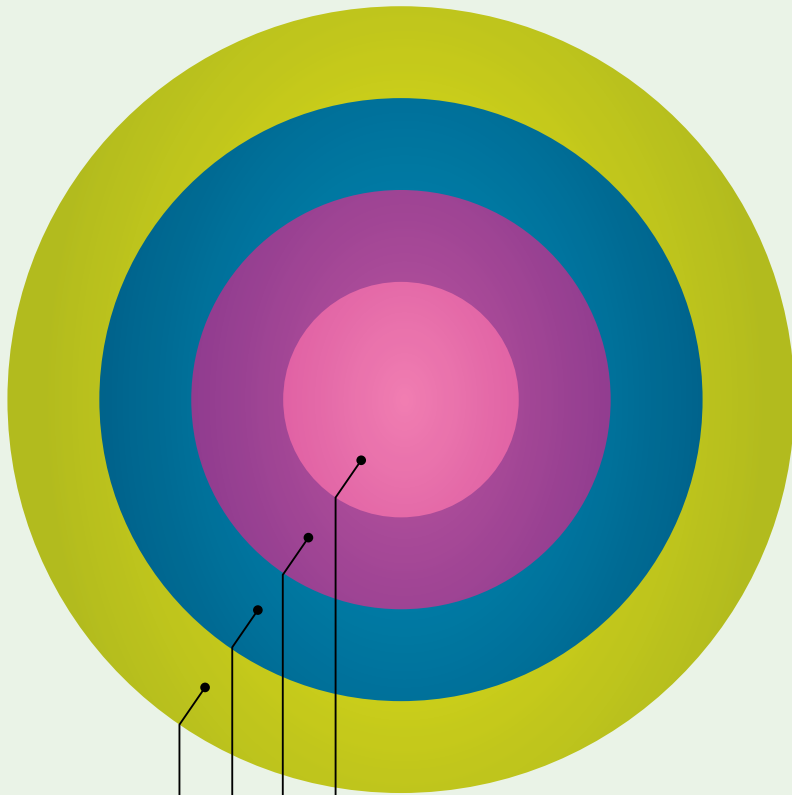
The paper was published by the Department for Culture Media and Sport – acknowledging the essential link between the creative economy and the cultural sector. It draws on a stylised representation of this relationship from an earlier report, *Staying Ahead* (Andari et al)<sup>9</sup>, in which the 'core creative fields' are seen as feeding the cultural and creative industries, which in turn feed the wider economy (see Fig.1).

This, if you like, is one view of a creative ecosystem. It has the production of 'pure creative expressive value' at its core. And at the heart of *Creative Britain* is a desire to strengthen that core: 'The bedrock on which the strategy is built is the Government's fundamental belief in the role of public funding to stimulate creativity.'

## The Arts and Cultural Sector

This analysis has put fresh wind in the sails of the cultural sector in the UK – a critical source of 'pure creative expressive value'.<sup>10</sup> It is a sector already in receipt of considerable public moneys and with a highly developed infrastructure, under the Arts Council and its sponsoring Department, to manage that support. If government wants to use public funding to stimulate creativity and a creative economy, therefore, publicly-supported arts and cultural organisations are hoping to be in the box seat, even in a recession.

The case becomes even stronger where arts organisations can demonstrate a more direct connection to commercial cultural industries like film, video gaming, software, brand management, design etc. Or if they are actively engaged in the new world of *Digital Britain*<sup>11</sup>, working with and developing the web 2.0 ways of engaging and co-creating that come naturally to digital natives and are spawning new genres, new businesses and new literacies.



**Core Creative Fields—**  
Commercial outputs possess a high degree of expressive value and invoke copyright protection.

**Cultural Industries—**  
Activities involve mass reproduction of expressive outputs. Outputs are based on copyright.

**Creative Industries and Activities—**  
The use of expressive value is essential to the performance of these sectors.

**The rest of the Economy—**  
Manufacturing and service sectors benefit from and exploit the expressive outputs generated by the creative industries.

Fig 1: Core Creative Fields.

## Watershed

Watershed in Bristol is one such organisation. It is a venue that has become a central space in the city for cultural exchange, promoting engagement, enjoyment, diversity and participation not only in film but in more diverse media arts and the city's burgeoning creative economy. It is one of a number of cross-artform and media venues in the UK that have flourished in the age of clicks as well as bricks, as described by Tom Fleming in his report *Crossing Boundaries*.<sup>12</sup> It is a space that people and organisations naturally gravitate towards to stimulate creativity and to 'make something happen'.

It is no surprise then that Watershed seems to have found a comfortable niche at the heart of emerging government thinking:

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*'Watershed is a prime example of a highly connected, flexible, porous piece of cultural and creative infrastructure, of which there are too few examples. Watershed is more than just an arts cinema. It is at once a cultural centre, a business broker, a social networker, a research and innovation facility, a café/bar, and a cultural tourist attraction.'*

—UK Creative Economy Programme

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There is plenty of anecdotal evidence to suggest that without this diverse, eclectic, creative space and radical spirit the city of Bristol would have struggled to become a 'hot spring of innovation'.

## Supporting a Creative Ecosystem

But here's the problem. Funding systems in the arts and cultural sector have not yet made the shift described earlier to providing the enabling conditions for innovation. The funding for each of the many facets of Watershed's requisite diversity inevitably comes out of different pots, from different Ministries and agencies, each grant with its own objectives and performance criteria attached. Whilst what is appreciated at Watershed and other places like it is the rich, emergent capacity of the whole, funding tends to support only the parts – and then in mildly prescriptive terms that make emergent creativity less likely. Government wants to nurture the creative ecosystem, the overall habitat, but is structured only to support individual species – sometimes at each other's expense.

This is not just another bleat about the need for ‘joined-up funding’. The challenge runs far deeper than that. How do you fund an ecosystem, rather than its individual components? And is money in any event necessarily what a creative ecosystem most needs in order to thrive?

Think of the ecosystem as a pot plant. Give it some money and ask it to grow. If that fails give it some more – ‘joined up’ this time and aligned around a set of smart indicators. The experiment still fails.

If we really want the plant to grow we have to understand the complex system of which it is a part. We have to understand how growth occurs. We need to understand the system *in its own terms*. Then, and only then, we might be able to use money to provide what the system needs – some fertiliser, perhaps, or a larger pot. But our support is worthless, and possibly counter-productive, without that knowledge.

So it is with Watershed – and with any complex creative ecosystem, be it a locality, a region, a city, an organisation. If we want to keep it healthy and see it grow as a *creative ecosystem*, then we must understand how it operates in its own terms.

Light Up Bristol (dshed.net/content/light-bristol). Photo by James Burniston Photography.





*Part 2:*  
**Homo Ecologicus,  
Homo Economicus  
and Homo Poeticus**



## Homo Ecologicus, Homo Economicus and Homo Poeticus

It turns out that understanding how a creative ecosystem operates in its own terms is quite a big question. It is one to which a variety of scholars in diverse disciplines have made significant contributions over the years. Weaving these and other ideas together, IFF's work begins to provide a set of foundational ideas and concepts that we believe will provide a significant new framework for policy and practice for years to come.

These ideas are explored in depth in Bill Sharpe's volume of essays *Economies of Life: patterns of health and wealth*.<sup>13</sup> What follows is a necessarily brief summary of that substantial body of work. These are the main concepts that are applied in practice to understanding Watershed in the following chapters. In essence they involve thinking rigorously in three different modes about the complex human system: thinking ecologically, thinking economically, and thinking as an artist.

## Ecosystems and Economies

The obvious way to gain an understanding of a creative ecosystem like Watershed is to gain a general understanding of ecosystems – what they are and how they function – and then relate that to the specific instance of Watershed. We might then ask simply where to invest the funding, public or otherwise, to support this particular ecosystem to help it flourish.

But just as we are using a general understanding of ecosystems to gain insight into the specifics of Watershed, so we need to use a general understanding of economies in order to gain insight into how the specific example of the economy based on money might relate to a creative ecosystem.

This is a novel move for most of us. We tend to assume that there is only one ecosystem (the natural world) and only one economy (the one that is based on money). We also know that these two are related: the way we run the economy can either exploit and degrade the ecosystem or it can renew and sustain it.

But these instances in fact represent an example of a set of general principles. Ecosystems and economies are just two different ways of understanding complex systems. And they are related. The Oxford English Dictionary interestingly defines 'ecology' (the study of ecosystems) with reference to 'economy' as follows:

*ecology: the science of the economy of animals and plants; that branch of biology which deals with the relations of living organisms to their surroundings, their habits and modes of life, etc.*





The essential distinction is that ecology is a disciplined way of thinking about *what is*. It is a science that will describe exactly what is going on in an ecosystem, what flows through it to keep it healthy, what are the relationships between the various constituent parts. Economy, on the other hand, is a way of thinking about the same system from the perspective of *what for*?

These are the two stages we need to progress through to comprehend Watershed. What is going on in the Watershed ecosystem? And what is it, or could it be, for?

