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While browsing the articles section of the International Game Developers Association (IGDA) website recently I was struck by the dramatic growth in the number of pieces in the sections devoted to business/ legal concerns and censorship issues; no less welcome is an increase in the number of articles devoted to outreach and quality of life issues, areas that were only just emerging when I first joined the IGDA. But it is also clear that some sections are languishing, particularly the section devoted to “Academic Topics.” This lack, however, fairly reflects what has remained a vexed relationship between academic research into gaming and the professional development community. Indeed, according to John Hopson’s (2006) article in *Gamasutra*, provocatively titled “We’re not Listening” there is not, in fact, much of a relationship at all. In an argument that seems directed particularly at academics from humanities and “soft” social science backgrounds, Hopson questions the utility of non-instrumental research, i.e. research that does not focus explicitly on those elements that can be incorporated directly into a game build and which will have an immediate impact on a game’s bottom line. Subtitled “An Open Letter to Academic Game Researchers” Hopson offers two main criticisms: that game researchers aren’t providing the kind of research that game developers need, and that they aren’t providing it in an accessible and digestible form. Nor is Hopson’s skepticism confined to the professional game development community; rather, it fairly reflects a wariness on the part of many game studies scholars, particularly those from a technical background or whose research focuses on the application of traditional experimental methods.

Hopson’s attitude toward the role of research is in marked contrast to that of game designer Ernest Adams (2002). In a Soapbox column for *Game Developer* magazine he argues that:

Competition drives advances by the game industry, but competition is mindless and dependent upon the fashions of the moment. It’s only motivated by a desire to beat the other guy, not a genuine wish to explore. For serious exploration beyond the frontiers of gaming, we need academic researchers willing to tramp those woods and ford those rivers for the sake of knowledge alone. Let us be Jefferson to their Lewis and Clark. (p. 55)

That Adams’ Lewis and Clark analogy will now likely strike many as peculiarly extravagant is indicative of an increasing societal skepticism toward research that doesn’t offer an immediate and demonstrable pay off. Hopson’s argument is designed to be provocative and I would readily concede that he does point to a real problem: a gap between academic communication norms and those of other professional communities. Nevertheless, his article reveals as much, if not more, about problems inherent in attitudes toward research in the gaming industry as it does flaws in the approaches taken by academic researchers. Indeed, his underlying skepticism concerning the lack of utility supposedly inherent in non-instrumental

research efforts is often shared by those game studies scholars who favor a more empirical approach to game analysis and see dubious value in the efforts of scholars from humanities backgrounds in particular. Therefore I want to revisit Hopson's argument in order to suggest a broader understanding of the nature and function of non-instrumental game research and to outline some ways in which this research might benefit the gaming development community.

Busy People

Much of Hopson's advice concentrates upon educating gaming researchers in the nature of the audience represented by the development community. Indeed, Hopson's point that many academics have not found a way to communicate meaningfully with the game design community has an element of truth. Many academics do tend to address a small coterie of fellow scholars through specialized conferences and publications and do a terrible job when it comes to trying to communicate with non-academic audiences.

The communication strategies employed by academics have been most intensively debated when it comes to the issue of the public's understanding of science, with concern about declining levels of scientific literacy (as measured by a number of indicators) reaching new heights in the 1990s. The perception of a crisis-in-the-making in science was due largely to the central role public literacy has played in the evolving self-image of the sciences since the early years of the twentieth century: expanding scientific literacy was supposed to result not only in the greater effectiveness of scientific discoveries but an increased willingness of the public to fund further scientific research (Logan, 2001). However, "Communicating the Future," the report of a panel convened by the Space Science Laboratory of the Marshall Space Flight Center to explore the research base underpinning the communication of science information to a lay audience, noted that there was little evidence that increased literacy led to greater advocacy or understanding (Borchelt, 2001, p. 199). The report draws a direct comparison with political communication; an enterprise that, compared with the communication efforts of scientists, is well funded, highly organized, and carried out by skilled professionals. . .and which has nevertheless done little to influence the awe-inspiring levels of political ignorance of the US public (Shenkman, 2008). In a literature review prepared in support of the report's recommendations, Weingold (2001) notes that an obstacle to scientists' communication efforts may be the degree to which they have tended to rely on a "deficit" model of literacy: the public is believed to have little meaningful knowledge about science and is reliant upon scientists to tell them what they should know. Therefore, while the public has traditionally been seen as the problem, it is more accurate to note that the communication assumptions and practices of scientists themselves often create obstacles to understanding.¹ Thus while alternative models of literacy have become more widespread in scholarly studies of scientific communication, and the public's use of knowledge is being understood in increasingly complex ways, this appears to have had little effect on the attitudes and practices of scientists themselves.² Nevertheless, research in science communication points to the need to understand the public according to principles that are straight out of classical rhetoric: that there is no such thing as a general

audience, and that the communication process should be driven by what people want to know, not what the communicators think it is good for them to know (Borchelt 202-203, 204).

This awareness of the particularity of audiences and the necessity of tailoring communication practices to fit the concerns of that audience inform much of Hopson's advice. Thus he reminds academic researchers that in addressing an audience of game developers, whether it be in the form of a web presentation, live conference session, or journal article, they will be talking to audience members immersed in very different stages of their projects and that this may limit their ability to take advantage of specific recommendations. Furthermore he notes that developers are already buried in suggestions about how to improve their games: "The people listening to your talk already have a full workload. They've already been cutting features to make their production milestones, often features that represent some of their best ideas and strongest held beliefs about games." Therefore researchers need to shape their recommendations accordingly: emphasizing prescription rather than description, giving people features that are easy to incorporate within existing designs, describing changes that can be implemented on an individual level and providing proof of concept demonstrations (trying out your ideas on a reworked game level, for example) (Hopson, 2006).

Few in the development community would find much with which to disagree in his recommendations. However if the intention is to bring two groups of people together it is not usually a good tactic to spend time articulating their differences instead of those aspects that they have in common. Emphasizing that game developers have a full workload and have had to make extensive sacrifices and compromises on the road to realizing their vision, for example, tends to imply that the same is not true of academics. Furthermore, while many academics probably wouldn't initially describe their work in this light, academic research has more in common with the design environments of game development than people might initially suppose. For the academic projects I am working on at the moment there are many "features" I would like to include but can't; for some I can't justify spending that amount of time based on the perceived gain from the project, for others they are great ideas but probably better realized in a different project, still others are not yet developed sufficiently or I don't have the expertise or tools necessary to realize them (I strongly suspect, for example, that for one of the articles I'm writing at the moment I've "licensed the wrong engine," i.e., adopted the wrong theoretical framework). Perhaps the most important source of common ground is that while designers and academics alike embark on projects for all kinds of reasons—financial gain is always present, of course, but not always a primary motivation—the project itself often assumes a life of its own; what seemed like a good idea at the time can end up taking us on a wild ride in unexpected directions, not all of which we would have chosen if we had in fact been able to choose.

And bring me a donut and a cup of coffee

In fact it is not Hopson's intention to bring academics and developers together. Rather he aims simply to establish a more effective mechanism according to which academic researchers respond dutifully and efficiently to the demands of developers;

after all, Hopson's argument seems to suggest, developers already know how to produce great games, all that is needed is just a few tweaks here and there which could, on occasion, be supplied by sub-contracted "outsiders." Most game developers, however, would be hard-pressed to argue that Hopson's view reflects the current reality of game development. Games are certainly being sold in large quantities and money is being made (by some people at least), but it is manifestly not the case that the industry is awash in well-designed, well-executed games. Every year a few stand-out games obscure the fact that a substantial number of games are either strikingly unambitious or poorly conceived even when judged only by each game's own gameplay framework and goals. More worryingly, an unacceptable percentage is surprisingly badly executed on a technical level (shipping with numerous bugs, misleading feature lists, etc). Blame for the existence of such games cannot be laid entirely at the door of developers; the industry has a number of structural problems that are well-known and that profoundly influence the nature of the final product. That said, and leaving aside also the fact that many of Hopson's recommendations paint an unflattering (and, I hasten to add, inaccurate) portrait of game developers (suggesting, in effect, that they are people with short attention spans and little interest in larger conceptual, artistic, or philosophical issues), Hopson's argument portrays game development in a light which, if true, suggests that there are some profound problems with attitudes toward research and innovation in the industry.

