Can Socio-Cultural Context Affect Experimental Results?  
The Case of the Zimbardo Prison Experiment Repeated in Poland by Artur Żmijewski

Abstract
The famous Phillip Zimbardo’s study (1971), known as the Stanford Prison Experiment, was repeated some ten years ago in Poland by Artur Żmijewski, a video artist. His findings deserve the attention of social psychologists doing experimental research. The video released by Żmijewski in 2005 shows that his action ended with a completely different outcome than that of the original experiment: the participants themselves decided to stop it. The difference may have been a consequence of the artist’s unconcern about full conformity with the methodological rules the academics consider necessary to follow in conducting experiments. However, the impact of a particular socio-cultural context provides another plausible explanation of why Żmijewski’s results depart from those obtained in the original study. Polish culture differs in a number of dimensions from the culture that was taken for granted by Zimbardo in creating the Stanford experimental setting and informed his interpretation of the results obtained therein. This note offers an account of Żmijewski’s project, as well as an explanation of its results in terms of cross-national comparisons. The author’s aim is to provoke more discussion on the role of socio-cultural context in experimental research.

Key words: Phillip Zimbardo, Stanford Prison Experiment, Artur Żmijewski, socio-cultural context, dimension of culture

Introductory remarks
The Stanford Prison Experiment is a classical example of using experimental research in order to learn more about human nature. In his book The Lucifer Effect: Understanding How Good People Turn Evil (2007), Zimbardo described ‘more than 30 years of research on factors which can create a “perfect storm” that leads good people to engage in evil actions’ (Zimbardo 2015). He concluded that all humans can undergo such a transformation to which he gave the name of the Lucifer effect.

His conclusion, based on the results of his 1971 experiment, can be questioned, however, as it is inconsistent with the results of the repetition of Zimbardo’s experiment by Artur Żmijewski in Poland. His project has not yet become known to academic scientists. Żmijewski is not a researcher but a video artist. His aim was not to carry out a strict replication (in the meaning this term has in the methodology of experimental research) of the classical study. His results, however, should enter academic discourse, even though the author did not publish any report in any
scientific journal. Instead, a piece of video art he produced from the recording of the experiment was shown at the 51th Biennale in Venice, giving the author an opportunity to share his product with a wider public. Żmijewski also informed Zimbardo on his repetition and its results and Zimbardo’s answer was made public. It is high time for researchers to get acquainted with that unusual repetition and its results, and reflect on factors which could have brought about such a surprising effect.

The fact that a performer and video artist tried to repeat Zimbardo’s experiment could be seen as no more than a curiosity. Actually, the artist designed his performance with the intention to strictly repeat the conditions of the Stanford Prison Experiment. It is worth mentioning that Zimbardo himself complimented the artist on that. Even though Żmijewski did not plan a proper replication of the experiment, what he obtained deserves more discussion and analysis because of his results are so distinct from the original.

The outcome observed by Zimbardo led him to define the Lucipher effect. Żmijewski’s experiment shows that this effect can be overridden by the solidarity effect, or the effect of cooperation emerging between two groups of participants playing quite different roles in the experimental social system. That is, the effect observed by Zimbardo is not as universal as it is generally believed to be, but it can occur in certain circumstances due to some factors whose nature has yet to be disclosed.

Artur Żmijewski and his activities

Artur Żmijewski, a video artist and performer, is a representative figure of Polish critical art. According to Izabela Kowalczyk (2002), this important movement has been one of the first discourses critical of the transformation that Poland experienced after 1989. Some artistic activities served as a strong tool of social criticism, or even formed a sort of political declaration directed against some practices. In her book devoted to Polish critical art, Kowalczyk included a full chapter (Kowalczyk 2002, p. 275–298) about Żmijewski and his art before Repetition. His early works focused on human body, the theme of the Other, and social traumas. After Repetition the artist realized various works and organized several politically and socially engaged projects. He has been involved in the activities of the leftist think tank Political Critique (Krytyka Polityczna). Some of his videos may be watched on the website (http://artmuseum.pl/en/kolekcja/artysci/artur-zmijewski) of the Museum of Contemporary Art (Muzeum Sztuki Nowoczesnej) in Warsaw.