## Value

The shift from ecosystem thinking to economic thinking, from 'what is?' to 'what for?', is a shift in perspective. It is the value shift.

Value is not a thing and does not reside in a thing. It is a perspective. Valuing is a point of view on the world. So the 'value' of a tree depends on the viewpoint and the concerns of whoever is doing the valuing. It may bring aesthetic pleasure to the nature lover, promise commercial gain to a furniture manufacturer, or provide a comfortable nesting place for a bird in the forest. These are all ways of describing not what the tree is but what it is *for*.

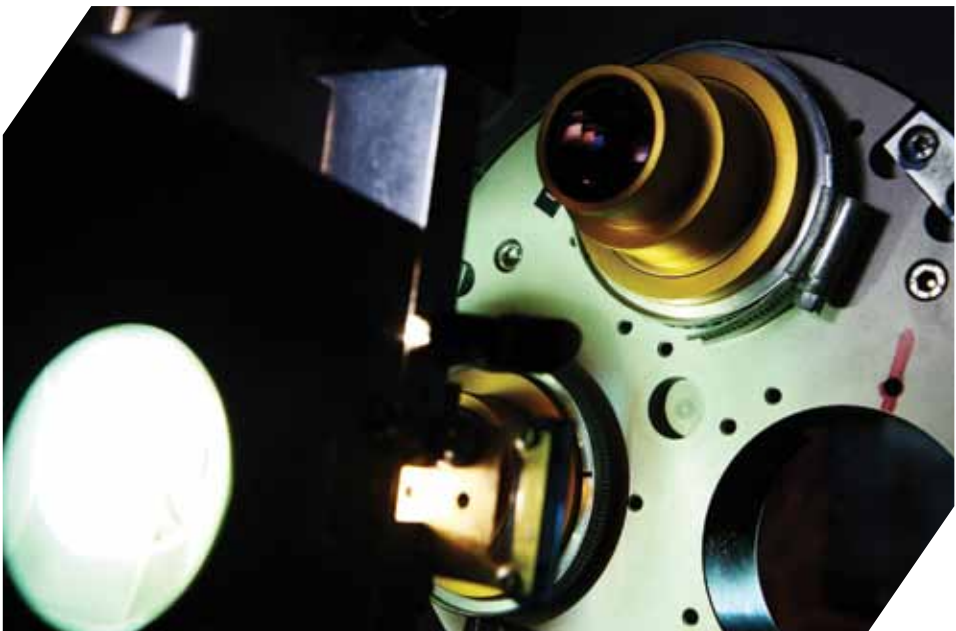
Value is never intrinsic to an object. It arises from taking that object as a matter of concern, in the framework of a particular pattern of relationships – an ecosystem, a habitat, a forest, a plantation, or a commercial economy. We know this. One man's

meat is another man's poison. A pollen grain is seed for a flower, food for a bee, metaphorical potential for a wordsmith. There is no value except as it is expressed in relationship.

It is when we make this value shift, taking something as a matter of concern, that we imply the existence of an economy – in which that value can be realised and traded. The economy brings together people who have a shared appreciation of value, a shared perspective. They do not have to have the same perspective, or value things equally – just so long as their different perspectives can be coordinated and related to each other in an economy.

To understand the nature of 'coordination', consider this example. The horizon we see from the deck of a ship is unique to the individual. It is an optical phenomenon rooted in the observer. And yet we talk of it with others as if it is there, and that they see the same thing. Although each of us perceives a unique horizon, our knowledge that this is a shared experience common to all individuals allows us to name a single phenomenon.

It is the same with value in an economy: our perceptions are coordinated to the point where we believe there is a physical phenomenon out there (value) which in reality is the consequence of our being in relationship with others. Value is always for a life, in a pattern of other lives.



## Value Constellations

Some of the more advanced business thinking is beginning to appreciate this. Normann and Ramirez, for example, start from the observation that a business does not generate value, it configures value creation. Value is co-produced with the customer, who generates the value of a product by putting it to use.<sup>14</sup> And the product will become more valuable if it can be placed in a complex array of relationships that will give people the opportunity to make more imaginative



uses of it. In other words, the product can be seen as configuring a constellation of different kinds of value, and this value can be intensified by enhancing the variety of ways the customer can build relationships around it.

An example might be a cup of coffee. Its value is only realised when somebody puts it to some use, most obviously as a source of stimulus and refreshment by drinking it. But serve it in a nice place and it might be a prompt for convivial conversation. Install wifi and it might become the occasion to get some business done. Serve the coffee in a café at a cinema and it might encourage conversation about the film. Tell the story of the beans and the growers and allow people to support them through their purchase. Take some beans home... or a branded mug... to help recreate the experience. And so on.

Value does not rest in the product. Value is for a life in a pattern of other lives. And the key to success therefore is to generate opportunities for the richest set of relationships between people and product.

## Currency

An economy coordinates these patterns of valuing. But in order to develop beyond simple barter and exchange an economy needs a currency. This becomes a proxy for value in the system, such that trades can become more complex and removed in time and space. As the name implies, the currency is what flows through the system. Maintaining the health and integrity of the currency is imperative therefore to the health of the system. Elaborate agreements and cultural practices grow up to achieve that. The role of a currency is to coordinate individuals and society into a cultural system of shared order and valuing.

This might appear rather abstract. But consider some common currencies. Money, for example, is the currency of exchange. Anything can be money – shells, pieces of paper, stones. But it lies at the heart of a shared cultural system that takes these tokens as representing a particular form of value which can then



be exchanged and traded. It is an immensely helpful element in a system, which has allowed our economy of exchange to become highly complex and to grow way beyond the limits of physical exchange (as we have recently discovered to our cost).

In a similar way, measurement is the currency of science. The shared cultural system of scientific investigation relies on sound data and comparable results across teams, across cultures, across disciplines. As a result of this common currency we have seen phenomenal progress, again with increased complexity – with the latest multinational experiments at CERN emblematic of the strength of science as a healthy economy. At the same time more recently we have seen vigorous efforts to restore the integrity of the currency in the wake of doubts about the presentation of climate change data.

Votes are the currency of a democratic political system. They lie at the heart of a shared cultural practice that enables individuals and society to come to a view about government and policy. Again this currency has allowed for increasing complexity in the governance arrangements for diverse societies.

Each currency can be seen as framing an economy. And the economies overlap. Money flows through the scientific community as a currency as readily as measurement. So too does it flow through the political system. The critical thing is to maintain the integrity of currencies so that each system continues to function on its own terms – no falsification of scientific results for monetary gain, no cash for votes etc.

To bring something into circulation in a particular economy is to measure it according to the shared denomination of value in the currency of that economy. Take the old vase in the attic. We valued it previously for its place in the home – but we might put it in an antique market and find a monetary value, or into the local museum where it is valued for its place in local domestic history, or into an art gallery because it turns out it is a fine example of a particular period of ceramics. Each economy is different. Each creates a shared valuing amongst diverse individual activities.

Understanding this point is crucial. There are many economies, each with its own currency. And each needs to maintain its integrity as a shared cultural practice, or what we shall call here a cultural genre.

## Art is the Currency of Experience

The challenge for art is that it is valuable in many different economies. Hence some see it as somehow wasteful or self-indulgent to pursue 'art for art's sake'. But that is ridiculous.

Consider another practice blessed with being valued in many domains: mathematics. This too is a shared cultural system, a cultural genre, in which pure mathematicians explore new branches of mathematics motivated by the discovery of new results that advance the discipline – maths for maths' sake. Part of what sustains the genre is the passion of the people who do it.

But there is also a broader cultural engagement because of what the physicist Eugene Wigner called the 'unreasonable effectiveness of mathematics in the natural sciences'.<sup>15</sup> Mathematics advances in ways that are deeply entwined with all our naturalistic sciences, supporting within them the means of their expression. And so there is a constant to and fro between maths and other disciplines, each enriching the other (whether or not money is ever involved).

Each discipline forms an identifiable cultural genre – a distinct field of meaning constrained by a human activity system. When the field of meaning called mathematics is related to other fields of meaning, new cultural genres can emerge.

As with mathematics, so with art. Perhaps the first cave painting was done out of sheer enjoyment of the expression in itself – art for art's sake. Once done, it opened up a new way for us to relate our selves one with another. Painting became a cultural genre, as has dancing, story-telling, music and so on.







Great art of any form has an unreasonable effectiveness to relate us to each other in a way that allows us to share our unique experience of the world. It provides a medium through which we can share the inevitably individual experience of living our own lives in a pattern of other lives that has persisted through history and will persist after we are gone. Art thus intertwines with all our culture, infusing it with the means to express what we find to be the general experience of being human, and the particular path of our own life.

This is not easy. The experience of living my own life is mine alone. It cannot be traded and exchanged and shared like other commodities. Just as I cannot sell you my haircut, nor can I sell you my experience of listening to a Beethoven symphony, or falling in love, or walking on the beach on a summer's evening. These experiences are mine.

