"Please please don't buy this game like I did. I feel terrible and wish I could return it!": A corpus-based study of professional and consumer reviews of video games

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Background

This paper is a corpus-based comparison of professional and consumer reviews of video games. Professional video games journalism is a well-established field, with the first dedicated publications launched in 1981 (*Computer and Video Games* in the UK, followed by *Electronic Games* in the US). Over the next 30 years, such publications were highly influential in the success of particular video games, often leading to accusations of conflicts of interest, with the publishers of the games under review also paying substantial amounts of money to advertise their products in the same video games magazines.

The rapid growth of the web since the early 2000s has seen a decline in all traditional print media, and games magazines are no exception. Such publications have now been largely replaced by professional video games review sites such as IGN.com, established in 1996 as the Imagine Games Network. However, the influence of professional review sites such as IGN appears to be waning, with a recent report by the Entertainment Software Association suggesting that only 3% of consumers rely on professional reviews as the most important factor when making a decision on which game to purchase (ESA 2015).

The decline of professional games reviews does not reflect the state of the video games industry in general. It has been estimated (Newzoo 2016) that the industry generated almost $100 billion of revenue worldwide during 2016. At the same time, we have seen a growth in consumer reviews of products online, on ecommerce sites such as Amazon but also on dedicated review sites in particular industries. For video games, the predominant site is Metacritic.com, which aggregates professional reviews from various sources but also provides a platform for gamers to give their own reviews.

Anecdotally, there is seemingly growing discord between professional reviews and consumer opinions on the same games. As far as we are aware, though, there have been no previous linguistic studies comparing professional and consumer reviews of video games. There has been some research on professional and consumer reviews of films (de Jong & Burgers 2013). This work was a genre analysis of 72 reviews, relying on manual coding of descriptive and evaluative moves (e.g. 'placing the movie in context' and 'recommending the movie' respectively). The authors found that professional reviewers tend to give more practical information about the film whereas consumer critics use more first-person, evaluative language. However, the scope of the study was necessarily limited by their manual approach. In our research, we adopt a corpus-driven approach, focussing on lexical differences in a large corpus of professional and consumer reviews.

The Corpus

Our corpus contains online reviews by professional critics and reviews written by consumers on the Metacritic website. We included only games on the PlayStation 4 and XBox One platforms which had been reviewed by all of the four top ranked (according to Alexa web rankings) online games magazines: IGN, GameSpot, DigitalSpy, and GamesRadar. A maximum of 100 user reviews were downloaded for each game on each platform, based on the default sort order used by Metacritic (a rating of the 'most helpful' reviews).

The resulting corpus covers 150 games, with the professional reviews sub-corpus containing 707,336 tokens (from 593 reviews) and the consumer review sub-corpus containing 2,184,748 tokens (from 14,771 reviews).

Key Words Analysis

Table 1 shows a Key Word analysis (Scott 1997) of the professional reviews compared against the consumer reviews. We see that professional reviewers tend to be preoccupied with giving factual information about the game, whether this be the *developer* and *publisher* or the type of game (*single-player, open-world, first-person*). The consumer reviews, on the other hand, tend to contain more evaluative language: *good, fun, great, amazing, bad, love, boring, awesome, best*. This is similar to the findings of de Jong & Burgers (2013) in their analysis of film reviews but on a much larger scale and without the need for time-consuming manual coding.

Table 1 Key words from the Professional and Consumer reviews

Professional Reviews		Consumer Reviews	
game's	together	game	overall
moments	place	graphics	boring
three	narrative	good	say
particularly	foes	really	awesome
enemies	action	fun	COD
sense	power	great	best
single-player	distinct	games	FPS
two	attack	amazing	lot
enemy	instance	played	pretty
new	meanwhile	story	gen
attacks	in-game	play	playing
four	battles	buy	give
abilities	fire	gameplay	recommend
open-world	five	people	DLC
nearby	first-person	bad	etc
ability	process	better	opinion
occasionally	individual	think	price
events	specific	fan	money
rise	course	reviews	bugs
players	means	love	year

In our key word analysis we see consumers make greater reference to specific elements of the game: *graphics, story, gameplay, bugs*. These findings echo the ESA report (ESA 2015) which found that the largest proportion of consumers (22%) rank "interesting story/premise" as the most important factor in making a purchase decision. Our analysis also chime with an online news article on the ESA report (Breitbart 2015) which states that professional reviews "have long been criticised for being overly politicised and for focusing on irrelevant detail at the expense of conveying information about frame rates, gameplay and other factors gamers say they care about".

