



Number 41 Summer 2007

The Society for the Study of Gambling

www.societystudygambling.co.uk

NewsLetter

The Society For The Study of Gambling

Newsletter
Summer 2007, Number 41

Editor:

Professor Peter Collins
Centre for the Study of Gambling
Salford Business School
The University of Salford
Salford Manchester M5 4WT
Email: p.collins@salford.ac.uk

Chairman:

Paul Bellringer OBE
Responsible Gambling Solutions Ltd
1 Quarry Close
Rusper Road
Horsham West Sussex RH12 5QN
Email: paul@responsiblegambling.co.uk

Honorary Secretary:

Faith Freestone
The Gordon House Association
43/47 Maughan Street
Dudley West Midlands DY1 2BA
Email: ff@gordonhouse.org.uk

Honorary Treasurer:

Barry Faulkner
Association of British Bookmakers
Regency House
1-4 Warwick Street
London W1B 5LT
Email: barryfaulkner@abb.uk.com

Executive Committee

Barry Faulkner
Anthony Jennens
Rachel Lampard

The Society For The Study of Gambling

The Society for the Study of Gambling was formed in 1977 to provide a forum for those concerned with research into gambling; to promote its scientific study, especially as far as the psychological, social and economic aspects are concerned; and to inform the public about these matters. In more recent times the Society has broadened its focus to include a wide range of issues relevant to the field of gambling.

The membership of the Society is drawn from a wide circle of people who have interest in various aspects of gambling. They range from those that deal with problem gambling to members of the commercial gambling industry. It is a condition of the Society that there should be freedom of opinion and practice among its members. Consequently the Society does not take any particular stance in relation to gambling.

Talks and papers presented at Society meetings are often reproduced in the Newsletter. They are published at the invitation of the Editor and with the permission of the author. They are not intended to be an alternative to publication in a learned journal. The Editor welcomes unsolicited manuscripts, correspondence book reviews and other items which are of interest to SSG members.

The Society holds regular meetings twice a year in London. **The next meeting will be held on 6th November 2007.** For further details please contact the Treasurer.

Information about the Society and a précis of the articles that have been published in recent Newsletters can be found on the Society's website:

www.societystudygambling.co.uk

Membership

The Society for the Study of Gambling has in the past recruited its members by invitation. We do not propose to change this, but we would like to encourage our existing members to issue invitations to those who they feel could both make a contribution to and reap a benefit from The Society.

Any member may bring any potential new member free of charge to one meeting (including lunch). We hope this small inducement will help us to expand our membership.

It was agreed at the last Executive Committee Meeting that fees for membership would be: £30 for members; £35 for non-members; £15 for full time students

**Membership fees at renewal would be:
£25 for individuals; £125 for corporate membership.**

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Editorial

The new Gambling Act has finally been implemented. Whatever one thinks of the results – perhaps that it is good on problem gambling, incomplete on remote gambling, incoherent on casinos – it is astonishing that it has taken a full eight years and massive expenditure in terms of money and man hours by all sorts of different people to get to where we are now. And still large numbers of people, for all sorts of different reasons, remain dissatisfied.

The problems of developing and implementing good gambling policy are certainly not peculiar to the UK. The European Union has, with rather less public notice, been recently struggling - largely unsuccessfully - to develop sensible gambling policy. Moreover, whatever else one may say in criticism of the UK's legislation, it is streets ahead of that of our EU neighbours to the South when it comes to responsible gambling.

Why then is it so difficult, especially for democracies in large, affluent countries to formulate and implement good gambling law?

The fundamental reason is that devising good gambling law in such societies is both a highly complex and a comparatively unimportant business while at the same time being one on which it is extremely difficult to generate democratic consensus.

Gambling policy is complex because it is likely to have to address the concerns not only of government departments concerned with leisure but also those of departments responsible for health, for planning and for taxation. Such joined-up government is intrinsically difficult to achieve even on matters of much more substantial public interest.

It is unimportant because in large, affluent societies - as opposed to smaller, poorer ones like Antigua - gambling is unlikely to be an important contributor to the economy in terms of either GDP or taxes nor is problem gambling likely to be a major threat to the health and well-being of very large numbers of people, comparable, say, to cancer, heart disease, other mental illnesses or even drugs and alcohol.

And it is extremely difficult to generate democratic consensus because public opinion in relation to gambling is made up both of specific minorities who have passionately held but conflicting views and a majority whose position is ambivalent: most people gamble a bit themselves but most people are also uneasy about gambling, don't think of it as just another leisure product and feel that, while we should have some legal gambling, we should not have too much of it. Under these circumstances it is very difficult for politicians to do what democracy compels them to do and conform their conduct to what public opinion wants or will, at least, accept.

All this means that making good gambling law requires a great deal of knowledge and thoughtfulness on the part of those who write the policy (mainly civil servants) and a willingness by ministers to expend time, skill and energy mastering the relevant argument

and evidence and making a persuasive case to parliament, the media and the public. Unfortunately, so many other political issues are so much more important than gambling to both the civil service and their ministers (like eliminating global poverty and advancing their careers) that no-one is incentivised to acquire the necessary knowledge - and, in the absence of knowledge, to exercise the necessary judgment - to tackle the complexities of the issues involved, formulate a coherent and sensible policy, sell it to both the general public and to special interest groups, and implement it with intelligent regulations.

In the case of the UK and the EU, the trouble arose because the politicians and civil servants failed to understand the complexity of the task they had set themselves and thought it would be sufficient and uncontroversial to rely on simplistic and inappropriate nostras about free markets of precisely the sort that no democratic majority will tolerate for gambling any more than they would for hard drugs or brothels.

The consequence has been that, in the case of our gambling law, what governments have been trying to reconcile is both conflicts of interest and conflicts of moral and political principle.

Unsurprisingly most of this conflict has focussed quite irrationally on casinos because they are highly visible and not well understood in Britain though they are common in the rest of Europe and the English-speaking world.

The principal interest groups have been, on the one hand, a somewhat unholy alliance against liberalisation composed of principled prohibitionists (or maximum restrictionists) and protectionists, who did not want greater consumer choice to lead to more competition for their existing businesses. On the other hand, in favour of liberalisation, there has been an alliance between would-be new entrants into the market (especially foreigners) and the potential beneficiaries of what would in effect be gambling taxation dedicated to investment in development, i.e. the local authorities who wanted – and still want - a new casino.

The conflicts of moral and political principle have, on the whole been less well noticed than the conflicts of interest. They are, however, more instructive.

Thus, there has been a fundamental conflict between the essential principle of liberalism – provided individuals don't wrongfully harm others, they should be free to choose how to live their own lives even if many people think their choices foolish or immoral - and the essential principle of democracy – governments must do what the majority want them to do. It is not always realised that in democracies majorities don't always want and, sometimes, won't accept the application of the principle of liberalism to particular policy issues. Sometimes this is because most people ignominiously don't want to see the same freedoms accorded to other people's private choices, which they personally dislike, as they would insist on in relation to their own private choices. Often, however, majorities override the principle of individual free choice on the genuine and initially persuasive

grounds that they want governments to stop people from harming themselves – as with drugs, cigarettes and maybe soon food.

In addition to this fundamental conflict of principles, there have been other pairs of competing principles which governments need to try to accommodate in formulating good gambling policy.

Thus, the principle of national democratic decision-making competes with the principle of local democracy. Notoriously, the UK accords extraordinarily little power to local communities by comparison with, say, the USA, especially with respect to gambling. And indeed, there is, on the face of it a strong principled case in respect of gambling for allowing local communities to decide for themselves how much, if any, gambling they wish to authorise and of what kind.

There has also been a conflict with the political ideal of promoting prosperity by increasing consumer choice (and thereby real consumer wealth) and ensuring adequate consumer protection.

Similarly, there has been a conflict between promoting equality by using the abnormal gambling taxes which restrictions on supply make possible to advantage the least advantaged in society and the objective of not having a tax policy which uses monies collected from poor lottery players to subsidise rich opera-lovers.

Finally, it is a genuine *moral* principle in politics that governments should not imperil existing legitimate interests, save for good cause shown – where the good cause would have to be a very substantial, over-arching public interest. This is a principle consistently ignored by many of those who think of themselves as virtuously calling for measures which would lead to the closure of existing gambling businesses without anything approaching clear evidence that they do substantial and avoidable harm. On the other hand, it is no business of government to take account of the illegitimate interests of existing businesses, in particular their spurious and self-ascribed right to be protected from competition.

In addition to trying to accommodate all these competing moral considerations, governments also ought to be concerned not to pass laws which will be unenforceable and thereby undermine respect for the law in general.

The difficulty of passing good gambling laws is greatly increased in a democracy such as the UK by the baleful and excessive power of its media. The truth is that gambling policy in the UK has been made not by government but by the tabloid press. The media generally have been unhelpful because they are constitutionally incapable of dealing with the complexities of issues. But the tabloids have been especially pernicious because they are fundamentally in the business of selling entertainment by catering to our least morally admirable appetites – our prurience, our relish in the misfortunes of others, our masochistic enthusiasm for scare-stories, our *schadenfreude* in the humiliation of those in

authority, our taste for smug moral self-congratulation. (They also, of course, make good money by selling the opportunity to gamble on their own online sites.)

As I have said policy-makers have found it so difficult to make good gambling policy, because they have not been able to do intellectual justice to the complexity of the issues involved. Nor have they been well served by researchers who have at best offered shaky and shallow conclusions with undue confidence and at worst tailored their conclusions to their own ideological agendas or those of the people paying them.

Of course, policy-makers are right. In the greater scheme of things gambling policy makes very little difference one way or another to the sum total of human well-being – certainly when compared with policy relating to health, education, law enforcement, the management of the economy, climate change and the waging of war. On the other hand, perhaps it is the same structural inability to deal with complexity in these areas which explains why democracies find it so hard to deal adequately with these other and more important issues as well.

“Good To Great In Gaming” – Gaming Companies Doing What They Know Best By Keeping It Simple

Andrew MacDonald

Executive Vice President - Gaming

Genting Overseas Holding Ltd

and William R. Eadington

Director, Institute for the Study of Gambling and Commercial Gaming

University of Nevada, Reno

“The fox is a cunning creature, able to devise a myriad of complex strategies for sneak attacks upon the hedgehog. Day in and day out, the fox circles around the hedgehog’s den, waiting for the perfect moment to pounce. Fast, sleek, beautiful, fleet of foot, and crafty—the fox looks like the sure winner. The hedgehog, on the other hand, is a dowdier creature, looking like a genetic mix-up between a porcupine and a small armadillo. He waddles along, going about his simple day, searching for lunch and taking care of his home.

*“The fox waits in cunning silence at the juncture in the trail. The hedgehog, minding his own business, wanders right into the path of the fox. ‘Aha, I’ve got you now!’ thinks the fox. He leaps out, bounding across the ground, lightning fast. The little hedgehog, sensing danger, looks up and thinks, ‘Here we go again. Will he ever learn?’ Rolling up into a perfect little ball, the hedgehog becomes a sphere of sharp spikes, pointing outward in all directions. The fox, bounding toward his prey, sees the hedgehog defense and calls off the attack. Retreating back to the forest, the fox begins to calculate a new line of attack. Each day, some version of this battle between the hedgehog and the fox takes place, and despite the greater cunning of the fox, the hedgehog always wins.” From Jim Collins, **GOOD TO GREAT.***

“There is a line among the fragments of the Greek poet Archilochus which says: ‘The fox knows many things, but the hedgehog knows one big thing’. Scholars have differed about the correct interpretation of these dark words, which may mean no more than that the fox, for all his cunning, is defeated by the hedgehog’s one defense. But, taken figuratively, the words can be made to yield a sense in which they mark one of the deepest differences which divide writers and thinkers, and, it may be, human beings in general. For there exists a great chasm between those, on one side, who relate everything to a single central vision, one system less or more coherent or articulate, in terms of which they understand, think and feel—a single, universal, organizing principle in terms of which alone all that they are and say has significance—and, on the other side, those who pursue many ends, often unrelated and even contradictory, connected, if at all, only in some de facto way, for some psychological or physiological cause, related by no moral or aesthetic principle; these last lead lives, perform acts, and entertain ideas that are centrifugal rather than centripetal, their thought is scattered or diffused, moving

on many levels, seizing upon the essence of a vast variety of experiences and objects for what they are in themselves, without consciously or unconsciously, seeking to fit them into, or exclude them from, any one unchanging, all-embracing, sometimes self-contradictory and incomplete, at times fanatical, unitary inner vision. The first kind of intellectual and artistic personality belongs to the hedgehogs, the second to the foxes...” From Sir Isaiah Berlin (1953), **THE HEDGEHOG AND THE FOX**.

Jim Collins’ classic business book, **BUILT TO LAST** (1994), was followed by his 2001 contribution, **GOOD TO GREAT**, where he examined the principles of companies that had made the leap from being “merely good” to being “great.” In conducting the research for his book, Mr. Collins focused only on companies that were able to progress from a track record of good performance to a sustainable period of “great” performance in the long term, i.e., 15 years or more. As such, his conclusions are about principles that deal with transformation: principles that allow a company to transform from Good to Great and stay there.

Collins borrowed from Sir Isaiah Berlin to develop his essential principle in **GOOD TO GREAT**: the *Hedgehog Concept*. He defined this as “a single organizing idea, a basic principle or concept that unifies and guides everything within the organization.” It does not matter how complex the world really is; a *Hedgehog Concept* reduces all challenges and dilemmas to simple—indeed almost simplistic—*Hedgehog* ideas. Anything that does not somehow relate to the *Hedgehog Concept* has no relevance.

The good-to-great companies studied by Mr. Collins and his team were found to have built and zealously focus on strategies that were founded on three key dimensions.

1. **What is it that you can do better than anyone else in the world?** (And, equally important: what can you *not* do the best?) This discerning standard goes far beyond *core competence*. Just because you possess a core competence does not necessarily mean you can—or ever will—be the best in the world at it. Conversely, what you can be the best at might not even be something in which you are currently engaged.
2. **What drives your economic engine?** All the good-to-great companies analysed by Mr. Collins attained piercing insight into how they could most effectively generate sustained and robust cash flow and profitability, by identifying and focussing on a single common metric—i.e. *profit per x*—that had significant impact on their economic performance.
3. **What are you deeply passionate about?** The good-to-great companies focus on those activities that ignite their passion. The idea that needs to be carried forward is not to stimulate passion but to discover what makes a company passionate.

The intersection of these three dimensions becomes the core defining *Hedgehog Concept* for the organization. Such a concept should not be a blindingly complex statement of

strategic objectives, but rather it should follow Occam's razor by offering the simplest and best possible solution for a variety of challenges.

When we apply these ideas to gaming companies, can we find some that have made the leap from Good to Great by following a defining *Hedgehog Concept*? We begin by looking at a couple of gaming organisations that may have taken that leap and arguably can be characterised as having achieved greatness.

Wynn Resorts is a relatively new company founded by Steve Wynn which went public in October 2002. Wynn is often given credit for having been the visionary and driving force who redirected Las Vegas and helped transform it from what it was into a world-class destination—arguably the world's most popular tourist destination—from the end of the 1980s to the present. Indeed, he is sometimes referred to as the Walt Disney of the gaming world.

In 1989, when Wynn and his then-company Golden Nugget (later to become Mirage Resorts) built and opened The Mirage on the Las Vegas Strip, Las Vegas carried a somewhat mixed reputation among potential visitors. Its casinos could be divided between “carpet joints” and “sawdust joints,” and popular casino design of the day could unkindly be characterized as “modern bordello.” The business philosophy of many casinos was that every part of the operation had to serve as a loss leader, with a purpose of funnelling customers into the casino, which would serve as the only real profit centre and “cash cow” for the entire operation.

