

AN APPLICATION OF PERCEPTUAL CONTROL THEORY TO THE FILM 'DONNIE DARKO' by Richard Westmoreland



Perceptual Control Theory (PCT) is a theory about control in living organisms. Advancing from the cybernetics movement of the early 20th century, PCT was developed in the 1950s by a physicist named William T. Powers (Mansell & Carey 2009) and continues to evolve in both following and application. Donnie Darko is a 2001 film, written and directed by Richard Kelly (IMDB.com). The film spans numerous genres, containing elements of comedy, drama, psychological thriller and science fiction. Set during the presidential election of 1988, the movie concerns a troubled teenager named Donnie Darko. After narrowly escaping death, Donnie begins to have disturbing visions predicting the end of the world.

This paper aims to apply the principles of PCT to the film Donnie Darko. The essay will begin with an overview of PCT. The extent to which Donnie is in control of his own actions will then be examined and his lack of behavioural control discussed. The principles of arbitrary control and conflict will be applied to the film, and psychopathology will be examined in terms of PCT. Finally, the treatment that Donnie receives will be analysed and the implications of this considered.

PCT rejects the traditional behaviourist perspective that behaviour is the response to a stimulus. Instead it proposes that living organisms are driven by internal standards ('goals'), and will adjust their behaviour to bring their perception in line with these (Mansell 2005). Accordingly, Powers proposed that from a PCT viewpoint, 'behaviour is the control of perception' (Powers 1973). This control takes place through dynamic negative feedback loops (Appendix 1). Humans are complex beings and our nervous systems are made up of many loops. Powers suggested the idea of a hierarchical structure (Appendix 2), which "forms during the developing stages of life and continues to be modified throughout life". The negative feedback loops at the top of the hierarchy control the reference values of those below (Mansell 2005).

The numerous combinations of loops are constantly altered by a process named 'reorganisation'. Essentially, this is a random adjustment of the properties and parameters of control systems, so that existing control capacities are ameliorated and new ones are learned. Reorganisation is expressed behaviourally as epiphanies and brainstorming (Carey 2008). With such a complex organisation of loops, it is inevitable that an organism will have numerous goals. These are prone to conflict. Powers proposed that in terms of PCT, conflict is the "situation where two control systems are specifying incompatible or opposite reference signals at the same time" (Powers 1998). Further, conflict represents the "most serious kind of malfunction of the brain short of physical damage" (Carey 2008).

The film *Donnie Darko* lends itself fervently to the principles of PCT. In the film, the titular character is a troubled adolescent plagued by visions of an impending apocalypse. One night whilst out sleepwalking, a jet engine mysteriously crashes through the roof of Donnie's bedroom. Coming to terms with his survival and trying to cope with the people in his town, Donnie's 'hallucinations' escalate, and as the end of the world approaches, he is drawn into a disturbing series of events that may simply be a result of his growing insanity.

Control is an everyday phenomenon (Carey 2008). Accordingly, throughout the film there are numerous instances of control that can be explained in terms of PCT. One of the prominent themes involves the extent to which we control our own lives. Donnie is frequently forced to question the existence of free will, or whether it is fate that determines the choices that he makes. In the scene where Donnie watches television with his father's friends, he witnesses a 'liquid spear' emerging from his father's chest. In this way, Donnie is able to see his father's future materialised. In terms of PCT, this may reflect his realisation that control systems continue to run automatically when a person is unaware of them. Bargh and Chartrand (1999) explained that "various nonconscious mental systems perform the lion's share of the self-regulatory burden". Thus, we are able to pursue our goals despite not being conscious of them. However, presumably this would only continue until the error (difference between one's goal and perception) was sufficient to require awareness and subsequent reorganisation.

PCT is further demonstrated in the film through Donnie's need to be in control. These control issues are evidenced when he and his friends are discussing the Smurfs. Unable to abide his friends' explanations, Donnie is quickly distressed and feels compelled to propose his own. PCT would dictate that Donnie's reference value is to remain in control of interpersonal situations. Often, his perception is that other people are in control e.g. when other people are winning an argument. Thus, the significant error created causes Donnie to reorganise in a way that often results in extreme and violent behaviours. The manifestations of this lack of behavioural control are important, as the loss of control is linked with psychopathology, which will be discussed later.

