High-tech Low-tech Authenticity: The Creation of Independent Style at the Independent Games Festival

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1. ABSTRACT

In academic and popular culture commentary, as well as in advertising, *independent games* have been declared a major factor in video game culture in the last few years. At the same time, most academic and industry discussions have stated it impossible to describe independent games in a meaningful way. Counter to this, this paper examines the history of winning entries in the Independent Games Festival from 2000-2013 and identifies the rise of a specific visual *Independent Style* shared by many independent games, a style that uses contemporary technology to emulate visual styles from earlier times, including pixel style graphics, sketches and other analog materials. This visual style is meant to invoke a type of authenticity and "honesty in materials" that marks it as distinct from the alleged realism of bigger-budget titles. This type of strategy is associated with the contemporary maker movement, as well with 19th century ideas about arts, crafts, and architecture. It is a style that is not simply a natural expression of a particular method of game development, but an example of "authenticity work": a careful construction to appear as a counter to large-budget game productions, and to give the appearance of a direct connection between players and game developers.

This does not simply mean that Independent Style is a dishonest construct, but rather it enables video games developed with few resources to present themselves as the result of identifiable stylistic decisions rather than of a lack of resources, while also in some cases giving developers a way to demonstrate a counter-technical expertise by using video game hardware and tools against the intentions of manufacturers (such as using 3d hardware to develop 2d games).

Keywords

Independent games, visual style, video game history, honesty, authenticity, DIY, Independent Style, craft.

2. THE RISE OF INDEPENDENT GAMES

By name *independent game* refers to the financial independence of the game developer, rather than to the design of the game. Yet we are just as likely to associate "independent games" with particular designs, people, distribution channels, and platforms. Certainly, with independent games, the assumed slick commercialism of both big budget and casual games is met by a counter-image of small, cheaply developed, more personal and experimental games [22]. While the name refers to the financial situation of the developer, it is also used more loosely to describe games made on small budget. However, simply describing the economic conditions of production does not exhaustively capture independent games [58], and commentators typically focus on the general vagueness of the label [21]. Independent games have been compared to independent music and cinema [33] [58], as well as to punk music [50] with its rejection of polish and big budgets, and some proponents argue that independent games embody an authenticity not found in larger productions [14]. This paper proposes, not a definition of independent games, but a *description* of an influential visual Independent Style, a style that borrows from both the history of video games, and from the history of art and design.

As film theorist David Bordwell has argued, the study of style is a rich source for understanding the development of an art form – in all its complexity, with all its actors [8] – but the question of style has also sometimes been dismissed as an unimportant footnote to more important matters. However, style is a very concrete factor – games are developed for, and judged and grouped by their style, and to ignore this would be to render ourselves blind to the processes by which games are selected, celebrated or ignored. Hence we need to understand the history of style in independent games.

To develop independent games is to face a particular challenge: how can a game made on a small budget be perceived by players as something unique and new, rather than simply a game with too small a budget, a literally cheap version of a big-budget game? The Independent Style outlined here is a particular answer to this problem, because it signals that a game has *deliberately* been developed with a low-budget visual style, a style that would not be improved by a bigger budget. By emphasizing the small, personal and simplistic, Independent Style makes the claim that limited budgets are not a limitation, but rather a better, and more authentic, way of making games [46].

This focus on small productions and the value of personal creation shows how independent games connect both to ideals of the maker movement [17] [25], do-it-yourself (DIY) [51], local production, as well to older ideas such as those of the Arts and Crafts movement of the end of the 19th century. In the 1888 essay "The Revival of Handicraft" [37], William Morris described the disappearance of handicraft in the face of machine

production as "a degradation of life" and hoped, as the title suggests, for a societal and political revival of authentic workmanship where the individuality of the creator would once again shine through. Compare this to the way many independent game developers claim that their games – unlike the games made by large teams – reflect personal experiences [2], effectively longing to return to a more simple time in video game development, when games were made by small teams or a single person.