Repetition, not replication

In 2005 Żmijewski represented Poland at the 51st Art Biennale in Venice. He decided to show a video documenting his repetition of the experiment conducted in 1971 by Zimbardo. Zimbardo’s simulated prison, with its architecture and rules, was recreated in Polish reality. The persons who were assigned the roles of guards and inmates were recruited by the artist from the unemployed men. He selected seven prisoners and nine guards by means of a procedure that involved psychological
tests and examinations to eliminate mentally unstable candidates. The rooms were equipped with Venetian windows (one-way mirrors) to enable filming of the course of the experiment with the use of five manually operated cameras and several night-vision industrial TV cameras. Other participants of the experimental setting included: psychologists acting as experts with the right to stop the experiment if things turned dangerous, a former prison inmate, and a sociologist who had been involved in reforming the Polish prison system.

The experiment lasted for seven days. While making the Repetition, Žmijewski, not for the first time, turned to the aesthetics of violence and segregation. He was aware of the contemporary context of his artistic actions. The Polish repetition took place just after the torturing of prisoners in Abu Ghraib came to light but before the perpetrators were sentenced.

In his experiment, two opposite groups, the guards and the prisoners at some moment quite unexpectedly joined hands and rebelled against the institution of prison, the artist, and the very situation he had put them in. Žmijewski commented on this in the followings words:

Repetition suggests that what people most ardently strive for is a compromise. People don’t keep torturing one another until the conflict is solved. They search, rather, for a safe status quo, negotiate, and act opportunistically (http://culture.pl/en/artist/artur-zmijewski)

Żmijewski does not use the term replication nor does he pretend that he is a scholar. He does not quote scientific publications nor does he use psychological jargon albeit he must have studied some literature on the Stanford Prison Experiment. His work consists in a creative, free use of scientific procedure to produce a piece of video art to be shown to the public. His aim was not to submit a research report for publication in a regular scholarly journal. A critical analysis of his product seems counterproductive. Even Zimbardo’s answer to Žmijewski’s note ignores its potential academic relevance. Nevertheless, the results obtained by the artist playing with the experimental method call for attention and reaction of the academia.

Joanna Tokarska-Bakir (her reflections are quoted here after the text available at http://culture.pl/en/artist/artur-zmijewski), a prominent Polish cultural anthropologist who has been active in hot public debates, suggests that Žmijewski’s work should be interpreted metaphorically, not as a repetition of an old experience, but rather as a new opening of the space of social evil. She placed Žmijewski’s work in this context in accordance with a later reinterpretation of the original experiment by Zimbardo himself. She also noticed that the volunteers who agreed to take part in the Polish experiment, including those who became the guards and even their head, did not trust authority nor did they display full identification with their roles.

This is the first reason to ask the question of how different the two cultures in which the experiment was originally conducted and repeated were. The level of social trust in Poland is one of the lowest in Europe and certainly lower than in the American society. The same can be said on the attitude toward authority. That is why one should take into account the socio-cultural context in the analysis of Žmijewski’s repetition.
Iza Desperak

Video content (summary)

As the video is not available online at the moment, I am going to give a short summary of it. It is not a detailed transcript, but an overview of its content. The focus is on the last stages and the very moment when the remaining participants decided to stop the experiment.

Żmijewski’s video, which is 1 hour 15 minutes long, is for now the only documentation of his experiment released by the author. The video presents the course of the experiment as a sequence of selected happenings which took place on particular days or hours. The sequence starts from the scene when one of the participants is led to the place of his destination, with his eyes covered. Another scene shows how the participants who will be playing the roles of prisoners are changing into prison clothes: long shirts (like those in Abu Ghraib?) with numbers printed on them. Next, the prisoners’ photos are being taken with the numbers displayed in front of them. Such an opening of the video is followed by informing the viewers that:

We recreated the conditions of Professor Zimbardo’s experiment in order to investigate how an oppressive situation influences people’s behaviour. Do they turn into torturers and victims? Or are they able to resist the temptation of ruthless exercise of power? Both the guards and prisoners are paid the equivalent of $40 a day.

The number given at the end of this statement can be interpreted in the context of the economic conditions of living in Poland at the time when Żmijewski carried out his Repetition. In 2005 the minimum subsistence level for a single person was $145 monthly, or around $5 daily, which is 8 times less than the amount that a participant would earn for each day in the experiment. The average monthly salary at that time reached $612, or some $20 per day, twice less than the reward for a day spent in prison. The prospect of earning a significant amount of money in a relatively short time might have appealed to the volunteers, as they were recruited from the unemployed for a long time. Some participants declared that they joined the project because of curiosity or interest in its cognitive aspect. One of them – asked if he would be ready to do everything to earn some money – refused to participate. Nevertheless, the financial aspect of participation cannot be considered entirely unimportant.