The image of Las Vegas up to that era had more than a few rough edges. Las Vegas was considered by many—though not all—as being “cheesy,” “tawdry,” “mob infested,” “cheap,” and “nasty.” All-you-can-eat buffets were a cornerstone of the destination's marketing image. Cheap rooms, cheap food, escort services, and a reputation tarnished by years of mob influence and political scandal had left many cold to the idea of visiting Vegas. As a result, Las Vegas was tapping into only a moderate portion of its potential market.

But Steve Wynn saw something different – a vision of a Las Vegas reborn – that would cater to affluent Americans and foreigners who were prepared to spend more for quality, and who would willingly extend their leisure and after-hours lifestyles to the places they visited on holidays. Wynn's vision was that resorts in Las Vegas could be attractive to those who enjoyed the finer things in life and were prepared to pay for them, and were also attracted to the excitements of the casino floor and the accompanying resort ambience.

Casino resorts possess a unique structure that allows two options for payment of the services they offer: they can be paid for directly and at full retail price by customers who so choose, or payment can be made as part of a bargain between the casino and a playing customer who will be rewarded by discounted or free services—“comps”—in exchange for “action” at the table games and gaming devices. This added dimension of making the cost of the visit itself a gamble provides a little more excitement and adrenaline to the Las

Vegas adventure. Wynn's casino resorts mastered this fine balance between explicit and implicit pricing.

The Mirage was one of a number of major casino developments in Las Vegas by Steve Wynn that set the foundations for the new Las Vegas. His Nevada ventures began with refurbishment of the Golden Nugget in Downtown Las Vegas in the 1970s, and these were followed by the building and opening of The Mirage (1989), Treasure Island (1993), Bellagio (1998), and Wynn Las Vegas (2005.) The Mirage, Bellagio, and Treasure Island are now owned and operated by MGM Mirage, which bought out Wynn's original company in 2000. Wynn had also opened the Golden Nugget in Atlantic City in 1981, the Beau Rivage in Biloxi, Mississippi in 1999, and the Wynn Macau in 2006, and had partnered with Circus Circus to open Monte Carlo on the Strip in 1997. It was clear early on that creation of extravagant casinos was Steve Wynn's true passion. It was also clear that attention to detail and to execution of the resort experience were something that Steve Wynn put ahead of all other priorities.

This proclivity to build outstanding and dramatic casino resorts is obviously a part of Steve Wynn's overall *Hedgehog Concept*. Whether he would identify it as such would be a question that only Mr. Wynn himself could definitively answer. However, we can examine the three key dimensions in order to identify what are perhaps the defining elements of the Wynn formula.

- **Question: What are Steve Wynn and the management leadership at Wynn Resorts deeply passionate about?**
- **Answer: Creating and designing incredible, high-end integrated casino resorts with matchless attention to detail, along with simple but unmistakable elegance that caters to the needs and desires of discerning gaming customers.**

Under Steve Wynn's leadership, Wynn Resorts—and before that company, Mirage Resorts—time and again built the most impressive casinos in their respective marketplaces. Costs were often not an important consideration; rather, getting it right and then executing the delivery of the product to the customer was paramount. As a result, everything at a Wynn resort was well executed, even from the opening day. (The contrasting histories of other Las Vegas casino openings, in terms of problems that quickly became apparent, serve an interesting illustration for the ability of Wynn's companies to execute. Wynn's main Las Vegas Strip properties—The Mirage, Bellagio, and Wynn Las Vegas, opened without missing a beat; in contrast, there were far rougher openings at the MGM, the Luxor, and the Venetian, among others. Wynn clearly infused his passion to get it right the first time into his organizations.) The only time Steve Wynn missed his market on a casino opening was in Biloxi, where his company was criticized for providing far more quality and elegance at the Beau Rivage than the market really wanted.

In summary, Steve Wynn and his companies have been highly committed to developing outstanding physical facilities, and then supplying them with activities, amenities, and

attractions that would exceed expectations, accompanied by delivery of high quality service to pampered and high-expectation guests through a corporate culture built around the principles of employing, developing and retaining the best staff in the industry.

- **Question: What is it that Wynn Resorts can do better than anyone else in the world?**
- **Answers: Accessing capital markets to fund the development of the most expensive resort projects in the world. Positioning resorts to be the most desirable high end properties in their respective markets. Accumulating a large number of the world’s most exclusive high-end brands and providing a showcase for these in an opulent environment under one roof.**

From his earliest dealings in Las Vegas shortly after he arrived in the early 1970s, Steve Wynn truly mastered the “Art of the Deal.” Under the tutelage of Nevada banker E. Parry Thomas, he cleverly parlayed his initial stake in Las Vegas to build up his financial resources, which soon allowed him to gain control of the Golden Nugget, after which he built one spectacular casino resort property after another, often using cutting edge and occasionally controversial financial vehicles and strategies.

The name Wynn has become synonymous with “top of the market” in every market where they operate. Where other companies were cost conscious, Wynn’s companies would do whatever it took to get it right, and the ultimate judge on “what is right” was Steve Wynn himself. There was a sense that, whatever the cost, the quality of product would be able to generate the revenues and cash flow to justify the investment and reward the shareholders. Time, and the financial experience of Steve Wynn’s companies, have demonstrated the workability of this thesis, but it is not one that is easily mimicked by others.

Wynn Resorts—and Wynn’s predecessor companies—reinforced their “high quality, high expectation” mystique by creating unsurpassed elegance in shopping options, dining experiences, and entertainment extravaganzas in their various properties by attracting and contracting with the most prestigious retailers, world renowned chefs, exclusive auto dealerships, exotic animal trainers, and unbelievable acting troupes. Wynn Resorts and Steve Wynn personally also have accumulated a priceless art collection that has become part of the signature for exclusivity and style at the later properties.

This strategy creates an aura of anticipated experience for preferred guests at Wynn’s opulent resorts. Whether it is at the green baize of the baccarat table in the casino, the front row seat in the showroom, relaxing in the suite, or enjoying the premier table in the restaurant, the experiences generated are undoubtedly highly memorable, if not unforgettable.

Other casino and hotel developers have imitated the Wynn formula, including Sol Kerzner with the Atlantis development in the Bahamas and Lloyd Williams with Crown Resort in Melbourne, Australia (now owned and operated by James Packer’s PBL Corporation.) However, no one has gotten the entire package “right” in the same way

that Steve Wynn has done, by linking construction and design with opulence and service, to create a high level of customer expectations and then consistently deliver on those expectations.

- **Question: What drives the Wynn Resorts economic engine?**
- **Answer: Total yield management of customer spend across all gaming and non-gaming segments producing *total* revenue per available room (REVPAR) that generates significant returns on invested capital. This is a result of the principles espoused above.**

Steve Wynn contributed substantially to the resurgence of the “new” Las Vegas with his casino developments in that market. Now, in a similar manner, he is repeating that role in the recent emergence of the “new” Macau. Wynn Macau, which opened in September 2006, has helped to redefine consumer expectations in that long-standing but previously unattractive gambling centre. Similar to the earlier Las Vegas and its relationship to its prime customers, the Macau market had long been rejected by affluent Hong Kong (and other urban Asian) residents who considered Macau to be too infested with prostitutes, triads, and sleazy and smoky gaming rooms. Wynn Macau is a facility that “speaks” well to the affluent and well-heeled Hong Kong and broader Asian market – people who have long been exposed to some of the world’s leading brands, and some of the best hotel and service standards in the world. Wynn created a casino resort for affluent Chinese from Hong Kong and further abroad and, in doing so, has outperformed his competitors on many key metrics.

We suggest that Wynn’s *Hedgehog Concept* is: ***The design and development of the most costly, large-scale, opulent and elegant (and therefore most sought-after) casino resort environments with a wide range of high-end amenities that target affluent gaming customers and provide exceptional service through high quality, well-trained staff.***

It could be argued that Steve Wynn deviated from this concept with projects like Treasure Island and the Monte Carlo on the Las Vegas Strip in the mid-1990s. However, he appears to have returned to his *Hedgehog Concept* with Wynn Las Vegas, Wynn Macau, and the yet-to-open Encore in Las Vegas. While there has been some criticism of Wynn Macau as being too much of a replica of Wynn Las Vegas, that is a bit like criticising Picasso for painting just another “Picasso.” Wynn has created and defined a style of casino resort architecture, interior design and service execution that others now can only copy or attempt to emulate.

Harrah’s Entertainment is another company that over the years—initially under the founding guidance of Bill Harrah, and then with significant refinements from the company’s modern leaders, former CEO Phil Satre and current CEO and Chairman of the Board Gary Loveman—has made the leap from Good to Great, and has done so on very well defined principles first enumerated by Bill Harrah. We can once again pose the *Hedgehog Concept* questions for Harrah’s.

- **Question: What have the leadership at Harrah's over the years been deeply passionate about?**
- **Answers: Consistently delivering a high quality gaming product with excellent customer service. Applying and executing fundamental marketing principles and research-based knowledge. Customer relationship management – focussing on the avid, experienced gaming customer. Developing analytical systems based on hard data, facts, and knowledge rather than conjecture, and using that knowledge and analysis to confront challenges and develop company strategy.**

When the rest of the gaming world—including Steve Wynn, the MGM, Caesars, Circus Circus and Las Vegas Sands—were building lavish casino properties, especially along the Las Vegas Strip, Harrah's was focussing its primary efforts on developing an extensive player data base, closely linked to its slot loyalty program now known as *Total Rewards*. The genesis of this approach can be traced back to Bill Harrah who introduced the first player loyalty program with “premium points,” introduced at his Reno and Lake Tahoe casinos in the 1960s, and his appreciation of the slot customer, who was typically given back-seat to the more attractive “action player” at the tables.

The underlying philosophy that evolved at Harrah's was that a better understanding of customer preferences and spending patterns, estimating player worth based on analytical tools, and a focus on which customers were most consistent with Harrah's over-all yield strategy, would ultimately lead to a far more efficient use of Harrah's physical, human and analytical resources, and allow for far more effective development of a focussed customer development strategy for the organization. Harrah's eschewed the “build it and they will come” philosophy pursued by a number of casino companies in the mid to late 1990s in Las Vegas and rather focussed on investing in a deep and rich understanding of the Harrah's casino customer. They invested millions in technology while others developed bricks and mortar. Harrah's recognised their inability to compete on this level with their existing assets and so focussed on better understanding the casino customer and their ability to market more effectively to a core customer than their competitors. Importantly, Harrah's recognised the value that their marketing programs could drive, and through *Total Rewards*, they developed solutions that could be deployed in new markets or rolled out to businesses that they acquired. This was the foundation that allowed Harrah's to capture significant benefits with the company's acquisitions in the early 2000s, and especially that of Caesars in 2005.

Though Wall Street analysts penalized Harrah's in the mid- to late-1990s due to their lack of any significant presence on the booming Las Vegas Strip, the soundness of their approach has become increasingly apparent over the years. Between 1993 (when Harrah's was known as the Promus Companies) and 2006, Harrah's revenues climbed from \$1.2 billion to \$9.7 billion, net income increased from \$86 million to \$536 million, and market capitalization went from \$3.3 billion at the end of 1993 to about \$16 billion in 2007 at the time of their announced acquisition in a private equity buy-out. Harrah's adjusted share price in 1993 was as low as \$7; in early 2007, it was around \$85 per share.

Harrah's has exploited superior knowledge about its customers derived through its extensive player tracking systems and data mining capabilities to create a hub-and-spoke system of casinos, with the hubs being in destinations where tourism demand is greatest, such as Las Vegas, New Orleans, and Lake Tahoe, and the spokes reaching out to casino markets that are essentially frequented by local or regional customers, such as Joliet, Kansas City, Chester (Pennsylvania), and Tunica. Harrah's had early on committed to a geographically diverse strategy, after having discovered that players who prefer to play in multiple markets are also high value customers who should be targeted.

The multi-property propensity of desired customers is enhanced by the company's loyalty programs. Players' accumulated *Total Rewards* benefits are interchangeable among all of the Harrah's properties; therefore loyal customers from a locally or regionally oriented market can turn their rewards into a gambling vacation in the more exotic environs of a popular tourism destination.

- **Question:** *What is it that Harrah's can do better than anyone else in the world?*
- **Answers:** **Working with technology suppliers to develop gaming loyalty and analytical systems that address a massive and geographically distributed customer base. Utilising and applying decision science tools to market to their avid experienced multi-market gaming customers and to quickly identify others who may fit that category. Acquiring smaller gaming companies and integrating their player lists and multiple brands into the Harrah's loyalty programs.**

Harrah's has arguably the best distribution structure in the casino industry, with 38 properties (as of June 2006) operating in 17 jurisdictions world-wide, but with main emphasis (so far) within the United States. Early on, the company positioned themselves to be the "McDonald's" of the casino industry, with a consistency of product offering and explicit development of the primary brand. Over the years, primarily through acquisitions and then adaptation of the newly acquired casinos into the Harrah's fold, they broadened their stable of casino brands and worked at market segmentation and product differentiation among their targeted client base. Initially, they worked with the Harrah's brand (for enthusiastic, experienced gaming customers), the Rio brand (for younger adventurous professionals), and the Showboat brand (for older slot-oriented customers.) With later acquisitions, they ended up with various other brands, the most important of which are probably Caesars, Horseshoe, and the World Series of Poker. (Their other brands—such as Flamingo, Bally's, and Grand—may eventually be put up for sale.) As with General Motors in the mid-20th century, Harrah's are now in a position to offer a broad mix of product at different price/quality/theme points, thereby capturing more significant market share of desirable core customers in the longer term.

Economies of scale and product differentiation have been by-products of the strategies that Harrah's has fleshed out in pursuit of their *Hedgehog Concept*. This has allowed them to leverage their brands in a number of non-traditional ways in the context of the casino industry, and then apply marketing efficiencies against their customers'

preferences in ways that competitors cannot match. Their sheer size has also given them significant buyer's power with important vendors such as IGT, food services wholesalers, media companies, and travel partners, as well as with some of the cross-branding ventures they have pursued, as with NASCAR. Such relationships are still mutually beneficial, but more of the benefits gravitate to Harrah's because of their improved negotiating position.

- **Question: What drives the Harrah's economic engine?**
- **Answers: Same store sales growth as a metric to gauge individual property performance. The percentage of the gambling budget from their target of avid experienced enthusiastic casino patrons.**

Harrah's is perhaps the most "scientific" casino company in the world today. This might be partly influenced by the fact that Gary Loveman used to be a Professor of Marketing at the Harvard Business School, specializing in strategic marketing and large data base management. They have become well known as a company with many "propeller-heads" in the back office: geeks and nerds (as they used to be called) who now are using decision science to outperform the competition. In an industry known for machismo, brashness, risk taking, and "over-the-top" posturing, Harrah's came onto the scene as the kid with thick glasses, a pocket protector and a calculator, who soon was outperforming their bigger, stronger, and more attractive competitors.

A good illustration is Harrah's emphasis on capturing a greater percentage of the gambling budget of existing customers by persuading them to be "less promiscuous" and more faithful to Harrah's, rather than "playing around" with other casinos. Since the late 1990s, when they publicly stated they felt there was greater value in gaining a greater proportion of gambling spend from existing customers than in cultivating new customers. By making it less attractive for their customers to gamble in competitors' casinos than with Harrah's, they have pursued this objective relentlessly. Much of their recent success is arguably attributable to successfully expanding this one metric.

Harrah's has also established a well-defined set of incentives for their employees and managers tied to other key metrics such as Service Scores and Employee Engagement Scores, all of which closely correlate with Same Store Sales Growth. When well-defined targets are met or exceeded, bonus payments are made to affected employees or responsible managers. Again, this is an exercise strongly influenced by objective measures and quantitative objectives.