Such claims of personality, authenticity and even honesty are common among independent developers. *Super Meat Boy* designer Edmund McMillen lists honesty as the most important trait of an independent designer [34], and developer Dan Cook stresses the authenticity of independent games [14]. Like the Arts and Crafts movement, this notion of independent games can therefore be said to embody a certain nostalgic or anti-industrial attitude, even though this is in independent games combined with modern technology and distribution methods.

My central argument here is that the combination of anti-industrial attitudes with modern technology is clearly visible in the visual style of many independent games. A visual *style* here means a particular way of representing a game world and its logic [28].

Though "independent games" has been described as an unclear label, a quick glance at the well-known independent games shown in Figure 1 through Figure 3 gives an impression of similarity. Each of these games has a side-view perspective and builds on earlier games (*Super Mario Bros* [40] in the case of the first two and *Kirby: Canvas Curse* [24]) while adding twists both in graphical representation and gameplay.

Figure 1: *VVVVVV*
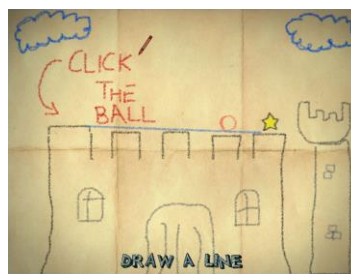

Figure 2: *And Yet It Moves*

Figure 3: *Crayon Physics Deluxe*

On the other hand, their visual styles *do* at first appear quite different: *VVVVVV* (Figure 1) uses a low-resolution pixel style that harkens back to an earlier point in video game history, the Commodore 64 games[1] of the 1980's [47]. This pixel style is perhaps the primordial independent visual style, also found in earlier games like *Cave Story* [53] (which references different hardware platforms). By **pixel style** I mean graphics where each pixel has been edited by hand, *and* where these pixels are enlarged, giving the appearance of a lower resolution than what is afforded by the platform the game is running on. But not all independent games share this retro 8-bit style. *And Yet It Moves* [10] shown in Figure 2 could not have been produced in the 1980's due to technological limitations, with the graphics appearing to be made out of cut-out paper, thus giving the impression of being analog rather than digital. Though *Crayon Physics Deluxe* [45] shown in Figure 3 also requires modern graphics capabilities in order to represent its crayon-based visual style, this style is again different from the paper style of *And Yet It Moves*. Is there any commonality in their visual styles at all?

The answer is that each of these games uses contemporary technology to represent a low-tech visual style. For *VVVVVV*, the style is 1980's video games; for *And Yet It Moves* and *Crayon Physics Deluxe*, the styles are torn paper and childlike crayon drawings. In their 2000 book *Remediation*, Bolter and Grusin make the broad claim that new media tend to remediate, that is simulate, earlier media forms [7]. As can be seen, this visual Independent Style hinges on a remediation of earlier styles in order to create something new and contemporary. Or put in another way: *Independent Style is a representation of a representation; a high-tech representation of low-tech, and usually cheap, materials.*

What Bolter and Grusin also say is that each new medium promises us a more immediate – transparent – experience, but also points to itself *as* a medium in the process [7]. It is easy to trace this line of rhetoric in the promotional campaigns for new consoles, which regularly promise more realism *and* emphasize the technology that allows a particular console to provide such alleged realism [29]. This shows that Independent Style represents a break with the idea that video games through technological progress are moving on a linear path towards realism. Independent Style is rather a deliberate attempt at going back in time, towards earlier representational styles – styles

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[1] While Cavanagh explains [47] that *VVVVVV* refers to Commodore 64 games, the game's use of single-color sprites suggest that he is thinking of games such as *Manic Miner* and *Jet Set Villy* which were converted from the ZX Spectrum, and hence use a visual style common on that platform.

made from cheap materials[2] – that now appear as less realistic than what is promised by console manufacturers and big-budget game development. I will call this style **Independent Style** (capitalized), and it can be described like this:

