# **Learning About Organizational Patterns from Drama Patterns**

Focus Group Report

Valentino Vranić Aleksandra Vranić Branislava Vranić val.vranic@gmail.com aleksandra.vranic@gmail.com branislava.vranic@gmail.com

Institute of Informatics, Information Systems and Software Engineering Faculty of Informatics and Information Technologies, Slovak University of Technology in Bratislava Slovakia

## **ABSTRACT**

Based on the idea that through drama patterns as a special kind of organizational patterns the participants could learn how to approach organizational patterns of software development or any other kind of organizational patterns in a more relaxed and natural way, we organized a focus group that attracted seventeen participants (apart from the organizers) at the 30th Conference on Pattern Languages of Programs. We managed to build a drama play, reflect upon it and a real organizational story, make the final rehearsal, perform the drama play. The participants had a chance to experience where to start with applying such patterns, how to actually apply a pattern, how to improve a pattern, how to modify a pattern, how to incept a higher level pattern, how to retract a pattern, and pattern composition. Despite having only a short time to build the drama play, the performance was a complete success, ensuring everyone once more how powerful patterns are in terms of putting together a piece of creative work in collaborative and inclusive manner.

# **CCS CONCEPTS**

• Software and its engineering  $\rightarrow$  Patterns.

#### **KEYWORDS**

drama patterns, design patterns, organizational patterns, pattern composition  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 

#### **ACM Reference Format:**

Valentino Vranić, Aleksandra Vranić, and Branislava Vranić. 2023. Learning About Organizational Patterns from Drama Patterns: Focus Group Report. In *Proceedings of 30th Conference on Pattern Languages of Programs (PLoP 2023)*. ACM, New York, NY, USA, 4 pages.

## 1 INTRODUCTION

Good drama is composed of patterns. Some two dozen of drama patterns have been documented [6, 9, 10] and actively applied with diverse participants ranging from small children [9] to university

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s).

PLoP 2023, October 22–25, 2023, Allerton Park, Monticello, Illinois, USA. © 2023 Copyright held by the owner/author(s). Hillside ISBN 978-1-941652-19-0

students and staff [8, 11]. Applying drama patterns is a very involving and fun activity. The participants become a part of a drama pattern and virtually feel the conflict of contradicting forces the pattern resolves. At the same time, they become a part of the dramatic element that resolves that conflict.

Organizational patterns of software development have been mined in highly successful software organizations built unaware of patterns [4]. There are dozens of organizational patterns of software development described [1–5, 7]. Yet, no case of their application in a production setting has been reported. While this doesn't prove that organizational patterns are not used in practice, it throws a shadow of doubt to what extent is this outstanding body of organizational knowledge really used. Our fear is that this is so because practitioners are expected to apply organizational patterns out of their descriptions.

The idea of this focus group was that—since drama patterns are a special kind of organizational patterns—the participants could learn how to approach organizational patterns of software development or any other kind of organizational patterns in a more relaxed and natural way. In particular, we aimed at making them experience where to start with applying such patterns, how to actually apply a pattern, how to improve a pattern, how to modify a pattern, how to incept a higher level pattern, how to retract a pattern, and pattern composition.

The organizers discovered the concept of a drama pattern and published several papers on this topic [6, 8–11]. They organized two successful focus groups around drama patterns at EuroPLoP (in 2019 and 2023), both of which ended in a banquet performance [8, 11]. They also organized a workshop entitled *Understanding Humane in Patterns Through Drama* as a PLoP 2022 PLoPourri event (remotely). They have experience in applying drama patterns with hundreds of children of all ages and almost a hundred of students within a regular university course. <sup>2</sup>

The rest of this report describes building a drama play (Section 2), reflection (Section 3), final rehearsal (Section 4), and performing the drama play (Section 5). It ends with concluding notes (Section 6).

http://poetisania.com/val/pub/plop22/

<sup>&</sup>lt;sup>2</sup>https://is.stuba.sk/katalog/syllabus.pl?predmet=393400

#### 2 BUILDING A DRAMA PLAY

The focus group attracted seventeen participants (apart from the organizers). It took place in the Library, a fascinating two-story room in Allerton Park. Building a drama play was the first and longest activity. We've chosen a short play created by Aleksandra Vranić based on the essential motif from the story of Alice in Wonderland, namely on the second Lewis Carroll's novel on Alice, Through the Looking-Glass, and What Alice Found There.

The play was first described in our EuroPLoP 2019 paper [10] and we used it in our focus group at EuroPLoP 2023 [8]. As explained there, Alice finds herself in a large room with many doors. She tries them one by one hoping that one of them will bring her back home. But each door gets her just into another bizarre situation. Figure 1 presents an overview of the play and the drama patterns involved. The numbers indicate the order of the patterns we introduced as we built the play.