So what is Harrah's *Hedgehog Concept*? We suggest it is: **The development and utilisation of decision science tools to effectively understand and respond to the needs and wants of the company's target customer - the avid, experienced user of casino gaming for personal entertainment.** As with Steve Wynn and Wynn Resorts, Harrah's has bred imitators in the gaming industry such as Ameristar and Station Casinos. Interestingly, Station has recently also taken a chapter from the Steve Wynn playbook with their recent casino openings of Green Valley Ranch and Red Rock in the Las Vegas locals market.

Collins in *GOOD TO GREAT* identifies other characteristics of Good to Great companies. While Wynn Resorts and Harrah's may not meet all the criteria that would define them as "great," they have established clearly defined strategies that, from external observation, can be readily identified. Customers know what to expect from Steve Wynn when they enter a Wynn property or see a Wynn design. Likewise Harrah's is entirely committed to *Total Rewards* and the returns it can yield when properly managed. While more of Harrah's strategy is "under the hood" than with Wynn, it is nevertheless a strategy which the company openly communicates, especially to the financial community. *Total Rewards* has become the industry benchmark for Customer Relationship Management, while Wynn's designs are often considered the benchmark for casino architecture - amongst the casino-going public if not the entire architectural community. The Bellagio, for example, was recently ranked 22nd on the American Institute of Architecture's list of America's favourite works of architecture, the only casino to be so included in the top 150.

It can also be noted that both Steve Wynn and the current Harrah's organization were very much influenced by William Harrah, the somewhat eccentric but widely admired founder of Harrah's. Bill Harrah's original *Hedgehog Concepts* had been based around cleanliness within the casino, attentiveness to creating a positive experience for the customers, and being respectful of the company's employees. (For an excellent summary of Harrah's management philosophy, see *EVERY LIGHT WAS ON: BILL HARRAH AND HIS CLUBS REMEMBERED*, University of Nevada Oral History Program, 1999.) When Steve Wynn opened the Golden Nugget in Atlantic City in 1982, he paid homage to both Bill Harrah and Walt Disney as his creative influences.

The value of a *Hedgehog Concept* is perhaps most obvious when we examine companies that did not seem to have one, and which drifted into difficulty or oblivion as a result of not having strong guiding principles. Bally's in the late 1980s was a good illustration of such a gaming company, as was Caesars when it was owned by ITT Sheraton and then later by Starwoods. The Trump casinos in Atlantic City might provide a similar example. If a company is not organized around a compelling *Hedgehog Concept* that permeates the organization, then Jim Collins would suggest it is not "built to last," and indeed, it may not last.

Establishing a *Hedgehog Concept* is useful at any level whether personally or for an entire company. It may also be useful in going from Average to Good, or from Start-up to Achieving Initial Target Performance Levels. In its simplest form, it is about finding a positioning that the individual or the company can enjoy, a niche that can be exploited, that the individual or the company can be good at, and a reason—economic or otherwise—to do so.

As this review suggests, other gaming companies would be well advised to take heed of lessons learned from Jim Collins, Wynn Resorts, Harrah's Entertainment, and the hedgehog.

This article is a reprint of an article originally printed in the August 2007 edition of the Urbino Newsletter.

Two Fat Ladies, Clickety-Click: Rhyming Bingo Calls and the English Language

Carolyn Downs
Research Institute for Health and Social Change
Manchester Metropolitan University

Class differences in British society have provided food for the satirist, research opportunities for sociologists and ethnographers, and have been institutionalised in many of the organisations that make up British society. It is in the use of our common language that many of the most noticeable indicators of class difference lie, both in accent and in vocabulary. That different groups in society used English differently was recognised and commented on academically in the eighteenth century when dictionaries of thieves cant and servants' argot first appeared.¹

The move from investigating linguistic differences between the classes as a curiosity towards creating a theory of language and class was pioneered by Basil Bernstein, with his publication of a collection of essays and articles in 1971 representing a synthesis of the research into language and class that he had started in the 1950s. For the purposes of this work the juxtaposition of Bernstein's work *Class, Codes and Control* (1971) on language and class with an era that some have claimed to be the beginning of the end of social class differences in British society is fortuitous, for this makes it possible to use Bernstein's work as a contemporaneous measure against which to look at a phenomenon of working class culture of the 1960s; commercial bingo.

Whilst Bernstein is most noted for his descriptions of language as consisting of elaborated and restricted codes, terminology now considered to carry rather unfortunate undertones, his research also identified several key features of working class language that are particularly noticeable in rhyming bingo calls. Bernstein described the style of English spoken by the working classes as a 'restricted code', stating that this was in large part, 'a public language [that] tends to emphasise things rather than processes'.² One of the key features of the type of public language identified by Bernstein was that the use of idiomatic phrases was common.³ The calls adopted by bingo reflect these aspects of working class styles of speech, while one of Bernstein's key points on language and class: 'Language is considered one of the most important means of initiating, synthesising and reinforcing ways of thinking, feeling and behaviour that are functionally

¹ *Dictionary of the Vulgar Tongue. A Dictionary of Buckish Slang, University Wit and Pickpocket Eloquence.* Printed for C. Chappel of Pall-Mall, London in 1811. This is one of many such dictionaries that were published from the 1750s onwards.

² Basil Bernstein, *Class, Codes and Control: theoretical studies towards a sociology of language*, London, 1971 p.44

³ Bernstein, *Class, Codes and Control* p. 42. Rachael Dixey with Margaret Talbot, *Women, Leisure and Bingo*, Leeds, 1982 pp 78 - 80

related to the social group', is particularly pertinent to the game of bingo where research has identified that players have a strong sense of loyalty to the club and game.⁴

The links between bingo and social class have long antecedents. The game was the only legal gambling activity allowed in the British Armed Forces, where it was considered to be particularly the preserve of 'generations of the British Tommy'; while evidence given by the police in the 1930s noted that the game was mostly played by, 'women of the poorer sort'.⁵ Later studies of the gambling habits of the British concurred. The Gaming Board of Great Britain collected data on player profiles from 1969 and has consistently found that the majority of bingo players are working-class; research by Rachel Dixey and David Cornish supported such findings.⁶

Twentieth century working class popular culture is in many ways a commercial culture. It has its roots in the music halls and professional sport that developed in the nineteenth century, grew in the cinema, radio and dance halls of the early twentieth century, and came to rest after the Second World War in widespread access to recorded music and television. All of these activities have to some extent spawned a language that is at first particular to that activity but this has often spread into the general vocabulary of the English. Despite the popularity of a range of commercially provided leisure working class popular culture is and has always been intimately connected to gambling, often organised commercially even when the activity was against the law.

The apparently sudden rise of commercial bingo as a popular leisure activity amongst the working classes was a considerable surprise to both Parliament and the quality press when, in 1961 the commercial game was almost accidentally legalised by the Betting and Gaming Act (1960). This was despite numerous assurances by the Minister of State at the Home Office, Dennis Vosper, that commercial gaming could not be established under the provisions of the Betting and Gaming Act (1960). Commercial bingo spread rapidly across the country, giving rise to concerns about the popularity of 'this cretinous pastime', the risks to children 'neglected while their mothers play bingo' and adjournment debates in parliament that attracted more than fifty speakers.⁷ In fact, bingo had been played in a quasi-commercial fashion since at least the inter-war years as housey-housey, tombola and bingo, with the game popular in the forces, at holiday camps, fairgrounds and arcades, at a range of mainly working-class social clubs. Pre-1961 bingo was not a small-scale activity, as games regularly attracted up to 500 players and sessions running for up to four hours were not uncommon.

⁴ Bernstein, *Class, Codes and Control* p.43

⁵ PRO Mepol 3/765

⁶ D. B. Cornish, *Gambling: A Review of the Literature and its Implications for Policy and Research*, London, 1978 pp 112-115 Rachael Dixey, *Women, Leisure and Bingo*, Leeds, 1982.

⁷ 'Those who hopefully scan the social scene for growing evidence of the "creative use of leisure", one of the promised fruits of universal education, are bound to be depressed by the success of this cretinous pastime' *The Times*, 14 September 1961 13c Adjournment debate called by the member for West Lothian on 31 July 1961.

Although there was almost no awareness amongst the middle classes of the extent to which bingo was a popular leisure activity amongst the working classes before the Betting and Gaming Act (1960) the one thing that was widely known about the game was that rhyming calls played a part. The rhyming calls used in bingo were primarily there to slow the game down, and many of the expressions have come into everyday language. This transfer of language is described in the account taken from an oral history of the soldiers of the First World War, 'Deaths Men':

The most complex game tolerated by the authorities was House. Twenty-four cards were issued at two shillings and six pence a time. Each card had three lines with five numbers on. One man handled the cash and cards while the other called out the numbers. Ninety pips were drawn out of a bag and each number had its epithet – Kelly's eye for one, doctor's shop for nine, ten and twenty were blind, legs eleven, twenty-two dinky doo, [dinky doo] thirty-three, Gerty Lee; top of the bleeding bungalow, and so on. The game was taken into everyday speech – 'What time is it?' 'Legs eleven'. Men would cover the called numbers with pieces of bread, and the first to cover his lines would shout 'House', and won the stake. The first game would be free.⁸

A similar transfer of language from other areas of popular culture into the game of bingo, and then back into popular, vernacular speech has continued throughout the twentieth century. The phrases adopted for the calls are a mirror of popular, mass culture through the twentieth century, with some of the phrases still in use dating back to the era of music hall, and with the range of phrases and terms encompassing those that relate specifically to the military and naval traditions, as well as to the spread of Hollywood films and popular entertainment and entertainers.

The calls used for the number eight represent the range of types of calls found in the game. All of these calls are still in common usage and include: *One Fat Lady*, *Garden Gate*, *Harry Tate*, *Gareth Gates*. 'One Fat Lady' is a visual pun. These calls are common in the game and also include 'Legs Eleven' and 'Two Little Ducks of twenty-two. 'Garden Gate' is a simple rhyme that appears in counting and skipping games. 'Harry Tate' is an interesting call that derives from the music hall in the early twentieth century and was widely adopted by the military as a slang phrase that could cover a multitude of purposes. Harry Tate (1872-1940) was the stage name of Ronald Hutchison.⁹ First as a solo performer and then as part of a double act with his son he was a top-of-the-bill act with a range of sketches that generated many popular catchphrases. These included 'Goodbye-ee', (the source of the popular World War One song) 'How's your father?' and '... I don't think!' The popularity of Harry Tate led to his name being adopted as a

⁸ Denis Winter, *Death's Men – The Soldiers of the Great War*, London, 1978, p.154

⁹ Harry Tate was killed in a German air raid in 1940. He was the grandfather of the entertainer Hughie ('Opportunity Knocks') Green (1920-1997).

nickname for Major-General (Thomas) Herbert Shoubridge (1871-1923), who bore a remarkable facial resemblance to the comedian and the 1916 aircraft the RE8, not generally considered one of the best of those developed by Duxbridge.¹⁰ However, the military did not stop applying his name to other purposes, including any Royal Naval Mate plus a type of slide rule, sugar (Tate and Lyle) and any chaotic situation that arose (the link with chaotic situations was because Harry Tate's comic sketches always involved a large element of chaos). In the Second World War the name was adopted by The Royal Naval Patrol Service or Harry Tate's Navy, a unit whose fleet was made up of hundreds of trawlers, whalers, drifters, paddle steamers, yachts, tugs and other sea-going craft, designated 'Minor War Vessels' by the Admiralty. It seems likely that the use of Harry Tate as a call in housey-housey dates back to the First World War, and is still common in games of bingo played in ex-servicemen's clubs. Gareth Gates is a recent addition to the canon; he was the runner up in a popular television talent competition in 2002. The survival of Harry Tate as a popular bingo call reflects in part that:

Since cultures change more rapidly than languages phrases in a lexicon may reflect previous rather than current cultural interests.¹¹

However, this is only part of the picture, for as Bernstein established and other socio-linguistics studies have confirmed, to the working classes language signifies ownership and belonging, 'Language use is a recognised and recognisable reflection of ones social identity'.¹² Interestingly, although the calls were used in accounts of games of bingo played by the middle classes, there are almost no calls that can be considered to have a middle class origin; an indication of the strength of the working class affiliation to the game.

Although calls have now largely disappeared, especially from commercial cash bingo, even the modern, automated game still starts with the traditional, 'Eyes Down'; a signal for silence to descend over the players, while games run at amusement arcades and for charity often make use of the traditional calls, considering them to be central to providing a traditional game of bingo. Despite the declining use of bingo calls, started by the birth of commercial bingo and the push towards a faster, more mechanised game, what emerges is a depiction of a language that has evolved over time to reflect popular culture, and that has kept many calls dating back to the British origins of the game, as a gambling activity of the military or a seaside and fairground amusement. The oldest surviving calls date back to the Edwardian music hall and the stars, songs and catchphrases most popular with the working classes, including Vesta Tilly (thirty - Burlington Bertie, c1900) the comedian Charles Austin (forty-nine - PC Parker c1910) and sentimental ballads such as 'Sweet Sixteen' (c1898) but recorded many times before the Second World War were fertile sources of language transfer. The calls collected in this research included many

¹⁰ University of Birmingham Centre for First World War Studies <http://www.firstworldwar.bham.ac.uk/nicknames/shoubridge.htm> and British Library http://pages.britishlibrary.net/mikepymm/new_page_19.htm

¹¹ Nancy Bonvillain, *Language, Culture and Communication: the meaning of messages*, New Jersey, 1993, p.54

¹² Bonvillain, *Language, Culture and Communication*, p.167

military references, especially to the regimental nicknames of regiments that fought in both World Wars, as well as calls that relate to the cost of train travel between London and Plymouth, references to Naval personnel going on leave. Military games shared a common language with civilian games to a large extent, with the military calls that relate to regiments long since amalgamated still used in games played in ex-servicemen's clubs. Other calls still in use link closely to pre-decimal coinage. For example seventy-six has the call 'Was she worth it?' This is attributed either to the cost of a marriage licence, or a night out followed by bed and breakfast. This is perhaps indicative of working class distaste for anything decimal or potentially European as the European Commission itself acknowledges:

Don't know", "don't understand", and "don't trust" would appear to the UK mantra when looking at the European Union.¹³

It is certainly the case that in all surveys of public opinion carried out in the United Kingdom on matters European, the working classes are overwhelmingly against anything that appears to link the United Kingdom with Europe, and this may be why bingo calls have held fast to pre-decimal (and therefore pre-European) calls when other calls from the same era have evolved to reflect changes in society.

After the Betting and Gaming Act (1960) the British working classes continued to play housey-housey in the services, at fairgrounds and the seaside, as well as participating in the now legal cash bingo, the middle classes only occasionally used the game as a fund raiser, an alternative to holding a whist drive, indicative of a gambling class divide that developed into a gulf after the development of commercial bingo. Nevertheless, to the middle classes bingo was wholly acceptable abroad; indeed, it possibly became part of their British identity as they travelled through the Empire. The British naval and expatriate community based in Hong Kong were keen players, calling the game tombola, and adopting the traditional calls for the numbers, while Evelyn Waugh described a game that included rhyming calls in the first edition of his book *Men at Arms* (part one of the Sword of Honour trilogy), an account that bears many similarities to the games described by other ranks serving in the Second World War.¹⁴ Housey-housey was also played on liners travelling to outposts of the Empire and in the Officers clubs of the British in India, and is still played on board the QE2. However, it would be wrong to suggest that to the middle-classes the game or the gamble was the central part of the activity, it is far more likely that to the middle-classes abroad the place where the game was played was of far greater significance. Housey-housey meant different things to the different classes:

¹³ European Opinion Research EUROBAROMETER "STANDARD REPORT" (2002) EB 57.1 – National Report – United Kingdom. Survey carried out for the European Commission's Representation in the United Kingdom, Validated by Commission's Representation in the UK, p.24.