> **Independent Style** is a representation of a representation. It uses contemporary technology to emulate low-tech and usually "cheap" graphical materials and visual styles, signaling that a game with this style is more immediate, authentic and honest than are big-budget titles with high-end 3-dimensional graphics.
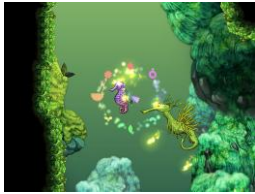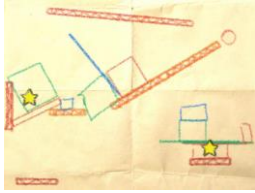
3. THE HISTORICAL APPEARANCE OF INDEPENDENT STYLE

I claim that Independent Style signals authenticity and honesty, but before I further argue for this interpretation of Independent Style, let me first ask: what are the historical origins of this style? It is clear that many independent developers create games in other styles, but this visual style is predominant among well-known, and well-awarded, independent games. Is there a logic or necessity to this particular style, or is it an arbitrary construction, a style that was decided on simply to signal belonging to a particular subculture of game developers? To answer this, let me examine the grand prize winners of the annual US Independent Games Festival (IGF), not only because this is the longest-running major festival of independent games, but also because it *names* the games that it judges as exemplars of independent games. It is not that the IGF can tell us a final truth about independent games, but rather that the IGF has been a high-profile venue for the curation of a particular idea of what constitutes (and doesn't constitute) an independent game. It is therefore valuable to follow the choices of the IGF jury as the historical evolution of a particular conception of independent games. (Full disclosure: the author is also a jury member.)

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[2] The use, or referencing, of cheap materials can be compared to the Italian *Arte Povera* movement in art.

Year	Name	Screenshot	Visual style	Theme / gameplay
2000	*Tread Marks*		3d	Tank battle
2001	*Shattered Galaxy*		Isometric	Strategy game
2002	*Bad Milk*		Photos rotating in 3d	Associational multimedia
2003	*Wild Earth*		3d	Animal safari
2004	*Savage: The Battle for Newerth*		3d	MOBA war
2005	*Gish*		Monochrome 2d / physics	Platform game
2006	*Darwinia*		Platonic low-poly 3d	Strategic war game

2007	*Aquaria*		Watercolor 2d	2d swimming
2008	*Crayon Physics Deluxe*		Hand-drawn 2d	Physics-based puzzle with drawing
2009	*Blueberry garden*		Hand-drawn 2d	Storybook platformer
2010	*Monaco*		Pixel style 2d w/ lighting effects	Multiplayer top-down action
2011	*Minecraft*		Pixel style 3d	Quirky world-building
2012	*Fez*		Pixel style 3d/2d	Platform game with puzzles and 2d/3d twist
2013	*Cart Life*		Pixel style greyscale	Existential simulation of low-paying occupation

Table 1: Independent Game Festival Grand Prize winners 2000-2013

As the table demonstrates, the IGF's idea of the independent game has evolved significantly during the history of the festival. This history can be divided into four different phases.

1. **Before Independent Style**: 2000-2004 winners are not recognizable as having the Independent Style that I have outlined, but rather appear as small versions of bigger-budget games, with 3d graphics and presumably an intention of eventually acquiring publisher backing and distribution on physical media. Three of these games share a regular theme of armed conflict, but *Wild Earth* has a more "ecological" message (borrowing from the photography element from *Pokémon Snap*). The 2002 never-released winner *Bad Milk* is a return to 1990's CD-ROM experiments.

2. **The rise of pixel style**: 2005-2009 winners show the appearance of a well-defined *Independent Style* as 2d side-scrolling games with unique graphical representation. This style coincides with the increasing availability of non-physical game distribution, when it gradually became

common for developers to distribute small-budget games globally. In visual style, *Darwinia* is the exception, with a type of "platonic" 3-dimensional graphics, arguably referencing the movie *Tron* and thus referring to the 3d visual style of an earlier time.

3. **Pixel style in the 3rd dimension:** 2010-2012 winners show a movement beyond the 2d platform game, with *Monaco* as a top-down 2-dimensional game, and *Minecraft* and *Fez* representing the transformation of pixel style into the third dimension.