The first of those problems is the extent to which, as has been increasingly evident in recent years, some people in the development community are comfortable with maintaining that what they do should be understood *only* as a business. Thus Hopson's injunction that "if the research doesn't include specific practical recommendations or a measurable impact on the final product, don't bother trying to sell it to the industry" will again seem like common sense to many. But if we look more closely at his recommendations to researchers we get a better sense of what constitutes this "common sense." For Hopson, in order to count as "useful" research the work produced by academics needs to be focused on present needs of developers (relevant to the specific project they are working on at that time), able to be implemented immediately, doesn't require development teams to work differently and won't require substantial changes in the nature of the game). Above all, he argues, all research recommendations should be advocated in terms of their effect on the game's bottom line. All of this suggests a very narrow view of the utility of research which, if adopted by game developers, would ensure that the game design industry rapidly evolved into an industry characterized by complete tunnel vision. Adams in fact made this very point, laying the blame for academics' lack of influence upon game development squarely at the door of the game development industry. One major reason why a designer wouldn't see any use for academic research, he argues, is because he or she has grown comfortable with producing games that don't push the envelope:

Academic research is necessarily at the frontier—in fact, it is beyond the frontier, out in regions where there's no real way to know whether it's useful or not. This is as it should be. Since the academy doesn't have to sell it's work, it can look into areas that are really speculative. If you're making a nice, safe, game in a nice, safe genre, of course you don't need the academy; you're not taking any risks. (p. 55)

The ultimate goal of research should be to be useful to the constituencies at which it is directed. Hopson, however, understands utility in very narrow terms as being focused only on the here and now. Contrast this not simply with the academic world but with the ubiquity of R&D in many professional and industrial organizations. This research is often *not* focused on immediate needs and practices, but future directions and improvements; such research frequently encourages, as Adams notes of academe, wildly speculative and hypothetical experimentation. The complex factors shaping many R&D programs often boil down to one very simple motivation: the awareness that things will not always be the same as they are now. Tastes, contexts, infrastructures institutions, political climates. . .all are subject to change and successfully anticipating such shifts imposes a much lower cost on organizations than frantic adaptation at the last minute.

Given my belief in the importance of shaping communication practices for specific audience I anticipated that Hopson and I would be on shared ground when I came to his final set of recommendations, “The Customer is Always Right.” However the customer in this case turns out to be the game industry. This is perhaps Hopson’s biggest misunderstanding concerning the nature of academic research into electronic games. I would hazard a guess that most game researchers don’t consider that we are doing what we are doing in order to help game developers and publishers make more money. Rather we see ourselves (perhaps grandiosely, perhaps misguidedly, but no less genuinely for all that) as doing our small part to help produce better games which will ensure a more engaging and/or challenging experience for more game players. We are also trying to ensure that our culture understands the creativity that goes into game development—surely a good thing for game developers in the long run—and that people (gamers and non-gamers alike) approach games with something more than the unsophisticated conceptual frameworks that are so painfully in evidence in the ongoing censorship debates.

Hopson, however, notes that if academic researchers really want to know what kind of research to do, they should simply be asking the game companies themselves:

if you’re doing a giant longitudinal survey of players in a particular MMO, contact someone at the company ahead of time and talk to him or her about your study. Start by contacting the game’s community rep and explaining your project, they should be able to forward you to the right person within the company. They may be able to provide you with internal data or to suggest lines of inquiry which might not have occurred to you (Hopson, 2006).

He acknowledges that this may present researchers with some challenges, such as being bound by non-disclosure agreements or having to deal with people who don’t understand how to interpret research results. However he seems to overlook the single most obvious problem: such a relationship would be ethically compromised at its root. It is exactly this kind of cozy relationship that has come under scrutiny in relation to the bio-pharmaceutical industry, with researchers dutifully producing the kind of research the company needs—usually that which will help it gain approval by the Food and Drug Administration. It is this kind of research, with companies “suggesting lines of inquiry” that was so scandalously revealed in the case of Big Tobacco’s production of endless research reports demonstrating that miraculously smoking didn’t kill you (or, more often, demanding simply that researchers would discredit studies proving that it did).

When it comes to research, introducing the idea of a “customer” for that research is deeply problematic: customers pay money and expect to receive something specific in return. From the academic point of view, on the other hand, while the idea of “customers” for research has made recent (and regrettable) inroads, it has in the past been more common to think about the “beneficiaries” of research. Often this is vaguely defined as “the public” but most researchers can usually define subsets of that public with more precision. Even in its abstract state, however, the notion of the public as beneficiaries of research points to a very different role for academic research as compared with dedicated industry research. Many publishers and some developers already conduct their own research or sub-contract specific research projects. But that research usually remains locked up in-house. The ideal of academic research—and I’ll be the first to admit that it is looking a little frayed around the edges—is that research is undertaken for the benefit of a wider group, for the public good, rather than simply to help out an isolated few. So what the game design industry does not need is yet more proprietary research; rather it needs research from which the industry as a whole can benefit. In fact, what the industry needs may well be research that focuses more meaningfully on the real customers: the gamers.

Dovey and Kennedy (2006), in an analysis of game development culture built around the case study of (now defunct) UK developer Pivotal Games (creators of the *Conflict: Desert Storm* (2002) series and *Conflict: Vietnam* (2004)) note that:

Although the games industry relies on widespread consumer feedback, the testing apparatus that does exist is by and large limited to debugging games during production, followed by the collection of magazine reviews and focus group testing by publishers that is only ever seen by senior staff. This testing is in the main limited to thinking about how game features, playability or interaction can be improved, rather than looking into what kind of games might be made in the first place. (p. 62)

While Dovey and Kennedy acknowledge that creativity in development is also hampered by other factors, such as the constraints exerted by a rigid, hierarchical production economy imposed on a networked and fluid development environment (p. 48), the lack of meaningful consumer research also reflects a high degree of homogeneity in most development houses. Many developers and design teams, Dovey and Kennedy argue, consider themselves to have a privileged level of insight into what their consumers want mainly because they themselves are gamers; they consider that they are producing games for people “just like us.” Thus the irony is that while development studios often position themselves as reflecting a kind of “everyperson” (or, more usually, an “everyman”) attitude, the assumption that everyone out there is just like you is in fact the hallmark of an insularity of vision that leads inevitably to elitism. More importantly, from the perspective of the business of game development, when the lack of meaningful consumer research is combined with an enclosed development culture, it produces stagnation and a lack of innovation.

Game development needs people who are what I describe as sympathetic outsiders, people who may share some background similarities and interests with developers, but are looking at game development from a different perspective and with other interests in mind. One advantage of academic research has always been that it is freed (again, ideally) from narrow agendas driven solely by present concerns.

Research that is driven only by the pressures of the moment inevitably ends up not so much pushing the envelope as licking it, sealing it and posting it to the IRS. It is *because* academic researchers aren't bound by the immediate concerns of the bottom line that they are capable of exploring ideas and concerns that may, in the long run prove more beneficial (and more profitable) for industry.

If, then, research should not be focused on the bottom-line or even the immediate needs of specific companies, what other kinds of important roles can academic research fill that might be of longer-term service to the game development industry? Hopson observes that,

One major difference between academia and industry is that academic work can be purely descriptive and still be successful. Discovering and describing a new phenomenon can be a genuine academic victory in itself. However, while understanding games is a research discipline, actually making games is an engineering discipline. There needs to be a clear and explicit path from the imagined beauty of research ideas to the ugly reality of implementation.