Group http://europa.eu.int/comm/public_opinion/archives/eb/eb57/eb57_uk.pdf

¹⁴ David Cliffe *A Companion to Evelyn Waugh's Sword of Honour*,

<http://www.abbotshill.freemove.co.uk/SH%20Chapter%203.htm>

<http://www.abbotshill.freemove.co.uk/index.html> The theatre of the Hong Kong China Fleet Club

<http://www.gunplot.net/chinafleetclub/chinafleetclub.html>

LeMahieu, *Culture for Democracy*, p.332

The common culture of the thirties did not displace traditional patterns of taste as much as provide unifying points of reference among them.¹⁵

Thus it is important to see this cross-class adoption of the game in entirely different contexts as part of a pattern of cultural change that occurred in the twentieth century:

The class-based nature of the game is also evidenced through the evolution of the calls to reflect changes in society and popular culture. The adoption of 'Maggie's Den' as a call after the election of the first woman prime minister in 1979 might not be seen to reflect any particular element of the working classes, although she was an iconic figure for a range of reasons, the integration of popular songs into bingo calls that started in the 1890s continued in the 1970s with Abba's 'Dancing Queen' and the Bee Gees 'Staying Alive' both moving into bingo from the hit parade to contribute to the canon of calls. Cultural transfer continued with the catch phrases of music hall gaining additions from the catch phrases of situation comedy and from the working class comedian Jim Davidson. The evolution of the phrases that made it into the lexicon of rhyming bingo calls is particularly linked to mass, popular culture.

Bingo rhyming calls might usefully be categorised under the linguistic heading of slang, and indeed, the calls are often included in dictionaries of slang, usually with no other origin cited than that the phrase is a call used in the game of bingo, and possibly of military origin. Slang though has many uses; one is that it creates group lexicography.¹⁶ Research conducted in the 1980s found that slang was particularly important to groups in society that feel the need to insulate themselves against the outside world.

The status of bingo as a 'dead end use of leisure' and the butt of jokes may have meant that the calls developed from a means of slowing the game down into a significant feature of the cultural identity of participants. Hayakawa, in a work that despite its publication in 1941 still has relevance, especially in the context of bingo calls, described slang as 'the poetry of everyday life', a means of expression that 'vividly expresses people's feelings about life and about the things they encounter in life'.¹⁷ This is in contrast to the perceptions of those who do not use slang, in whose eyes its adoption is 'regularly the subject of social stigma', again, this is particularly pertinent in the case of bingo, as those who play the game are often seen by many non-participants as lacking in the ability to use their leisure time creatively.¹⁸ It is certainly the case that creativity in the use of language is enhanced rather than dimmed by bingo calls, yet they also serve another purpose. By the memorability of the phrases, through the use of techniques such as ellipsis and concision, the lexicography of bingo demonstrates that the restricted code of the working classes is a code that allows for cultural transmission across generations.

¹⁶ Ronald Carter, *Language and Creativity: the art of common talk*, London, 2004. p.135

¹⁷ In Carter, *Language and Creativity*, p.135

¹⁸ In Carter, *Language and Creativity*, p.135

The thinking public do not generally consider that bingo is a game worthy of serious consideration, yet the language of bingo, the phrases and terminology, have become popular clichés, entered the consciousness of the thinking public in a way that much that represents working class culture has not.

eCOGRA Global Online Gambler Survey: A Summary of Findings from Exploratory Research into Player Attitudes and Behaviours

Jonathan Parke, Jane Louise Rigbye, and Adrian Parke
University of Salford

Despite the substantial growth of remote gambling in recent years, in terms of both availability and participation, we currently know relatively little about it. Essentially, the aim of this research was to explore this phenomenon, and to find out more about the “basics” of online play: who gambles, in what way and why?

The research took place in two phases. Initially, data for the quantitative investigation was collected using an Internet survey. Overall, 85 questions including closed and open-ended questions were used to collect data on various aspects of behaviour and attitudes of players who had gambled at Internet casino sites, Internet poker sites or both within the last three months.

Summary of Participant Details

Total Respondents	10865
Males	6246
Females	4517
Countries	96
Employment Sectors	37

Secondly, focus groups were held across five countries (3 focus groups in each). A total of 94 Internet gamblers (male and female) ranging from 17 to 60 years of age participated in the research.

Of those participating in the survey 58% were male and 42% female, with the majority of respondents being between the ages of 18-65. The majority of Internet play took place at home (89.7% of respondents), with the most popular time of day being in the evening (71.9%), followed by late night (53.4%). Women (9.1% compared to 7.6% of men) were significantly more likely to play at work.

Internet Casinos

Women gambled more frequently and for longer periods of time, but spent lower amounts of money than men. Men gambled for shorter, less frequent periods of time however, they played at higher stake levels.

According to this survey the typical Internet casino player was likely to (% Internet casino players):

Be female (54.8%)

Be aged 46-55 (29.5%)

Play 2-3 times per week (37%)
 Have played for 2-3 years (22.4%)
 Play for between 1-2 hours per session (26.5%)
 Wager between \$30-\$60 (18.1%) per session

This was consistent with Lesieur's (1988) suggestions regarding gender differences in motivations for gambling. For example, the finding that men gambling for excitement and arousal is consistent with short, high risk casino gambling sessions, whereas women's preference to 'escape' or relax through gambling is consistent with long, lower risk gambling sessions.

Overall, people tended to claim financial success (winning more or losing less) when playing online poker compared to playing at casinos. Less than a third of poker players claimed to lose money on a monthly basis, and twice as many casino players claimed to lose money than win money in Internet casinos.

Internet Poker

Men were significantly more likely than women to play Internet poker (almost 3:1 in favour of men), and were significantly more likely to be younger players. Men were also more motivated to gamble online for excitement and for financial reasons when playing poker and women reported higher levels of social motivation or avoidance behaviour (e.g. boredom and escape).

According to this survey the typical Internet poker player was likely to (% Internet poker players):

Be male (73.8%)
 Be aged 26-35 (26.9%)
 Play 2 to 3 times per week (26.8%)
 Play one (24.1%) or two (24%) tables at a time
 Consider the monthly bonus (30.8%) to be the most important factor in deciding where to play
 Play both cash games and tournaments (34%)
 Play at big-blind (minimum stake) levels of \$0.50 to \$2.00 (61.2%)
 Play with 6-10% of their bankroll at a table at anyone time (23%)
 Use the chat facility but not very often (37.8%)
 Claim that they are "average" in terms of skill level
 Feel that there is slightly more skill involved in poker than luck (31.9%)
 Have played for 2 to 3 years (23.6%)
 Play for between 1 to 2 hours per session (33.3%)

Around 12% of players pretended to be a different gender when playing online. Those who always swapped genders when playing poker reported having less profitable play than other players. This finding is consistent with Parke, Wood, Griffiths, and Rigbye (2006) who found that gender swapping during poker play among students was the number one predictor of gambling problems when playing Internet poker.

Responsible Gambling

On average, participants claimed that they would generally find responsible gambling features such as: limits on time and spending, self-exclusion, regular financial statements and responsible gambling information to be at least “quite useful” (see table below).

Players Perception of the Value of Responsible Gambling Features					
<i>Feature</i>	Not at all Useful	Not very useful	Quite useful	Very useful	Extremely useful
Self-set spending limits	11% (962)	18% (1576)	40% (3452)	18% (1558)	12% (1046)
Self-set time limits	19% (1604)	31% (2614)	32% (2708)	12% (989)	7% (556)
Self-exclusion	16% (1347)	26% (2145)	35% (2857)	13% (1046)	10% (813)
Regular financial statements	9% (766)	16% (1318)	42% (3530)	20% (1700)	13% (1086)
Self-assessment test	14% (1186)	23% (1932)	38% (3165)	15% (1273)	9% (723)

The survey and focus group data reveal that players prefer less restrictive options such as financial statements, with less interest being expressed in more restrictive alternatives such as limits and self-exclusion. Furthermore, while spending limits and checks on “affordability” were suggested by some respondents, putting these suggestions into practice may not (at least in today’s infrastructure and regulatory framework) be feasible nor practical. For example, players setting up limits on one account or set of accounts may, once they reach a limit and want to continue gambling, open new accounts with competitors where there would initially be no restrictions in place. Responsible operators would suggest that investment in such an approach could prove self-defeating.

Some Key Conclusions and Future Directions

It is important to note that gender differences in Internet gambling are changing. More women are playing internet casino games compared men and more women than ever are playing Internet poker (26.2% of players are female compared to 15% as estimated by the AGA 2006). This change is probably the result of a variety of different factors:

1. The “de-masculinisation” of gambling – gambling is becoming more acceptable for women, especially in the context of heavy media exposure of female poker celebrities (e.g. Jennifer Tilly);
2. The Internet provides a great learning environment for women – playing for free or for as little as 1-2 cents means females can learn to play very cheaply. The Internet also permits anonymity for those novices who would have been afraid to make mistakes offline.
3. Women claim that the internet provides a high level of security, privacy and convenience that is not available in real environments offline.

Furthermore, despite some claims that online poker has reached its peak in terms of popularity, findings from this study may have different implications. Younger players are playing Internet poker and older players are playing at Internet casinos. It is hard to tell if this is an age effect or a cohort effect. However, we would suggest that such differences may be a result of both, given that younger people have:

1. Larger social networks which may fuel the acquisition and maintenance of poker behaviours (e.g. home games);
2. More exposure to, and be potentially more influenced by, media coverage of poker (e.g. televised games; celebrity poker events etc.);
3. More time to play poker (argued to be more time consuming than playing at Internet casinos) as a result of having less responsibilities.

Such a trend implies that with time, the popularity of poker may continue to grow at the expense of Internet casinos, as today’s younger players continue to play in the older years and newer, younger players continue the trend and enter into the game.

In terms of future research, now that we have more information about the “who, where, why and how” of Internet gambling, we should now probe deeper to further explore player strategy (e.g. styles of play, winning and losing strategies etc), player motivation and problem gambling.

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Regional Casino Licences: why the Government’s policy regarding the selection of a location may be seen as neither fair nor transparent?

**Marc W Etches
Warren Enterprises**

1. The House of Lords, 28 March 2007

The House of Lords Merits of Statutory Instruments Committee published on 20 March 2007 its report drawing special attention to the Government’s Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007.

The Committee raised important questions as to “*whether the (Casino Advisory) Panel’s interpretation of their terms of reference matches that of the Government, and the degree to which the terms of reference reflect the statutory licensing objectives, is an issue of public policy likely to be of interest to the House.*”¹

The House of Lords took notice and on 28 March 2007 voted in favour of an amendment laid down by Lord Clement-Jones (Liberal Democrat):

*“That this House, taking account of the 13th Report from the Merits of Statutory Instruments Committee, declines to approve the draft order; considers it desirable that Lords be appointed to join with a committee of the Commons as a Joint Committee to consider the process by which a decision was reached on which licensing authority should issue the regional casino premises licence and to report by 1 June 2007; and calls upon Her Majesty’s Government to take account of the recommendations of any such Joint Committee and to lay regulations including the licensing authorities as set out in the draft order whose responsibility it is to issue the eight large and eight small casino premises licences.”*²

The winning margin was just three votes, 123 to 120, but this resulted in the failure of Government’s attempt to have the Casino Advisory Panel’s recommended 17 new casino licences accepted by Parliament.

2. Casino Advisory Panel (CAP)

The formation, terms of reference, workings and final recommendations of the Casino Advisory Panel have all contributed to undermine a sense of fairness and transparency among local authorities, community leaders, regional agencies, politicians and industry leaders.

The Statement of National Policy (Casinos) dated 16 December 2004 set out the intended criteria of a future Advisory Panel as follows:

“In order to ensure that the impact of the new casinos can be assessed on the basis of a broad range of information and experience, the Advisory Panel will be asked to identify areas for the new casinos which will provide:

- *a good range of types of areas, and a good geographical spread of areas across Britain;*
- *the Panel will also want to ensure that those areas selected are willing to license a new casino.*

*Subject to these criteria, the Panel will be asked to choose areas in need of economic development and regeneration (as measured by employment and social deprivation factors) and likely to benefit in regeneration terms from a casino.”*³

Notwithstanding the reduction in the number of regional casinos from eight to one, immediately prior to the General Election in May 2005, the policy statement was current at the formation of the CAP in August 2005.

2.1. Formation

The Statement of National Policy (Casinos) stated that *“the (Advisory) Panel will collectively have knowledge and expertise in a range of matters including planning, securing regeneration, tourism and addressing the social impacts of gambling.”*⁴

In practice, no one was recruited to the CAP that had expertise in assessing social impacts as they relate to the unique activity of gambling.⁵ The minutes of the CAP meetings appear to show that budgetary constraints may have inhibited its ability to reach out to additional expertise, although it is not clear as to whether the CAP considered such expertise necessary or not.⁶

It may have been that the CAP did in fact consider that it possessed sufficient expertise and understanding to allow it to address social impacts appropriately. However, if the presumption that it did not have sufficient knowledge is correct, how could the CAP have known what it was that would be required?

The lack of knowledge in this apparently crucial area (see Terms of Reference below) is not raised as a criticism of the CAP, more that it was simply not fair to have expected the CAP to assess a matter in which it was not expert.

It follows that the process was therefore not fair to bidding local authorities, whether they themselves understood or not what was meant by the concept of ‘the best possible test of social impact’, in that they were assessed by an uninformed assessor.

2.2. Terms of Reference

The CAP terms of reference were:

“The criteria against which the Panel will assess these submissions (for all seventeen licences) were set out in the Government’s national policy statement on casinos published on 16 December 2004. The primary consideration will be to ensure that locations provide the best possible test of social impact. Subject to this, the criteria will also be:

- *to include areas in need of regeneration (as measured by employment and other social deprivation data) and which were likely to benefit in these terms from a new casino;*
- *to ensure that those areas selected are willing to license a new casino.”*⁷

Crucially, these criteria differed from the Statement of National Policy both in terms of primacy and in the fact that a totally new concept of “best possible test of social impact” was introduced for the first time.

The Government has never defined ‘social impact’ or what would constitute “the best possible test of social impact”. The CAP was left to ponder how best to interpret this criterion.⁸

The CAP reports that “*none of our remitted criteria explicitly require us to consider social impact per se*”⁹, taken to mean ‘by itself’, which begs the question as to how the CAP could fairly meet the challenge of determining which location offers the best possible test of social impact without considering what is meant by social impact.

The CAP may well have done so but this is not transparent in its Final Report. In any event, what would have been the basis for its knowledge on this matter given what has already been said about the lack of the CAP direct expertise in relation to social impacts of gambling and the lack of evidence to show that the CAP familiarised itself with either the Reports of the Scrutiny Committee¹⁰ or with the principal findings of relevant international academic research. (See Research and Expertise below)

In its Final Report, the CAP is candid in expressing that “*some indication as to the meaning of the best possible test of social impact is revealed*” in the requirement to select sufficient number in each category in a range of areas and types of location across different parts of Britain.¹¹

The CAP acknowledges the “*peculiar problem*” of achieving this for the one regional casino and declares that it could only select a location that offers a “good test”, concluding:

*“After considering all the evidence, no single regional casino proposal emerged as the self evident favourite in presenting the best test of social impact. All had one or another point in its favour.”*¹²

It is not clear as to whether this refers only to the original eight short-listed bids, the seven final bids or includes some if not all of the other 19 bids that were evaluated; probably the seven final bids.

Professor Collins submits that *“the idea that the impacts of regional casinos in general can be tested if there is only one is inherently absurd.”* Furthermore, he is critical that even when added to eight ‘large’ and eight ‘small’ licences *“the idea that the present list of 17 can be used as any credible or coherent test on which future policy might be built is undermined because no one casino can tell you what will be the likely impacts for better or worse”* of different types in different situations adopting different local management approaches.¹³

2.3. Workings of the Casino Advisory Panel

Regardless of the fundamental question as to whether it was reasonable and fair to ask the CAP to undertake a task that was so obviously flawed (in respect of the regional casino at least), there were not the resources in terms of money and time to properly and fairly assess 80 bids for 17 licences.