4. **New themes:** The 2013 winner *Cart Life* retains the pixel style, but is more of a life and business simulation, in this case used towards documentary and political ends, presenting the struggles of poor street vendors.

This history also points to differences within the high-tech representation of low-tech materials. Pixel style games refer directly, and probably nostalgically, to an earlier time in video game history. On the other hand, *Crayon Physics Deluxe* cannot point to an earlier point in time when video games were made with crayons. What is referenced is rather the general idea of playing with crayons and paper. The pixel style 3d games *Minecraft* and *Fez* also cannot refer to an earlier time when 3d games were commonly made out of large volumetric pixels (voxels), so like *Crayon Physics Deluxe*, the historical reference is somewhat counterfactual, but still suggests a simpler, if nonexistent, earlier technology.

4. HONESTLY OLD-FASHIONED AND HIGH-TECH

Independent Style is most consistent on a visual level, but it has parallels in fiction (emphasizing irreverent or atypical themes) and gameplay (surprising variations on existing genres). Certainly, the platform genre has been overrepresented among independent games: in games such as *VVVVVV* and *Braid* [42], many conventions from the 1980's platform game are intact, but our expectations for how time and physics should work in such games are also challenged. Camper has examined such strategies in deliberate retro games [12], and describes how developers aim to capture a central experience of an old game, while adding contemporary developments in gameplay. In visual style, developers often add some contemporary flourishes such as particle effects or detailed animations that would not have been possible in the 1980's.

More poignantly, the use of physics engines in games like *Crayon Physics Deluxe* is a parallel to the visual Independent Style: this type of physics engine-based design comes across as immediate, simplistic and playful since it mimics a free-form play activity with bouncing objects. Yet it also requires modern processing power to work, and high quality physics libraries have only recently become broadly available. In this way it shares the high-tech-low-tech duality of the visual style, by being a thoroughly modern representation of a pre-digital play experience.

In the beginning, I discussed how the idea of honesty and authenticity connects independent games with earlier movements. Art historian Linda Nochlin has examined the idea of *honesty* in architecture and the decorative arts through the 19th century and writes:

> As early as the 1840s Pugin was inveighing against the dishonest concealment of architectural members, declaring that 'architectural skill consists in embodying and expressing the structure required, and not in disguising it by borrowed features'. [41]

This is a common type of argument, where it is emphasized that art or design should appear direct and without artifice express its own substantial structure and materials. It is a type of argument that has been used extensively in cultural history, and even in game design discussion [15].

In short, Independent Style follows this dictum of honesty in the choice of the low-tech materials that are represented, but contradicts it by *representing* these low-tech materials through high-tech tools. Independent Style effectively invokes and also contradicts these ideals of authenticity or honesty championed by earlier historical movements, but invokes an idea of make-do craft or expertise as a consequence: Independent Style consists partially of the "borrowed features" that Pugin was against in the previous quote; particularly the remediated pixel style can require developers to work around default software and hardware affordances.

5. CRAFT: CONTRADICTIONS OF THE OLD AND THE NEW

If the low-tech and analog materials *represented* in Independent Style suggest authenticity and honesty, the representation of these low-tech materials can thus require a technical expertise that gives developers an opportunity to exhibit their ability to work against the intentions and default settings of hardware and software manufacturers. This points to three related contradictions in Independent Style: 1) between old and new technology, 2) between DIY and the expertise of the craftsperson, 3) between local and global distribution.

1) **The old and the new**: What can we make of the fact that Independent Style uses modern technology to imitate older styles of representation? Discussing the phenomenon of indie craft (today most associated with sites like etsy.com), Emily Howes examines the idea that crafting is a way of escaping the digital and immaterial, and that this can be seen as an echo of the Arts and Crafts movement, only responding against the digital where the Arts and Crafts movement responded to the industrial revolution [27]. Ultimately, Howes argues that contemporary indie craft is rather an example of how the "digital and the handmade are not in such opposition as might be assumed". In this case, Independent Style is a type of creative anachronism, where it is possible to reference past styles, pixels and drawings, without wishing for a complete return to some imagined pastoral past.