Describing the process of making games as an engineering discipline is, however, exactly like saying that novel writing is simply a printing discipline. Hopson's attempt to force a separation between two mutually compatible components of the creative process—technique and aesthetics—highlights a problem discussed by Sakey (2003): the fact that the game industry (covering the production, distribution, advertising, and reviewing of games) has a highly developed vocabulary for the technical aspects of gaming; all practitioners at various levels are comfortable with this vocabulary and adept at using it. However, the industry lacks a vocabulary to deal with the creative aspects of gaming. Sakey underlines just how far games fall below the level of other media when they subscribe only to a technical vocabulary:

in the gaming world, new games are covered as technical marvels, never as creative entities. We're bound to see a flood of "powered by" titles following in DOOM 3's wake – while in Hollywood, we often see "From the Writer of," or "From the Director of," instead. You'll never see "Shot by the Same Camera that Shot *Serpico*" in a movie commercial.

Since Sakey wrote his article little has changed; if anything, Hopson's piece indicates that the dominance of the technological/engineering framework as the primary means of understanding game production and reception remains just as strongly entrenched. More to the point, while Hopson's article is ostensibly addressed to all academic game researchers, it is very clear that his criticisms are more selectively targeted. In downplaying "descriptive" research, Hopson's argument implicitly indicts those researchers who come to an interest in game research with humanities backgrounds.

Frivolous Musings

To see the bias against humanities research in a more obvious form consider Allen Varney's "Immersion Unexplained," published in *The Escapist* in August of 2006. Varney is Hopson with the gloves off, and his article makes no bones about the fact that when it comes to game design humanities scholars are about as useful as

wielding a Vaseline rubber chicken in a multiplayer *Halo* session. This is evident in Varney's summary of the "narrativist" position: "Because this approach treats games as texts, critics can cast them in structuralist terms, and thereby increase their credibility rating with peer reviewers and conference organizers." Apparently, only game developers are allowed to think about games seriously; humanities theorists simply want to pad their résumés. In fact, as Varney makes clear, no one but game designers *should* be thinking about issues such as immersion anyway: "Designers would love to comprehend the exact causes of immersion. In a more practical world, this task would fall to those who theorize about games for a living. Oh well" (Varney, 2006). Now on the surface the idea that scholars aren't doing this for a living sits oddly with the claim that they are simply padding their CVs, but what Varney means, of course, is that they aren't producing games themselves as a business proposition.

Therefore, while I disagree with Hopson's argument concerning what counts as appropriate research, I fully understand his inability to see how the kinds of "soft" research into games undertaken by those in the humanities, for example, might have any applicability to the process of game design. This perception is, as Varney's article makes clear, based on a set of much deeper and more widely held stereotypes. The first is the idea that humanities scholars, because they deal in the realm of things that lack objectivity and about which there frequently isn't even a high degree of disciplinary consensus don't produce any work of value. Hence Varney's disgust that when it comes to immersion "These being humanities professors, no one has yet offered a testable, falsifiable hypothesis," a remark that is of a piece with many of the criticisms leveled by Hopson. But Varney clearly has other issues with humanists, as evidenced by his response to a piece by game researcher Celia Pearce: "It's hard to read all this airy palaver, this baffleheaded pedantry, without shouting, "Get a job." Can these detached structuralist and post-structuralist critics help us understand immersion? Could they ever, ever admit becoming immersed themselves, in anything?" While I might be tempted to put Varney's intemperance down to a traumatic early encounter with a college English class, the stereotypes he is deploying here are in fact widely shared in our culture: humanities scholars communicate in a mass of insider jargon (and game developers do not?), thinking about conceptual issues isn't real work, and the work of humanists is academic in the worst sense (disinterested and removed from a visceral engagement with the research subject).

The stereotype that Varney employs is, of course, often directed at academics more generally, and as Townsley (2006) argues, it achieved its modern shape in the evolution of the concept of the "public intellectual" in the late 1980s. Emerging as part of a US neoconservative agenda to contain the influence of putatively "liberal" universities in politics, the concept of the public intellectual created its opposite: the academic intellectual:

Academic intellectuals are criticized as narrowly intellectual: overly specialized, overly technical, overly abstract, socially aloof, and jargon-ridden. The opposition contained by the public intellectual then works to elevate what is virtuously public about public intellectuals, specifically, democratic commitments in language and topic choice; thus, general relevance, plain English, social engagement, responsibility, and common sense. The political effect is to criticize intellectuals in the university as problematically non-public (p. 40).

The similarities with Varney's language are obvious. It is important to note, however, as Townsley does, that the use of the public/academic intellectual opposition was quickly adopted by a wide variety of groups beyond the original neoconservative audience. Journalists, for example, treat the term as self-evident: that there are public intellectuals and that being one is "good." But journalists are, Townsley argues, in fact playing a key role in constructing the term in ways that are blind to their interests in doing so. It is no accident, for example, that a central element in all formulations of the "public intellectual" is the idea that these people operate in the more "accessible" area of the contemporary mass media (p. 52). Varney's use of the academic intellectual stereotype, then, is entirely of a piece with the attempt to portray game developers—like journalists, workers in the mass media—as plain-speaking folks driven by common sense and in touch with the needs of "the people," which is often, as Dovey and Kennedy point out, an entirely false set of assumptions.

Nevertheless, you would think that a game developer, with firsthand knowledge of all the uncertainty surrounding the process of game creation and reception (the many slips twixt designer vision and developmental reality, the legion of "sure-fire" hits that tank abruptly, the wildly popular game that no one saw coming, the stealthy classic that builds a cult following) would know that what they are doing is not a science, not part of the domain of the "testable, falsifiable hypothesis" (and of course not all science or engineering operates that way either). Many who work in game development do understand this. That some, like Varney, do not, goes back to Hopson's confusion between the process of game building (a highly technical, engineering process) and game development and creation (a highly subjective, densely creative, artistic endeavor).

There is a strong resistance to theorizing one's work that among the developers often takes the form of a variant on the claim that "I ain't got time for this," a belief echoed by Hopson with his reminder to researchers that game developers are busy people. In an article on adaptive music, for example, Andrew Clark (2007) includes this clarifying aside:

This article is targeted mostly to experienced game composers and audio programmers with actual practical adaptive music experience. In general, I don't expect them to have had much spare time in their production schedules to spend on frivolous musings about the essential nature of the craft. (I know I didn't).

If composers, programmers, and developers in general don't have time to read a relatively insubstantial four page web article, then we are dealing with a much bigger problem than whether or not developers and researchers are talking with one another. It would render it logistically impossible for anyone to be doing all the things that the IGDA, to take just one example of an industry organization, is in fact doing; all of its many accomplishments, apparently, are founded on the nonexistent free time of a large number of people. Of course, the truth is that people will make time to consider information they feel is relevant to their work, but that apparently trying to think more deeply about the nature and implications of what you do is regarded as "frivolous musings."

The reason why reflecting on your practice is regarded as "frivolous" is due to an underlying assumption inherent in many technical fields, one that Varney makes quite explicit when he concludes his argument by noting that "working game

designers must still struggle to make their games immersive the old-fashioned way: by playing them.” This is the age-old distinction between theory and practice, with Varney advocating the view that practice by itself is sufficient. While not a universal belief, this view is widely held within the development community (and understandably so given the intensely iterative nature of the actual game production process); it also dovetails nicely with the navel-gazing view of game design (I experience this, therefore this must be the way it is for everyone) outlined by Dovey and Kennedy. Given how difficult are the answers to apparently simple game design questions however—not to mention the intense time pressure within which such questions must be answered and the number of livelihoods that depend upon finding useful answers—leaving it all to be worked out in the course of the doing is taking a huge risk. Furthermore, Varney’s breezy assertion that game developers are experts when it comes to using the trial and error approach is contradicted by the huge number of schlocky games such an approach has produced. The reason research exists, however, is that you can’t learn everything by doing, because while you are doing you are not likely to be engaged in reflection, experimentation, and so on. The appeal to practical experience is, however, as Adams notes, seductive: “Being self-taught has a homespun, Abe Lincoln romance about it, but in real terms, it’s impractical. If you only learn what you need to know as you go along, you end up not so much self-taught as half-taught. . .” (p. 56). Relying solely on the trial-and-error approach would also render game design the sole exception among creative and engineering fields. There comes a time when most good novelists, film-makers, painters, sculptors, architects, structural engineers, etc. turn away from the practice that constitutes the majority of their work lives and toward the conceptual. This doesn’t necessarily involve enrolling in university classes or writing a philosophical tome; instead it commonly involves simply paying attention to the craft of others working in your field, thinking about what they do, how they achieve the effects they do, how these things may (or may not) connect with your own practices. Something I have noticed many times as a writing teacher is, I firmly believe, true in general of creative/design/engineering disciplines: without reflection your practice does not improve. While trial and error promises short-term efficiencies, long-term, lasting gains in practice come from turning to considerations that only seem more abstract and theoretical.