A cursory study of the selection process and the CAP Final Report reveals a range of inconsistencies in that what seems to count as an advantage in discussing one jurisdiction is a disadvantage in discussing another. The criterion of ‘willingness to licence’ offers some of the more obvious examples of inconsistency.

2.3.1. Research and Expert Advice

For whatever reason, there is no evidence to show that the CAP familiarised itself with either the Reports of the Scrutiny Committee or with the principal findings of the international academic research which has been carried out in this area.

This research, whether conducted by people who are sympathetic to the introduction of new casinos (Prof William R Eadington, University of Nevada at Reno, USA) or by so called Christian Economists who favour prohibition (Professor Earl Grinols, Baylor University, Texas, USA) are unanimous that ‘destination’ casinos, have greater net positive impacts than do urban or suburban casinos. This is primarily because ‘destination’ casinos export services to residents outside the immediate area whereas, urban casinos cater to a local market thereby creating substantially greater shifting of spending patterns within those local markets.

Notably, the CAP took an opposite view in assessing Blackpool. It said that although Blackpool as a whole *“has the advantage (in testing social impact) that it is small in comparison”* it is ultimately disadvantaged because *“most of the social impacts would be exported.”*¹⁴

With regard to Manchester the CAP said that it was too large as a whole “*to trace the city-wide social impact*” although it believed that East Manchester “*would be relatively easy to adduce impacts*”.¹⁵ There is a temptation to infer that the CAP may have taken the view that East Manchester was a good location because it was most likely of all the bids to induce increased rates of problem gambling, which clearly would be at odds with the Government’s “*cautious approach*”.¹⁶

Overall the CAP showed very little understanding that wherever a regional casino may be located it will be successful and likely to attract large numbers of its customers from over an hour away and therefore would inevitably ‘export’ benefits in terms of consumer surplus and costs in terms of problem gambling.

In a report to the Scottish Executive, Dr Gerda Reith of Glasgow University offers a note of caution that was directly relevant to the CAP task of recommending locations that would offer the ‘best possible test of social impact’:

“Understanding of the social impacts of gambling is limited by a serious lack of high quality research. Many studies have produced inconclusive or contradictory results, which can exacerbate the controversy that surrounds gambling with an evidence base that is often not able to resolve the most contentious issues.

*As a result both the negative as well as the positive effects of gambling, particularly casino gambling, tend to be overstated. Claims that casinos create significant wealth, new jobs and regenerate local economies; or that they create massive social problems through increases in problem gambling and crime tend to be exaggerated. The evidence base shows that casinos are neither as beneficial as supporters claim, nor as damaging as opponents fear.”*¹⁷

Dr Reith’s report goes on to support the proposition that “‘resort’ (destination) casinos tend to be associated with the lowest social costs relative to economic benefits, since the majority of their customers come from outside the immediate area. However, urban or suburban casinos tend to draw large numbers of local residents to them, meaning that social costs remain within the community.”

The CAP references Dr Reith’s work¹⁸ but there is no evidence that shows the CAP to have weighed this in balance with research that was commissioned anonymously by particular individuals, companies or sectors of the industry who had specific protectionist agenda which happened to be well served by the conclusions of the self-styled independent researchers including Henley, NERA, Hall Aitken and Europe Economics. Indeed, the CAP may have been influenced by such material to the same extent as have some parliamentarians and journalists.

The CAP did not consult with Professor Peter Collins, Director of the Centre for the Study of Gambling at Salford University who is the leading authority in the UK on the economic and social impacts of casinos. Furthermore, there is no evidence that the CAP read and took notice of anything that Professor Collins has written, including Chapter 5 of his book *'Gambling and the Public Interest'* (Greenwood Press, 2003) that was distributed, at their request, to all members of the parliamentary Joint Committee, which considered these same issues in 2004.

Professor Collins makes the essential point that a regional casino would be best located in a destination setting because it mitigates negative impacts by requiring those who want to gamble to make considered choices in relation to personal investment of time, effort and money. And, depending on the location, there is the opportunity to redistribute spending from areas of relative affluence into an area of relative disadvantage.

The relative advantage of a 'destination' casino is further underscored by Karen Lee in her research report that was commissioned by the CAP:

*"Experts agree that people are more likely to get into trouble if their gambling is unplanned and unstructured. (Evangelical Alliance, 2006) Therefore, they recommend that the casino is located where gamblers have to make purposeful, dedicated trips to the destinations, such as to a destination casino resort for a gambling as well as holiday experience to lower gamblers' 'random' incidences of gambling."*¹⁹

This research, although published on the CAP web site with a note from Professor Crow drawing attention to specific issues, was inexplicably not taken into account by the CAP in relation to reaching its conclusions.²⁰

2.3.2. Selection Criteria and Process

Following the initial expression of interest stage, local authorities were given two months to prepare and submit detailed bids including specific information relating to eight headings including 'need for regeneration', 'social impact' and 'willingness to licence'.

The others being 'probability of implementation', 'regional context', 'community benefits', 'unique characteristics', and 'type of area', which subsequently became 'range of areas'.

The 'Call for Proposals' issued on 31 January 2006 and the table of moderated scores published on 24 July 2006, two months following the announcement of which bids had made the 'short-lists', indicate that each of these headings were treated individually and had equal weighting.

This raised serious questions (at the time and since) among the bidding authorities that the CAP had moved away from assessing proposals on the basis of which offered the ‘best test of social impact’ and which was most likely “to benefit (a location) in regeneration terms”.

For example, the London Borough of Havering is concerned that “*the way the Panel chose to expand upon and then apply the selection criteria seriously distorted and departed from the intentions of the national policy statement on casinos and their terms of reference.*”²¹

Havering has detailed why it believes its *proposals* “*had not been fairly and objectively evaluated alongside its competitors.*”²²

It is known that a number of local authorities submitted applications without adequate local consultation or full Council approval. This is evidenced by the subsequent withdrawal of short-listed candidates Brent (regional), Thurrock (large), Dartford (large) and Canterbury (large/small).

The argument may be fairly made that the process has allowed local democracy to prevail in these cases. However, there are two further considerations; firstly that it is not certain that others now recommended by the CAP such as Newham will ultimately proceed, and secondly that a simple analysis of the CAP initial ‘scoring’ of bids suggests that there were other bids of similar strength more likely to proceed willingly.

In this last respect both West Dunbartonshire and Havering (both made concerted bids for the regional casino licence) scored higher than Brent, Greenwich and Manchester.²³

It remains unclear as to how the CAP determined that it would short-list eight bids for the regional licence rather than any other number. This is an important question because there are a further five bids within the same range of score variation as existed between Manchester, Cardiff, Newcastle, Brent and Sheffield.²⁴

Without further clarification, the ‘cut-off point’ appears arbitrary (assuming one pays no attention to the suggestion that the Government may have wanted to have eight potential locations in the event it subsequently reasserted the number of regional licences set out in its Statement of National Policy(Casinos)).

This is all the more disappointing to West Dunbartonshire and Havering in particular because both these bids (jointly only 2 points out of a possible 80 behind both Manchester and Cardiff) believed, with considerable justification, that they fitted the definition of a ‘destination’ casino as recommended by the

Joint Committee, and were consistent with the spirit of what Government intended to encourage.²⁵

There may have been more merit in making the ‘cut-off point’ between fourth placed Sheffield and Brent and Newcastle tied in fifth place given the existence of a relatively large gap of 4 points.²⁶ This would have at least had the result of allowing the CAP more time to more fully consider the ‘large’/‘small’ casino shortlist of 31 competing locations.

Limited time certainly inhibited the opportunity for the CAP to adequately test competing claims and disadvantaged those bids that might have fared differently had they the chance to present their evidence directly. Manchester serves to illustrate that a relatively low initial ranking score was indeed capable of being significantly enhanced following further investigation.

The issue of relying on written evidence is of critical importance in examining the fairness of the selection process, particularly in relation to the ‘large’ and ‘small’ categories. There was no opportunity for the competing local authorities to present to the CAP in person. Equally there was no opportunity for the CAP to challenge the assertions made both for and against those bids.

This was not the case for those local authorities bidding for a regional licence. The process of selection ultimately relied heavily on ‘Evidence in Public’ sessions (EiPs).

However, there were substantial differences in the way each of the seven EiPs were conducted, especially in relation to who was allowed to speak and when and to what extent delegations were confined to presenting the case for their own location rather than attacking the claims made on behalf of other locations, or indeed how much time was allotted to participants whatever their stance.

As examples of the situations that caused a strong sense of a lack of fairness, the following are informative:

- ❖ Greenwich did not have its EiP session take place locally, which it concludes “may have impacted on the attendance of local representatives and observers.”²⁷
- ❖ The CAP made different arrangements for visiting proposed locations and reported variable success in accessing sites or areas despite offers to assist by local authorities.²⁸
- ❖ On-the-spot decisions to invite individuals to move from the audience at some EiP sessions to give evidence despite refusal of others that had made written requests as set out in the rules the CAP set.²⁹

- ❖ Greenwich and Manchester were able to utilise the entire session to make their case but others particularly Newcastle and Blackpool were significantly restricted by the time given over to opponents. In Blackpool's case only half of its presentational team was able to give evidence.³⁰
- ❖ Professor Crow uniquely permitted the proponents of the case for Manchester to spend much of their time at the examination in public attacking other bids, especially those of Greenwich and Blackpool.³¹
- ❖ At the conclusion of what was the penultimate EiP Professor Crow invited Sir Howard Bernstein (Chief Executive to Manchester's City Council) to send a representative from Manchester to be present at the Blackpool examination the following day.³²

Each of the EiP sessions was recorded but no transcripts have been made available.

2.4. Final Recommendations of the Casino Advisory Panel

Commendably, the CAP did set out what it regarded as the 'gold standard' for a regional casino as a regeneration project. That is, a regional casino must not only provide jobs, demands on local services and other quality facilities such as hotels, theatres and conference venues but it must "*set in train spontaneous growth that would continually revitalise the local economy.*"³³

However, it is not clear that this was the basis for its recommendation of Manchester. The reasons given by the CAP in support of its recommendation highlight the likely commercial success of a location with "*a catchment area for a casino second only to London*" and the assertion that "*as one of England's eight 'Core Cities' and one of the cities in the Northern Way, (Manchester) has a pivotal role in the regeneration of Northern England.*"³⁴

The evidence is that no matter where a single regional casino licence is located it will be a commercial success³⁵ and there is a hint of obfuscation that specific and positive references should be made to national regeneration initiatives in support of the CAP recommendation having rejected without adequate evidence and argument, the preference expressed for Blackpool in both the NW Regional Economic Strategy and Regional Spatial Strategy.

Since the CAP Final Report was published there has been the suggestion that Manchester may now consider alternative locations other than the Sports City site on which it based its evidence to the CAP. Such a situation may in itself define the CAP

process as being fundamentally not fair given that its assessment has been based on a specific area within Manchester.

3. Conclusion

Professor Collins has criticised the CAP Final Report saying that its *“conclusions, though they certainly exhibit great independence and impartiality, nevertheless appear to be often arbitrary, highly disputable, and based on reasoning which is frequently inconsistent, superficial and ill-informed.”*³⁶

Others have described the CAP Final Report as lacking *“a robust evidence base”*³⁷ and that the selection criteria and process *“failed to meet essential requirements of being objective, independent, consistent, fair, thorough, and transparent.”*³⁸

104 Members of Parliament, including 80 from the Government’s own benches signed an Early Day Motion that expressed *“surprise and regret at the CAP failing to recommend a licence for Blackpool, whose case for regeneration is overwhelming and which matched the key criteria set for the Panel.”*³⁹

Certainly many in Parliament were angry with what was perceived as the Government’s undue haste to accept a report that House of Lords Merits of Statutory Instruments Committee advised *“may imperfectly achieve (the Government’s) policy objective.”*⁴⁰

Whatever one may think of how the CAP went about its task, and the quality of its Final Report, once the number of regional casino licences was reduced from the eight, as adopted within the Statement of National Policy (Casinos), to one in response to political pressure on the eve of the 2005 General Election, the task in relation to the one regional casino licence became impossible to carry out fairly.

References:

- 1 *Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007*, para 36, pp 11, 13th Report of Session 2006-07, Merits of Statutory Instruments Committee; House of Lords 67-I, 20 March 2007
- 2 See Hansard (House of Lords) Vol. 690, Part No. 67, 28 March 2007: Column 1664
- 3 CAP Final Report – Appendix C, paragraph 9
- 4 CAP Final Report – Appendix C, paragraph 8
- 5 See <http://www.culture.gov.uk/cap/members.htm>
- 6 See http://www.culture.gov.uk/cap/minutes/cap_min_5jul06.pdf
- 7 CAP Final Report – Appendix B
- 8 CAP Final Report - Chapter 3, paragraphs 64-67
- 9 CAP Final Report - Chapter 4, paragraph 83
- 10 See www.parliament.uk/parliamentary_committees/jcdgb_rg.cfm
- 11 CAP Final Report - Chapter 1, paragraph 12
- 12 CAP Final Report - Chapter 3, paragraph 81
- 13 Professor Collins' submission to the Select House of Lords Merits of Secondary Instruments Committee examining the Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007 (Written Evidence HL Paper 67 – II, paragraphs 15 and 16)
- 14 CAP Final Report - Chapter 7, paragraph 125 and Chapter 9, paragraph 513
- 15 CAP Final Report - Chapter 7, paragraph 178
- 16 Statement of National Policy (Casinos), 16 December 2004
- 17 Dr Gerda Reith, University of Glasgow: *Research on the Social Impacts of Gambling: Report to the Scottish Executive*, September 2006
- 18 CAP Final Report - Chapter 4, paragraph 88

- 19 *Casinos: Social Impact and Regeneration* (An International Case Review Commissioned by the Casino Advisory Panel, Karen NK Lee, 2006. See http://www.culture.gov.uk/cap/publications/capresearch_report.pdf)
- 20 See http://www.culture.gov.uk/cap/publications/research_forward_scrow.pdf
- 21 London Borough of Havering's submission to the Select House of Lords Merits of Secondary Instruments Committee examining the Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007 (Written Evidence HL Paper 67 – II, paragraph 12)
- 22 London Borough of Havering's submission to the Select House of Lords Merits of Secondary Instruments Committee examining the Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007 (Written Evidence HL Paper 67 – II, paragraphs 13 -28)
- 23 See http://www.culture.gov.uk/cap/documents/Table_moderated_scores_regional.pdf
- 24 See http://www.culture.gov.uk/cap/documents/ranked_proposals.pdf
- 25 Statement of National Policy (Casinos), 16 December 2004
- 26 See http://www.culture.gov.uk/cap/documents/ranked_proposals.pdf
- 27 London Borough of Greenwich's submission to the Select House of Lords Merits of Secondary Instruments Committee examining the Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007 (Written Evidence HL Paper 67 – II, paragraph 9)
- 28 Cardiff City Council's submission to the Select House of Lords Merits of Secondary Instruments Committee examining the Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007 (Written Evidence HL Paper 67 – II, paragraph 38)
- 29 Guidance Notes for Participants in the Examination in Public of certain proposals for a Regional Casino (Revised 2nd August 2006) paragraph 17. See http://www.culture.gov.uk/cap/documents/EiP_guidance.pdf
- 30 Blackpool Council's submission to the Select House of Lords Merits of Secondary Instruments Committee examining the Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007 (Written Evidence HL Paper 67 – II, paragraph 30)
- 31 Blackpool Council's submission to the Select House of Lords Merits of Secondary Instruments Committee examining the Draft Gambling (Geographical Distribution of

