

Tensions rise between 'guards' and 'prisoners' in The Stanford Prison Experiment.

drawl of the sadistic prison captain in the 1967 film *Cool Hand Luke*, preying undeterred on the weaknesses of 8612 in particular.

The prisoners, at first rebellious, are broken by the guards and pitted against one another; the experimenters themselves lose perspective. When 8612 begs to be released, Zimbardo and his colleagues initially refuse, convinced that he is faking his distress even though that should not override the voluntary nature of the experiment. Several subjects, all screened as emotionally well grounded, have breakdowns; rather than fear for their well-being, Zimbardo develops a paranoid belief that outside forces will shut "his prison". Finally, psychology PhD student Christina Maslach (later Zimbardo's wife) persuades him to change his mind after seeing the prisoners, half-naked and chained together, with bags over their heads, on a trip to the toilet. She tells Zimbardo: "Those are boys, and you are harming them." The next day, as guards force prisoners to pantomime sexual intercourse, Zimbardo tells them that it is time to go home.

The film pulls few punches regarding Zimbardo's behaviour. This is consistent

with his confession, in *The Lucifer Effect*, that he failed to provide "adequate oversight and surveillance when it was required ... the

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findings came at the expense of human suffering". He wrote, "I am sorry for that and to this day apologize for contributing to this inhumanity." The study was subsequently deemed to fall within existing ethical guidelines.

Others have wondered, however, whether Zimbardo oversold the results. When I contacted the real-life 'John Wayne', Dave Eshelman, he said that the experiment reveals no generalizable truths about humans' propensity for evil, and that he was playing a part, running his own experiment to see how far he could push people. "I figured I was doing them a favour by trying to force some results." At least one other guard has said that Zimbardo went out of his way to create tension.

Milgram, too, has a complex legacy, as *Experimenter* reveals. Through an imaginative structure, the film explores several of his contributions to behavioural psychology. But he is best known for his electroshock experiments at Yale University in New Haven, Connecticut, a decade before Zimbardo's experiment. In them, an authority figure asked volunteers to administer what they were told were increasingly painful electric shocks to an actor who they believed was another volunteer. Two-thirds maxed out the voltage despite the actor's anguished cries.

It was difficult for many to come to terms with the results — including some of the research subjects, who were unhappy about the deception (Milgram preferred "illusion").

Almereyda playfully gives the audience a backseat view of the psychologist's approach. There are scenes in which Peter Sarsgaard, playing Milgram, speaks directly to camera — an homage to Milgram's own films explaining his experiments. This is a work, as the title implies, much more about the experimenter than about the experiment. Zimbardo has spoken of meeting Milgram, who "embraced me and said, 'I'm so happy you did this because now you can take off some of the heat of having done the most unethical study."

The shared legacies of the researchers can be seen in updated regulations for psychological research on human subjects, which prevent the kind of deception that Milgram perpetrated and the unstructured opportunity for abuse that Zimbardo created. But their experiments will always hold captive a dark part of the human imagination as we wonder just what kind of pain we would be willing to inflict on other human beings.

Brendan Maher *is biology features editor at* Nature. *Additional reporting by Monya Baker.*

CORRECTION

The review 'Space-rock alert' (*Nature* **522**, 418; 2015) gave an incorrect affiliation for Peter Jenniskens. He is at the SETI Institute in Mountain View, California.