As the story unfolds before the eyes of the viewers, they are watching what is going on in the prison as it will be slowly developing its daily routine. They can observe the prisoners and the guards, as well as the committee of organizers debating about the rules and communicating their decisions to the guards. When the guards prepare and announce first regulations, one of the prisoners comes up with a question, and the performance starts out.

Once the prisoners have been assigned numbers, they are told to call one another with these numbers and to use them while reporting to the guards. The prisoner who has asked the question got the number 810; he will become one of the main characters of the story. He talks a lot, appeals for solidarity, but his behaviour results only in all of the group members’ being punished.
The story goes on. When the inmates misbehave, the guards discuss among themselves how to control them, trying to contrive new punishments. Some punishments, like a limitation of walks or visits, play only a symbolic role, but later the guards will take pains to invent more severe measures to discipline the inmates, like using the truncheon, limiting sleep or access to the toilet, etc.

On the 5th day one of the participants (playing the role of a prisoner) reports his will to abandon the experiment. He pronounces aloud his real name (in full), confirms his decision and says that he does not want to give any reasons for it. We see him leave the cell and move to the room where he can change to his own clothes; lastly, we witness his talk to one of the organizers.

This participant who leaves the prison comments on his feelings, saying ‘Thanks a lot, I feel like a shit’ (in Polish ‘chujowo’). He is not the first one to leave. Out of twenty participants at the end only three prisoners and few guards remain. Next day (the 6th day of the experiment) another participant playing the role of a prisoner leaves the experiment, and two guards are discharged.

The rest of the crew decides to press ahead with another torture. They order the prisoners to cut their hair with the trimmer. Who can use this instrument? Prisoner number 810, the one who started all the protests, comes forward. He shaves his own head, but other prisoners disagree to cut or shorten their hair. The guards punish all the prisoners by not letting them sleep at night. In the morning (Day 7) number 810 talks to the chief warden and offers to him to encourage the prisoners to have their hair cut. After the approval he encourages one of fellow prisoners to allow him to conduct the operation. The other agrees, but only to shorten his hair on the back and by the sides. Number 810 starts the job. He begins by cutting the hair on the agreed-on parts of the head, but suddenly by mistake he cuts the hair from the middle of the scull, so that to complete the task he has to cut all the hair.

On the same day the guards communicate that the sewage system broke down and the inmates will not be able to go to the toilet. They are given metal buckets to be used inside their cells. They do not like it, but later they will play with the content of the buckets.

The guards return to their space. They are reading the note one of them has just got. It is a cramped piece of paper with the communication: THEY ARE GETTING READY TO TAKE OVER. LOCK THE DOORS.

In the afternoon, there arises a conflict over emptying the buckets, making the guards embarrassed. The chief guard is talking to the organizer (Żmijewski?). When he is criticised for his poor efficiency, he comes back to his office and takes the poster with the prison regulations. He reads the rules point by point, marking them with a tick or circling, and adding something at some points about violations. Finally, he writes on it: STATE OF CRISIS. The guards start talking on the crisis, aware of the need to solve the problem.

In the following scene the guards are writing something on a piece of paper, a proposal of new regulations perhaps. We can see words: CORRECTIONAL FACILITY, REHABILITATION, PRISONER, GUARD, WARDEN, DIGNITY, GOLDEN MEAN.
In the next scene, the inmates, staying in their cell, see the same list written on a piece of paper. Finally, they are going to leave the cell. In the following scene we see them sitting in a circle together with the guards. In the end, a guard asks the prisoners if they want to return to their cells. Prisoner 810 answers: ‘I am leaving without giving my reasons,’ and starts taking off his prison uniform. The guards and other prisoners follow him. After that they shake hands and introduce themselves with their first names.

The next scene shows an after-experiment meeting of the former participants, talking about what they have experienced. The video includes also fragments of a conversation (conducted later) with a participant about the effect of the experiment on an individual.

The letter to Zimbardo and his reply to Żmijewski

After the experiment Artur Żmijewski informed Philip Zimbardo about his project and received a reply from him on 7th October 2005. Zimbardo congratulated him on a good replication of the prison environment and praised the author of the video for the artistic values of his movie. At the same time he pointed to the lack of important details in the description of Żmijewski’s project. Indeed, we do not know how the recruitment was organised, how many participants played the roles of guards, whether the participants actually lived closed in the simulated ‘prison.’ He also criticised the organiser for his influence on the interaction process going on within the experiment setting (one of the guards was chosen to play a special role, that of the experimenter’s confederate?).