Casino Premises Licences) Order 2007 (Written Evidence HL Paper 67 – II, paragraph 30)

32 M W Etches attended each of the seven EiP sessions and took notes that included this invitation being made.

33 CAP Final Report - Chapter 5, paragraph 92

34 CAP Final Report - Chapter 9, paragraph 517

35 Professor Collins' submission to the Select House of Lords Merits of Secondary Instruments Committee examining the Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007 (Written Evidence HL Paper 67 – II, paragraph 13)

36 Professor Collins' submission to the Select House of Lords Merits of Secondary Instruments Committee examining the Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007 (Written Evidence HL Paper 67 – II, paragraph 8)

37 Blackpool Council's submission to the Select House of Lords Merits of Secondary Instruments Committee examining the Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007 (Written Evidence HL Paper 67 – II, paragraph 2)

38 London Borough of Havering's submission to the Select House of Lords Merits of Secondary Instruments Committee examining the Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007 (Written Evidence HL Paper 67 – II, paragraphs 31)

39 Early Day Motion 823 *Casino Advisory Panel and Blackpool*, Joan Humble MP. See <http://edmi.parliament.uk/EDMi/Search.aspx>

40 *Draft Gambling (Geographical Distribution of Casino Premises Licences) Order 2007*, para 39, pp 12, 13th Report of Session 2006-07, Merits of Statutory Instruments Committee; House of Lords 67-I, 20 March 2007

Taking Risks Wisely: an educational intervention

Nelleke Bak

University of Alabama at Birmingham

*Abstract: In 2006, the SARGT commissioned a teaching resource for use in South African schools and suitable for youth groups. Some key challenges presented themselves: the series of lessons had to conform to the legislated OBE requirements of South African schooling; the material had to address the real and pressing risks faced by South African youth; the task of the teacher had to be made easier, rather than complicated (and increased); and finally, the material had to be able to engage a vast range of different learners (in terms of English language ability, intellectual abilities, socio-economic backgrounds, geographical locations and multi-cultural milieus). The initial part of the project, *Taking Risks Wisely, for Grades 7-9*, is a colourful, eye-catching multi-media resource that lends itself to a variety of users in a variety of contexts. The model of learning that underpins it is process learning, driven by activity-based learning tasks. Although distinctly South African in design and examples, it has international appeal.*

The public education charge of the SARGT

The South African Responsible Gambling Trust (SARGT) was established by the National Gambling Act of 1996/2004. Its brief is to advise and monitor social and health consequences of commercial gambling and act to mitigate harm. The SARGT administers the independent research unit called the National Centre of the Study of Gambling as well as the National Responsible Gambling Programme (NRGP). A major component of the NRGPs agenda is to develop sound educational programmes that have the following general goals:

- To reduce the incidence of problem gambling, especially among youth;
- To reduce the risks and harms related to problem gambling;
- To increase public awareness about the potential consequences of gambling and promote healthy lifestyle choice;
- To neither encourage nor discourage people from gambling; but to help them exercise their freedom of choice in an informed and responsible way.

The NRGPs is neutral with respect to whether adults choose to spend their free time and money gambling. It is, however, concerned that people who presently gamble or who may one day choose to gamble, do so knowing what the risks are and how to minimize them.

In 2006, the South African Responsible Gambling Trust commissioned a group of educational experts to develop a teaching resource for use in South African schools and

suitable for youth groups. The first phase of the project has been completed and is called *Taking Risks Wisely*. Not only does the resource focus on achieving the aims of the NRGP as listed above, it also draws of the latest research that is being undertaken by the research centre on the latest scientific findings relating to addiction in general, and pathological gambling in particular.

The challenges of developing an effective teaching resource

As an initial undertaking, the commissioned curriculum developers sourced the various school programmes on offer in other countries. Extensive curriculum work has been done in Australia (especially in Queensland), and to a lesser extent in the United Kingdom and in the USA. Particularly robust and innovative schools programmes have been developed in Canada (Saskatchewan in particular has well-targeted multi-media material). The South African curriculum developers were excited and impressed by much of what is on offer, but judged that in order for the NRGP education programme to be effective in South Africa, it needed a schools programme that seriously addresses the unique challenges faced by South African teachers and learners. We therefore set about developing our own material, with the focus of making it relevant to the very people who will be using it and responsive to the educational and social context of South African schools and youth groups.

1. The first major challenge was to design a series of lessons that would conform to the legislated requirements of South African schooling. The resource has been developed within the context of Outcomes Based Education (OBE) and the South African Revised National Curriculum Statement. Its contents and activities are designed in such a way to achieve the stipulated critical outcomes which include: to promote learners who will be able to identify and solve problems and make decisions using critical and creative thinking; to work effectively with others as members of a team; to manage their own activities responsibly; to communicate effectively; to use up-to-date information to inform their responsibilities to themselves and to others; and to understand that problem-solving contexts do not exist in isolation.

The South African schooling system has four main phases: the General Education and Training band comprises the Foundation phase (R- Grade 3); the Intermediate phase (Grades 4-6), and the Senior phase (Grades 7-9). The Further Education and Training band includes Grades 10-12 (the last two years of schooling).

The group decided to develop material for Grades 7-9 (learners are about 12-15 years) and for Grades 10-12 (whose learners are about 16-18 years). And eventually for youth groups. Although there is some evidence of “problem gamblers” as young as 10 years old (Gupta and Derevensky 1998, and Frankel and Louw 2004), what might count as “addiction” in children is not clear once it’s recognized that addiction, including gambling addiction, is a neurochemical condition (Ross *et al* 2008). The reason for concentrating on the teenage years is that the adolescent learner is starting to be exposed to a wider range of risky health and safety issues, and increasingly adolescents are

starting to make independent decisions about which activities to become involved with, including high-risk entertainment activities like gambling. In order to make informed and sensible choices with regards to health, safety, life-style options and leisure time activities, appropriate understanding, skills and values are needed. Since the adolescent learner has to deal increasingly with a range of high-risk behaviours, the educational material that we developed is aimed at helping the learner acquire such skills. It is not so much a matter of **what** to decide, but rather **how** to go about making sensible decisions. We believe that if the learner understands the process of responsible decision-making, then it is a process that can be applied to a whole range of risky situations. The resource is therefore called *Taking Risks Wisely*.

2. The second main challenge therefore for us was to develop material that addresses the real and pressing risks faced by South African youth. They are at risk because as they are initiated into the adult world, they are being confronted with forms of adult lifestyles, e.g. smoking, drinking, sexual relationships and gambling. Given the alarmingly high rate of HIV/AIDS in South Africa, and the extensive drug problem among youth, we know from teachers that equipping learners with appropriate skills to handle these high-risk forms of behaviour is essential. The main thrust of the material is therefore aimed at teaching learners **how** to make sensible decisions about high-risk behaviour, including gambling, and how to manage the risks sensibly if they do decide to gamble.

The decision to develop material that teaches learners how to decide rather than telling them what to do is based on the following considerations: telling youth not to engage in a risky form of behaviour very often is the motivation for them to go and try it; and second, merely telling youth that gambling is bad in no way develops critical thinking and understanding that are the very aims of the South African OBE directive. Moreover, we think it imperative to promote a skill that can be applied to an ever-changing range of different high-risk behaviours, not just to gambling, or to drinking or to sex. In the fast-paced and ever-changing social environment, there is an increasing range of entertainment options available. Also, youth – especially in cities - are interacting with a range of different groups of people, each one with different social conventions. For example, there are different levels of acceptance about drinking, the use of drugs, sexual relationships, and gambling. In some groups, drinking is regarded as morally wrong, whereas in other groups it is part of everyday life. Having to make responsible choices about the overwhelming options is therefore an important skill for youth to learn.

Studies have shown (Jacobs 2000) that youth are more at risk for developing addictive patterns of behaviour than any other age group. Youth are particularly at risk because of their over-confidence combined with their lack of full life experiences. They are convinced that they will be able to handle the risks in certain situations, but since they don't yet have the experience of just what those risks are, they are often unable to cope with the actual outcomes. It is the main aim of *Taking Risks Wisely* to help learners develop the understanding, appropriate skills and values that will enable them to make sensible and informed decisions about many of the new high-risk behaviours with which they are being (or will be) confronted.

3. The third key challenge was to make the task of the teacher *easier*, rather than to complicate (and increase) it. Also, the education programme had to cohere logically within the prescribed Learning Areas or subjects of the GET (Senior Phase). The most appropriate place for the lessons is within the Life Orientation Learning Area which has five main Learning Outcomes: Health promotion, Social development; Personal development; Physical development and movement; and Orientation to the world of work. The teaching and learning resource *Taking Risks Wisely* slots into two of these Learning Outcomes, viz Health promotion and Personal development. Health promotion helps learners “to make informed decisions regarding personal, community and environmental health”, and personal development aims to teach learners “to use acquired life skills to achieve and extend personal potential to respond effectively to challenges in his or her world”.

By developing material that teachers see as relevant not only to teach about the risks in gambling but to a whole range of high-risk behaviours, we try to facilitate over-worked teachers’ buy-in. Coupled with a design that takes seriously the constraints that many teachers face (teaching material with which they’re not familiar, teaching in a language in which they are often not fluent, completing OBE lesson plans and ensuring that assessment standards are adhered to), *Taking Risks Wisely* hopes to be an effective teaching and learning tool with positive implications for lifelong learning as different high-risk options have to be thought through carefully and responsibly.

4. The next challenge was to design material that can engage a vast range of different learners (in terms of English language ability, intellectual abilities, socio-economic backgrounds, geographical locations and multi-cultural milieus). The English in which the resource is written therefore had to be very clear and simple. Key concepts had to be explained carefully and the examples used had to be relevant to the life-world of learners who live in affluent urban areas and attend well-resourced schools, as well as to rural learners whose school conditions are scant and under-resourced. The still recent legacy of apartheid in South Africa means that there are schools with no electricity, learners with scant skills in English, and teachers who are feeling both overwhelmed coping with a completely new (and administratively intense and demanding) schooling system.

Outline of *Taking Risks Wisely*

The first phase of the material is aimed at the Grade 7 - 9 learner who is increasingly exposed to a range of risky situations in the physical and socio-economic environment and who needs to acquire the skills to make responsible decisions. The main rationale for developing the material with a focus on high-risk behaviour is that the potential of developing a behavioural problem can be reduced through awareness and education.

Teachers can help learners reduce the risks involved in certain forms of behaviour. *Taking Risks Wisely* is aimed to help the teacher help teenagers make sensible decisions about their leisure time activities and how to avoid developing a gambling problem, especially in a world that accepts gambling as a legitimate form of entertainment.

The resource is designed to do the following:

- Help learners identify high-risk behaviours and assist learners in developing sound decision-making skills on how to manage high-risk behaviour responsibly.
- Show that gambling is a form of high-risk behaviour.
- Explain to learners how gambling works (i.e. the underlying mathematical principles) and why the outcome of gambling cannot be known beforehand or be controlled.
- Explain to learners the various misconceptions, superstitions and myths that give gamblers the illusion of control.
- Show learners that gamblers pay for the opportunity to gamble and that the more players gamble, the more they have to pay.
- Teach learners about the social, psychological and economic risks involved (e.g. spending more time and resources than are affordable, or developing problems with gambling)
- Make learners aware of certain strategies that may help reduce those risks and to help learners develop competencies and confidence to take action in managing personal high-risk behaviours and/or the effects of problem gambling by people they care about.

The structure of the teaching and learning programme is designed to make it relevant to South African learners' actual environments and interests. Part of the material consists of a comic, with "township" characters: Joe who gets into serious gambling problems, Tiger his friend who sees Joe heading for trouble, and Sister Bucks, the sleazy operator who encourages Joe to bet. These are South African figures that learners from all different backgrounds can recognize and understand. Moreover, the examples used are typically South African (e.g. fafi betting), and the colourful design of Ndbele artwork, a zebra motif and a mask to indicate the three different grades make this an eye-catching and innovative presentation that will hopefully stimulate both teachers and learners to become involved with the content. Although distinctly South African in its examples and design, the resource aims to have international appeal.

Taking Risks Wisely, bound in an easy to use ring binder, consists of: a printed teachers' manual with five detailed lesson plans for each of the three grades, scripted delivery, transparencies, structured learning activities (with answer sheets for the teachers), a comic book and an interactive CD rom. By creating multi-media materials, we hope to that both teachers and learners remain stimulated by engaging with a variety of different methods. We think that this encourages sustained interests as well as flexibility of thinking and decision-making skills. Also, for schools that do not have ready access to computers or the internet, the text-based material covers everything that the CD rom does. Moreover, the CD rom offers learners the opportunity to engage with the issues in a different way, and is also suitable for accelerated learners who want to explore additional considerations.

Although the material is mainly designed for face-to-face teaching, much of the curriculum design lends itself to distance education. The CR rom will be posted on the internet and freely accessible. Moreover, given the step-by-step development of understanding, the print-based material can easily be adapted for users who want to learn independently, e.g. for members of youth groups or adults enrolled for education programmes in community centres, or even for inmates in prisons.

A key design feature of the resource is that learners learn by doing. Like learning to ride a bicycle, learners have to “get on” and get actively engaged with the issues. The lessons therefore are driven by activity-based learning tasks. These are set out in the “Learning Activity Sheets” which are printed single-sided, are easily detached from the ring binder, and are in simple black and white in order to make photocopying easier and cheaper.

The model of learning which drives this curriculum is that of process learning, which means that understanding proceeds i) through systematic and active engagement with the issues, as well as ii) through regular reinforcement. Key concepts are introduced early on and are subsequently re-visited in later Grades with the aim of developing an enriched and deeper understanding. So, in each of the Grades the notion of high-risk behaviour and decision-making skills are addressed with the aim of consolidating and building on previous understandings. Learning is not so much a simple linear process, as a systematic cyclical process with ever-increasing sophistication and mastery. The comic book also lends itself to multiple uses. In Grade 7 it is used to illustrate the difference between the actual consequences of Joe’s gambling as opposed to Joe’s hoped-for outcomes; in Grade 8 learners use the comic book to identify Joe’s reasons for gambling; and in Grade 9, learners discuss the warning signals of Joe developing a gambling problem.

Since we are aware of South African teachers’ extraordinarily demanding workloads, we have tried to anticipate many of the possible teaching tasks. The resource *Taking Risks Wisely* is presented in a user-friendly format that reduces the teacher’s load, rather than increases it. Each detailed lesson has a summary of the main steps and key concepts, and icons indicate the different tasks (e.g. teachers presenting information, learners doing a learning activity). Teachers at a glance can follow the logical progression of the main phases and specific steps in each lesson. For those teachers who are unfamiliar with the content and who welcome suggestions on what to say when, each lesson has sections with scripts for teachers to follow. Main points are captured in colourful transparencies. The resource also provides possible answers that teachers can consult to the tasks and questions learners have to complete. A combination of colour-coded section indicators and simple icons for task recognition make it a resource useable for teachers with different abilities and in different teaching environments.

At the end of the resource, additional references and websites are given for those teachers who wish to know more about gambling or who wish to develop their own materials.

The way forward

The resource *Taking Risks Wisely* is being pilot tested in specific sites and feedback from teachers and learners will inform the further development of the resource, ensuring a relevant, lively and productive pedagogical tool. The next phase in the programme will be aimed at Grades 10-12, with more emphasis on money management, other forms of gambling (e.g. sports betting and the internet), and the persuasive social and physical factors that entice gamblers to keep betting. The material for youth groups will again focus on sound budgeting for leisure time activities, as well as examine the various myths and superstitions that give players the illusion of control.

Since the material is designed for flexibility and adaptability by different-leveled teachers, learners, physical school environments and geographical locations, it can also easily be used by social workers, adult education facilitators, counselors in penitentiaries and parents. The complementarity of print-based materials and internet presentations encourages a variety of uses and so hopefully reaches an ever-increasing number of users. In this way, we envisage promoting the aims of the NRGP in a robust way that sets an example for other countries.

