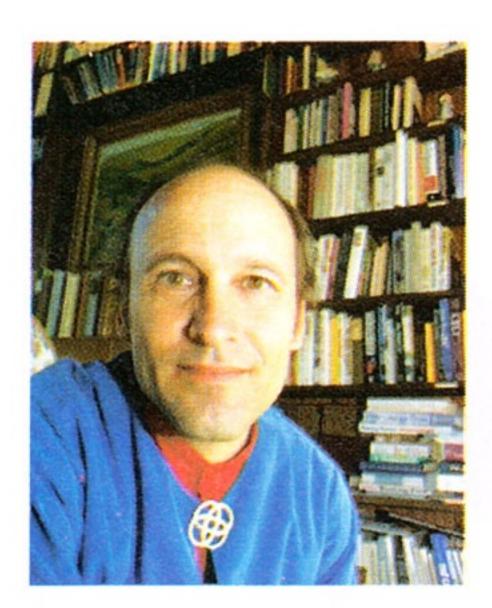# The way games ought to be...

Hi-octane game theory by Chris Crawford

Are you a winner or a loser? And how do you tell the difference between the two? And how come even the "best" games are so darned simple to beat?

Let us consider the gameplaying process as story-generating process. That is, a game is a machine that grinds out a custom story for the player, each time he plays. Now, most games generate insipid stories that few would compare with hand-crafted stories. In this article I will not ask how we might correct this problem. Instead, I propose only to examine the gameplaying process as a sequence of stories.

I shall use as my working example (once again) *Doom*, for the same reasons that I have used it before: almost everybody has played the game and so most people are familiar with it. Moreover, I have praised the game design, so I need not waste anybody's time on the diplomatic niceties.

The example I'd like to zero in on is in *Doom II*, in a level called "Barrels O' Fun." This is a particularly clever level because there are two places where rows of barrels are set up to explode in a chain reaction that will kill the player if he doesn't find shelter. OK, that's clever. But consider the precise sequence of stories that the player must go through until he finds a story with a "happy ending":

Story One
Well, here I am in a new level called "Barrels O' Fun." It sounds interesting. I see lots of barrels all around me. I'll very carefully just look around and... Omigod, I must have tripped a secret latch. A door has opened and I can hear the growl of a monster! Where is he? Hey, he just shot at me and a barrel blew up! Now more and more barrels are blowing up! I'm dead!

Story Two
OK, this time I'm ready. I know that as soon as I move more than a couple of steps, I'll trip the secret latch and the monster will come. So this time I'm going to get him first. I'll just face in the correct direction and edge closer...closer... Yes, there he is! But there's a barrel between us! If I shoot, I'll set it off! Oh no, he's shooting, the idiot!

The barrels are exploding! I'm dead!

Story Three
I'm not sure what to do because I can't shoot back and I can't seem to escape the exploding barrels. But I do notice an empty space where there aren't so many barrels so I'll just duck into that. Whoops, here comes the bad guy. The barrels are blowing up. Augghh, there are still too many barrels — they're all blowing up again. I'm dead!

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Story Four
Well, I don't know what to do. There appears to be no way out of this. But this is a long, long room; perhaps if I go to the other end I'll find some way out of this mess. OK, let's start running. Drat, the barrels get in the way. Uh-oh, the monster started shooting, I can hear barrels exploding. I'd better run faster. Look, there's a doorway up ahead! Maybe if I get through that... auugh, the exploding barrels caught up with me! I'm dead!

Story Five
Well, we now know that there's a doorway at the end of the long room, and I think that if I can make it to the door, I might find safety inside. So this time I'm going to run as fast as I can toward the doorway. Let's go! Monster coming out... I'm stumbling a bit... barrels exploding... I've got a good lead... almost there... here's the doorway... augghh, Didn't make it! I'm dead!

Story 6
Let's try again. Here we go... running fast... maneuvering around those barrels well... the monster seems to be slow off the mark... there he goes... yes, barrels are exploding... I've got a huge lead... just don't make any mistakes now... almost there... explosions getting closer... at the door now... open it up... I'm through! Explosions have stopped! It's over! I made it! Hooray! I'm not dead!

Now here's the question: is this five stories with unhappy endings followed by one story with a happy ending? Or is it one long story of triumph over adversity? Now you may think that this question is arbitrary, that is strictly a matter of perception, and in fact, it is largely a subjective matter. But my point concerns the person making that subjective judgment. If that person is an old pro gamer, then it's easy to take the second interpretation. The various deaths along the way were merely intermediate steps on the path to triumph. They make the success all the sweeter.

But what if you're not an old pro gamer? What if you consider dying to be the same as losing? You'll have to lose five times before you win. And the question is, how many times are you willing to lose before you give up? Can you take all those unhappy-endings to achieve the happy one?

Experienced PC gamers have come to regard the save-die-reload cycle as a normal component of the total gaming experience. I want to slap all these people in the face and cry, "Wake Up!" What they regard as business-as-usual has a completely different meaning for most people. For most people, death means failure, losing, end-of-game. It doesn't mean time-out, lose-a-turn, or reload. When we design games that kill the player repeatedly, most people don't get the message that the game is challenging; they get the message that they're dummies who can't survive 10 seconds in a child's game.

The way games ought to be...

I offer the following design criterion for your consideration: Any game that requires reloading or starting from the same place over and over again as a normal part of the player's progress through the system is fundamentally flawed. On the very first playing, even a below-average player should be able to successfully traverse the game sequence. As the player grows more skilled, he may become faster or experience other sub-challenges, but he should never have to start over after dying.

Indeed, this raises a new question: should we banish death from our games? Why must we kill the player when we all know perfectly well that he will merely reload or restart the game again? Why should we force the tedious process of reloading or restarting upon him? And why should we require the even more tedious task of frequent saves? Why not use the computer to handle the tasks? If the player makes a mistake, then we automatically take him back to the most recent starting point and let him try again. The result in terms of gameplay is exactly the same, except that the player no longer has to deal with the petty issues of file management. Isn't that what computers were made for?

But there are even larger questions raised by "Barrels O' Fun." This level is one of the most complex and sophisticated challenges in one of the very best games of the 1990s, yet it presented a challenge that was easily solved by nothing more than near

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brainless trial and error. It didn't require any great insight on my part to solve the problem; no stroke of genius or flash of inspiration got me through. Instead, it was just brutal trial and error until I muddled through. What can we say about a design that challenges a person's willingness to resort to trial and error? Shouldn't a game challenge something deeper inside us? I think so.

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