A significant precursor to the loss of behavioural control is arbitrary control. Powers defined this as the 'attempt to make behaviour conform to one set of goals without regard to other goals...that may already be controlling that behaviour—that *must* already exist, since the behaviour exists...'. Arbitrary control is able to occur between or within persons (Mansell 2005). Interpersonally, Powers posits that 'arbitrary control of the behaviour of one person to suit the goals of another person ignores the goals that are already governing the behaviour of the other person, and inevitably creates conflict...' (Mansell 2005). In the film this is evidenced through the Darko family's reaction to Donnie's schooling system. It is frequently made obvious that Donnie's parents have problems with their son's education. For example, in one scene Donnie objects to Mrs Farmer's teaching exercise, which results in the principal calling his parents into school. It is evident that they find the situation humorous. In terms of PCT, it may be that their goals of undermining the conservative education system are being achieved through Donnie's outlandish behaviour. Furthermore, physical manipulation can result in arbitrary control. In one scene, Donnie is held at knifepoint by the school bully and dragged around. This physical control over Donnie results in his goals being disregarded, and creates conflict between Donnie's goal to escape, and the bully's goal to make him stay and be threatened.

In fact, Powers explained that arbitrary control is the main cause of unresolved internal conflict (Mansell 2005). Conflict occurs between control systems at the same level

within a hierarchy and its effects are expressed at levels lower down (Carey 2008). Hence, conflict is often manifested behaviourally and is associated with psychological distress (Mansell 2005).

There are numerous demonstrations of conflict throughout the film. For example, in one scene Mrs Farmer asks Donnie's mother to take the local dance troupe to a competition. Here, Mrs Darko is reluctant. With regards to PCT, we can assume that one goal of hers is to ensure that the girls attend their competition and are happy. However, another goal might be to purposely antagonise Mrs Farmer, a person whose moralistic values she seldom agrees with. This results in uncertainty, as Mrs Darko oscillates between both goals and reaches a 'fragile midpoint' (Carey 2008). Here, neither system is able to control effectively. Without effective resolution (through reorganisation) the prolonged conflict could lead to psychological distress. Another example of conflict is when Donnie's teacher asks the new girl Gretchen to sit next to the person she thinks "is the cutest". On one hand, Gretchen fears that doing so will upset the other boys in the class as they will doubt their attractiveness. On the other, she feels she must carry out this exercise in order to appease her new teacher. Failure to do so might result in embarrassment. This conflict results in a momentary loss of control and presumed distress.

Problems with conflict and loss of control are frequently implicated in psychopathology. Carey has proposed that people access psychotherapy when they have difficulty controlling some aspect of their life. Szasz (1960) suggested what we call mental illnesses are actually problems in daily living, arising from conflicts in human relations. Further, "when conflict endures...manifestations of such things as irritability...restlessness... and paranoia can occur." (Carey 2008) Throughout the film, numerous allusions are made to Donnie having a mental illness. Significantly, Donnie suffers from what his therapist refers to as "daylight hallucinations". Hallucinations are a prominent symptom of prolonged conflict within psychopathology (Mansell 2005). PCT is able to account for this through its explanation of memory and modes.

PCT suggests that memory is a local phenomenon, characterised by storage and recall of information carried by neural impulses. This means that perceptual signals are able to be replayed and these replayed signals are still subject to interpretation. Further, imagery is recalled in place of present-time perception (Mansell 2005). With regards to the film, Donnie might recall information from his hallucinations at the expense of present time. This would explain his recurrent confusion between what is real and imagined.

'Modes' are psychological processes resulting from changing connections between layers of control systems. In the 'imagination' mode, higher order control systems function without connections to lower systems, allowing the control of perception without noticeable behavioural change. This permits control over mental simulation. It could be that Donnie's hallucinations are a result of conflicts in these higher order systems. This would result in a subsequent loss of control within them. Further, when in conflict, a higher-order control system is able to reach its reference value "by affecting the input function...of lower order perceptual systems..." (Mansell 2005). Ultimately, this could lead to perceptual distortion.