Zimbardo attributed the outcome different from the one he had obtained himself to the decreasing number of participants, including guards. Finally, he stressed that in the Polish study it was much easier to get out of the experimental social system than it was in the Stanford experiment. According to him, it was that difference that had such a strong effect on the results of Żmijewski’s repetition of the original experiment. He also informed about exchanging emails with one of the participants (called ‘Czarny Maniek’) and suggested using the term ‘replication’ instead of ‘repetition’ (Zimbardo 2005). To me, his response seems fairly superficial and a bit patronizing. In fact, his comments lack an in-depth discussion of the results and their prospective significance.

Discussion of Żmijewski’s ‘Repetition’

As I have already mentioned, Żmijewski is not a scientist but an artist. His intention was to create a work of art that would impress the viewers. Had he designed his ‘experiment’ with the aim to learn the patterns of human behaviour that arise in social systems characterized by granting to one group extreme power over the other, he would have to create an experimental setting in which all the methodological requirements are fulfilled. However, he did not care too much about it.

However, there is another plausible explanation for why the artist faced unexpected resistance of the actors refusing to play the game he had told them to play as long as
possible. Such an outcome of the group process he had initiated may well have been a consequence of a different socio-cultural context in which his experiment was done.

To create an experimental prison and set it in motion by assigning actors to two social positions (guard and inmate) in the system, Żmijewski used human beings with a definite cultural background. They had undergone the socialization process in the country where respect for authority had never been positively valued.

The roots of this cultural pattern lie in the history of Poland, making the inhabitants of their country allergic to any authority. When the Polish state more than a hundred years ago was divided into parts under the control of three much stronger states, the Poles who cooperated with foreign authorities — by taking positions allowing them to exercise legal power — did not enjoy the respect of their compatriots. For the same reason, over the whole post-war period of Soviet domination, which followed a short-lived independence (restored in 1918) and over 5 years of German occupation, the attitude of a typical Polish citizen toward his or her superiors or supervisors (in particular, those one has to obey in prison or a similar social institution) was characterised by low respect for and distrust of authority.

This situation might be diagnosed by resorting to the concept of homo sovieticus. Even though the concept, which has been applied to the Soviet society, can no longer be used to describe social attitudes in contemporary Poland, some elements of this model still persist in this country (Tischner 1995, p. 205). In fact, Polish society is often pointed out as a unique example of a society with the lowest level of social trust (Giczi, Sik 2009). In this respect it differs significantly from the society in which Zimbardo carried out his experiment.

There may exist other socio-cultural factors responsible for the differences, too. To enquire into the matter more thoroughly we would need to compare the results of repetitions done in many different socio-cultural contexts.

Another track to be followed to understand Polish results is the recruitment procedure that was used by Żmijewski to find volunteers for his ‘repetition.’ As Zimbardo points out, no detailed description of the recruitment procedure was given by his Polish colleague. Fortunately, we have some information on the subject, so a comparison is possible. In the case of Stanford Prison Experiment the participants were recruited from among students. In Poland it was a group of unemployed men representing various professions from qualified workers (an electro-mechanic) to an actor. Even if they were not older (we do not know anything about their age, we can only guess it from the video recording) than the Stanford participants, they certainly shared many traits that distinguished them as a social category from American students in 1971. They differed in social status, future prospects, and, last but not least, their employment experience. Those who were jobless for a long time probably experienced more or less serious economic and financial difficulties. If so, they should have been more economically oriented than American students. Each day they spent in the experimental ‘prison’ they earned an amount of money that probably counted in their daily and monthly budgets. If that was the case and the financial motivation were to play a more important role for Polish participants, they should be more willing to stay in the experiment longer than American students. But they still decided to leave the experiment — so the
economic factor, even if it certainly had a strong impact on the situation, in the last resort, did not count that much.

Another factor that might have produced the result different from that obtained in the original experiment was that Polish participants, apart from having a richer life and job experience, may have brought into the experimental situation their strong commitment to certain *general values* concerning work and employment. Polish workers might also have been faithful to certain more specific values that achieved a prominent position within Polish national variety of the working class ethos. ‘Solidarity’ movement, which had grown out of Polish cultural tradition and became its important component itself, stressed the importance of non-economic rights of the workers and political freedom with emphasis on the necessity to respect unalienable *dignity* of any employee. This value was incorporated into Polish cultural heritage due to the teaching of John Paul II on the ‘dignity of human work’ and the ‘dignity of the subject of work.’ The Pope’s teaching was presented in his encyclical *Laborem exercens*, which was issued 14th September 1981 just before the second part of the 1st National Congress of the “Solidarity” trade union.