We also see stylistic differences between the two sub-corpora, with evidence of a more formal writing style in the professional reviews: *particularly, sense, occasionally, instance, distinct, meanwhile*. Consumer reviews tend to be less formal, as seen in the following example:

> *Wont be buying games on release day any more SADLY !!!!!! I wanted to love this game & give it a 10 but IT's A BIG FAIL !!!*

However, as we go on to demonstrate it would be inaccurate to generalise and claim that all consumer reviews are poorly written and lacking in depth. Using examples from our corpus, such as the following, we illustrate that many of the rhetorical features more commonly associated with professional reviews are present in consumer reviews too:

> *In closing, the LOTR fan will love this game, and any fans of the Assassin's Creed or Batman series could definitely get into it.*

Through a subsequent analysis of key n-grams we explore in depth further differences between professional and consumer reviews. For example, the 3-gram *buy this game* is significantly more frequent in consumer reviews, with both negative (as in the title of the paper) and positive examples ("Go and buy this game now, it's awesome!"). Such specific recommendations tend to be absent in professional reviews.

Differences between Professional Review Sites

In the final part of the paper we explore linguistic differences between the four professional review sites in our corpus (Table 2). We find evidence of a more informal first-person style in IGN reviews (*I, me, my, I've, I'd, myself*), as well as a use of evaluative language which is more commonly found in consumer reviews (*fun, great, interesting*). This is in sharp contrast to previous research on professional film reviews (de Jong & Burgers 2015).

As we illustrate, this seems to be the result of an increasing trend on the IGN website for reviews in video format with a text transcript below or, more accurately, for reviews which are written to be read out loud. The language of such reviews remains the conventional language of professional reviews but modified slightly to make it more personal and more suitable to be shared in video form, e.g.

> *Assassin's Creed Chronicles: China is a decent attempt at converting the Assassin's Creed experience into a side-scrolling form-factor, but it lacks heart.*

The pieces are all there, but they are patched together in a dry, passionless way that left me feeling emptier the longer I played it. http://uk.ign.com/articles/2015/04/21/assassins-creed-chronicles-china-review

Table 2 Key Words for each publication in the corpus.

IGN	GameSpot	DigitalSpy	GamesRadar
I	you	we	you'll
me	your	players	reviewed
my	game's	game	will
I've	these	our	you're
I'd	her	we'd	starts
version	may	although	game
playstation	such	games	yes
myself	must	we've	that's
fun	fight	it's	via
like	moments	we're	theme
great	nearby	fans	it's
found	process	really	split
didn't	he	something	up
was	how	will	kicking
felt	upon	visuals	incredibly
interesting	lead	colourful	bits
it	several	you'll	know
had	many	has	real
versions	I	users	start
mostly	ordinary	colour	damn

Conclusion

In this paper we present novel research on the application of corpus linguistic techniques to a 'real-world' problem of growing importance: the mining of consumer intelligence data. With reference to the domain of video games, we demonstrate how the relevance of professional reviews in the buying process has decreased while consumer reviews have grown in importance. We show that the latter tend to be less formal and more personal in style, and tend to have different preoccupations: graphics, gameplay and fun. We also show that some of the professional review sites that remain appear to be adapting to reflect the more immediate, personal style of consumer reviews.

References

Breitbart (2015) *Report: Professional Game Reviewers Almost Totally Irrelevant to Buyers,* Retrieved 9 January 2017 from http://www.breitbart.com/london/2015/04/14/report-professional-game-reviews-almost-totally-irrelevant-to-buyers/

de Jong, I. K.E. & Burgers, C. (2013). Do consumer critics write differently from professional critics? A genre analysis of online film reviews. *Discourse, Context and Media, 2*, 75-83.

ESA (2015) *Entertainment Software Association Essential Facts About the Computer and Video Game Industry*. Retrieved 9 January 2017 from http://www.theesa.com/wp-content/uploads/2015/04/ESA-Essential-Facts-2015.pdf

Newzoo (2016). *The Global Games Market Reaches $99.6 Billion in 2016, Mobile Generating 37%*. Retrieved 9 January 2017 from https://newzoo.com/insights/articles/global-games-market-reaches-99-6-billion-2016-mobile-generating-37/

Scott, M. (1997). PC Analysis of Key Words – and Key Key Words. *System*, *25(1)*, 1-13.