Although I’ve spent a lot of time disagreeing with Hopson, I want to make it clear that I have a lot of respect for his argument because I appreciate the position he’s arguing from, even if I see it as a common rationalization of a more widely held set of assumptions within the game design community. I certainly respect a rationalization a lot more than the deployment of unthinking prejudice à la Varney (even if the extremist nature of that argument does reveal what I think is an additional substrate of Hopson’s more considered position). Varney assumes that humanists and their ilk have no useful role to play when it comes to the practical, business-oriented world of game design. Hopson, by contrast, may well believe this for all I know, but his article is instead framed as a challenge directed at those of us who are game-researching humanists: what is the wider benefit of what you do? In response, I want to highlight several different strands of game-related research activity not explicitly targeted toward either immediate gameplay issues or the overall bottom line of the game and describe how they contribute to the long-term health of the game development industry. I stress that what I am offering here is an overview only; it is also somewhat idiosyncratic, designed not necessarily to portray the contributions that current

humanities-based gaming scholarship makes to the cause of game development, but the contributions it *could* make if it listened to the better angels of its nature.

Hermeneutics: Expanding the Audience's Interpretative Horizon

Scholars of cinema, photography, music, and literature spend a great deal of time developing new interpretations of works that focus not just on what the work is, but attempting to provide plausible (or, occasionally, plausibly implausible!) interpretations of what it might mean. Some of the work undertaken by game scholars is no different, and it is this kind of endeavor that is likely to seem the most quixotic and, indeed, redundant, to game developers. People play games because they are fun, right? They don't "interpret" them or try to pull deep and meaningful conclusions from them. The same argument has, of course, been made about novels and films: people just enjoy them and literature and cinema critics are often accused of over-thinking things.

There are three working assumptions underlying the scholarly process of exploring interpretations; their axiomatic status means, however, that they are rarely communicated to non-academics with the consequence that the quest for interpretation can seem more than a little perverse:

1. People are essentially hermeneutic (meaning-making) creatures; faced even with the apparently irrational and chaotic they will try to impose some kind of meaning on it. And as the original meaning of hermeneutics related to the study of religious texts, so the idea of hermeneutic activity as being something connected with a core need in people's lives persists.
2. Nothing takes place in a vacuum: words and images arrive on the page, in our mouths and on our screens carrying a lot of baggage, our every encounter with them influenced by a history that shapes their present usage and signification. For the importance of this second assumption we need only to look at the effect of failing to attend to the weight of word and image, especially when coupled with the effects of the "we're gamers so we know" attitude discussed above: a sorry history of female characters with their brains in their boobs, racial stereotyping run amok, and the proliferation of slaughterfests where the "aliens" are thinly-veiled stand-ins for cultural demons (from illegal aliens to terrorists).
3. Enjoyment is not incompatible with thought. Taking pleasure in something is not simply a process of passive reception, but an active process of interpretation and analysis, with much of this happening below the level of conscious thought.

One of the drawbacks in the way games are talked about in the gaming industry (including publishers, the gaming press, and some developers) is that game players are usually treated primarily as consumers, a point made deftly by journalist Chuck Klosterman (2006). Meaningful gaming criticism would not, Klosterman suggests, focus simply on the expository but would instead remain true to the interactive and variable nature of gaming by writing about "the significance of potentiality." To some

extent a focus on consumerism is unavoidable as at a certain point in the development process it becomes about how many units will this game sell. However by this point in our history games are hardly alone in being an entertainment or artistic form that is also a commodity; they are, however, a rarity in that they are treated by most people as a form that is only—and will ever be only—a commodity. Treating gamers *only* as consumers is inherently limiting, and the Hollywood movie industry serves as a cautionary example. Such an approach produces an industry that oscillates wildly and often desperately between two extremes: more of the same, or a frantic pursuit of the new. The results for the gaming industry are well-known: sequel mania, on the one hand, or games designed around the latest technical (usually graphic) innovation at the expense of engaging gameplay. As is so obviously the case when Hollywood follows this approach, the result is generally an avalanche of crap. Regrettably, as Sakey pointed out with respect to the overreliance on a technical gaming vocabulary, gamers themselves tend to be singularly invested in their designated role as consumers. What we have then, is an insidious situation where the industry cultivates a particular Lowest Common Denominator mindset in its market, and then constrains itself by designing games to meet those relatively low expectations. So entrenched is this dynamic that while Klosterman sees a clear way forward he has no faith that it will actually happen, a pessimistic view that I do not (at least on my good days) share. What the gaming industry needs is not simply consumers, but *literate and intelligent* consumers—and then to start treating them as such.

While the idea of what counts as literacy is currently being eroded in US culture even at the academic level to the point where it means only the ability to comprehend information and communicate effectively (and where “effectively” is usually shorthand for “in a business context”) many humanities scholars in particular use literacy in a much broader sense, one that meshes perfectly with the concerns of game developers. Literacy is the willingness and ability to read the world around us as it is: as a rich, often problematic, sometimes contradictory, always challenging ebb and flow of meaning.

Games are extremely complicated symbolic systems: to the already complex audio-visual environment of cinema they add the theatricality of user-directed behavior, the kind of time-commitment usually required of a nineteenth-century novel, and the customizability and replayability associated with DVDs and Tivo. Sure, we could say that all that’s going on here is people playing “just for fun.” But that short-changes not only the effort put in by design teams but the intelligence of players. One might justifiably point to some interpretations of a particular game by scholarly critics and claim, “No, no no, that is not what the designer intended, at all.” However one of the cornerstones not only of literary analysis but of film criticism and art history is that once an artist enters the domain of representation and interpretation the effects are not predictable; the smarter artists, those who don’t want to maintain a fascistic stranglehold on the “authorized” meaning of their work, have always understood that this element of indeterminacy is an essential ingredient in making art a rich experience for the appreciator and is in fact that which gives it a useful cultural function (the ability to be interpreted anew by each historical period, for example).

This might also be a time to recall that for many designers the holy grail of game design is in fact emergent (which is to say non-predictable) behavior, i.e. that players

start using the game in ways that the designers didn't expect, and which are in keeping with the goals of the gameplay environment (in order to distinguish emergence from the exploit). Usually, however, the notion of emergence is restricted only to *in-game* behavior. There's no reason, however, why emergence can't describe the ability of players to read meanings into the game that designers didn't consciously put there. Better still, the players read those meanings out of their gameplay experience and fold them back into an enhanced enjoyment of the game that may even change the way they play.

How does research into hermeneutics benefit game designers and the development process? The most immediate benefit is that a more literate player base means that designers can craft more complex games, where complexity is not simply related to the nature of the tasks that players are asked to perform within the gameplay environment. Should all games be like this? Of course not; it's unlikely that the majority of the games will engage players in this way, anymore than that the majority of novels or films do so. The raw visceral thrill of a good action flick, or the book that you can't put down for an entire weekend but about which you can recall absolutely nothing a month later both serve an important role in our imaginative lives. Functionally, however, most games are now interchangeable, replaceable, and ultimately forgettable consumables. It would be nice to see games like *Deus Ex* (Ion Storm, 2000) , or *Bioshock* (2K Games, 2007) not as isolated exceptions to the rule, but instead finding themselves in company with a wide range of games across a variety of genres; games that attempt to tantalize and engage gamers and ultimately enrich their experience by soliciting emotional *and* intellectual immersion, by cultivating interpretation and reflection rather than just task-completion and problem-solving.