But, like the experience of the horizon, they are also part of the shared condition of being human. They draw from and contribute to the stream of human culture and we would not be able to develop and grow into our full humanity if this were not the case. That is the force of Clifford Geertz's observation: 'Without man, no culture. Equally, and more specifically, without culture no man.... We are in sum, incomplete or unfinished animals, we complete or finish ourselves through culture – and not through culture in general but through highly particular forms of it'.<sup>16</sup>

We can do this because, as in other spheres, we have developed a currency that allows us to weave together our personal and individual experience of living with a collective experience of being human. Art is the currency of experience.

## A Football Game

This may be sounding a little esoteric. So let us consider a simple example in which multiple economies and multiple currencies are involved: a professional football game. Twenty-two players on the pitch, each paid to perform, a referee and two assistants, also paid to officiate, and a crowd of several thousand who have paid a fee for admission (we will leave the worldwide TV audience, sponsors, advertisers etc aside for the moment for the sake of simplicity).

An analysis from the perspective of the money economy of exchange suggests that the fans have parted with some money in exchange for watching the game, some of which has been passed to the players and the officials in exchange for providing the spectacle. The rest is profit.

But this is also a sporting contest, a game. It is part of a series of matches that will lead eventually to declaring one team 'champion' of the league. And it is also recognisably a football match, played to a set of rules that allow for others to play the same game and for scores to be compared.

There is another economy at work, therefore, in which the currency is the score. This allows us to compare results between games. It is important that the integrity of the currency is maintained: the officials must make sure that the rules are upheld and that the score therefore reflects the true state of the competition. This common currency also allows for the game to develop – reviewing the rules from time to time, for example, to make for more goals or more exciting games. The currency of the score maintains a specific economy of meaning, a cultural genre, called football as a competitive sport.



Circular Rules Football at Igfest, 2009 (igfest.org).

But if you were to take your child along to the match you would certainly not suggest that they just watch the scoreboard. Because watching the game – just like playing the game – is also an *experience*, which will be appreciated by everyone in the crowd differently. The conversation after the game may be about the score – but that will be the least interesting part. It will rather be a sharing of multiple perspectives. Some will have noticed a beautiful pass, others a niggler off the ball, others will have been reminded of seeing the same fixture in years gone by with a friend now departed, others will question the referee and his judgement at critical moments in the game. And the conversation, the sharing of perspectives on the experience, will continue long after the final whistle, echoing through workplaces and news pages for days – until the next game comes along.

Two simple observations arise from this example that hold true across the board. First, although there are overlapping economies at play in this complex human

interaction, there must be strict observation of the boundaries, connections and possible conflicts between them.

In particular the money economy. Because money's role in the system is to act as a medium of exchange. Hence its natural tendency is to split systems apart. Money can take something from its central role in one system and place it somewhere else. It may still be valuable in that new setting, but it may no longer be able to play the central role it was playing before. Like the tree removed from the forest to make furniture.

So it is fine for players to get paid to play, or officials to be paid to officiate, or fans to pay to watch. That allows money to flow through the system whilst maintaining its integrity: each element can still function in the system that is the game. That is not so if we use money to pay the officials to secure the result of the game, or the players to deliver a certain score. To avoid the tendency of money to fracture complex relationships it is best to keep monetary transactions at the margins. It is OK to pay to get in, but not to pay the referee for the right result.

Secondly, note that the most fecund economy around the game is the sharing of experience. Like any other commercial spectacle, the game may have been arranged to make money. But its value for the participants (players and spectators alike) arises from the meaning that arises from the experience. And that meaning grows in the sharing.



Happy Packages by Thought Den and Mobile Pie. Media Sandbox 2008 (mediasandbox.co.uk).





*Part 3:*  
**Watershed as a Cultural  
Innovation System**



## Watershed as a Cultural Innovation System

With this analysis in mind, we can now see Watershed in a new light. It is a creative ecosystem, operating in many different and overlapping economies. And it is an innovator. It is pushing the creative boundary not only in the invention of new work, but in the subsequent consolidation of that work in new patterns of shared meaning, new cultural genres.

A healthy creative ecosystem will always be generating new ideas, new possibilities, new meanings. This is the creative process. But equally creative is the process of negotiating the interaction between the multiple economies that will always be in play. Watershed's particular role is as an innovator (not just an inventor) in the economy of meaning. It is a place where novel things happen that are subsequently translated into sustainable new patterns of shared expression and activity. We call this 'cultural innovation'.

Every economy configures a particular shared pattern of human life, has its own particular measures of health and wealth and must be understood in its own terms. In order to support Watershed's role as cultural innovator we need to understand how these economies – especially the economy of money – might link together so that they all grow in appropriate and mutually supportive ways.

To tackle this we need a way to view the long term rise and fall of different patterns of value creation, and the tensions between them. We have found two tools useful in tackling this in practical situations: dilemma thinking, and three horizons.

## Three Horizons

The mathematician and philosopher Alfred North Whitehead talked about a 'creative advance into novelty' as the ultimate ground of all being. Generating richer and more intense conversations, opening up new possibilities, triggering new connections, new configurations – this is what it means to generate 'more' meaning, advancing into novelty. We have found the 'three horizons' model (see Fig 2) of longer term change a useful framework for understanding the dynamics of this advance.<sup>17</sup>

The first horizon – H1 – is the dominant system at present. It represents 'business as usual'. As the world changes, so aspects of business as usual begin to feel out of place or no longer fit for purpose. In the end 'business as usual' is superseded by new ways of doing things.

Innovation has started already in light of the apparent short-comings of the first horizon system. This forms a second horizon – H2. At some point the innovations become more effective than the original system. This is a point of disruption. Clayton Christensen called it the 'innovator's dilemma': should you protect your mature business that is on the wane or invest in the innovation that looks as if it might replace it?

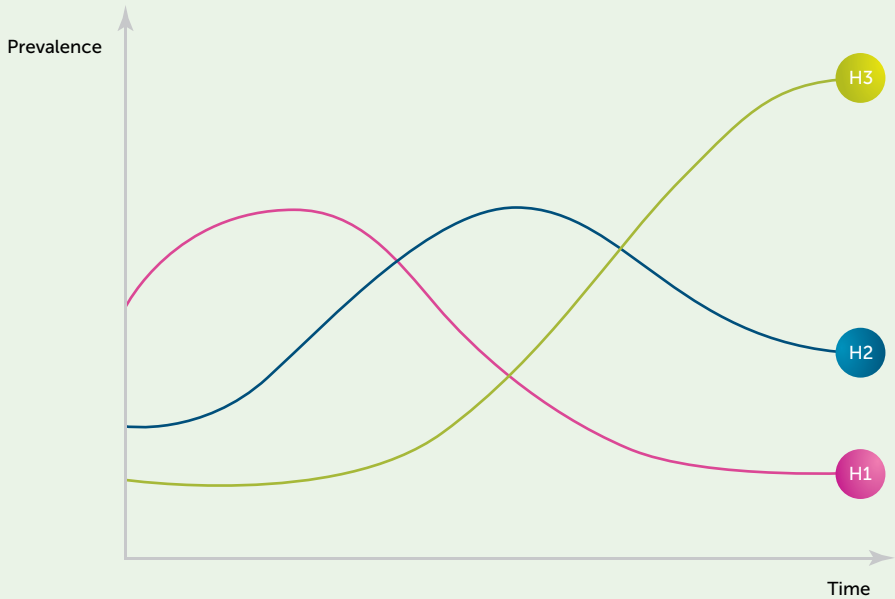


Fig 2: The three horizons represent shifting patterns over time as conditions change

Meanwhile, there are other innovations happening already that today look way off beam. This is fringe activity. It feels like it is a long way from H1, based on fundamentally different premises. These are the first stirrings of a third horizon – H3. This horizon is the long term successor to business as usual, the product of radical innovation that introduces a completely new way of doing things. We always have the chance to configure new sources of abundant life.

The advance into novelty is an adaptive transformational process, a journey towards the third horizon. It is by no means an easy process. For the first horizon's commitment is to survival. The dominant system can maintain its dominance even in a changing world either by crushing second and third horizon innovation, or by co-opting it to support the old system. These behaviours lead to variants on the smooth transition depicted above – notably the common 'capture and extension' scenario in which innovations in H2 are 'mainstreamed' in order to prolong the life of the existing system against the grain of a changing world.

## The Meaning - Money Dilemma

Alongside an appreciation of the advance into novelty over time, we also need to understand the tensions always in play, in the present, between the different economies of which Watershed can be a part.

One Watershed offer is as a venue for participation in film and digital moving image more generally. It has a cinema, which brings film into the economy of meaning as a currency of experience.

At the same time, like all of us, and like the football club we examined earlier, Watershed operates in the economy of exchange. The economy of exchange coordinates individual perceptions of use values into collective markets. This is the familiar economy where the currency is money.