Donnie regularly visits a therapist, Dr. Thurman, and throughout the film a variety of therapeutic techniques are utilised e.g. hypnotherapy. From a PCT perspective, an alternative treatment might be Method of Levels (MOL) which is based upon the principles of PCT. MOL increases clients' awareness of the hierarchy of control systems in an attempt to resolve conflict. This takes place through 'moving up a level' and reorganising. MOL prompts clients

to describe present experiences, as this redirection of awareness “can only happen in present time” (Carey 2008). Moreover, the patient determines the content of the session as much as possible. With regards to MOL, the treatment that Donnie receives is ineffective. The therapist is presented as manipulative, with her own set of goals that she seems keen to enforce (further exemplifying arbitrary control). Moreover, despite Carey’s proposal that “a problem cannot be suggested by another”, Thurman frequently asks questions about Donnie’s family in an attempt to direct the conversation.

The ineffectual therapy Donnie receives (including Jim Cunningham’s useless self-help classes) may further contribute to his lack of behavioural control. Due to his inability to find a successful, secure resolution to his problems, it seems likely that Donnie reorganises in a way that is disruptive. With regard to reorganisation, Carey (2008) posits that the process speeds up as control declines and slows as control is regained. Applied to the film, as Donnie’s arguable psychopathology intensifies, and the number of visions increases, his control over events is diminished. This results in a faster rate of reorganisation. Behaviourally, this is expressed as Donnie begins to come to terms with the events unfolding around him.

In conclusion, this paper has looked at the fundamental aspects of PCT. The principles of arbitrary control and conflict have been related to the film, and an applied explanation of psychopathology has been given. Finally, the treatment received by Donnie has been analysed and compared with Method of Levels, a therapy based on the ideology of PCT. As we have seen, the principles of PCT lend themselves to the events and characters of Donnie Darko, especially in terms of psychopathology and therapy. More widely, the application of PCT to media such as film may have implications for its future use. Applying PCT to popular media would serve to broaden its audience. Potentially this could increase its following and promote further research into the area.

References

Bargh J, Chartrand, T. (1999). The unbearable automaticity of being. *American Psychologist*, 54(7), 462-479

Carey TA. (2008). Conflict, as the Achilles heel of perceptual control, offers a unifying approach to the formulation of psychological problems. *Counselling Psychology Review*, 23(4)

Mansell W. (2005). Control theory and psychopathology: An integrative approach. *Psychology and Psychotherapy: Theory, Research and Practice*, 78, 141-178

Mansell W and Carey TA. (2009). A century of psychology and psychotherapy: Is an understanding of ‘control’ the missing link between theory, research, and practice? *Psychology and Psychotherapy: Theory, Research and Practice*, 82, 337-353

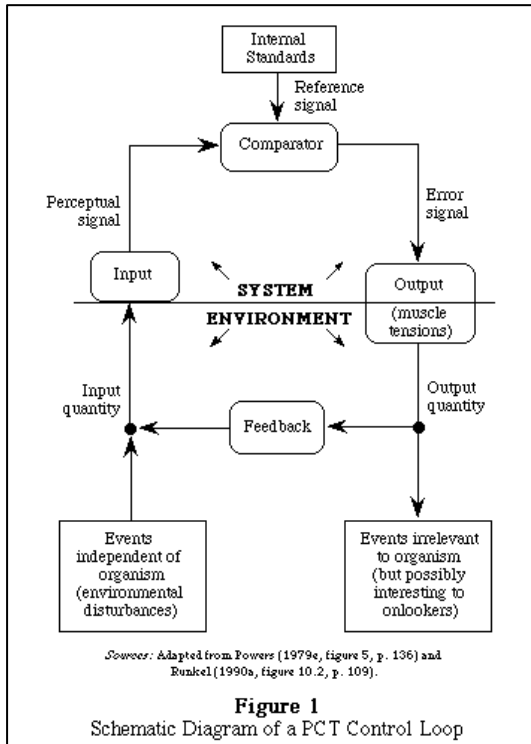
The Internet Movie Database (IMDB): Donnie Darko (2001). Retrieved 1st December 2009 from <http://www.imdb.com/title/tt0246578/>

For a PCT approach to psychosis, see also:

Tai, S. J. (2009). Using Perceptual Control Theory and the Method of Levels to work with people who experience psychosis. *The Cognitive Behavioural Therapist*, 2, 227-242.

Appendices

Appendix 1: The negative feedback loop



Appendix 2: The hierarchy of control systems

