

Being Offered an Alternative to Prosecution: The Lived Experience of General Aviation Pilots and Prosecutors

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Abstract

Background To learn from incidents, it is imperative that people involved feel safe to share their complete unadulterated stories without fearing punishment. Recently, the Netherlands Public Prosecution Service has begun to offer general aviation pilots an alternative to prosecution. **Objective** Gain insights into the lived experiences of the adjudged pilots and the public prosecutor for aviation and its policy employee to understand how they experienced this new way in which the public prosecutor resolved law violations. **Method** A phenomenology-inspired methodology was constructed based on Moustakas (1994) to create rich and vivid descriptions of the lived experiences of the informants. **Findings** The pilots were found to experience being a 'suspect' in a criminal investigation for a law-violating error they made as if entering a different realm, going from being just any pilot to being a suspect in a criminal investigation. However, they experienced the hearing with the public prosecutor as an empathic, non-judging, mature conversation, and they felt that the eventual solution, sharing lessons learned with peers through a presentation, was mature and fitting as opposed to paying an easily forgotten fine. The public prosecutor and policy employee experienced the process as rewarding, yielding more than giving a fine or prosecuting and as respect-invoking for pilots showing self-critique and taking responsibility after an occurrence. **Implications** The findings demonstrate the importance of treating people who unintentionally found themselves playing a causal role in an occurrence with respect, understanding and compassion, thereby enabling learning and entering into meaningful dialogue with people hurt by that occurrence. The findings further showed that forgiveness could play a valuable role in Just Culture. Also, it showed a similarity between how the public prosecutor judged the actions and behaviour of the pilots and Bosk's (2003) findings on how attending physicians treat errors from their resident physicians. The accountability asked from and shown by the pilots can be characterised as prospective, empirically reinforcing the argument for a (more) restorative Just Culture (Dekker, 2017).

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For safety-critical industries to learn from events where safety was jeopardised (e.g. a train not stopping for a red signal or an aeroplane nearly colliding with another aeroplane), it is imperative that those involved in an occurrence share their entire story of what happened and why they acted in the way they did. However, if sharing their complete, unadulterated story for the benefit of safety improvement increases the chance of being prosecuted for their involvement in that occurrence, they may think twice before doing so. Notwithstanding, a key part of the democratic rule of law is that nobody is above the law and all should be held to account for their actions when violating the law or endangering others.

The Just Culture concept was conceived to strike a balance between safety improvement and the administration of justice (Reason, 1997, p. 195). Essentially, in a Just Culture, mistakes should not be punished unless they constitute gross negligence or willful misconduct (Reason, 1997, p. 205; Regulation 376/2014, Recital 37). Since conceived, Just Culture has found its way into various domains, amongst others, aviation and healthcare (for reviews of the evolution of Just Culture in these domains, see Ulărescu, 2019; Barkell & Snyder, 2021), and has become part of EU aviation law (e.g. Regulation 376/2014, Recital 37).

The arguably most debated point of Just Culture is deciding if someone should be adjudged and thus possibly punished through an organisational or the criminal justice system (Dekker & Breakey, 2016, pp. 188-189). I.e. how this aforementioned balance is struck when an occurrence possibly constituted a violation of the law and has or could have endangered the safety of some or many. Van Dam et al. (2019) describe how some European judiciaries and safety advocates' perspectives on this consideration have evolved in the past two decades in the EU aviation domain.

This study describes a phenomenon where Dutch pilots who violated the law and were deemed culpable by the Dutch public prosecutor were held to account by the public prosecutor in a novel way. I.e. by giving a presentation about their occurrence to an audience of peers instead of being fined or prosecuted. The public prosecutor for aviation first used this novel judicial response in 2021, and all three such cases are included in this study.

Purpose of the Research

The purpose of this phenomenology-inspired study is to create rich and vivid descriptions of the lived experiences of adjudged pilots, and the public prosecutor for aviation and its policy employee with

the phenomenon of a pilot being adjudged to have culpably violated the law and being offered an alternative to a fine or prosecution (i.e. retributive justice). This takes place in a justice system that, by law, incorporates Just Culture principles, as laid out in Regulation 996/2010 and Regulation 376/2014, applicable to all E.U. member states. Secondly, the possible implications on existing theories on Just Culture, and the balancing of accountability and safety improvement are discussed.