As a system, Watershed can operate to maximise its returns in either money economics or meaning economics. If it concentrates only on meaning it may produce exceptionally valuable work but go broke – the artist in the garret. If it concentrates only on money it may become highly profitable but will no longer offer participants the opportunity to enrich their understanding of the meaning of their own lives and what it is to be human. Money works best when it has no meaning – circulating in the system in order to enable exchange.

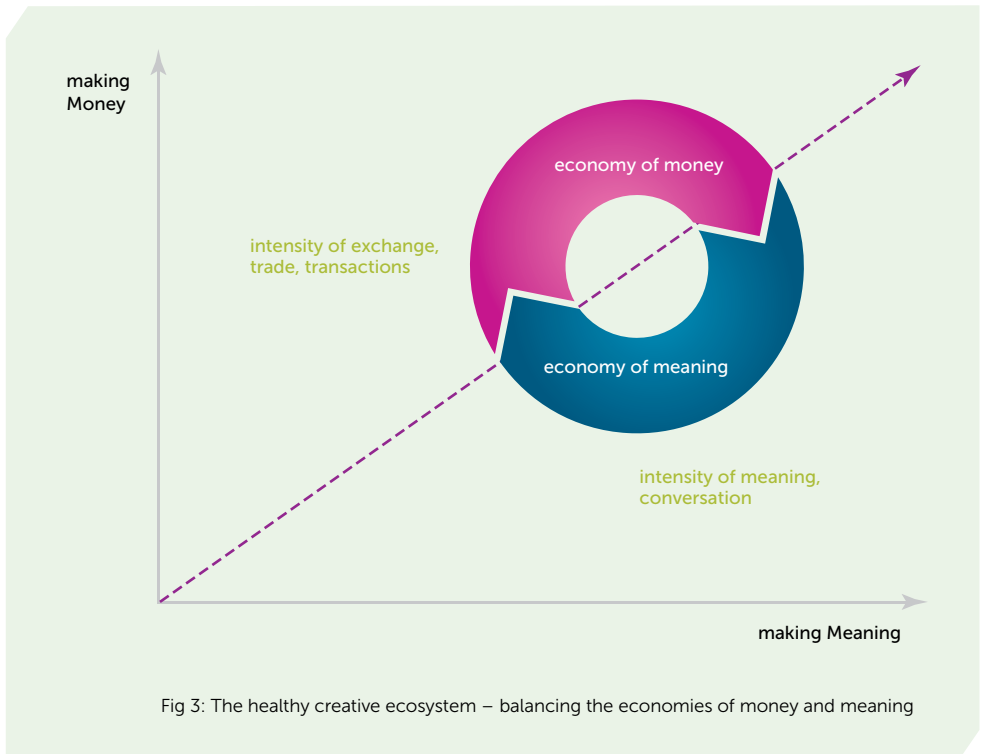


Fig 3: The healthy creative ecosystem – balancing the economies of money and meaning



Watershed can thus be seen as operating in a dilemma space between these two economies. The central idea of dilemma thinking is to take conflicting requirements and use them to frame a space in which to search for a creative resolution.<sup>18</sup> The key insight of this approach is that resolving such dilemmas is always a process of creative insight achieved in the moment. It is never stable, can never be reduced to rules, and must always be lived – like keeping a sailing boat upright while sailing as fast as you can in a stiff wind. Dilemma resolution between meaning (the purpose of our lives at any moment) and money (access to resources) is thus an act of artistic production. A healthy creative ecosystem is one in which they are so configured as to feed and replenish each other, the sweet spot combining money and meaning (see Fig 3).

## Cultural Innovation

Three horizons and dilemma thinking provide a way of thinking about cultural innovation – how a culture advances over time. A healthy culture, a creative ecosystem, will always be generating new ideas, new possibilities, new meanings. Today's highly connected world, as Yochai Benkler describes in *The Wealth of Networks*, has effectively released a Cambrian explosion of information and possibility.<sup>19</sup> There is an unprecedented abundance of chaotic human cultural potential.

But to become meaningful – in our terms, to take its place in the economy of meaning – this chaotic potential needs to be configured into cultural patterns and relationships, ‘genres’, that release its capacity for shared meaning making.

The isolated, novel, visionary acts of artistic invention in horizon three provide a growing edge for the established first horizon culture. As they are configured in the second horizon these isolated instances of creative vision are brought into relationship, creating new patterns of shared meaning, new cultural genres. And these new genres in turn become recognised as an important part of our culture, settling into an established role within an expanded first horizon. This is the process of cultural innovation (see Fig 4).

The way that the Web has spawned a whole collection of new models of collaborative production in almost every field of endeavour is an example. Watershed itself has come into its own as a cultural innovator over the past decade as it learned faster than most the creative power of the Web and how to coordinate its potential for new value.

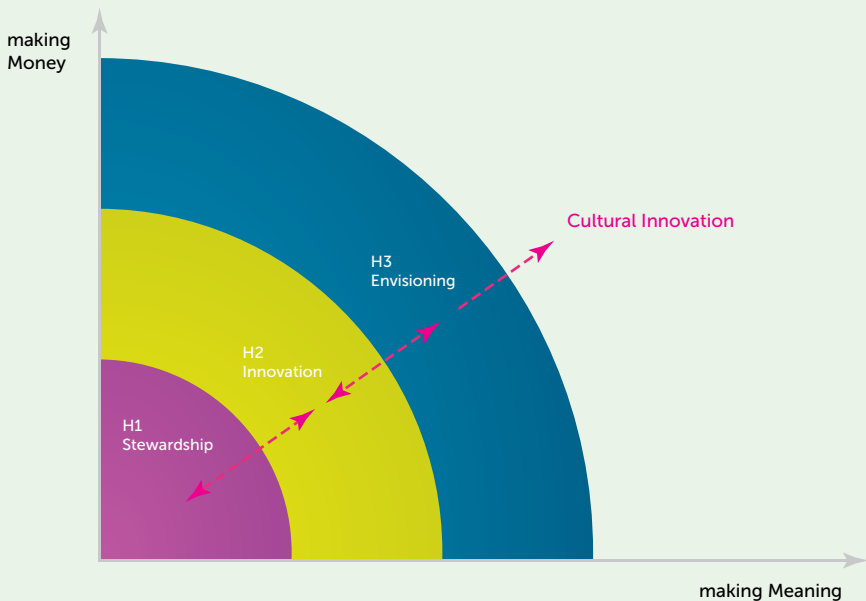


Fig 4: The Dynamic of Cultural Innovation. The pull is towards the visionary third horizon. The horizon two innovation system is the crucible in which isolated events in horizon three are configured into new cultural patterns capable of extending and being absorbed into a new extended horizon one.

More specifically to the media sector, the way computer games are evolving beyond their initial audience into use in a wide variety of settings such as education is another good example. This process of transition from radical edge to cultural centre is never smooth since it involves vigorous debate over which values should predominate in the new patterns. The economy of meaning promotes the health of these debates.

To be a cultural innovator is to operate in the second horizon space, configuring the chaotic abundance of meaning in the third horizon. The claim is that artistic innovation has a particular role to play in opening up new forms of collective patterning of our lives. In a beautiful image from Daniel Barenboim in his Reith lectures of 2006, it is the process of configuring noise to make music. This is a human process, a relational process, a creative process:

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*'When you play music, whether you play chamber music or you play in an orchestra, you have to do two very important things and do them simultaneously. You have to be able to express yourself, otherwise you are not contributing to the musical experience, but at the same time it is imperative that you listen to the other... the art of playing music is the art of simultaneous playing and listening...And therefore through music we can see an alternative social model, a kind of practical Utopia, from which we might learn about expressing ourselves freely and hearing one another... Music itself should not be used for political or any other purpose. But although you cannot make music through politics, perhaps you can give political thinking an example through music. As the great conductor Sergei Celibidache said, music does not become something, but something may become music.'* <sup>20</sup>

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We make the move from invention to innovation in the economy of meaning when 'something becomes music'.

## The H2 Innovation System

This is therefore the critical competence to maintain a healthy creative ecosystem. We need to find ways to configure a chaotic, diverse mix of ideas and experiences so as to intensify the opportunities to make new shared cultural patterns that shift the culture in the direction of novelty and growth. It is this capacity to 'make music', or, better, to 'hear the music' in the chaos of voices, that attracts people to Watershed.

What they find there is an innovation system in the economy of meaning. Watershed fosters a chaos of ideas, invention, imagination and possibility in H3, then operates in H2 to configure that abundance in new ways that begin to gain cultural traction. Eventually these innovations will either die out – the fate of most innovations in most economies – or will become accepted as part of the mainstream culture: they are absorbed into H1 where the task is no longer innovation but stewardship.

Watershed practises both. It provides a place of stewardship for film and moving image in a conventional and regularly funded way. And it engages in cultural innovation. Both aspects are important. The H1 offering – the selection of films at a reasonable price, the good food in the bar, the reliability and upkeep of the space, the advertising and reputation etc – is essential to maintain a steady flow of people into the building. This 'footfall', as diverse as possible, is essential.