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Why Gambling Policy is Falling Behind Gambling Science

Don Ross

University of Alabama at Birmingham

Systematic research into gambling behaviour (including but not limited to problem and pathological gambling) has recently moved from being a fringe activity of a tiny community to a being a substantial academic industry. Whenever this happens to a subject area, one always sees very rapid improvement in methodological sophistication, as sharper workers are drawn to the field and as young scientists choose to make it their specialization from the outset. In science, the best work is mainly contributed by the younger researchers. Gambling research has been no exception to this rule. It has also been no exception to another, less happy, generalization. When an area of public policy controversy opens space for popular scientific authorities – that is, scientists who serve as policy and advocacy consultants and media spokespeople – the public tends to assume that ‘authorities’ ought to be old and wise, or at least middle-aged and impressively officed. It has trouble understanding that older scientists, especially in rapidly expanding research areas, are with respect to their younger compatriots more like older footballers than they are like older businesspeople or older civil servants. Contemporary science has much less to do with wisdom than with mental stamina and knowledge of the newest technologies (including new mathematics).

In a very few recent years, the scientific community has made large strides towards understanding the nature of pathological gambling and of addictive and impulsive behaviour more generally. This is mainly thanks to contributions from neuroscience. In consequence of new investigative technologies, neuroscience is now the driving engine of all behavioral and cognitive sciences, and has turned upside down one assumption after another that were treated as ‘defining principles’ a mere decade ago. Yet what is mainly informing public debate on gambling policy today is behavioral research of a traditional, methodologically crude and – most importantly – systematically misleading kind. The aim of this article is to explain just *what* is crude and misleading about studies of problem gambling when they are innocent of neuroscience.

Problem and pathological gambling are social phenomena. Scientific investigation of any social phenomenon must always start with determining its magnitude. Thus the first wave of good studies of gambling behaviour were efforts to estimate prevalence and incidence of different behavioural tendencies to gamble in various populations. The methodology for doing this is straightforward: one takes a community sample large enough for sound statistical inference and tries to determine how much of the sample gambles occasionally, how much gambles regularly, how much gambles very frequently, and how much gambles more than they or their families wish they did. This is pedestrian science for which no one will win prizes, but it is the foundational work on which all else rests. Furthermore, it has had to be done over and over, in different national and cultural populations, since the only thing that can really assure us that prevalence estimates are

converging on a true and reliable range is getting similar numbers in repeated surveys under varying background conditions.

In gambling research, the logical priority of prevalence studies raised a fundamental problem from the beginning. In order to count problem gamblers or pathological gamblers one needs to have some prior conception of what a ‘problem gambler’ or a ‘pathological gambler’ is to begin with. This conception ought itself to be based on science; yet we are here talking about the *first* application of science to the phenomenon. A proverbial chicken-and-egg problem arises.

The initial generation of gambling researchers resolved this dilemma by turning to the one *other* systematic kind of work that has been done with disordered gamblers, namely, refinement of clinical diagnosis. Ideally, the clinical community stabilizes diagnostic criteria in the following way. First, clinicians report symptoms that they have observed occurring together – so-called ‘comorbidities’ – in their necessarily small and unrepresentative patient samples. These reports are published in journals of clinical observations. Periodically they are reviewed by meta-analysts who search for comorbidity patterns that recur frequently across the small accidental samples. To the extent that such patterns can’t be explained away as consequences of the interactions of other, already diagnosed and managed, conditions or syndromes, they become the basis for new diagnoses. Once there is approximate consensus on a diagnosis and on the best treatment practice that should follow from it given current knowledge and technology, this is published in a diagnostic manual. Typically, diagnostic manual entries do more than merely summarize the physicians’ observations on which they’re based. They also aim to *refine* diagnostic practice by supplying a standard test or *protocol* that clinicians can use with a patient when they suspect that she is suffering from the newly defined condition. This has the highly valuable consequence that one clinician can then refer a patient along through the treatment network using diagnostic labels that are interpreted in roughly the same way by everyone who consults the patient’s file.

Non-scientists might suppose that this is the end of the story with respect to isolating and characterizing a type of pathology. For many clinicians, whose concerns are mainly practical, it is. For the scientist, however, it is just the *beginning* of the road to understanding. Knowing that a group of symptoms are comorbid immediately raises the question ‘why?’ What *mechanism* is responsible for the comorbidity in question? How does the pattern relate to other (especially other already understood) patterns? What causes it to arise in some people rather than others? These scientific questions are of course not merely expressions of disinterested curiosity. They are the basis of improvements in prevention, treatment and, ultimately, diagnosis itself. When diagnostic manual entries are revised, as they regularly are, this is usually in consequence of systematic scientific research rather than new clinical observations that contra-indicate previous ones.

Scientists distinguish between *analyses* and *operationalizations* of their concepts of the phenomena they investigate. When a scientist operationalizes an idea she doesn’t think of

herself as trying to directly state the truth about its deep nature. Rather, she takes herself to be stipulating what she'll mean by it *for now*, pending theoretical refinement. Analysis is then something to be done after the data, which are gathered using the operationalization as a tool, have come in. The only test of a good operationalization is usefulness: does it divide the phenomena being studied into two or more piles that both or all turn out to be interesting? Diagnostic manual entries are such operationalizations, filters through which data are gathered. The scientist expects to eventually discard them, once her field achieves consensus on analysis. Of course, such consensus can take many years to stabilize, and in the interval doctors and patients will go on thinking about diagnoses and prognoses in terms of the prevailing operationalization. This can easily lead them, and others, to forget that real analyses remain outstanding. I think this has happened with the phenomenon of pathological gambling.

In the case of patterns in gambling behavior, the relevant clinical authorities are psychiatrists. Their *Diagnostic and Statistical Manual of Mental Disorders*, currently in its edition IV, operationalizes 'pathological gambling' as follows:

A chronic inability to refrain from gambling to an extent that causes serious disruption to core life aspects such as career, health and family. A person is diagnosed as a probable pathological gambler if they agree with five or more of the following statements:

1. You have often gambled longer than you had planned.
2. You have often gambled until your last dollar was gone.
3. Thoughts of gambling have caused you to lose sleep.
4. You have used your income or savings to gamble while letting bills go unpaid.
5. You have made repeated, unsuccessful attempts to stop gambling.
6. You have broken the law or considered breaking the law to finance your gambling.
7. You have borrowed money to finance your gambling.
8. You have felt depressed or suicidal because of your gambling losses.
9. You have been remorseful after gambling.
10. You have gambled to get money to meet your financial obligations.

Like many psychiatric operationalizations, this one is based on a *screen*, that is, a survey instrument to be administered verbally or on paper to patients. The screen, then, is a diagnostic tool that implements the operationalization, which is itself a diagnostic tool. *It is not an established scientific fact, but a pre-scientific working assumption adopted for practical clinical purposes, that most people with serious gambling disorders will agree with five or more of the statements above.* This goes almost entirely unnoticed in public policy debates over gambling that cite prevalence research.

The *DSM-IV* diagnosis is not the only operationalization of gambling disorders relevant to the policy community. Regulators, industry participants and counselors also refer

regularly to ‘problem gambling’, which is often taken to indicate regretted over-indulgence in gambling that is not (yet) ‘out of control’. In the United States, President Clinton constituted a Committee on the Social and Economic Impact of Pathological Gambling that submitted its report in 1999. It operationalized problem gambling as “gambling behavior that results in any harmful effects to the gambler, his or her family, significant others, friends, co-workers etc.” In this the Committee simply reflected what it found in the treatment and policy literature at the time. However, this operationalization is not connected to any *DSM*-based screen. Moreover, it is so liberal as to be clinically useless: losing £5 on a football bet or being late for lunch with a co-worker because of a queue at the betting window constitute ‘harmful effects’ of gambling, however trivial. Ideally, if ‘problem gambling’ is intended to denote a condition that constitutes a warning for vulnerability to fully-fledged pathological gambling, then the operationalizations of the two ideas should line up with one another. That is, we should be able to use the same screens we use for identifying pathological gamblers to identify problem gamblers, but applying a lower threshold. However, this confronts us with the problem that the statements in the *DSM* screen don’t all seem to be equally diagnostic. Anyone who agrees with questions (5), (6) or (10) probably has or had a relatively serious problem associated with gambling, and likewise for (8) if ‘depressed’ is interpreted neurochemically (as it should be, given how far along the road to analysis science has come with depression). But this cannot be said of the other statements unless their interpretations are specially restricted. It cannot be said of question (1) under *any* plausible restriction. These criterial differences make it unclear what ‘lowering the threshold might *mean* in the case of the *DSM* screen.

Thus, despite the regular use in the media and in policy circles of the phrase ‘problem gambling’, it has no workable operationalization, let alone an analysis. For the moment, therefore, if we want to at least talk *clearly* – if not yet scientifically – then we should confine ourselves to referring to ‘pathological gambling’ and drop ‘problem gambling’. Nevertheless, there are important motivations for the sort of distinction that President Clinton’s sensible Committee fuzzily tried to draw. It is patently obvious that many people occasionally lose more money gambling than they retrospectively judge they can comfortably afford, while a much smaller proportion of people – almost certainly no more, and probably significantly less, than 3% of any adult population ever surveyed – find their lives and welfare catastrophically consumed by an almost unrelenting felt compulsion to gamble. Policy-makers and industry participants *need* to know whether there’s a qualitative ‘jump’ between typical consumers of gambling services who sometimes have bad days at the casino – as people have bad days in all their activities – and pathological gamblers as people for whom special policies and practices need to be adopted. Most carefully regulated and administered casinos do, at present, implement a distinction like this as a prudential matter and aim to identify and then exclude full-fledged pathological gamblers. They don’t, however, seek to exclude or have special policies for those who merely occasionally gamble a bit more than they intended to. If there is *not* a qualitative jump between these types and all people who gamble too much are on a smooth continuum without ‘bright lines’, then policy problems are going to be relatively more challenging. If any frequency at all of ‘bad days’ has *some* predictive

significance for a person's probability of developing pathological gambling, then casino operators and gambling policy-makers carry a potentially dramatic level of ethical responsibility. On the other hand, if pathological gambling is a distinctive and relatively *sui generis* condition, then we should expect science to eventually make the problem no more *morally* tricky than that of aiming to keep people with tuberculosis off jetliners.

Are occasional episodes of reckless gambling, then, the road to full-blown obsessive gambling? At present, scientists simply don't know the answer to this question. As I will be explaining shortly, we *do* now know quite a lot about full-blown obsessive gambling; in particular, we know that it is a form of addiction and we have a quite good idea as to what addiction amounts to as a neurochemical condition. However, we don't yet know what triggers its onset. There is evidence that some part of vulnerability to addiction – but no one knows what proportion – is genetically inherited. However, most genetically inherited dispositions require certain sorts of environmental triggers to produce their associated effects. It is a reasonable guess that for gambling addiction these triggers include opportunities to gamble. But no one knows – *at all* – whether or how much it might matter whether these opportunities are hard or easy to come by, or frequent or rare in a person's environment.

Most adult addictions begin in adolescence. That is a useful fact to have in our hands, but not as informative for policy as one might think. The reason for this is that *most* adolescents indulge in potentially addictive consumption (of various kinds) at rates that in an adult would be regarded as reliable indications of addiction. Yet the large majority of such adolescents reduce their consumption by their late twenties without outside intervention or any significant struggle – or even conscious decision – on their own part. Thus, though addicted adults were typically impulsively consuming adolescents, most impulsively consuming adolescents don't become addicted adults.

One key policy question around gambling is: how much care and trouble should we take to shelter young people from commercial gambling environments? Another is: how many curriculum resources should we devote to educating children and teenagers about the dangers of over-indulgence in gambling? Until we know much more than we do now about the developmental basis of pathological gambling, any speculations on these questions are just that. So here is a topic on which the application of scarce resources for research seems especially well motivated.

The strength of this motivation will of course be sensitive to how common we believe pathological gambling to be. A typical estimate found in the current research literature is 1% to 3%. That isn't a very precise range, to put it mildly: the upper limit is three times the size of the lower one. In the UK alone the difference between the floor and the ceiling is 1 million 260 thousand people.

I said earlier that the first thing the scientific community systematically explored with respect to disordered gambling was prevalence determination. I also said that this is quite straightforward methodologically. However, I also said that it depends on beginning with

a tolerably useful operationalization of the phenomenon one aims to estimate. It emerges at this point that the operationalization of pathological gambling based on the clinical criteria of the *DSM* raises significant problems.

With respect to conditions that can cause serious harm, such as pathological gambling, the clinical imperative – the need to help suffering people – has higher social priority than scientific research. In screening people to determine who are pathological gamblers for clinical purposes, the treatment community rightly prefers to err on the side of avoiding false negatives. That is, there is a preference for diagnosing risk in some people who aren't really in trouble over missing people who in fact need help. Clinical screens build in this bias, and are rightly criticized on public health grounds if they don't. But then we face a dilemma in choosing a screen for research purposes. If we use the clinical screen, we will find in most populations we survey a higher prevalence of the target condition than is really there. If we instead develop a research screen that differs from clinical screens, then we'll get mis-matches between clinical and research samples. This is problematic for two reasons. First, subject recruitment for studies of conditions that affect only small proportions of the population, such as pathological gambling, is difficult and expensive. Practical purposes require that we usually rely on samples already assembled (often by self-selection) for treatment purposes (so-called 'convenience samples'). This is especially true, for obvious reasons, when an aspect of a research project is evaluation of a therapeutic approach. Second, there are serious ethical problems in sorting clinical populations into those we scientifically classify as 'really' manifesting the condition for which they are being treated and those we admit we have merely diagnosed for cautionary reasons. Since scientific research on subjects cannot be concealed from those subjects, doing this would send confusing signals to the subjects as patients, and thereby undermine the point of having designed our clinical screens to minimize false negatives in the first place.

These objections carry the day in practice. In the study of pathological gambling, research subjects are generally recruited and pooled using clinical screens. This has several problematic implications.

First, it creates havoc for the job of prevalence estimation. In the face of this, an ideal prevalence study applies a so-called 'double filter'. That is, if one has run statistical tests to determine the *extent* to which a screen gathers false positives, one can then use this to systematically down-weight prevalence estimates in a population obtained using that screen.¹ However, notice that this requires that we have already made some progress in the direction of analysis; if you have nothing beyond a bare operationalization of your

¹ For examples see Cox, B., Enns, M., and Michaud, V. (2004), Comparisons between the South Oaks Gambling Screen and a DSM-IV-based interview in a community survey of problem gambling. *Canadian Journal of Psychiatry* 49: 258-264; and Grant, J., Steinberg, M., Kim, S.W., Rounsaville, B., and Potenza, M. (2004). Preliminary validity and reliability testing of a structured clinical interview for pathological gambling. *Psychiatry Research* 128: 79-88.

phenomenon with which to work, then you have no distinction on which you can base the statistical testing.

Second, when considering any research report, especially of research into the efficacy of a therapy or policy, one needs to know where the screen used to recruit and pool subjects stands comparatively on the question of the average *severity* of pathology found in these subjects. Consider two hypothetical screens A and B. Suppose that screen A consistently produces samples in which the median subject agrees with 8 statements in the *DSM-IV* operationalization of PG, while the median subject recruited by screen B agrees with 6 of them. If one knows that, then one also has reason to suspect that research using screen B is more likely to find that a given policy or therapy is effective than is research on that same policy or therapy that recruits and pools subjects by means of screen A – because the A-screened samples will contain higher proportions of ‘hard cases’. (One can’t be quite sure of this, however, because of the fact that, as noted above, not all the *DSM-IV* criteria seem to be of equal diagnostic weight. Suppose, for example, that more of the B-screened subjects agree with statements (5) and (6).)