Figure 4: *Cave Story* character with anti-aliased and aliased graphics

2) **DIY and the expertise of craft**. If we focus on the low-tech materials represented in Independent Style, then we can chain Independent Style to a type of humble "lo-fi" DIY culture that emphasizes participation and personality rather than skill [51]. On the other hand, if we focus on either the high-tech representation, or the idea of the low-tech representation as something that enables developers to perfect minimalist game designs [39], then Independent Style becomes a place where developers can demonstrate their technical skills and their perfected craft. As Sennett describes this value, "Craftsmanship names an enduring, basic human impulse, the desire to do a job well for its own sake" [49:9]. As an example, the popular Unity3D engine will by default provide anti-aliasing when rendering, making pixel art appear blurry. Figure 4 shows the blurriness that the default settings of Unity3D would apply to the *Cave Story* main character (left), compared to how the character will look with the necessary adjustments to render pixel art with hard edges (right). The latter gives the appearance that the game is running on a different platform than it is, one material imitating another.

Figure 5: Unity3D *Angry Bots* tutorial game

In addition, before version 4.3, Unity3D did not explicitly support 2d games. Regardless, *Unity3D* is a popular platform for independent developers. This is also unexpected given how different the default game demo is from independent values. Figure 5 shows the gritty 3d military shooter demo *Angry Bots*, which from version 3.4 of Unity3D has been installed by default. Presumably, Unity Technologies feel that this shows off the tool well, but it is completely contrary to the Independent Style I have described here. It has therefore been up to developers to find ways to use Unity3D to create games in styles for which the platform was not designed or intended [54].

Such technical challenges are also tied to the ethos of sharing that Guevara-Villalobos has described in indie communities: "Within indie communities and networks, code sharing is a defining feature of game work. It fulfils different purposes, as it is both the product of the cultural ethos of the Web and a learning practice." [23]. For example, the open source *Flixel*

library [48] was created by *Canabalt* author Adam Saltsman, and provides a set of routines that makes it straightforward to make pixel style games in Adobe Flash, even though that platform by default encourages anti-aliased graphics. In this way, developers improve their craft and share tricks and tools with the community in order to overcome the default assumptions of the Flash software.[3]

The idea of craft has undergone a resurgence with books such as Sennett's *The Craftsman* [49], and the recent anthology *The Craft Reader* [1]. These books trace a lineage back to William Morris, quoted earlier, and discuss the idea of craft as personal skill and contemplation. Compare this to game designer Anna Anthropy's book *Rise of the Videogame Zinesters: how Freaks, Normals, Amateurs, Artists, Dreamers, Dropouts, Queers, Housewives, and People like You are taking back an Art Form*, where she promotes the idea of the DIY game that anybody can make, and compares them to the photocopied underground zine [3]. In this case, the pixel style that Anthropy's games often use, becomes a way of making video game development more accessible, as do other tools that she promotes, such as the text-based *Twine* platform [18].

Interestingly, Anthropy herself represents a hybrid position in that her games demonstrate considerable technical skill in referencing and combining elements from video game history, while she is also arguing for a type of development that is less reliant on such skills. As a type of middle ground, Westecott compares independent game development to craft as such [57], and notes how craft has often been associated with "women's work", and how mass production gradually devalued craft, associating it with the domestic sphere of women. Westecott also notes how independent games have the opportunity to bridge this division, but now face a potential division between amateur and professional independent developers.

3) **Local and global distribution**: Glenn Adamson defines *craft* as "the application of skill and material-based knowledge to relatively small-scale production" [1]. Given that independent games, and Independent Style, are highly dependent on the availability of digital (e.g. immaterial) global distribution of games, this creates a disconnect between the local, "small-scale" aspect of independent game development, and the global large-scale distribution that may follow. The short answer to this conundrum is that it *is* impossible for successful independent game developers to provide the type of personal connection and communication that the audience may expect from them, *as* independent game developers. The longer answer is that in independent games, the "small-scale" emphasis is on the production rather on the distribution, so that this is not understood as the conflict that one might predict[4].