Compared to the play we built in our EuroPLoP 2023 focus group, we made several modifications. Instead of the Dancing Robots scene, we introduced Exercisers, where the coach blackmails Alice trying to make her stay forever in the gym. Although the content of the scene is different, it is based on the same patterns.

We omitted Deaf Witches, but introduced Stolen Wallet (see Figure 2), which is based on *Reversed Advantage*. This is the same drama pattern that is at heart of The Red Riding Hoods drama play we staged at EuroPLoP 2019 [8]. Despite being based on the same drama pattern, the Stolen Wallet scene is completely different. While in The Red Riding Hoods the advantage was being the real Red Riding Hood, in this scene, it was having the wallet that was found on the street.

We omitted the Birds scene, in which Alice walks in the forest and the birds express her thoughts. Instead, we applied the same drama pattern—called *Thoughts Reflecting Environment*—in the Fashion Designer scene (see Figure 3), where mannequins express Alice's thoughts by making gestures.

Furthermore, we introduced the Photographer scene: a photographer can't make their subjects stand still (see Figure 4).<sup>3</sup> Alice is among them. After several attempts each of which ends by a destroyed picture by one of the subjects making something obscure like tightening shoelaces, catching a fly, and so on, with Alice adding the last drop by jumping into the scene asking where is the way home, the photographer finally loses a nerve and gives up. The subjects make their own selfies instead, and Alice leaves the scene.

The photographer is a collaboration initiator. Some subjects are collaborators, but some of them are collaboration destroyers.

Forces:

The collaboration initiator makes several attempts at initiating a collaboration,

*But* the collaboration destroyers prevent it from happening.

*Resolution:* While collaborators follow the collaboration initiator's instructions, the collaboration destroyers one by one take the improper, silly actions that prevent the collaboration from happening.

This is a drama pattern which we call *Collaboration Destroyers* (previously unpublished). The photographer motif has been used many times in short drama plays set by Aleksandra Vranić in her work with children and university students.

## 3 REFLECTION

After going through all the scenes of the drama play, we made a reflection on how they relate to applying organizational patterns. For this, we used a real organizational story from our earlier work [10]. Figure 5 shows the situations in this organizational story, along with the organizational patterns that correspond to them, including the order of their application.

We compared how the two are similar in many ways and challenged the participants to recall how the first pattern applied doesn't have to be (and usually is not) the topmost one (e.g., Mixed Perspectives), how the pattern that was going to be applied wasn't explained or required to be studied (all drama patterns that have been applied), how a pattern can be improved through rehearsals, how a pattern can be modified to better fit its participants (e.g., Escalating Blackmail), how a higher level pattern is incepted by announcing it before it can be fully implemented (e.g., Loosely Coupled Situations), how a dysfunctional pattern can be retracted (not actually done in building the drama play), and how patterns are composed (e.g., Loosely Coupled Situations with the patterns used to build the rooms Alice goes through). The corresponding examples from the organizational story were given.

# 4 FINAL REHEARSAL

Rehearsing without performing is frustrating. Before stepping in front of the audience, we needed to go through all the scenes. But there was not enough time for this during the focus group itself. Luckily, the performance was arranged to happen next evening, which was the last evening of the conference, so we invited all participants to join us.

We waited more than half an hour for the participants to gather. In a relaxed mood of the last conference evening, it looked as if all of them lost their interest. We started packing up our laptop and speakers when suddenly two participants approached us ready to start the rehearsal. In no time, the group was reestablished. About a half of the original participants and one new participant gathered.

The rehearsal took place in the beautiful Butternut Room. At the beginning of the rehearsal, we explained we were to go through all the scenes and then immediately after that perform the play in front of the rest of the conference participants. This sounded as a way too high commitment to many participants and they complained. Consequently, we relaxed this to just going through all the scenes, after which everyone will decide for themselves whether they are going to perform or not.

We agreed upon the main roles and in just a bit more than twenty minutes we went through all the scenes in the order they appear in the play starting from the Mirrors scene (see Figure 6). We had to repeat some scenes and make small corrections. We did not restart the play, though. Thus, this final rehearsal was not a complete, uninterrupted performance of the play. Nevertheless, when—after the last scene—we asked the participants whether they are ready to step in front of the audience, they all exclaimed: "Yes!"

<sup>&</sup>lt;sup>3</sup>This scene was first mentioned in our initial paper on drama patterns [9].

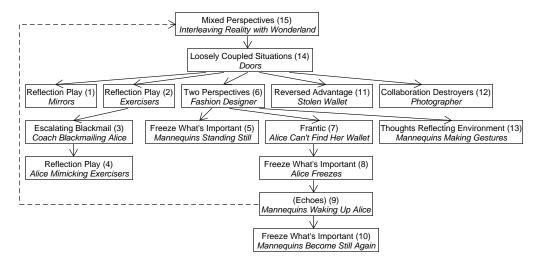


Figure 1: Drama patterns in Alice in Wonderland (adapted from our earlier work [10, 11]).