Third, one of the ‘big’ questions about pathological gambling for policy purposes, as indicated above, is whether there is a qualitative jump (which should be indicated by some quantitative discontinuity) between sub-groups of disordered gamblers. As I also explained, if there is such a discontinuity then it is highly unlikely that our current operationalizations exactly line up with it; bringing our operationalizations closer into line with it, so that they approach analyses, is precisely one of our current goals. This means that we can’t fully trust results derived from work using just one screen, because each screen will have its own bias with respect to the population proportions it selects on either side of the discontinuity² – but we can’t know in advance where these biases are, at least until we’ve clearly identified the basis of the discontinuity (assuming there is one). To complicate matters further, some researchers believe that there are three different kinds of pathological gambler, that each kind results from a different psychological process and starting point, and that people suffering from each kind respond best to different sorts of intervention.³ Where diagnostic screens are concerned, this suggests the possibility of different scales with discontinuities at different measurement points and of different magnitudes. We should therefore ideally run every study we think is important on several groups of subjects recruited using different screens; but this practice is expensive, logistically tedious, and almost never carried out.

This set of circumstances confronts us with a basic trade-off. On one hand, it is helpful for cross-comparability of studies that one particular screen has so far dominated pathological gambling research. On the other hand, this also limits our ability to bootstrap our way around the inadequacies of our initial operationalizations. In an ideal world we’d

² This would apply to the simplest case where screens rank subjects the same way.

³ Blaszczynski, A., and Nower, L. (2002). A pathways model of problem and pathological gambling. *Addiction* 97: 487–499.

have a matrix: we would use all available screens on sub-sample populations in all studies, thus having cross-comparability *and* controlling for screen biases.

Of course, we don't live in an ideal world (for research), where researchers have infinite budgets. The dominant instrument in the real world, as referred to immediately above, is the South Oaks Gambling Screen (SOGS) introduced in 1987.⁴ The SOGS is closely based on the *DSM-III-R*⁵ criteria for pathological gambling. (It has not been updated to reflect changes subsequently introduced with *DSM-IV*.) As of a 2000 survey,⁶ these diagnostic criteria had been used in over 90% of published research on pathological gambling. The SOGS can be self-administered by prospective subjects, which is convenient and cost-efficient. However, its tendency to yield false positives appears to be considerable, perhaps as high as one out of every two diagnoses. The leading gambling researcher Nancy Petry⁷ recommends that for research purposes SOGS be used as an initial screen, and that a more discriminating instrument then be employed as a further filter. She reviews four such existing instruments, among which the Diagnostic Interview for Gambling Severity (DIGS) developed by Winters and colleagues⁸ has been suggested by validation studies to be especially promising. Another recently developed more intensive instrument is the Canadian Problem Gambling Index (CGI),⁹ which facilitates distinguishing between more and less severely afflicted pathological gamblers as distinct categories. A research team of which I am part has surveyed one set of South African subjects using both the DIGS and the CGI and has found that the CGI diagnoses as pathological gamblers a clean subset of the subjects in the sample so identified by the DIGS. This is encouraging.

It must be clear, however, that such double-filtering hasn't thus far been the norm in gambling research, and that establishing it as the norm would add significantly to the average cost of studies. Instruments like the DIGS and the CGI are time-consuming to administer. Their use thus multiplies research staff time, laboratory usage time and the

⁴ Lesieur, H., and Blume, S. (1987). The South Oaks Gambling Screen (The SOGS): A new instrument for the identification of problem gamblers. *American Journal of Psychiatry* 144: 1184-1188.

⁵ This was the edition of the *Diagnostic and Statistical Manual* that was intermediate between the third and fourth editions.

⁶ Dickinson and Baron 2000.

⁷ Petry, N. (2005). *Pathological Gambling: Etiology, Comorbidity and Treatment*. Washington D.C.: American Psychological Association.

⁸ Winters, K., Specker, S., and Stinchfield, R. (2002). Measuring pathological gambling with the Diagnostic Interview for Gambling Severity (DIGS). In J. Marotta, J. Cornelius and W. Eadington, eds., *The Downside: Problem and Pathological Gambling*, pp. 143-148. Reno: Institute for the Study of Gambling and Commercial Gaming, University of Nevada.

⁹ Ferris, J., and H. Wynne (2001a). The Canadian Problem Gambling Index Draft User Manual. www.ccsa.ca/pdf/ccsa-009381-2001.pdf.

amount of subjects' time that must be requested. It thus also multiplies all of the main items in the cost budget of a typical prevalence study.

In many cases even double-filtering of the sort just discussed is inadequate. A number of studies have aimed at identifying the extent to which pathological gamblers tend to have additional comorbidities such as substance dependence, depression, schizophrenia, and anti-social personality disorder. Determination of comorbidity rates that are stable across populations of pathological gamblers, if there are any such rates, would be helpful for a number of reasons. First, it would assist in predicting the likelihood that a given person is at risk of becoming a pathological gambler, since establishing the comorbidity factors in question would carry at least some information about this. Second, it would be highly relevant to design of treatments and interventions, possibly helping to explain patterns of success and failure. Interventions that work for pathological gamblers who lack certain specific comorbidities might fail for others who do. For example, Ladd and Petry report that pathological gambling is more persistent in subjects who have been treated for substance abuse than in otherwise comparable subjects who have not been so treated.¹⁰ Third, efforts to explain such stable comorbidity patterns as we find might lead us to the explanation of pathological gambling itself, to the extent that pathological gambling and comorbidities are sometimes or often consequences of a common causal factor. Comorbidity data are what mainly lead Blaszczynski and Nower to the view that there are three different kinds of pathological gamblers. They report that across studies with larger numbers of subjects, stable proportions of pathological gamblers show comorbidity with, respectively (i) nothing, (ii) depression and other mood disorders, and (iii) anti-social personality disorder. Unsurprisingly perhaps, subjects in these groups respond differentially to therapy. Blaszczynski and Nower then argue, more controversially in my opinion, that the different comorbid factors causally contribute to pathological gambling in different ways (hence explaining the varying susceptibility to different interventions).

Most gambling policy in most countries, to the extent that it is sensitive to concerns about pathological or problem gambling,¹¹ attends to scientific research on gambling because of interest in the extent to which availability of commercial gambling opportunities and regulated features of casino games *causally* impacts on pathological gambling. As the perspective of Blaszczynski and Nower above reminds us, however, questions about causality are inherently bound up with underlying models about what pathological gambling is: a *sui generis* disorder or a secondary expression of less specific psychological problems? To the extent that we expect the latter, then gambling regulatory policy may be the wrong instrument for addressing the public health issues.

This point is the symptom of a deeper concern with basing public policy choice and opinion on standard prevalence studies. As typically designed, they capture correlations

¹⁰ Ladd, G., and Petry, N. (2003). A comparison of pathological gamblers with and without substance abuse treatment histories. *Experimental and Clinical Psychopharmacology* 11: 202-209.

¹¹ It isn't always. French policy, for example, takes little notice of pathological gambling in its motivations.

but can in principle shed no direct light on causal relationships. Simplifying matters a bit, there are two ways in which scientists investigate causation. One is by running controlled experiments in which suspected causal factors are systematically suppressed one at a time to test for their influence on effects. This approach is ethically challenging with human subjects and often logistically impossible in any case with large samples of the sort required for prevalence estimation of a low-frequency property such as pathological gambling. The other way of inferring causes is to gather data by reference to an explicit causal model and then test the data using a carefully selected regression technique tailored to the model. To my knowledge this has never been attempted in any pathological gambling prevalence study. There are two reasons for this. First, most pre-neuroscientific investigations of pathological gambling proceed on the basis of *no* underlying model. Second, the abstractness of the ‘pathological gambling’ construct, along with its multifarious demonstrated comorbidities, gives rise in vicious form to what econometricians call ‘endogeneity problems’. These occur when a dependent variable – in this instance, disposition to pathological gambling – is determined to different degrees by the model’s independent variables and these in turn partly co-determine one another. This limitation forces most prevalence researchers (like most social psychologists) to be content with weak tests of significance on correlations (e.g., T-tests), unable to employ the stronger econometric tests that aim to isolate causal structure.

These problems are not insurmountable. On the cutting edge of gambling research they are indeed being surmounted. I will now describe the current leading ways in which scientists aim to get around them.

First, on the issue of supplying an underlying model, it is neuroscience above all that is coming to the rescue. Efforts at developing hybrid neuroeconomic and neurochemical models of addiction, specifically including gambling addiction, are surveyed in a forthcoming book written by me and three co-authors.¹² It has been known for some time that addiction involves abnormal release of the neurotransmitter dopamine in an older part of the human brain (one we share with all mammals) located in roughly the middle, just above the palette. This is the system responsible for predicting rewards, valuing one potential reward against alternatives, and preparing motor activity to procure rewards. Thanks to the recently invented technology for testing refined functional hypotheses about brain processing based on disturbances in induced magnetic fields,¹³ it has been possible for scientists to gather sufficiently discriminating information about comparative neurotransmitter activity in addicts and non-addicts to work out specific models of addiction. I use the plural form for ‘models’ because residual uncertainties still leave room for more than one. However, all these models share some general features. Essentially, in addicts the dopamine reward system has gained control of the person’s overall behaviour by chemically attenuating feedback serotonin (and other) circuits from the frontal and prefrontal cortex that normally bid for some level of attention to longer-

¹² Ross, D., Sharp, C., Vuchinich, R., and Spurrett, D. (2008). *Midbrain mutiny: The picoeconomics and neuroeconomics of disordered gambling*. Cambridge, MA: MIT Press.

¹³ The two main varieties of this approach are functional Magnetic Resonance Imaging (fMRI) and Transcranial Magnetic Stimulation (TMS).

range sources of reward. Normal fear responses from the main emotional centre (the amygdala) are also suppressed. The reward system pulls off this mutiny by exploiting the discovery that, through relentlessly searching for cues to the arrival of an addictive target, and then organizing consumption of that target, it can reliably produce floods of dopamine that constitute the reward it is itself evolved to seek out and which simultaneously overwhelm the functioning of normally rival circuits.

It is clear that severe pathological gamblers closely resemble drug addicts in having hyperactive dopamine reward responses – at least in the presence of cues for gambling, including merely their own fantasizing about gambling – and hypoactive opponent neurotransmitter responses. This explains why the most seriously afflicted pathological gamblers display a variety of behavioural tendencies familiar from drug addiction, even in cases where they have no comorbid substance abuse problems. I thus regard it as confirmed that some proportion of people diagnosed as pathological gamblers by the *DSM* criteria are neurochemically addicted to gambling. When this insight is combined with the knowledge that the *DSM* criteria are biased in favour of false positive identifications, we are driven to conclude that it is highly likely that *DSM*-based screens – SOGS, DIGS and CGI alike – all tend to capture mixes of addicts and neurochemically normal heavy gamblers together. The SOGS may be less discriminating than the others, and the CGI might positively identify a smaller proportion of non-addicts; but all probably fail to a significant extent to ‘cut nature at its joints’, as the philosophers like to put it.

The existence of a model of gambling addiction that is independent of *DSM* criteria holds out the prospect of isolating causal factors for a refined re-operationalization of pathological gambling. The search for causal determinants has only just begun. However, the tools are finally at hand for making the search possible.

Given the expense, in both money and time, of examining subjects by neuroimaging, this kind of investigation will not *supplant* large-scale surveys of community samples. However, once we are equipped with independent model variables for gambling addiction, we can then seek so-called ‘proxies’ for them. These are behavioural variables that co-occur with the neural effects but are not directly implicated in the causal network that leads to obsessive heavy gambling and other self-destructive patterns frequently comorbid with it such as substance abuse. Re-engineering of the standard prevalence study should not stop there. The use of proxy variables to permit econometric tests of data against models is greatly enhanced in inferential power if at least a significant subset of a prevalence sample is re-visited and re-examined at one or more later time-points. Such longitudinal or panel studies permit measurement of changes in dependent variables against changes in independent ones. Best of all, one can combine longitudinal and experimental approaches: re-visited subjects can perform designed tasks, both in and out of the neuroimaging scanner, that allow testing of ever more closely refined models.

This is just what the team I lead in South Africa is preparing to do. With funding from the South African Responsible Gambling Trust, we will in 2008-2010 survey 5,000 subjects

cross-sectionally. A sub-sample of 300 subjects will be re-visited on at least 3 occasions, and will participate in behavioral experiments. A further sub-sample will perform the experimental tasks under neuroimaging. We are designing both the cross-sectional and longitudinal components of the study in light of a model of the behavioral control dynamic in gambling addiction that is informed by the latest neuroscience, and we are using state-of-the-art econometric techniques to test the model against the data.

I am confident that the South African group will soon be joined in this activity by many others. There are numerous scientists in the UK, the US, Australia, Canada and other countries who both know that this is how gambling research should be done and know how to do it – indeed, the breakthrough work on which our planned applications rest all come from top researchers in these countries, including George Ainslie, Warren Bickel, Paul Glimcher, Rita Goldstein, Read Montague, Nancy Petry, Marc Potenza, Howard Rachlin, David Redish, Howard Shaffer, Wolfram Schultz, and Nora Volkow. In South Africa we are small and nimble and unencumbered by an entrenched bureaucracy built around endless cataloguing of correlations. But we are glad the big battalions are coming up behind us.

In the meantime, I must urge policy makers, journalists, non-scientific academics and other commentators on gambling policy to bear in mind that all standing opinions in this area are based largely on a mixture of shallow truths and probable falsehoods. The usually cited figures for prevalence and incidence of pathological gambling probably mix apples and oranges and encourage exaggerated estimates. Most of the people they are counting are *not* the stereotypical gambling addicts desperately wagering their families' homes and educations and careening towards suicide. Most of the people they are counting will overcome their gambling problems by themselves, or with some help from their immediate families and friends. No one presently has any sound basis for claiming that most adolescent heavy gamblers are on paths to ruin; most are clearly not, but the real problem is that we can't yet reliably pick out the minority who *are* heading for serious trouble. When authorities cite the standard prevalence studies in order to justify claims that casino and lottery liberalization cause epidemics of pathological gambling, these claims should be discounted. This is not because they are necessarily false but because *we still don't know what causes pathological gambling*. It will not do to respond to this by saying that 'it stands to reason' that casinos cause it. Believing what 'stands to reason' – so-called 'common sense' – has a terrible track record in the history of science. Where the causes of human behaviour are concerned, neuroscience is again putting it to rout on a weekly basis.

Better research will not *settle* all policy questions. It will indeed open up new ones, both more difficult and more interesting than familiar questions about whether casinos should be legal or illegal, large or small, in major metropolitan areas or only at resorts. Suppose neuroscience delivers a reliable method of diagnosis for addictive gambling before it stimulates development of a cure? We could probably prevent many or most gambling addicts from going to casinos or racetracks. Preventing them from buying lottery tickets or playing Internet poker would be more difficult. But would it even be appropriate to try

to prevent such people from ‘playing’ the stock market? If so, what about real estate markets? Should pathological or addictive gamblers be prevented from re-selling houses or other assets? These are issues with which organizers of Gamblers Anonymous and other treatment organizations wrestle. There is not a consensus on them in the clinical and helping communities and they are bound to perplex politicians, bureaucrats and journalists. What about an elderly pathological gambler whose social life revolves around the casino? Would she be better off forced back to a solitary life in front of her television? When we identify the genetic markers for vulnerability to gambling addiction – as we will – should there be people who are barred from casinos before they ever enter one in the first place?

If we are going to debate these and other questions looming before us in a way that does credit to democratic participation, then the quality of science brought forward as public information must improve. Most of the recent shouting over gambling policy in the UK media and even in parliament was firmly based in a mixture of ignorance and sound but very shallow science. I hope that we shall all do better in the future.