But at the same time there is an 'H2 frisson' that helps to maintain interest in the H1 offering, and serves to develop the audience for new experiences. Because of this Watershed is now renowned as one of the best places in the UK to release any challenging new independent film. And it is this same H2 frisson that increasingly attracts other organisations to Watershed to learn how it does this, anxious that some of the H2 magic should rub off on them. Those organisations recognise that culture is dynamic, always evolving: stability is death in the economy of meaning.

So how does Watershed's cultural innovation work in practice?

Watershed provides a space for meaningful social engagement – conversation. It enables individuals to enter a space in which meaning and experience can be enriched through engagement with others. Film was the initial draw. But now the space itself, and its social reputation, also attracts.

The space is deliberately managed to encourage new conversations, new communities of meaning, to enable multiple agents (individuals and organisations)





to participate in the process, to provide individual artists a space in which they find a greater range of possibilities to marry their authentic practice with a means of paying the bills.

Elephant by Slingshot, igfest 2009 (slingshoteffect.co.uk).  
Photo by Dan Dixon.



The space is open. It is friendly. It is easily reconfigured by participants. It is interesting. Things are always happening there. It is designed for serendipity. A senior Director from Bristol City Council works from there – not because he is working for Watershed, but because he can do his job differently in that space. The Social Services Department sometimes hold interviews there, because it is a more welcoming space than their own offices. The group gathered around the corner table in the café might be young mothers reconnecting with everyday life, or local creatives working on a project together.

Some of these conversations and interesting juxtapositions are planned. Most are not. But they pick up on Watershed as a space of possibility and permission. They contribute to an abundance of meaning. And they help to fulfil a critical part of Watershed's mission: to make Bristol a more interesting place.

This is the first requirement. A healthy creative ecosystem must have an abundance of meaning flowing through it, extending the range of thinking and worldviews in circulation, providing an intensity of overlapping value constellations. Within the field of possibility created by this wide network of connections and conversations (both physical and virtual), skilled individuals at Watershed artfully 'curate' selected connections: the ones they judge are likely to release potential and value, an advance in meaning that is also likely to make money. This is a potential that Watershed has very likely seen even before the participants themselves.

Realising a monetary value for innovation, establishing a new balance in the money/meaning space, involves extending the cultural boundaries of H1 'business as usual' to embrace new ideas and new cultural genres. A cultural genre in this sense is a field of meaning that connects artistic expression to the culture of our everyday lives. Monumental media (images projected on to buildings) and street gaming (mobile technology enabling 'virtual reality' games in real streets) are both relatively new media genres that are finding their way into the wider culture. Both have been nurtured by Watershed. Both result from novel connections that realise new relationships in the money/ meaning field.

Watershed's core currency is audio-visual media. It is about sharing experience and narrative through moving image. The H1 manifestation of that in today's dominant culture is film. But there are infinite visionary H3 possibilities for manifesting that core currency in the future.

Watershed's cultural entrepreneurship involves bringing these new horizons into view. And its success in H1 provides capital in multiple economies – financial, social, reputational – to invest in cultural research and development to extend the range of H1 into an unknown future. Thus Watershed is not only a cinema, it is also consciously an innovation system for the creation of emergent new media genres.

## Producing – Mastering Cultural Logic

The critical competencies in the second horizon innovation system are those of the producer. This is a role whose importance is increasingly recognised in the arts. Many impressive cultural productions today are not the product only of cultural organisations or individual artists: they are enabled by an individual with the skills and energy required to orchestrate the creative process and to bring an artistic idea to reality.

The producer's role is fundamentally to sit between the first and third horizons, brokering the relationship. The producer must appreciate both the financial logic of H1 and the artistic logic of H3 in order to bring a project conceived in the visionary imagination to fruition with the backing of funders in the commercial economy.

Kate Tyndall's book *The Producers* illuminates the role beautifully in a series of interviews.<sup>21</sup> Helen Cole for example:

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*'I have always liked ideas at the early stages, at that point of uncertainty, when the balance between what is possible and what is not is constantly being redrawn... works have emerged from this indefinable alchemy... some kind of chemistry takes hold. As producer, it is my job to recognise this moment, to spot the possibilities, to listen to the dreaming, to replay the thinking, until the work takes shape and becomes real.'*

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Or, more succinctly, Helen Marriage: 'the role of the producer is to take responsibility'.

Producers at Watershed provide a space for diverse players to generate intense overlapping constellations of value and are then able gently and subtly to tend that process to allow new order to emerge from a specific collaboration.

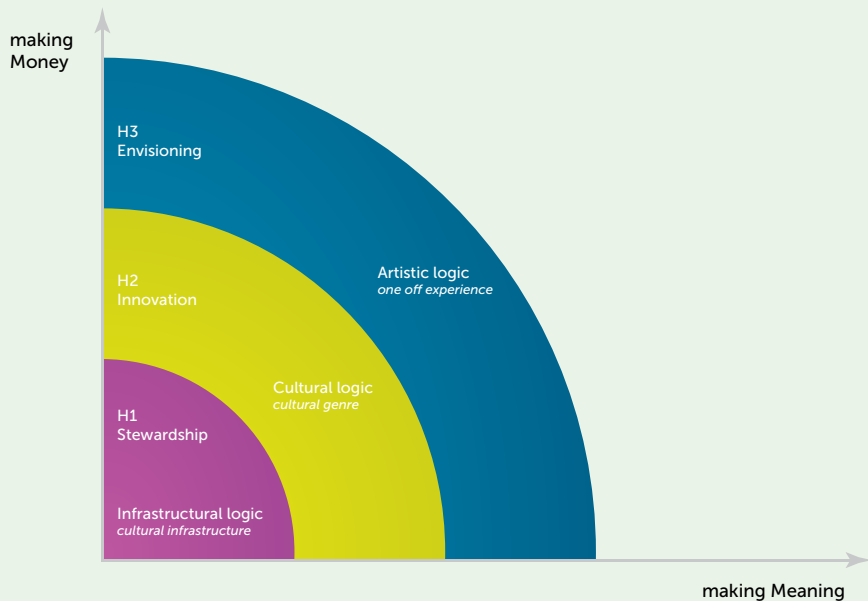
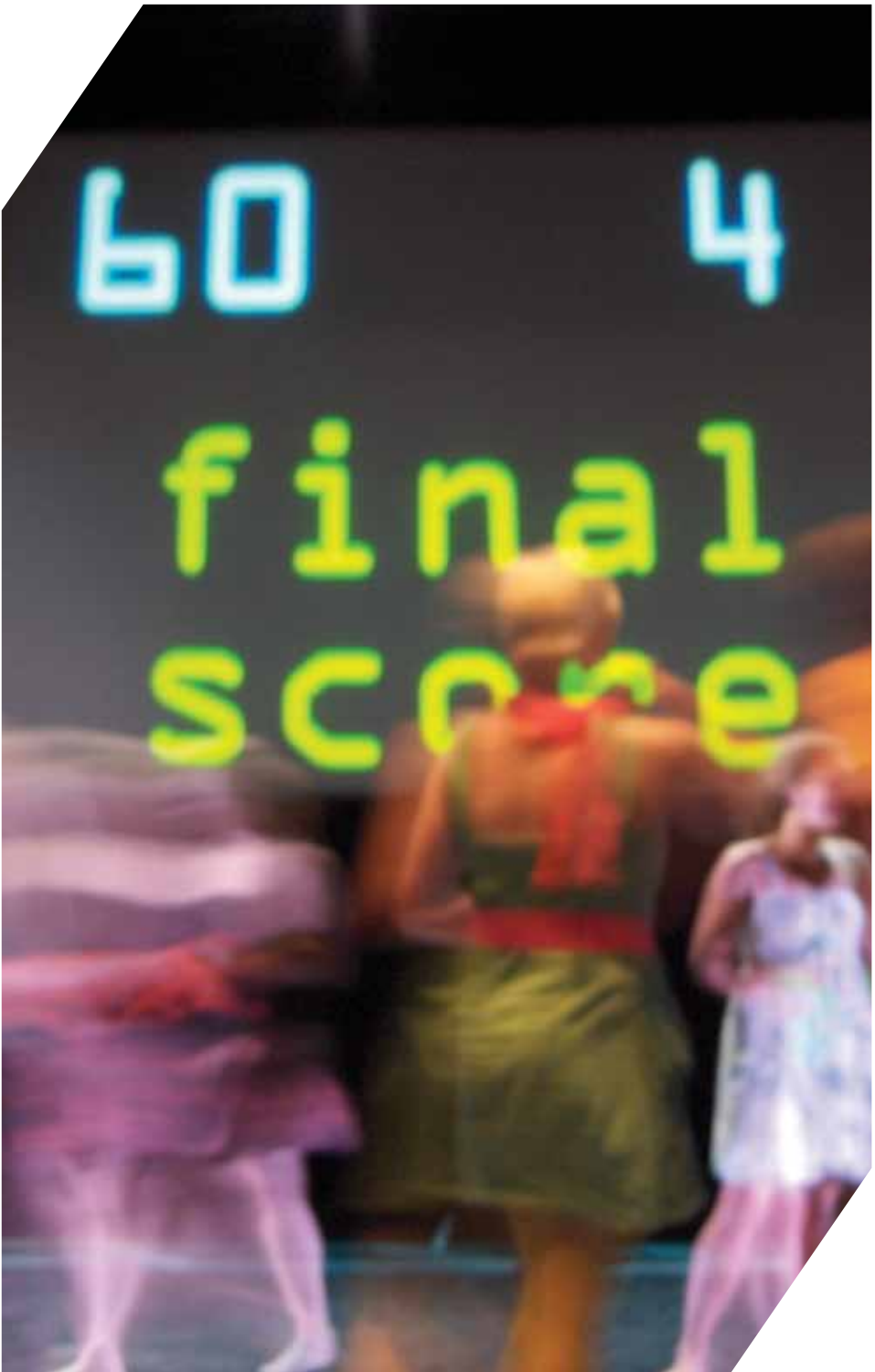