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[3] The open source *Box2d* physics library [13] used for *Crayon Physics* is similarly used by many independent games.

[4] The main alternate solution to the local-global dilemma is the "new arcade" [31], where developers avoid digital distribution and rather only make a particular game available at single events, using custom non-distributable hardware.

6. AUTHENTICITY WORK

As we can see, the signals of honesty and authenticity come from the materials *represented* by the visual style (large pixels, paper, crayons), while the *representation* of the same style may sometimes be technically challenging, and thus give developers a chance to demonstrate their skills while employing a visual style that suggests that little skill is necessary.

A default critical response may be to declare this a type of paradox of authenticity [52] in that the low-tech pixel style and hand-drawn graphics that are meant to signal authentic, unadorned and honest game development – are not the least authentic, but entirely and deliberately constructed embellishments enabled by the high-tech representation. And it would be easy to make such a critical reading of Independent Style, arguing that for something to be perceived as authentic, it will have to exhibit the signs of authenticity, and these signs will often be deliberately *curated*, hence undermining the authenticity claim in the first place. Straub [52] quotes Jonathan Culler for making such a general argument:

> The paradox, the dilemma of authenticity, is that to be experienced as authentic it must be marked as authentic, but when it is marked as authentic it is mediated, a sign of itself, and hence lacks the authenticity of what is truly unspoiled, untouched by mediating cultural codes. [52]

Peterson takes this a step further and argues that authenticity should therefore be understood not as a property of something, but as "a claim that is made by or for someone, thing, or performance and either accepted or rejected by relevant others" [43]. Based on examples of authenticity claims in country music, Peterson names this "authenticity work" in order to describe effort made to make something be accepted as authentic.

This suggests Independent Style to be a cynical ploy, an artificial construction made to create a false impression, a collection of dishonest signs[5]. However, such a critical conclusion would overlook the fact that some signs require more resources than others. A large advertising campaign extolling the authentic virtues of wine from a particular region [4] is clearly expensive, but a pixel style signaling another kind of authenticity may be cheap. But if the claim of the independent game is exactly that of having virtue due to it having been developed with few resources, then the style that I have described here as a sign used to *signify* independent authenticity – that style *is* an embodiment of development on a limited budget. It is cheap to make, and cheaper to make than are expansive 3d worlds with high-end graphics[6]. Lipkin argues that the term "indie" has shifted from being a signifier of production to referring to a style [33], but I am arguing that it is both at the same time, and that the style itself refers to production methods. And even though Independent Style is a constructed signifier

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[5] It is of course perfectly possible to interpret Independent Style as such as cynical ploy, but my argument is that independent games are appearing in a cultural environment that supports authenticity claims – and as quoted, some developers certainly make authenticity claims in public statements.

[6] The economy of "minimalist" visuals are also discussed by the *Osmos* developers [26].

chosen to signify low-budget production, the concrete style also *enables* low-budget production.

For example, *VVVVVV* developer Terry Cavanagh freely admits that the visual style for the game came about because of his personal limitations as a designer, where the self-imposed limitations of the retro visual style helped the development of the game.

> I don't have the technical ability to make my games look good, so I do what I can to at least make them look interesting. I find it easier to do this when I work within narrow limits - in VVVVVV, for example, I limited the background tiles for each room to just 5 shades of one colour, and then changed colours and patterns as I went along. [47]

The truth is two-fold here: independent development has to some extent followed the money and gravitated to the style that can be made on the smallest budget. But additional work is also employed in order to create the Independent Style that most directly signals authenticity and immediacy.