Frameworks: Cultivating Cultural Awareness of Games' Complexity

This is perhaps the area where academic researchers can make the biggest contribution to game development. In many respects this second approach is the obvious corollary of the hermeneutic task: once you have demonstrated that it is possible for games to have an interpretative dimension that transcends a simplistic notion of fun, then it is important to begin exploring some of the possible lenses through which the interpretative richness of games can emerge. The major challenge facing game development at this time is that our culture has a very limited number of interpretative frameworks that it employs in relation to games, and those that exist tend to be harmful to the cause of facilitating a sophisticated appreciation of games.

A core assumption of much humanities-centered work, particularly that dealing with popular culture, is that if you go looking for complexity and sophistication, you will find it. Unfortunately, this assumption is rarely articulated as such, with the result that the attempt to offer innovative interpretations of traditional works can often appear quixotic. Hence the annual *New York Times* articles poking fun at the conference program for the Modern Languages Association; while US culture expects most university research fields to be busily engaged in producing new knowledge, the popular assumption appears to be that the role of humanities scholarship is only to communicate eternal verities. The search for complexity, however, has also driven

research that has articulated the complex functions that previously derided forms of entertainment (from women's sentimental fiction through graphic novels to science fiction) play in people's real lives. While TV and film are also still beset by the "only entertainment" problem, people are still aware that film and TV are potential conveyances for sophisticated meaning. But when it comes to games, the culture as a whole takes developers, reviewers, and players at their word: it is all just mindless entertainment. We shouldn't be surprised, therefore, when the news media responds by writing similarly mindless articles about electronic games.³

Certainly the dangers inherent in the failure to foster a sophisticated cultural framework for interpreting individual games and for understanding the behavior of players and the role of games in general have become manifest in the increasingly strident calls to censor games. The possibility of taking a strong stand against censorship movements has, however, been hobbled by the widespread insistence by players and many developers alike that "it is only a game" where "game" is understood as synonymous with purely functional entertainment. For example, Ken Levine, lead designer of *Bioshock*, when asked whether games are art, replies that "he doesn't spend much time thinking about the art question." He goes on to say, "All I care about is, does it work—does it have an impact on an audience?" (Musgrove, 2007, p. F2). Other developers have reacted more strongly. John Carmack maintained in 2002 that "We're doing entertainment. Saying it's art is a kind of sophistry from people who want to aggrandize our industry" (quoted in Au, 2002); a point of view he reiterated in his keynote address at the 2004 GDC (McNamara, 2004). Carmack's view, in particular seems to represent a more widespread attitude among developers and gamers (google Carmack's "sophistry" statement and you'll find it quoted approvingly in a number of gaming forum discussions). When this attitude is applied to debates about regulation, the logic appears to be that if the pro-censorship movement is arguing that our product has a pernicious influence we will counter by arguing that our product has no influence at all. At best time is taken up with tedious deliberations concerning the effectiveness of rating systems. At worst, the "it's only a game" stance convinces no one, and more draconian regulatory measures advance unchecked.

However it is equally important to note that one result of a censorship environment flourishing (as many censorship movements do) in an environment of mass ignorance, is that it tends to produce self-fulfilling prophecies. If our culture believes that games are inherently childish, trivializing, and have little relevance to weighty cultural matters, censorship—or even simply the threat of censorship—ensures that games will become childish, trivial and inconsequential. This doesn't require heavy-handed official censorship in order to happen. The forces of reaction can smugly declare victory when the industry begins to nerf itself: self-censoring some games in advance and avoiding others, or avoiding production of "adult" (a term which is now, regrettably, synonymous only with pornography) games altogether in order to avoid the M rating. We only have to look at the way in which squeamishness about violence and "bad" language (and the perceived need to avoid the "M" rating) has sanitized all but the best of the WW2-themed games. And the result is that when games like the otherwise excellent *Call of Duty* series avoid portraying the effect of metal and fire on real bodies it actually makes the violence more cartoonish and therefore easier for gamers to play through with little reflection.

Here is the key point for game developers. Artistic representations have for some time been regarded as the legitimate carrier of cultural complexity, and while their protection has been fragile from time to time, the “speech” of art, however challenging or disturbing it may be, has usually been accorded legal protection:

The category of aesthetics has considerable power in our culture, helping to define not only cultural hierarchies but also social, economic, and political ones as well. The ability to dismiss certain forms of art as inherently without value paves the way for regulatory policies; the ability to characterize certain media forms as “cultural pollution” also impacts how the general public perceives those people who consume such material; and the ability to foreclose certain works from artistic consideration narrows the ambitions and devalues the accomplishments of people who work in those media (Jenkins, 2007, p. 21–22).

By choosing not to position its creative output as art, the game industry has therefore deprived itself of one of the most powerful anti-censorship defenses. Not surprisingly, the “only a game” defense strategy (or, to be more precise, surrender strategy) has made it very easy for critics (and the occasional court) to declare that games are not speech and therefore deserve no extraordinary protection. Worse still, the “its only a business” line of thinking brings games comfortably and easily under the larger sphere of commerce regulation.

My intention here is not to blame developers as much as it is to point out that when it comes to trying to provide more sophisticated frameworks that people can use to consider games, developers have a lot of allies in the academy where familiarity with the complexities of aesthetic interpretation coupled with an awareness of media history means that such allies are a fund of example and precedent waiting to be tapped. Moreover, many academics are also familiar with the problematic state of research into the link between violent representations and violent behavior and can speak against the desire to read this research in as perfunctory and simplistic a fashion as possible (Sherry, 2006).

Therefore, the degree to which the wider culture is able to perceive games as complex entities and the extent to which they see games not simply as a waste of time, or a retreat from reality, or a compensatory mechanism for the dispossessed and dysfunctional, or a guidebook to self and social destruction—or, at the very least, the extent to which games are understood to be no more these things than any other representational form—will directly impact not only the capability of game developers to explore a wider range of game styles and stories, but the very opportunity they have to do so. In this effort game researchers are valuable allies in a fight where the gaming industry can never have too many friends.

Genealogies: Relationships with other media

This has been a rather contentious area in game research until relatively recently. Many scholars have expressed strong reservations about early attempts to define games in relation to cinema, literary narrative and new media experimental forms such as hypertext fiction (Frasca, 2003; Eskelinen, 2004). “Games are not a kind of

cinema, or literature, ” Espen Aarseth (2001) wrote in his editorial for the inaugural issue of the online journal *Game Studies*,

but colonising attempts from both these fields have already happened, and no doubt will happen again. And again, until computer game studies emerges as a clearly self-sustained academic field. To make things more confusing, the current pseudo-field of "new media" (primarily a strategy to claim computer-based communication for visual media studies), wants to subsume computer games as one of its objects.

While resisting disciplinary containment, colonization and cooption seemed like worthy goals, the hardcore ludologist position that games should be understood only as playable rule-sets began to smack of a no less pernicious disciplinary empire-building. Not to mention the fact that it was denying what was increasingly obvious about many electronic games: that whether implicitly or explicitly, grudgingly or joyfully, games continued to draw heavily on other media in ways that shaped the fundamentals of the gameplay experience:

- franchise arrangements and movie / TV tie-ins;
- licensed content (music, for example);
- wholesale adaptation of genre conventions (*Max Payne* (2001) and the B-movie genre);
- stylistic appropriation, either in interface and cut-scene design or for the actual in-game visual style;
- recreation and re-enactment of moments from other media (the storming of Omaha Beach from *Saving Private Ryan* (1998) in *Medal of Honor: Allied Assault* (2002) and the attack on Stalingrad from *Enemy at the Gates* (2001) in the original *Call of Duty* (2003) ;
- all the “usual” borrowings and allusions evident in character design, dialog references, gameplay conventions, and easter eggs.

As Jenkins (2004) points out, some of the early arguments by ludologists tended to assume that “narratives must be self-contained rather than understanding games as serving some specific functions within a new transmedia storytelling environment” (p. 121). In all fairness to the ludologists, however, the same could fairly be said of many of those arguing from the narratological point of view. In either case, the way in which games are shaped by what is in terms of both production and consumption a “convergence culture” has been obscured (Jenkins, 2006). Games are many things, but they are also, irreducibly, representational and communicative structures. And with that in mind, it is not simply the case, as cyber-libertarians have maintained, that information wants to be free. Information is, rather, a promiscuous bastard. It spends half its time eagerly trying to figure out its parentage and the other half desperately hooking up with anything that comes along. When we toss something out into the world for people to play with, it enters a dense web of reference, allusion, precedent and accident: a slew of connections with other representational, communicative, and entertainment forms.