Fig 5: In the cultural innovation system each of the horizons has a different logic, moving from one off experience through new cultural patterns, or genres, to finally bedding down in the cultural infrastructure

This is not the same as project management. The producer is invested personally in the process as a participant. There is an emotional engagement. The process carries with it the visionary and inspirational quality of its H3 origins. The producer is inspired, has belief, and will pursue a project in ways that H1 might not understand. The producer cares, beyond reason.

The producer is operating according to what we might call a 'cultural logic' (see Fig 5). It is about fashioning potentially valuable, emergent H1 order out of the chaotic abundance of the meaning economy in H3. The producer is a market maker in the economy of meaning, a true 'cultural entrepreneur'.

This is a hugely valuable set of skills in today's world. The digital age has resulted in an abundance of opportunity for mixing and remixing, participation, collaboration and coproduction. The skills to orchestrate and configure this abundance, especially utilising the potential of the new digital technologies themselves, are not only valuable in cultural organisations. Every organisation now needs to learn how to master the cultural logic that lies behind Watershed's successful entrepreneuring.<sup>22</sup> For in time, like reading and writing, this logic will become a necessary part of our cultural infrastructure – which we require to master in order to live and thrive in a meaningful world.





*Part 4:*  
**Investing in Cultural  
Innovation: Policy and Practice**



## Investing in Cultural Innovation: Policy and Practice

Given these insights into Watershed's process and practice of cultural innovation, we can now turn to the other questions we began with – how to support and invest in this capacity:

How can Watershed increase the value it provides?

How can government or other investors best support or invest in Watershed and similar organisations as a creative ecosystem?

## Practising Cultural Innovation

Our inquiry reveals that Watershed and similar organisations have a distinctive offering as cultural innovators. Watershed offers the creation of emergent new media genres. Watershed is a producer of producers – it equips people with the competencies and experience required to play the producer role described above, a highly valuable set of skills in today's world. And Watershed is a master of cultural logic, a logic that every modern organisation now needs. In short, Watershed offers an H2 innovation system in the economy of meaning.

So now we know how it works, how can Watershed operate that system more effectively? Here are four suggestions.

### Keep a dynamic balance of money and meaning

Watershed's innovation space operates in H2. It gives a frisson of novelty to H1 and provides a focusing space for the abundance of possibility in H3. We can consider this in terms of the money/meaning field. Successful innovation will come in H2 from always seeking the balance point between money and meaning. This is about optimisation on both axes, not maximisation. In other words, aim for the top right corner.

As already described, part of Watershed's value lies in the breadth and diversity of its networks, and its attractiveness as a partner which keeps those networks constantly refreshed.<sup>23</sup> As a consequence it is always possible for Watershed to 'curate' appropriate connections, hook people into productive, apparently serendipitous, conversations. This is how imaginative play and possibility on the meaning axis is brought into communities, conversations and overlapping genres which help to shift the conversation towards the money economy whilst optimising the creative content.

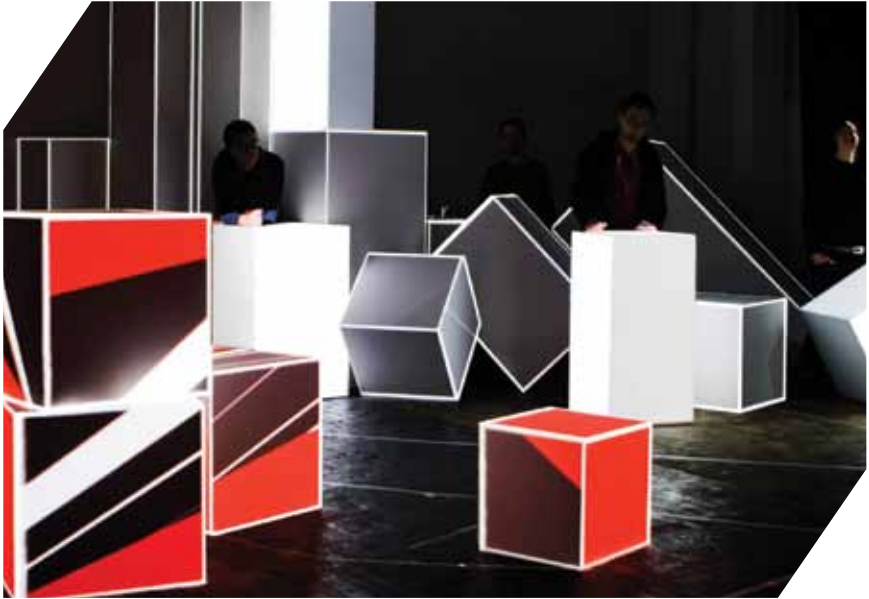
An example of moving in the other direction would be the Watershed café/bar. Many would see this as part of the operation designed to generate maximum income and perhaps to subsidise some of the less commercial activities. But here too, consistent with maintaining Watershed's critical role as an H2 cultural innovation system, Watershed considers the café/bar as a central facility for creating meaning. It is designed to encourage conversation and chance meetings. People feel at home and able to reconfigure the space to their own needs. It is where the value of the experience of watching Watershed's core offering is delivered – in the conversations after the film that share the experience between viewers. It would be possible to degrade this environment by exploiting only its commercial potential. Some money is foregone in order to optimise the café/bar's contribution in the economy of meaning.

The dilemma space can also be reflected in governance and management structures. So, for example, in many arts organisations the relationship between the artistic director and the executive director (often joined in a troika by the financial director) represents a physical embodiment of the money/meaning dilemma. We have seen organisations where office space is configured so that these two critical figures sit opposite each other – emphasising the need to resolve the dilemma every day, in the moment, case by case, decision by decision.

This also points to the need for an organisation like Watershed to pay attention to the disciplines of stewarding the H1 system as well as the creative process of cultural innovation. The natural process of cultural evolution will involve freeing up resources from established first horizon structures so they can creatively



Watershed Café/Bar (watershed.co.uk), © Toby Farrow.



recombine in the second horizon. The danger, and the temptation, is to run the process the other way – where innovation funding obtained for second horizon activity is shifted towards maintaining core infrastructure and activity in the first. There is a further rule of thumb for the artistic director/ executive director relationship: make sure resources are released from H1 activities for H2 innovation – not the other way around.

### Move money to the margins

Recall that the function of money in a system is to fragment and separate, to allow elements to be removed from one context and placed in another. It is a unit of exchange. And yet it is the overlapping of multiple economies in a complex constellation of value that is the essence of a creative ecosystem. Remember that where value is being created we nevertheless always have a choice about where to net out the value in terms of money. We have a choice about which transaction to pay for.

Take, for example, the experience of going to one of the showcase performances put on by digital artists in the Watershed cinema. Someone will come to see the 'monumental hypnotic live projections' of Watershed's Pervasive Media Studio residents AntiVJ, for example, because they trust the judgement of the programme selector, and knowing that they will be able to enjoy a pleasant drink in the bar afterwards discussing it with friends and strangers. Watershed carefully curates this whole experience, from the selection of the artist to the cultivation of an audience to the welcoming nature of the bar space.



There are many options for netting out the value in monetary terms. Watershed could charge for the entrance ticket, or a monthly membership, or rely on the food and drink charge at the bar, or charge a rent for time spent at a table, or charge by the number of words exchanged in the conversation. These last two are clearly absurd: because they bring the monetary transaction right to the centre of the experience, which changes it beyond recognition. We certainly need money to flow through the system, but not in a way that degrades the other currencies of value. Just as we pay to watch the football game but not to bribe the referee, so we need to keep the monetary transactions at Watershed at the margins.

### Grow more producers

One of the critical limiting factors at Watershed is the availability of the skills and competencies required for the role of producer. In order to build on its success Watershed needs to grow more producers. Fortunately, the creative ecosystem that lies at its core is the perfect breeding ground. Because what it takes to become a producer is experience.

Not project management experience, but the special kind of experience described in Kate Tyndall's book: operating explicitly in H2 and providing 'the bridge between the work and the world' (as Michael Morris puts it), or between the funders in H1 and the visionaries in H3. The producer needs a complex, messy, creative, diverse, highly-connected, H2 space in the money/meaning field in which to grow and develop.