Research Question

How do adjudged pilots, and the public prosecutor and policy employee for aviation perceive and describe the experience of a pilot being adjudged, by the Dutch public prosecutor, to have violated the law, and being offered an alternative to prosecution?

Reader's Guide

Reading a Phenomenology-Inspired Study

A phenomenology-inspired study that describes the lived experiences of a select group of informants is, by definition, a qualitative study, as it produces a rich and vivid description of the informants' experience with a phenomenon. As a result, phenomenological studies are "powerful for understanding subjective experience, gaining insights into people's motivations and actions, and cutting through the clutter of taken-for-granted assumptions and conventional wisdom" (Lester, 1999, p. 1). To properly appreciate a phenomenology-inspired study, it is vital to understand two characteristics of phenomenological studies: generalisability and sample size, and the interpretations of the findings.

Firstly, because of the detailed and thereby unique descriptions of people's lived experiences, the findings do not lend themselves to generalisation for a larger population. Because of that, one cannot speak of a sample (as in sample size) of informants because their experiences do not (necessarily) represent the experience of a larger population. Hence, it is not uncommon to find phenomenological studies with a single-figure number of informants like this study because there is no need to gain statistical significance, which makes meaningful research possible despite potentially limited availability of informants, e.g. because of the specificity of the researched phenomenon, as is the case in this study (Lester, 1999; Polkinghorne, 1989).

Secondly, because of the limited number of informants in this study and the lesser suitability of generalising the findings of phenomenological studies, the discussion section and the issues and

implications section of this study have been written in a suppositional manner to communicate that the arguments made are not firm conclusions but implications derived from the findings used to critique existing theories and introduce new insights in the field of Just Culture. Because of that, this study does not feature a traditional ‘Conclusions’ section but an ‘Issues and Implications’ section (Lester, 1999).

Finally, because of the nature of a phenomenology-inspired study, the research question is answered directly by the findings, as they narrate the lived experiences of the informants, whereas the discussion section and the issues and implications section serve to discuss the implications derived from the lived experiences.

The Judicial Process

At various points in this study, the roles of the aviation police and the public prosecutor are discussed and their actions are described. To better understand the order in which certain actions are executed, i.e. the process from a possible law violation to a decision by the public prosecutor, and to see how the roles of the aviation police and public prosecutor relate to one another, see the Appendix The Judicial Process From Occurrence to a Decision by the Public Prosecutor.

Structure of the Study

This thesis has the following structure:

Chapter one is introductory, describing the research’s background, context and purpose.

Chapter two succinctly reviews some literature on the conception and evolution of Just Culture and explores a new discourse within Just Culture that advocates for prospective forms of accountability and the use of restorative justice principles in Just Culture, reviewing some of the empirical findings of studies on these forms of Just Culture.

Chapter three describes how this study draws upon phenomenology as its methodology to explore the lived experience of Dutch pilots, the public prosecutor and the prosecutor’s policy employee.

Chapter four describes the findings of the study. The findings start with the individual textural descriptions of what each informant experienced in relation to the phenomenon under study. Next, these individual lived experiences are joined in two composite textural descriptions of the pilots’, and prosecutor and policy employee’s experiences. These composite textural descriptions are then complemented by two structural descriptions of how these groups experienced what they experienced. Finally, the textural and

structural descriptions of the pilots, and the public prosecutor and policy employee are synthesised to describe the essence of the lived experience of these two groups.

Chapter five discusses the findings and how they relate to existing discourses.

Chapter six describes the key issues and implications arising out of the study.

Glossary

The following terms are used frequently in this study and may be explained differently in different scientific discourses and work fields. Therefore, their meaning in the context of this study is described here and is vital for a sound understanding of this study.