Moreover, these issues are not simply “academic” but have considerable significance for game development processes. To take just one of the examples from the list above, probably one of the most challenging forms of game development is the franchise tie-in (a game using a licensed movie IP, for example). Players arrive at such a game with a host of expectations that include character appearance, character abilities, consistency with known backstory, visual appearance of the environment and so on. Balancing all of these expectations with the demand for a game that will provide new experiences, new challenges and meaningful gameplay can be a tall order. Because the initial IP might have a mass appeal, there will be pressure to make a game with similar mass appeal, an offering that will be all things to all people. The result is often a game that tries to accommodate incompatible play styles, or is so simplistic in its gameplay that it quickly becomes boring. When to all of this is added arbitrary development pressures (needing to rush a game to meet a movie release date or to catch the wave of its popularity) it is no surprise that elegant and engaging franchise games are few and far between.

Humanities and film scholars can be of some help here. Many have experience working with a wide variety of problems of adaptation from one medium to another, one genre to another, and analyzing the way in which creators have responded to the burden of audience expectations. In a larger sense, there is a rich history of work looking at the ways in which media interact and how these interactions influence not only audience reactions but the development of media. For example, one of the most useful insights amongst the many in Bolter and Grusin’s pivotal *Remediation: Understanding New Media* (1999) is not so much their elaboration of the many ways in which new media adapt and cannibalize the old, but the way in which old media began to absorb the content and conventions of newer media (with television news and sports adopting many of the window, framing and scrolling conventions of the web, for instance) (Bolter & Grusin, p. 40). For the purposes of this discussion I would also point to moments like the scene in *Star Wars II: Attack of the Clones* (2002) where Anakin fights his way along the droid assembly conveyor belt on Geonosis. It is fast and furious action straight out of innumerable platform jumpers; not only does the entire sequence look like a videogame, but knowing how the Lucasworld merchandising juggernaut works it is hard to escape the feeling that you are watching a sequence that was really a trailer for some as-yet-to-be-released game tie-in. Some of the lessons that can be drawn from this kind of work will translate into the field of game development, some will not (and the challenge for some humanities and film scholars will be to recast their work in terms of design lessons rather than simply aesthetic commentary). But there is a rich history of work in the field of media studies that can be drawn upon to help designers move beyond the somewhat haphazard way that media genealogies are influencing game development at present.

Resonance: Games’ Influence Upon Culture

Nothing, as I have mentioned a couple of times, has created more problems for games and game designers over the long haul than the insistence that games are “only” games. This is like saying that books are “only” books. Yet the list of mere books that have exerted a profound influence on Western culture and history is

substantial and varied. Apart from its more obvious idiocies, the censorship issue is particularly damaging because it is taking time and effort away from the many more interesting questions about the influence of games on culture that we (academics *and* developers) could be asking. Game researchers with backgrounds in literature, film and media studies in particular spend much of their time exploring the ways in which specific works have influenced culture, and the way in which that influence has changed over time. This is a kind of expertise that translates well to the field of game development and opens up possibilities of investigating a wide array of actual and potential cultural impacts of gaming (personally, I would be happy to move beyond not simply the violence issue, but the “simulators for the military” and “builds hand/eye coordination” approaches). And the more we know about the ways in which people are actually using games, the roles that they play in their lives, the better able developers will be able to design with these horizons in view (in terms of both what to build upon and what to avoid).

To take just one example, the development cycle means that unless your game is designed to be a long-term experience (an MMORPG, for example), most games are considered to have a relatively short shelf-life and therefore a limited ongoing claim on the developer’s attention, let alone being entitled to ongoing support. But what really happens when games enter the Dark Realm of Abandonware (or even the Shadowlands of “it’s-there-but-we-don’t-really-care-ware”)? In discussions on the Mad Minute Games’ forums (creators of the outstanding *Take Command: Second Manassas* (2006)) a while back I was astonished to find that people were still playing *Sid Meier’s Gettysburg* (Firaxis, 1997)—sometimes even in multiplayer—a decade after its release. I was even more astonished to find, while researching the availability of Abandonware that it was possible to get hold of games such as one of the first titles to make me fall in love with electronic games in the first place, Maxis’s *RoboSport* (1991). Evidence like this, and the demand for ports of a variety of classic console games indicates that there is a steady trade in games that have to all intents and purposes been forgotten by the industry that created them. What is it that still appeals to users about these titles? Why in a world where (according to prevailing industry wisdom and practice) players only want the latest and greatest visuals, are people still attracted to these games and playing them despite their crummy appearance and the often considerable obstacles created by platform evolution? Looking at these examples could tell us a lot about effective gameplay, divorced from distracting questions of photo-realistic representation and cutting-edge game engines. I’m sure that these are, in fact, the kinds of questions that developers themselves would be much more interested in investigating than spending their time debating whether or not little Johnny or Jane will go postal in their local McDonalds after pulling off a headshot in *Team Fortress*.

Individuation: Examining Different Play Styles

It is probably no exaggeration to say that game players are the most demanding, fickle, and hard to please of audiences. They have decided preferences when it comes to platform, game genres, and the way they prefer to play their chosen games. In this they are no different than the audience for other media forms: we all have preferred ways of watching TV, particular kinds of shows that we prefer to

watch, types of books we will not read, and a favorite reading mode. What makes gamers distinctive is that they are so highly partisan when it comes to these preferences, even when such partisanship borders on the illogical.

This tends to be most highly visible in MMORPGs (and to a lesser extent in other games that have a multiplayer component) where the long-term nature of the game and its ongoing development inevitably introduces major changes. MMORPG developers will be painfully aware of the most familiar schisms: PvPers vs carebears, crafters versus Quakers, RPers vs griefers, explorers vs power levelers. Within such a matrix of play-style loyalties, any change inevitably brings charges that developers are favoring one group, nerfing another, that they have ruined or broken the game, and not a few “I’m taking my ball and leaving” tantrums. Furthermore, many gamers have staggeringly high expectations for those games that they prefer; flaws in one area of an otherwise accomplished game can completely destroy their enjoyment of the game. In their consumption of games, furthermore, gamers display a range of behaviors that veer wildly from expressions of entitlement to a desire to influence the direction of the product. Thus players will stridently maintain that because they are paying for the game the game should be exactly what they want it to be, and anything less means that developers “don’t care about players.” These positions, however, (and the often appallingly vituperative arguments that accompany them) represent only the most superficial manifestation of a set of problems whose solution (or, at least, whose adequate balancing) is a matter of first importance to players and developers alike.

Yet we know so little about the individual and collective player realities behind these superficial arguments. The fact that we are dealing with a set of behaviors that have their own particular histories and dynamics becomes obvious when we compare this kind of partisanship with reactions to other media. Certainly people articulate marked preferences when it comes to fiction, cinema, painting. But it is relatively rare to find the kind of scorched earth condemnations so typical in the gaming world. A fan of horror films will rarely respond to a film that fails to utilize a character in an interesting way, or fails to explain some key plot point with a broad “That film sux a\$\$, dude” and a vow never to watch any film released by that studio ever again; people who prefer to read a hot new release from cover to cover, curled up with several cups of coffee, are not likely to dismiss those who prefer to ration the book, or who skip about the content as “losers.” The strength of the emotions connected with the preferences that gamers articulate clues us in that what we are tasked with analyzing here is nothing that can be reduced to a simple idea of playing what is “only” a game.