Watershed specialises in this kind of environment and so has become a very effective *producer of producers*. This is rare and very valuable, in diverse fields way beyond the boundaries of the arts and cultural sector. It is easy to train project managers, but a rare gift to be able to grow producers. As we have argued before<sup>24</sup>, this should become an explicit part of Watershed's offer to the world.

To some extent the offer works against the grain of traditional funding systems. Training project managers is easy. Grants tend to be awarded for specific projects, with timelines and budgets and deliverables, and the natural next step is to recruit somebody to manage the process.

Producers develop in a very different environment, the creative environment of the H2 innovation system, which cannot be supported in the same way. Given the current level of interest in leadership and personal development for difficult times, Watershed might well find that the promise of this kind of capacity development provides an even more compelling argument for supporting the creative ecosystem than the case for cultural innovation.

Companies and organisations looking to develop the producer competencies should send their people to Watershed. It would both be a form of training and development, and also an investment in a specific area or interest. Remember that the producer is personally invested in the role, drawn on by a vision of H3. This is part of the emotional quality of the work, and so individuals enrolling in the Watershed experience would need to have the freedom within their organisations to follow a personal passion in order to learn.

### Encourage participation



Light research workshop at Watershed, made by participants © The Bech 2010 ([dashed.net/light-graffiti-workshops](http://dashed.net/light-graffiti-workshops)).

The way to gain direct benefit from Watershed's innovation system is to participate in it. If you want to grow you need to plant yourself in the ecosystem. Like the producer, in order to innovate in this space and to benefit from the rich diversity of value and connections, you have to place yourself in the mix, participate in the process.

So those organisations already asking Watershed for advice with their own issues should be encouraged to send an individual or a team to Watershed to work on them in the setting of the H2 cultural innovation system. They will generate new ideas and initiatives that will be appropriate for their own setting. And they will gain an experience of cultural logic in action that will be a valuable asset in their home organisation.

It is not only other cultural organisations that should be encouraged to participate. Cultural innovation, creativity and cultural logic are attributes that all organisations will need to master – especially those dealing with complex issues in overlapping economies. The recognition by Bristol City Council of the value of locating a senior director in Watershed is evidence already that the creative ecosystem can deliver value beyond the organisation. But only through participation.

### Policy Transition

There are also pointers in our work for policy. Drawing on the conceptual thinking outlined in Part 2, and on our early experience in applying that thinking in practice at Watershed, we can start to discern the main outlines of a broader process of arts and cultural policy transition.

We suggest that the central principle for developing a new approach is to build on the concept of distinct economies that must be managed in their own terms.

In particular, this can be framed as managing the dilemma between economies of money and meaning.

*Economies of Life*<sup>25</sup> offers a first draft of some guiding principles for relating economies to one another so that they and the ecosystem of which they are part all remain healthy and wealthy in mutually supportive ways. Of these, seven are particularly relevant to the issues described in this case study and for any policy programme designed to support creativity and cultural innovation:

#### Maintain the integrity of each system

1. Each system has its own conditions of integrity.
2. Don't debase its currency.
3. Keep money at the margins.

#### Manage the dilemma between money and meaning

4. Money coordinates patterns of exchange.
5. Art coordinates patterns of meaning.
6. Resolving the dilemma is a constant process of creative production.

#### Practise three horizon thinking within and between all economies

7. Create distinct policy mechanisms for stewardship of the first horizon and nurturing innovation in the second, while scanning for acts of creative imagination in the third.

## Regularly Funded Habitats

One striking observation that follows from these principles is that arts funding is still very much based on funding individual organisations. As we have described, this makes a lot of sense in H1 where the primary task is consolidation and stewardship. But in H2, the domain of innovation where creative and practical ideas are born, the approach needs to be different. The direction of the policy transition we need to make is clear.

If we look at the way industrial policy has changed over the past 25 years we can see a shift from picking winners towards maintaining the enabling conditions for successful innovation: healthy markets, liquidity of money providing available funds for investment, business incubators to nurture start-ups, fluid relationships with research centres and universities etc. And we are gradually also making the more profound shift from seeing the environment as a limitless resource to something that needs to be sustained and renewed.

By analogy, cultural policy now needs to start making the same transition. But it will take time for the policy landscape fully to accommodate this discovery.

Innovation funding in the arts and cultural domain is still about picking winners. It needs to shift towards providing enabling conditions: a healthy creative ecosystem, liquidity of meaning providing a rich source for new relationships, and a sustainable relationship between the commercial economy and culture as an abundant resource, between money and meaning.

We also need to invent the equivalents of 'business incubators' and their surrounding infrastructure. We suggest that these might be thought of as 'Regularly Funded Habitats', rather than as the typical first horizon Regularly Funded Organisations.



Pervasive Media Studio (pmstudio.co.uk) © Toby Farrow.

The Pervasive Media Studio at Watershed provides a microcosm of how this approach might work in practice. It is a joint venture between Watershed and Hewlett Packard: a space thrown open to all sorts of individuals and organisations in the city to help them explore the new cultural genres of pervasive digital media. It is a place where University research (University of the West of England) is based, where established companies (like HP) can carry on advanced research and perform trials of new ideas, where artists can take residencies and be drawn into wider networks of collaboration, where community programmes can be run, seminars held, and so on and on – the full diversity of Watershed's networks can interact around the potential of the new media, sharing resources, ideas and their own connections, taking the media up into their own cultural genre.

The investment funding – from the local Regional Development Agency – has been used to pay primarily for the space rather than allocated to the participating companies. It effectively sponsors the desk space and, crucially, the producer figure directing the Studio. And the individuals and organisations chosen to get space in the Studio have been selected to represent an interesting mix of talents and interests. They are told from the outset that part of the deal is that they should be 'interruptible' and contribute to the intellectual commons of the Studio. They cannot just turn up, work on their project, and go home again. They are there to mix with each other, and to be available to speak to visitors and welcome the influx of local talent that shows up when the space becomes fully open every Friday.

The Studio is an ecosystem, not a business. Yet it has also been very successful in business terms as measured by the effects for the participating organisations, both large and small. At the end of its first year of operation IFF ran a workshop based on the ideas in this study to find out how the ecosystem was working. Recalling the core currencies of the creative ecosystem, we asked what

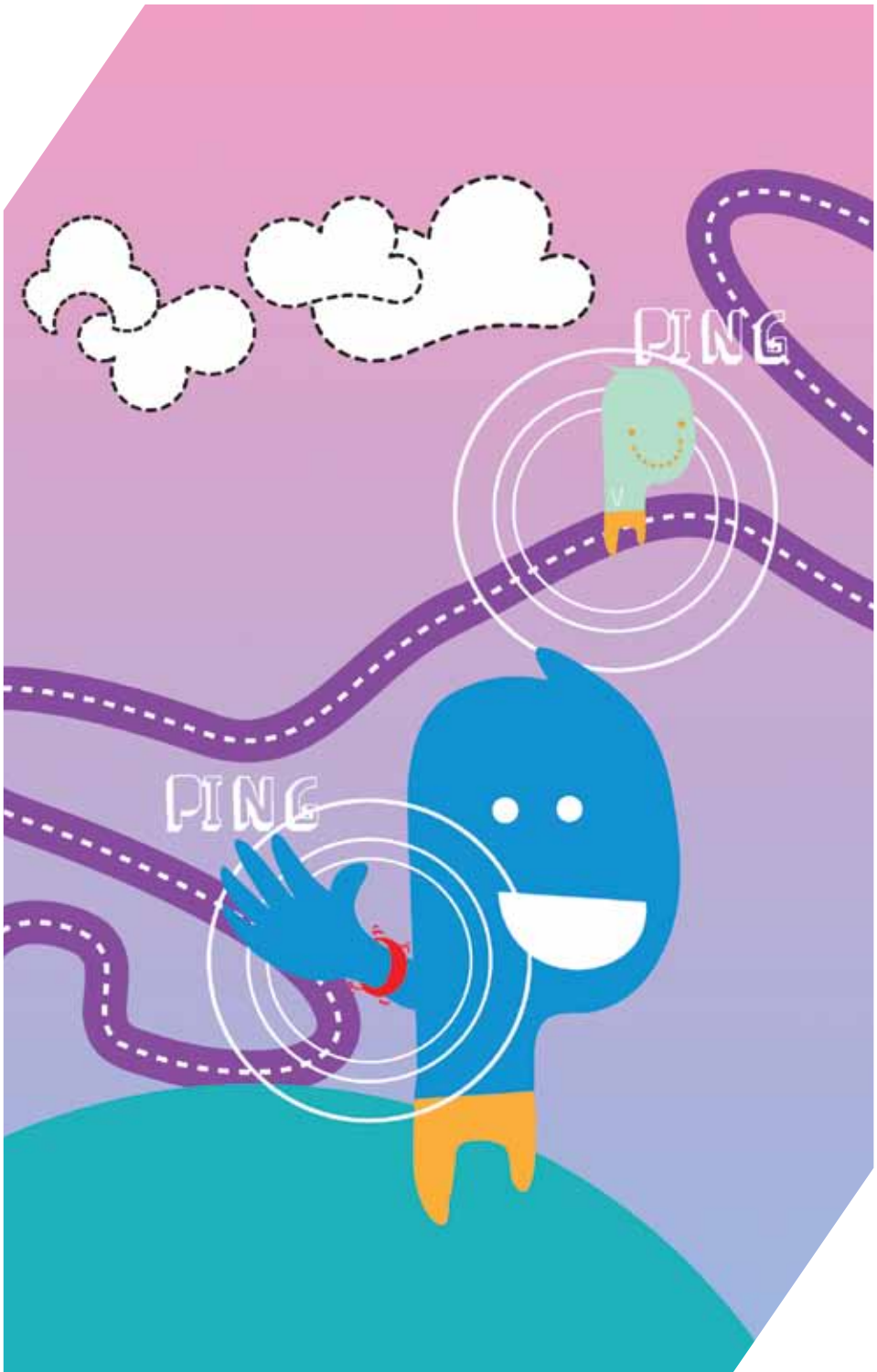
conversations the participants have been part of as a result of their membership of the Studio, and what communities they had got to know. We also asked what projects had resulted.