- **Restorative Justice** is a term that encompasses a major theme in criminological thinking with its roots in ancient Arab, Greek and Roman civilisation that, as such, has diverse explanations, dependent on whom you ask (Braithwaite, 2002, p. 1). A 1997 Delphi process sought to find a broadly acceptable definition of Restorative Justice among subject-matter experts, which led to the following (not overwhelmingly consented to) definition: “Restorative Justice is a process whereby all the parties with a stake in a particular offence come together to resolve collectively how to deal with the aftermath of the offence and its implications for the future” (Marshall, 1997, as cited in Braithwaite, 1999). Braithwaite (1999, p. 6) elaborates that this can be read as seeking to restore whatever dimensions of restoration matter to both victims, offenders and communities. In this study, these dimensions are considered to be physical (e.g. damage to property, injuries) and emotional and mental (e.g. dignity, a sense of safety, self-confidence, one’s place in a community).
- **Retributive Justice** also constitutes a major theme in criminological thinking, becoming dominant in Europe by the end of the Dark Ages (Braithwaite, 1999, p. 2) and being exported thereafter, with different explanations dependent on whom you ask. It is commonly explained as administering justice by handing out punishment to an offender that is deemed proportionate to the offence they committed, thereby serving the goals of imposing cost or hardship on the wrongdoer, signalling to society that committing an offence is morally wrong and does not remain unanswered and paying retribution to the hurt of the victims (Walen, 2020).

- **Just Culture** is a much younger term whose meaning, position and history are discussed at the beginning of the literature review section of this study. It is a term that, in the aviation domain, is both defined by legislation in the European Union (Regulation 376/2014, Recital 37) as well as argued to hold a socially negotiated meaning dependent on whom you ask, e.g. airline pilots and their managers (Schuit & Scott, 2021, p. 5) or aviation maintenance personnel (Cromie & Bott, 2016, p. 271). Therefore, in the context of this study, it is explained to mean, both top-down (by legislation) as well as bottom-up (socially negotiated), a balancing of safety improvement with accountability by encouraging reporting safety-related information without the fear of punishment, except in cases of wilful misconduct or gross negligence.
- The term **judicial response** constitutes the possible reactions by the public prosecutor to an investigated violation of the law. It can be, in order of less to more severe consequences: (a) dismissing the case, (b) dismissing the case on mutually agreed upon conditions (e.g. giving a presentation), (c) offering a transaction, usually a fine, which means that the matter is resolved between the suspect and the public prosecutor without a judge rendering a verdict and without the suspect formally acknowledging guilt, (d) imposing a sanction, which is similar to offering a transaction (usually the suspect is ordered to pay a fine), but with two essential differences: the suspect is now convicted for the law violation and thus has been prosecuted, only, without a judge rendering the verdict, (e) prosecuting the suspect in court with a judge rendering judgement (Netherlands Public Prosecution Service, n.d.). When a suspect is offered a transaction or a sanction is imposed, and they either protest (and the public prosecutor does not agree with their protest) or do not comply with the transaction or sanction, they are prosecuted in court.
- The word **hearing** is used to describe a meeting between the public prosecutor and a suspect pilot (possibly accompanied by a lawyer or representative from their aeroclub), at which time the public prosecutor has not yet come to a determination of what judicial response (e.g. dismissing the case, a fine, prosecution in court or an alternative such as offering to give a presentation) is suitable and judicially possible. The hearing is used to review the case with the suspect, gather the suspect's perspective, and thereafter decide on the appropriate judicial response. For an explanation of the judicial process, from a possible law violation to a judicial response from the

public prosecutor, see the Appendix

The Judicial Process From Occurrence to a Decision by the Public Prosecutor.

- **Second Victim** is a term introduced by Wu (2000, p. 726) in the healthcare and patient safety domain, referring to a nurse or a doctor that, through an error or mistake, unintentionally harms a patient and thereby becomes the second victim of that action, with the first victim being the patient itself. Scholars such as Dekker (2017, pp. 95-96) have extended the scope of the term to mean any individual who is hurt by making a mistake or (potentially) harming another person. Not physically, as a direct consequence of their actions (e.g. burning themselves), but mentally, by having to live with the consequences of their actions (e.g., from knowing that they hurt someone else to, for instance, losing their job). In this study, the pilot informants adjudged to have violated the law are considered second victims, which is reflected by their individual textual descriptions.