It *is* cheap to make pixel style graphics or to scan hand-drawn sketches. Yet given that these styles are in a sense borrowed because they do not represent the hardware on which they run, the assumed honesty can clearly not be located in the running program, but in the development process. Independent Style has the function of signaling this honesty, while also being identifiable as deliberate, well-executed design *because it by now is a well-understood existing visual style*.

When I claim that this style *signals* honesty, I mean that this is plausible given its affinities to both historical and contemporary movements, and because this interpretation is supported by the public statements of several developers. It is unlikely that all developers choose this style because they want to signal authenticity – the style has also become a default style that developers can now choose simply because it is already common and well understood.

7. RETRO: ANOTHER CASE OF HISTORY REPEATING?

Figure 6: *Hover Bovver*

Still, is there not a sense that all of this happened before? Compare *VVVVVV* to the 1984 UK home computer game *Hover Bovver* [36] shown in Figure 6. *Hover Bovver* is mostly made by a single person (UK developer Jeff Minter), features pixel style graphics and an idiosyncratic and non-heroic theme, in this case the mowing of the player character's lawn. In terms of visual style, theme, gameplay, and development conditions, this game is eerily similar to many contemporary independent games.

But *Hover Bovver* demonstrates what we can call a *Pierre Menard*-effect. In Jorge Luis Borges' short story *Pierre Menard, Author of Don Quixote* [9], the titular character decides to write – from scratch – a text that is word-for-word identical to *Don Quixote*, without having read the original novel. Borges' narrator compares the style of the two identical 20th century and 17th century texts – and concludes that they are radically *different* since the original *Quixote* was written in the language of the author's time, but the newer *Quixote* is archaic and mannered [9]. Which is to say that the simple pixel style of many contemporary independent games is deliberately dated, an archaic throwback to an earlier time in the history of the video game, whereas *Hover Bovver's* 1984 visual style was contemporary. In fact, *Hover Bovver* does not use pixel style in the way I defined it previously, given that its pixels are displayed in the native resolution of the hardware, rather than being enlarged as in *VVVVVV*. A particular visual style does not *mean* the same thing when executed twice, 25 years apart.

While many contemporary independent games may be associated with early Nintendo culture due to the common use of platform games as inspirational genre, I believe that independent games owe more to computer-based games in general, and to European video game of the 1980's in particular. This is in part a function of the fact that US and Japanese video game development at the time was largely directed toward consoles, while European video games were mostly developed for home computers. This meant that from the success of the Nintendo Entertainment System and on, many US and Japanese games were subject to approval by platforms owners, while more European video games could be freely created and distributed. Furthermore, and possibly as a result, many European video games of the 1980's share a thematic irreverence that was rare in console games [32] [16].

As Bennett Foddy has argued, independent game development has been a constant in the history of video games, but the idea of calling it "indie games" is quite recent [20]. What *is* new is the appearance of a style that references earlier (factual or counterfactual) times in game history. Interestingly, game-derived pixel style was popular in web design already around 1998 [19], before it became a popular game style, suggesting that contemporary pixel style is dependent on a distance (temporal or in media) to the materials and styles it references.

8. GAMES FOR THE CONOISSEUR?

It could be said that the rise of independent games is a logical consequence of the fact that video games are now being played by more than 50% of the population in many rich countries [44]. It used to be that playing video games was a differentiator, but now a new differentiator is needed, and (the idea of) independent games serve that need. In her book *Realism*, Linda Nochlin argues that in art, "the creation of the avant-garde was the mirror image, the precise response to the emergence of the mass Philistine audience" [41]. Some independent and art games can be seen as a similar response to the broadening of the video game audience, a way for self-identified game connoisseurs to develop a sense of having a particular and refined taste. This is the fourth contradiction in Independent Style: that this visual style can both work to democratize game development by enabling DIY development and to rarify game consumption, by catering to the tastes of a selected few. This contradiction is also

tied to the amateur/professional divide, where *Minecraft* has sold millions of copies, while more experimental games are only played by a small audience.