Particular play styles and their associated behaviors matter to players, and are linked in complex ways with the reasons for playing games, with identity, with social and gender roles (think, for instance about the widespread use of homophobic insults to describe technical flaws or particular gameplay changes). As yet, as we can’t even determine the degree to which these behaviors are the product of dynamics specific to gaming or larger cultural attitudes toward consumption, communication, art, entertainment, and even communication. To what extent, for example, are game designers reaping the whirlwind of a generation’s worth of (largely illusory, but even so) “Your way right away” advertising? Scholars from a wide variety of academic disciplines, but especially literature and media studies, have considerable experience addressing just these kinds of questions in relation to other media. Obviously we

can't carry over all previous assumptions intact to the very different world of games, but we have a considerable theoretical and practical research base to draw upon in helping developers work through issues of audience identification with particular modes of engagement, determining the role of online communities in establishing gameplay and feedback norms, and so on.

Significance: What are games?

This is perhaps the real “bottom line” for researchers and developers alike. Although it is a commonplace amongst game researchers to point out that electronic games are still a relatively new form on the cultural scene, that fact is important because we still don't have a good answer to a very basic question: what really are these things called games? From time to time we think we do, but at best we have fragments only of a massive puzzle. This in many ways should not be surprising. One of games' nearer relatives, cinema, only emerged in a commercially viable form after nearly a century of experiments with moving images and shifting points of view. Even after its formal “invention” it took film-makers the better part of two decades to figure out what this new thing was really good for (i.e. not simply mimicking theatre by recording stage-framed action from a single point of view, but shifting and playing with point of view). In everyday practice many developers tend to ignore this question in favor of the “quack like a duck” approach: a game is whatever we call a game, whatever players treat as a game, whatever is bought and consumed under the category of games.

This approach would not have worked in developing the potential of other creative forms. The practitioners of every form have had to define at an early point in the form's development what makes what they do distinctive from other creative modes. Early novelists, aware that their form had a lot to do with narrative in some way, struggled to position themselves against other print forms that also contained narrative elements: letters, fables, picaresque tales, for example. More importantly, however, if we were ever to reach an answer concerning games, the process would not end there. Painting was pretty cocksure that it knew itself on the eve of the arrival of photography. Broadcast news was pretty sure it knew what it was, trading on its ability to manufacture the illusion of “liveness,” before CNN exploded onto the scene with actual real-time coverage. We have many possible answers concerning the defining characteristics of games as a distinct form, but no consensus. It may be indeed that we have reached a cultural moment where a creative form is emerging that it is impossible to define with any degree of precision. But other creative forms have been difficult, slippery, hybrid beasts and culturally we have achieved a relatively stable (if perpetually revised) notion of what they are at their core. There is nothing to suggest that games are that much of a historical (or human) aberration.

If we were able to start from scratch, it would probably not be a good idea to use the term “games” to identify these things that people are enjoying so much. We're up against a long cultural history in which games are for most people irredeemably associated with childishness, frivolity and escapism. So deeply entrenched are these attitudes that you will find them espoused by many gamers, even those whom I described in the previous section as expending vast quantities of blood, sweat and tears, arguing passionately for or against particular game elements. “Game” doesn't

really conjure up the cultural importance of a phenomenon that Jenkins has called, “one of the most economically significant sectors of the entertainment industry, the real beachhead in our efforts to build new forms of interactive storytelling as part of popular, rather than avant-garde, culture. . .” (189). But we’re stuck with “games” and a significant part of the challenge facing researchers and developers alike is to transform the cultural understanding of games so that it won’t be the case that the only time we think of games in a serious context it will be when they are associated with practicing for war.

Conclusion

The “soft” research by academics, particularly those in humanities and social sciences is not immediately focused on developing better editing or scripting tools, or changing design practices. Rather, this kind of academic research tries to get beyond the surface reasons why gamers play particular games, like some games and not others, and play some games more often. In particular, what humanities and the social sciences bring to the table is an awareness that the reason for a game’s popularity (or lack thereof) and even for particular player behaviors within games cannot simply be explained by the nature of the game itself: players are products of particular cultures, they have been raised in specific (and various) ways, and been exposed to a wide variety of other media and life experiences, before they begin playing, all of which helps shape their game experience.

This is not to say that academic researchers have expertise in some of these areas and that game developers do not. Rather it is a matter of pooling our experience. Most game researchers nowadays have a lot in common with developers: they are fascinated by games, inspired by them, and love to play them. While there are undoubtedly some developers (and academics, sadly) who are only in it for the money (and the very different amounts of money we’re talking about here is what makes it sad from the academic point of view!) and define what they do as “just business,” that is not, I believe, true of most developers or researchers. Read an interview with almost any game designer where they describe their design process: very rarely does anyone say, “So, I sat down and tried to figure out how I could make a profitable game” or “The inspiration for this game came from the stock price on our publisher’s IPO.” Sometimes developers are inspired by other games; just as often they draw their inspiration from the fields of literature, philosophy, economics, or architecture. This is the reason why one of my favorite texts for introducing people to game design remains Richard Rouse’s *Game Design: Theory and Practice* (2005). There are more sophisticated conceptual approaches to game design out there, and more technically specific titles. But what Rouse’s book does is marry pragmatic advice with a rich archive of interviews with key designers. These interviews demonstrate how designers are influenced by other games, naturally, in the same way that a novelist is inspired, challenged, and/ or frustrated by other novels. But they also show how the process of design pulls in a wide variety of influences that are not specifically game-related: Sid Meier discussing how *Sid Meier’s Gettysburg!* was shaped by an attempt to capture the quality of panic and confusion that he read about in Civil War histories (p. 29); Chris Crawford talking about the extensive reading in military history and strategy that was necessary before he could begin

work on *Balance of Power* (p. 266); Will Wright referring to the formative early influence of the 1950s systems dynamics work of Jay Forrester (p. 410). From the scholarly point of view such interviews are a reminder that games themselves are, like their players, the product of an entire cultural network of influences, their success or failure, their impact and legacy, shaped by more than just the tunnel-vision desire to create a narrowly defined game.

Developers and researchers alike are interested in a) figuring out what makes games tick, b) designing “better” games (more exciting, more complex, more engaging), and c) making people passionate about games in general and not just particular games. A necessary first step in joining forces will be to accept that game design like academic research and communication has its instrumental aspects (the skill components that enable you to realize your vision, to get the job done). Neither game research nor game design, however, is fundamentally an instrumental endeavor. In neither case do we apply a set of given techniques and assumptions that produce an expected output. Sometimes the end product turns out to be greater than the sum of its parts; sometimes, regrettably, in the academic and design worlds, the final result is less than the promise of its components.

I am, therefore, in agreement with Hopson’s basic point, as long as it is stripped of its pejorative assumptions and stifling preconditions. Game designers and scholars (with the exception of a few celebrities like Henry Jenkins) are not communicating with one another very effectively at the moment. What is missing are the mechanisms for making the value of non-instrumental research visible for game developers. In this scholars from the humanities are particularly disadvantaged; often lacking access to the grant money that our colleagues in the engineering and social sciences possess; even attending industry events such as the annual Game Developers Conference can represent an insuperable barrier for many humanists (the registration fee for that one event alone would eat up my entire yearly conference budget). But the formal exchanges and informal networking that takes place at such events represent only one dimension of possible collaborations. We desperately need more participant and site studies, for example, of game design teams as they design a variety of different games. Ideally, such initiatives would not simply reduce the development teams to the status of amoebae under a microscope as some previous studies have done, but would allow an exchange of perspectives between academics and developers. Both game developers and game scholars are also heavily constrained at the moment by the presence of money: game scholars don’t have any, and game developers, in a sense, have too much in that they are driven by the need to pay back their investment and show a return. This means that game developers, even if they wanted to, don’t have the luxury of the freedom to explore genuine innovation, free of the constraints of the marketplace. Collaborations between designers and scholars to tap grant funding to set up short or long-term institutes are one option. There have been some important steps in this direction, such as the corporate-funded initiatives developed at MIT, but I have in mind more of a—to use the gaming term—sandbox. A place where scholars and designers could get together and attempt, for example, to design a series of games that have absolutely no chance of ever succeeding commercially. . .but from which we might nevertheless learn some interesting lessons applicable to commercial endeavors. Or where a team might, with the developers’ permission, take a game that was a commercial failure, and begin to rework it in a variety of ways. If such

activities were not simply design or scholarly tasks, but a mixture of both, the potential of both sides to learn from one another is boundless.