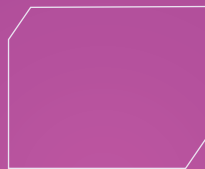
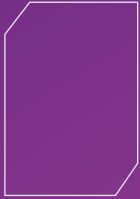
What we found was that the cross-fertilisation of ideas, conversations, and communities of people and practice had been very rich. And this was reflected in the project work. Some organisations had started working together. Others had found themselves picking up opportunities for colleagues when out doing business or promoting themselves. And they each enjoyed some reflected glory from sharing in the reputation of the whole, more so than they could have managed on their own account.

This has been a very successful experiment in funding an ecosystem rather than its individual members, keeping money at the margins. There is no control group for comparison, so we cannot prove that this has generated a greater return on investment for the participants than funding the individual organisations could have done. But the figures are very impressive (£1.4m raised on an initial investment of £300,000 at last count), and fully in tune with the theory developed in this study.



Moosehunt by Slingshot (slingshoteffect.co.uk).





Conclusion

## Conclusion

This is a work in progress. From a disarmingly simple question about how to fund a healthy creative ecosystem it has taken us into some very interesting areas and disciplines, all of which are evolving and converging in response to new discoveries about the nature of life, of meaning and of complex systems. Even the study of the economy of money is beginning to wake up to the reality of dynamic systems far from equilibrium. The generalisation of the notion of an economy as just a certain view of a system, and a currency as a functional element that enables that economy to grow and become more complex, has implications and applications far beyond the field of the arts and culture.

At Watershed we have made a first pass at focusing this thinking through the lenses of the three horizons model (to track the advance into novelty) and the money-meaning dilemma space. These frameworks have passed the first test of usefulness: they have helped the people actually involved in Watershed to make new sense of what they are doing and how to explain it to others.

There is still a lot more work to do to turn these ideas into working policy and management tools – that is our intention in the next phase of the work. The success of the simple evaluation workshop we held at the Pervasive Media Studio based on ecological thinking gives us encouragement that it will be possible to translate this body of thinking into robust practical approaches. We believe these will be valid at the level of the organisation, at the level of the creative city or region, and at the level of making intelligent policy to support such development.

Already we are finding that the simple framing of a money-meaning dilemma space is shifting conversations in the current climate that have become almost exclusively focused on money. This is an invitation to hold that concern in tension always with an appreciation of value in the economy of meaning. And to remember that money is only one currency – that has a tendency to corrupt others that may be more important in the health of a specific system.

The first requirement, however, is to follow our own precepts and get these ideas into circulation such that they can become the subject of rich and diverse conversation and their true value can be revealed. We hope this short report has gone some way towards starting that process.





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## Further Information

[watershed.co.uk](http://watershed.co.uk)

[dshed.net](http://dshed.net)

[ished.net](http://ished.net)

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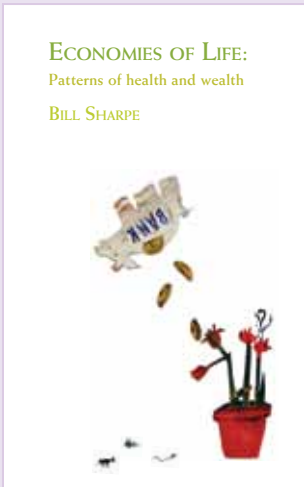
*Economies of Life: Patterns of health and wealth*

By Bill Sharpe

International Futures Forum

[internationalfuturesforum.com](http://internationalfuturesforum.com)

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## Endnotes

1. Partner Value Review by Peter Boyden Associates  
[www.watershed.co.uk/reports/partners.pdf](http://www.watershed.co.uk/reports/partners.pdf)
2. Tom Fleming (2008) *Crossing Boundaries: The Role of Cross-Art-Form and Media Venues in the Age of 'Clicks', not 'Bricks'* (UK Film Council, Arts Council England, Arts and Humanities Research Council)  
[www.ukfilmcouncil.org.uk/media/pdf/q/6/Final\\_final\\_report\\_20\\_May\\_version.pdf](http://www.ukfilmcouncil.org.uk/media/pdf/q/6/Final_final_report_20_May_version.pdf)
3. A series of short interviews with some of the creative individuals and artists that Watershed collaborates with. [www.watershed.co.uk/reports](http://www.watershed.co.uk/reports)
4. [www.watershed.co.uk](http://www.watershed.co.uk)
5. Bill Sharpe (2010) *Economies of Life: patterns of health and wealth* (Triarchy Press)
6. Geoffrey Crossick *Knowledge transfer without widgets: the challenge of the creative economy*, Lecture to the Royal Society of Arts, Leeds, 31 May 2006
7. See World Economic Forum 'Innovation 100' project. The heat map is written up with commentary in André Andonian, Christoph Loos and Luiz Pires (March 2009) *Building an innovation nation* published online by McKinsey and Company.
8. Department for Culture Media and Sport (2008) *Creative Britain: New Talents for a New Economy*
9. Andari, Bakhshi, Hutton, O'Keeffe and Schneider (2007) *Staying Ahead: the economic performance of the UK's creative industries*
10. See for example Robert Hewison's 2006 report for Demos picking up a phrase from the then Chancellor of the Exchequer Gordon Brown as its title: *Not a Sideshow: Leadership and Cultural Value*
11. Department for Business Innovation and Skills and Department for Culture Media and Sport (2009) *Digital Britain Final Report*
12. Tom Fleming (2008) *Crossing Boundaries: The Role of Cross-Art-Form and Media Venues in the Age of 'Clicks', not 'Bricks'* (UK Film Council, Arts Council England, Arts and Humanities Research Council)
13. Bill Sharpe (2010) *Economies of Life: patterns of health and wealth* (Triarchy Press)

14. See Rafael Ramirez (1999) *Value co-production: Intellectual origins and implications for practice and research* (Strategic Management Journal, Vol 20, issue 1) and Richard Normann (2001) *Reframing Business: when the map changes the landscape* (John Wiley and Sons)
15. Eugene Wigner (1960). *The unreasonable effectiveness of mathematics in the natural sciences* (Communications in Pure and Applied Mathematics Vol 13,1)
16. Clifford Geertz (1973) *The Interpretation of Cultures: Selected Essays* (Basic Books)
17. For more information see [www.internationalfuturesforum.com/projects.php?id=26](http://www.internationalfuturesforum.com/projects.php?id=26)
18. Charles Hampden-Turner (1990) *Charting the corporate mind: graphic solutions to business conflicts* (Free Press)
19. Yochai Benkler (2006) *The Wealth of Networks* (Yale University Press)
20. Daniel Barenboim (2006) *In the Beginning was Sound*, The Reith Lectures, UK: BBC
21. Kate Tyndall (2007) *The Producers, alchemists of the impossible* (Arts Council England, Jerwood Charitable Foundation, London)
22. The reaction of the large energy companies to the Copenhagen Accord is instructive. They complain that they need certainty about the global political carbon economy in order to make long term investments, but the agreement left them feeling deeply uncertain and with no level playing field. Welcome to the 21<sup>st</sup> century operating environment.
23. The reach of those networks is extended online at [www.dshed.net](http://www.dshed.net) and is given physical extension through the Pervasive Media Studio ([www.pmstudio.co.uk](http://www.pmstudio.co.uk)).
24. See Graham Leicester (2007) *Rising to the Occasion: cultural leadership in powerful times* (Mission, Models, Money) which argues that creative organisations like Watershed might become academies for developing the 21<sup>st</sup> century competencies – ‘Academies of Hope’
25. Bill Sharpe (2010) *Economies of Life: patterns of health and wealth* (Triarchy Press)

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