I have not defined independent games, but rather described a central Independent Style curated by the Independent Games Festival, a style that is shared by the majority of IGF winners since 2005, as well as by many other better known independent games. To name some games often referred to, and awarded, as independent, yet not sharing this style, *Osmos* [26] while 2-dimensional, is oriented towards the affordances of contemporary hardware rather than towards the emulation of an earlier visual style[7], and *Journey* [55] is a 3-dimensional game that does not remediate any earlier visual style either. Of course, given enough time, even currently high-end graphics effect (such as *bloom*) of contemporary big-budget titles may eventually be used by a future independent game developer as a way of signaling a simpler, more honest time in video games[8].

Figure 7: *Braid*

Another prominent game usually referred to as independent, but which uses a particular variation on Independent Style, *Braid* [42] shown in in Figure 7 uses contemporary graphical tools to give a (perhaps simplistic) appearance of expensive materials associated with fine art[9]. The style and materials represented here are not improvisational and cheap, but rather invoke something expensive or high-brow, matching the lofty aspirations of the game developer [6].

Independent Style is a positive force in that it supports the creation of small-budget games that are recognized as belonging to a particular well understood (and promotable) category. However, Independent Style was also part of a "tyranny of pixelated platformers" [30], when many games lauded as independent also seemed to become quite similar. This shows the inherent tension if a movement for dynamic innovation in games congeals around a well-defined style, regardless of whether that style is explicit or implicit, agreed upon or not. It

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[7] The visual style of *Osmos* could also be interpreted as a deliberately old-fashioned flat 2d-blending style enabled by early 3D graphics cards, even if the temporal distance is quite short.

[8] The 2013 *Thirty Flights of Loving* [5] is based on the 1997 3d engine from *Quake II* and its somewhat old-fashioned 3d graphics thus already arguably signal that the game belongs to an earlier, simpler time. Similarly, the game *Tuning* [11] references low-res 3D graphics.

[9] IGF winner *Aquaria* also references painting, but in *Aquaria*, the style referenced seems to be children's books rather than fine art.

also follows that it would be worthwhile to compare IGF winners to games selected and promoted in other venues and countries. In addition, future variations of Independent Style are likely to change as more modern visual styles become sufficiently distant that they can be invoked, no longer signaling limited budgets, but as conscious choices referencing an earlier, simpler time in video game history.

It is clear that small independent developers need not build their games around this particular Independent Style. A number of independent developers rather build "regular" 3d games in genres not seen as commercially viable by big publishers – *Chivalry: Medieval Warfare* [56] is an example of this strategy. Such games are rarely promoted or awarded by independent game festivals. They are reminiscent of the early 2000-2004 phase of Independent Games Festival winners, before the rise of Independent Style.

Conversely, though Independent Style enables low-budget development, there is nothing to prevent a bigger-budget production from using the same style, even if there are fewer financial reasons for doing so. As an example, the high profile (if medium-budget) PlayStation 3 game *LittleBigPlanet* [35] is based on high-end 3d representations of handmade materials built from cloth, thread, buttons, and stickers. The Lego Company similarly publishes Lego games built on existing franchises such as *Star Wars*, and uses 3d graphics to represent the low-tech brick-based representation of the *Star Wars* universe. Outside games, the directors of the *Lego Movie* "wanted to maintain the crude look of Lego figures and the limitations of the toys" [38].

Though the idea of independent games is by name tied to the economic and legal realities of game production, I have here talked about the components of a central Independent Style, a particular style that is not a necessary reflection of small-budget game development, but is rather a style deliberately designed to *signal* a particular small-team ethos. It is a style than can work as an enabler of small-budget productions, but game developers will sometimes put in extra effort in order to use this style. This is the dual nature of Independent Style, the high-tech representation of low-tech and low-budget materials.

Independent Style is a construct, but it also genuinely represents a cheap way of developing games, and its popularity makes it possible for developers to develop low-budget games that are understood by players not as cheap games that would have been better had they had a bigger budget, but as games that embody a particular style, and belong to a new type of video game.

9. ACKNOWLEDGEMENTS

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