If anything, it may be that the metaphor of the frontier that I borrowed from Adams is part of the problem. The idea that the game industry is out there on the edge of darkness, constantly testing the limits, is a perspective much beloved by developers. Gaming, however, is established, corporate, and thoroughly mainstream. This does not mean, however, that Adams' argument concerning the implied opposite is necessarily true: that game design has become a safe, solid, and respectable enterprise. Indeed, as I have argued throughout, the importance of game scholarship is that gaming and game design still lack the credibility and authority they ought to possess, and consequently game development remains an enormously unstable, uncertain, and begrudged activity. The disappearance of the frontier has not meant that civilization now reigns throughout the territory. Rather game designers and game scholars now find themselves operating on common ground: we look around and all we see is wilderness.

Cited Games

2015 (2002) *Medal of honor: allied assault*. EA Games.

2K Games (2007) *Bioshock*. 2K Games.

Firaxis (1997) *Sid Meier's Gettysburg*. Electronic Arts.

Infinity Ward (2003) *Call of duty*. Activision.

Ion Storm (2000) *Deus Ex*. Eidos Interactive.

Mad Minute Games (2006) *Take command: second Manassas*. Paradox Interactive.

Maxis (1991) *RoboSport*. Maxis.

Pivotal Games (2002) *Conflict: Desert storm*. SCi.

Pivotal Games (2004) *Conflict: Vietnam*. Global Star Software.

Remedy Entertainment (2001) *Max Payne*. Gathering.

References

Aarseth, E. (2001) Computer game studies, year one. *Game Studies*, 1(1). [Online]. Available at: <http://www.gamestudies.org/0101/editorial.html>. [Accessed: 28 January 2009].

Adams, E. (2002) In defense of academe. *Game Developer*, pp. 56, 55. Proquest [Online]. Proquest. Available at: <http://proquest.umi.com/>. [Accessed: 12 November 2007].

- Adams, S. (2007) Would you kill 'Little Sisters?' Quincy company challenges taboos with game violence. *PatriotLedger.com*, August 22 2007 [Online]. Available at: <http://ledger.southofboston.com/articles/2007/08/22/news/news01.txt>. [Accessed: 21 August 2008].
- Annaud, J.-J. (2001) *Enemy at the gates*. Paramount Pictures. (DVD)
- Au, W. J. (2002) Playing games with free speech. *Salon*. Available at: http://dir.salon.com/story/tech/feature/2002/05/06/games_as_speech/index.html. [Accessed: 30 July 2009].
- Bolter, J. D., & Grusin, R. (1999) *Remediation: understanding new media*. Cambridge, Massachusetts: MIT Press.
- Borchelt, R. (2001) Communicating the future: report of the research roadmap panel for public communication of science and technology in the twenty-first century. *Science Communication*, 23(2), 194–211.
- Clark, A. (2007) Defining adaptive music. *Gamasutra*, April 17 2007 [Online]. Available at: http://www.gamasutra.com/features/20070417/clark_01.shtml. [Accessed: 29 January 2008].
- Davies, S. R. (2008) Constructing communication: talking to scientists about talking to the public. *Science Communication*, 29(4), 413–34.
- Dovey, J., & Kennedy, H. W. (2006) *Game cultures: computer games as new media*. Maidenhead: Open University Press (McGraw-Hill Education).
- Eskelinen, M. (2004) Towards computer game studies. In: Wardrip-Fruin, N. & Harrigan, P. (eds.), *First person: new media as story, performance, and game*. Cambridge, Massachusetts: The MIT Press, p. 36–44.
- Frasca, G. (2003) Simulation versus narrative: introduction to ludology. In Wolf, M. J. & Perron, B. (eds.) *The video game theory reader*. New York: Routledge, p. 221–235
- Hopson, J. (2006) We're not listening: An open letter to academic game researchers. *Gamasutra*. November 6 2006 [Online] Available at: http://gamasutra.com/features/20061110/hopson_01.shtml. [Accessed: 27 January 2009].
- Jenkins, H. (2004) Game design as narrative architecture. In: Wardrip-Fruin, N. & Harrigan, P. (eds.), *First person: new media as story, performance, and game*. Cambridge, Massachusetts: MIT Press, p. 118–130
- Jenkins, H. (2006) *Convergence culture: where old and new media collide*. New York: New York University Press.
- Jenkins, H. (2007) *The wow climax: tracing the emotional impact of popular culture*. New York: New York University Press.

- Klosterman, C. (2006) The Lester Bangs of Video Games. *Esquire*. June 30 2006 [Online]. Available at: http://www.esquire.com/features/ESQ0706KLOSTER_66. [Accessed: 29 January 2009].
- Logan, R. A. (2001) Science mass communication: its conceptual history. *Science Communication*, 23(2), 135–163.
- Lucas, G. (2002) Star wars: episode II - attack of the clones. Lucasfilm. (DVD)
- McNamara, T. (2004) GDC 2004: John Carmack talks game development. IGN.com. Available at: <http://xbox.ign.com/articles/502/502305p1.html>. [Accessed: 6 November 2007].
- Musgrove, M. (2007) Monster fun. But is it art? *The Washington Post*, Sep. 16 pp. F1-F2.
- Rouse, R. (2005) *Game design: theory & practice*. Worldwide Game Developers Library. Plano, TX: Worldwide Publishing. (Second Edition)
- Rowe, D., & Brass, K. (2008). The uses of academic knowledge: the university in the media. *Media, Culture and Society*, 30(5), 677–698.
- Rowe, D. (2005) Working knowledge encounters: academics, journalists and the conditions of cultural labour. *Social Semiotics*, 15(3), 269–288.
- Sakey, M. (2003) There are no words (yet): The desperately incomplete language of gaming. *International Game Developers Association* [Online]. Available at: http://www.igda.org/articles/msakey_language.php. [Accessed: 26 January 2009].
- Shenkman, R. (2008) Just how stupid are we? Facing the truth about the American voter. New York: Basic Books.
- Sherry, J. L. (2006) Would the great and mighty Oz play Doom? :a look behind the curtain of violent video game research. In: P. Messaris, P. & Humphreys, L. (eds.), *Digital media: Transformations in human communication*. New York: Peter Lang, p. 225–236.
- Spielberg, S. (1998) *Saving private Ryan*. Amblin Entertainment / Dreamworks SKG. (DVD Special Limited Edition 1999)
- Townsley, E. (2006) The public intellectual trope in the United States. *The American Sociologist*, 37(3), 39–66.
- Varney, A. (2006) Immersion unexplained. *The Escapist*, 57 August 8 2006 [Online]. Available at: http://www.escapistmagazine.com/articles/view/issues/issue_57/341-Immersion-Unexplained. [Accessed: 6 August 2007].
- Weingold, M. F. (2001) Communicating science: a review of the literature. *Science Communication*, 23(2), 135–163.

Notes

- ¹ Research has also focused on the role of the news media in shaping both the public's perception of science and the communication practices of academics. See, for example, Rowe (2005) and Rowe and Brass (2008).
- ² Davies (2008) found that the deficit model of public scientific literacy was still overwhelmingly present in the attitudes of scientists in the UK, a particularly significant finding given that in the UK there has been massive governmental support (including financial) for communicating more effectively with the public.
- ³ As a case in point, a *Patriot Ledger* article in August of 2007 profiled the social harm foisted upon a helpless society by the fact that *Bioshock* (BioWare, 2007) allowed players to kill "Little Sister" characters. The article itself is an outstanding example of everything that is wrong with the "template journalism" coverage of gaming issues in the mainstream press: include a rabble-rousing shock/horror lead, a game designer defending the game on the grounds of art, a psychology professor whose research "proves" that games desensitize people to violence; then mention games in association with school shootings, mention that a kid somewhere who killed someone played computer games, mention the courts haven't done anything. The article is also exemplary in that the journalist (assuming the article wasn't assembled by a machine) has no broader gaming knowledge or no memory (or, more likely, lacks both). Thus there is no awareness that the successful *F.E.A.R.* (2005) was tasking players with trying to off a creepy little girl a full two years before *Bioshock* came on the scene—and our civilization didn't collapse.