Literature Review

The broader topic to which this proposed research relates is the application of justice mechanisms in systems incorporating a Just Culture.

The Goals and Conception of Just Culture

In 1997, James Reason (p. 195) conceptualised and argued for a Just Culture as a necessary component of a, at the time, much sought-after safety culture inspired by, amongst others, the contributions of O’Leary and Chappell (1996) on the creation of the Aviation Safety Reporting System in the U.S. in 1976¹ and the British Airways Safety Information System. The concept of a safety culture materialised, amongst others, in the 1991 International Nuclear Safety Advisory Group report on safety culture, written as a result of their analysis of the 1986 Chernobyl nuclear disaster. This report described how a safety culture could enhance safety in organisations through employees’ shared perception of the overriding importance of safety. However, it did not explain how to develop one.

Subsequently, scholars like Reason (1997, pp. 205-206), Leape & Berwick (1999, p. 725) and Marx (2001, p. 3) argued that safety improvements are contingent on safety information (complete and swift reporting of dangerous situations and mistakes that may pose a danger) being provided by the workforce, which is contingent on the workforce not being afraid of measures taken against them or their colleagues as a result of reporting a hazardous situation, possibly partially caused by their actions, while at the same time ensuring that the few persons who conduct “recklessness or negligent or malevolent behaviour” (Reason, 1997, p. 212) can be held accountable. Thus, to determine an individual’s culpability, Reason (1997, pp. 205-209) argued that a line should be drawn separating acceptable from unacceptable behaviour and proposed a decision tree that distinguishes degrees of culpability to fulfil that purpose.

The Shortcomings of Just Culture

As argued by various scholars (Dekker & Breakey, 2016, p. 188; Dekker, 2017, pp. 6-7; McCall & Pruchnicki, 2017, pp. 144-145) and Reason himself, there are multiple issues with ‘drawing the line’ and determining an individual’s culpability. Firstly, Reason’s theory does not explain who draws the line and which procedures govern the process of drawing the line to ensure due process as found in courts of law,

¹ The U.S. Aviation Safety Reporting System (ASRS) arguably was the first successful state-run aviation occurrence reporting system offering some form of immunity against sanctions in exchange for voluntary and honest disclosure of occurrences. For an early critique of the ASRS, see Eisenbraun (1981).

i.e. with rules of evidence, protection and judicial support for the suspect, independent judges and the possibility to appeal verdicts, which Dekker and Breakey (2016, p. 188) argue are indispensable to justly determine culpability.

Secondly, the area in which Reason argues it is most difficult to determine one's culpability is violating safety procedures (Reason, 1997, p. 211). When adhering to Reason's (1997, p. 209) culpability decision tree, an individual has some degree of culpability if they did not follow a procedure, regardless of whether procedures were available, workable, intelligible and correct. However, research shows that people continuously need to adapt and divert from procedures to accomplish their goals and maintain safe operations (Woods, 2018, p. 2; McDonald et al., 2002, pp. 200-201; Leveson, 2011, p. 61); thus, using whether or not procedures were followed to assess individuals their contribution to and culpability for an accident is an oversimplification of accident causality based on the false presumption that the procedure is (somewhat) right and the individual is wrong (Dekker, 2009, p. 3), which overemphasises the role of human error and neglects system's issues (Rasmussen, 1997, p. 190; Leveson, 2011, pp. 61-63) in accident causality.

This, in turn, may lead to the criminalisation of error (Dekker, 2017, p. 116), which is a recurring and worrying problem, as illustrated by two recent cases in different domains that demonstrate how the criminalisation of error is preventing learning thus improving safety: a) an American nurse who was convicted in 2022 of criminally negligent homicide and gross neglect for accidentally administering the wrong drug to a patient who died as a result, despite the nurse's lawyer and numerous healthcare advocacy groups arguing severe systemic issues with the drug-dispensing machine in use at the concerned hospital (American Nurses Association, 2022; Institute for Safe Medication Practices, 2022); and b) a Royal Norwegian Navy officer whose criminal trial for negligence began in January 2023 after a frigate he was commanding as officer-of-the-watch on the bridge collided with a tanker vessel and eventually sank (without fatalities) because the ship misinterpreted their position in relation to the closeby shore and tanker vessel (Furuly et al., 2023), with safety advocates stressing that society much choose between punishment and learning, we cannot have it both ways (Rolfsen & Tvedt, 2023).