Figure 2: The Stolen Wallet scene (building the drama play).





Figure 3: The Fashion Designer scene (performing).

## 5 PERFORMING

When we announced the play is about to be performed, all conference participants who were hanging around, gathered in the Gallery. Those who were already there, simply turned their chairs towards the back of the Gallery: our stage. With the sound of Song to the Siren (the famous Tim Buckley's song performed by This Mortal Coil),<sup>4</sup> the Mirrors scene opened the play. As of us, the focus group organizers, Aleksandra over viewed the performance as the director, while Branislava and Valentino took part in the play. Everything went smoothly to the great pleasure of the participants and fun for the audience.

All conference participants we've spoken to after the performance were amazed how little time we needed to build the play. They expected a way longer rehearsal for such a flawless performance.

 $<sup>^4\</sup>mathrm{The}$  song was used solely in a noncommercial setting for educational and scientific purposes.

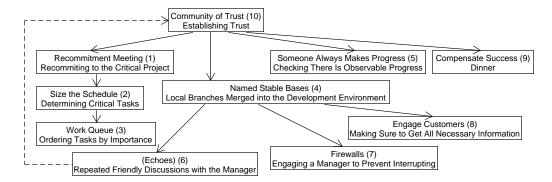


Figure 5: Drama patterns in a real organizational story (adapted from our earlier work [10]).



Figure 6: The Mirrors scene (the final rehearsal).

## 6 CONCLUSIONS

Based on the idea that through drama patterns as a special kind of organizational patterns the participants could learn how to approach organizational patterns of software development or any other kind of organizational patterns in a more relaxed and natural way, we organized a focus group that attracted seventeen participants (apart from the organizers) at the 30th Conference on Pattern Languages of Programs. We managed to build a drama play, reflect upon it and a real organizational story, make the final rehearsal, perform the drama play. The participants had a chance to experience where to start with applying such patterns, how to actually apply a pattern, how to improve a pattern, how to modify a pattern, how to incept a higher level pattern, how to retract a pattern, and pattern composition. Despite having only a short time to build the drama play, the performance was a complete success, ensuring everyone once more how powerful patterns are in terms of putting together a piece of creative work in collaborative and inclusive manner.

#### **ACKNOWLEDGMENTS**

The work reported here received funding from the Erasmus+ ICM 2022 and 2023 programs under the grant agreements No. 2022-1-SK01-KA171-HED-000077735 and No. 2023-1-SK01-KA171-HED-000148295.

#### REFERENCES

- Scott W. Ambler. 1998. Process Patterns: Building Large-Scale Systems Using Object Technology. Cambridge University Press.
- [2] Alistair Cockburn. 2006. Agile Software Development: The Cooperative Game (2nd edition ed.). Addison-Wesley.
- [3] Alistair Cockburn. 2008. The Cone of Silence and Related Project Management Strategies. http://web.archive.org/web/20170613023457/http://alistair.cockburn. us/The+cone+of+silence+and+related+project+management+strategies.
- [4] James O. Coplien and Neil B. Harrison. 2004. Organizational Patterns of Agile Software Development. Prentice-Hall.
- [5] James O. Coplien and Neil B. Harrison. 2018. Organizational Patterns. http://www.orgpatterns.com/.
- [6] Patrik Honíšek and Valentino Vranić. 2020. Mining Drama Patterns in Dramatic Situations. In Proceedings of 27th Conference on Pattern Languages of Programs Online, PLoP 2020, PLoP 2020. ACM.
- [7] Jeff Sutherland, James O. Coplien, et al. 2011. Scrum as Organizational Patterns. Gertrud&Cope, https://sites.google.com/a/scrumorgpatterns.com/www/, http://www.scrumbook.org/.
- [8] Aleksandra Vranić, Valentino Vranić, and Branislava Vranić. 2019. Drama Patterns: Seeing the Patterns from Within. In Proceedings of 24th European Conference on Pattern Languages of Programs, EuroPLoP 2019. ACM, Irsee, Germany.
- [9] Valentino Vranić and Aleksandra Vranić. 2019. Drama Patterns: Extracting and Reusing the Essence of Drama. In Proceedings of 24th European Conference on Pattern Languages of Programs, EuroPLoP 2019. ACM, Irsee, Germany.
- [10] Valentino Vranić, Aleksandra Vranić, and Waheedullah Sulaiman Khail. 2020. Growing Organizations with Patterns: Lessons from Drama. In Proceedings of 25th European Conference on Pattern Languages of Programs, EuroPLoP 2020 Online. ACM.
- [11] Valentino Vranić, Aleksandra Vranić, and Branislava Vranić. 2023. Dramatizing Software Patterns: Focus Group Report. In Proceedings of 28th European Conference on Pattern Languages of Programs, EuroPLoP 2023. ACM, Irsee, Germany.