There are more cultural differences one can suspect of bearing on group processes in laboratory systems created within larger social systems having each a definite cultural identity. The aim of the study conducted under the schemes of European Values and World Values Surveys was to examine value differentiation across a number of different cultures. The fundamental work of Geert Hofstede (2001) originated in a simple observation that two groups of candidates for a position in a company (one group coming from the USA, the other from the Netherlands) differed with their attitude toward two recruitment procedures because they represented different cultures with different sets of values, even though both sets functioned within the same cultural circle dominated by mainly protestant values. This difference was disclosed when the recruitment procedure was being implemented. The effect of the discovery was launching a big research project, aimed at measuring cultural differentiation – first, on the level of a company, finally, on the global level (Hofstede 2001). Moreover, the project inspired further research that led to defining the concept of *dimension of culture*. The concept was introduced to render how different cultures differ in their preferable values. Six value dimensions were finally detected by means of factor analysis: *power distance, individualism, masculinity, uncertainty avoidance, long term orientation, and indulgence*.

According to The Hofstede Centre, Polish and American value systems differ considerably in most of these 6 dimensions. The largest difference (+47) between the two cultures occurs in the *Uncertainty Avoidance* dimension. Poles are more prone than Americans to avoid conflict situations such that the outcome of the interaction process is hard to predict, so the two sides are *uncertain* about possible effects of their actions.

If the guards did not follow the instructions of their supervisor (his intention was apparently to intensify ‘class struggle’) and refrained from inventing new punishments to increase efficiency and extent of their power over the prisoners – in other words, if they did not keep them in constant uncertainty about the next torture – the experiment would certainly last much longer. Note that the guards were also motivated to
hold the level of coercion in reasonable limits, for another reason: to avoid their own uncertainty about what would be the response of their victims to new disciplinary measures.

**Table 1. Differences in cultural values between United States and Poland**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>United States</th>
<th>Poland</th>
<th>Difference PL-US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power distance</td>
<td>40</td>
<td>68</td>
<td>+28</td>
</tr>
<tr>
<td>Individualism</td>
<td>91</td>
<td>60</td>
<td>-31</td>
</tr>
<tr>
<td>Masculinity</td>
<td>62</td>
<td>64</td>
<td>+2</td>
</tr>
<tr>
<td>Uncertainty avoidance</td>
<td>46</td>
<td>93</td>
<td>+47</td>
</tr>
<tr>
<td>Long term orientation</td>
<td>26</td>
<td>38</td>
<td>+12</td>
</tr>
<tr>
<td>Indulgence</td>
<td>68</td>
<td>29</td>
<td>-39</td>
</tr>
</tbody>
</table>

*Source: The Hofstede Centre, http://geert-hofstede.com/countries.html*

‘What people most ardently strive for is a compromise.’ It is the interpretation of the results given by the artist himself. It turned out consistent with our explanation invoking Hofstede’s theory of multidimensional values systems.

**Conclusion**

To conclude, there are many variables which might have been at work in the experimental system created by the Polish artist trying to replicate the findings obtained by the famous American social psychologist. Some factors pertain to the very organization of the experiment. We do not have the necessary information to assess their importance. The position of the experimenter and his actions should not be ignored, either. In addition, even if he stays in hiding, it is clear that he has triggered off the interaction process. We may also suspect that he may have intervened in its course, say, by sending to the actors subtle cues prompting the ‘solidarity’ solution of the conflict situation.

Lastly, socio-cultural values varying across national cultures may have appeared the main factor responsible for diverging experimental results. It is not my intention, however, to offer a definite answer to the question of which factor played the decisive role but to invite social psychologists to a debate that might result in reconciling alternative explanations.

**References**


Czy kontekst społeczno-kulturowy może wpłynąć na wyniki eksperymentu? Przypadek eksperymentu więziennego Zimbardo powtórzonego w Polsce przez Artura Żmijewskiego


Słowa kluczowe: Phillip Zimbardo, stanfordzki eksperyment więzienny, Artur Żmijewski, kontekst społeczno-kulturowy, wymiar kultury