Finally, an empirical study by Heraghty et al. (2018, p. 6) showed how the language and type of accident causation model used in an accident investigation report (linear versus systemic and human

versus system focused) influences whether the readers of the report believe the accident was caused by systemic issues or by human error and whether or not the individuals involved should receive training, reinforcement of correct behaviour or punishment. This study demonstrates that the justness of any process to determine culpability is contingent on the way the case is presented to the judges of that process.

Just Culture in European Aviation Law

The European Union incorporated Just Culture principles into its aviation law by enacting Directive 2003/42/EC, regulating occurrence reporting in civil aviation. This directive attempted to balance learning from incidents and accidents with administering justice by extending some protection to the reporters of occurrences while retaining the possibility for member states to administer justice when their national criminal law mandates or requires so (Pellegrino, 2019, p. 94). This directive was repealed and succeeded by *The reporting, analysis and follow-up of occurrences in civil aviation* (Regulation 376/2014) that incorporates both these goals (safety and justice) in its definition of Just Culture:

‘Just Culture’ means a culture in which front-line operators or other persons are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but where gross negligence, willful violations and destructive acts are not tolerated.

(Article 2)

This definition bears the same shortcomings as Reason’s (1997, pp. 205-213) description of Just Culture. Firstly, it does not describe who judges whether gross negligence, willful violations or destructive acts have occurred and how that judgement is made (i.e. procedural justice), which Dekker and Breakey (2016, pp. 190-191) argue is necessary for a Just Culture to function, as does Trögeler (2011, p. 43). Secondly, it does not define what constitutes gross negligence (Langejan, 2022, p. 57), although that may be found in Article 16 paragraph 10 b in *The reporting, analysis and follow-up of occurrences in civil aviation* (Regulation 376/2014), which describes in which situations the Regulation’s protections from prosecution do not apply:

Where there has been a manifest, severe and serious disregard of an obvious risk and profound failure of professional responsibility to take such care as is evidently required in the

circumstances, causing foreseeable damage to a person or property, or which seriously compromises the level of aviation safety.

This paragraph of the Regulation confirms recitals 41 and 43 of *The reporting, analysis and follow-up of occurrences in civil aviation* (Regulation 376/2014) that member states retain their right to administer justice through their national criminal law, regardless of how an occurrence comes to their attention and regardless of whether or not the Regulation states that individuals should be protected from prosecution or other forms of sanctions. In this judicial space, the Dutch public prosecutor can criminally investigate possible law violations when it has reason to believe that a culpable violation may have been made, which is their role within society, and if the investigation confirms this suspicion, initiate a judicial response. Thus, an argument can be made that the European Union's incorporation of Just Culture into its aviation laws bears similarities with Reason's (1997) Just Culture concept, including some of that concept's shortcomings regarding the difficulty of determining individual agency and culpability in (potentially) hazardous occurrences, as argued in the previous section. However, as van Dam et al. (2019) argued, the only way to accurately determine individual agency and culpability may be through case-by-case discussion and negotiation between the judiciary and safety experts in the domain, which requires mutual trust between those parties. As described by van Dam et al., although being utilised in varying degrees by some E.U. member states, such a process is not a compulsory part of criminal investigations or proceedings concerning aviation occurrences in the E.U.

Moving From a Retributive Just Culture to a Restorative Just Culture?

Dekker (2017, pp. ix-xvi) argues for an alternative way to accomplish a Just Culture focused on restorative justice instead of retributive justice. He argues that the Just Culture developed by Reason (1997) and Marx (2001), which served as the basis for how the European Union implemented Just Culture into its aviation law, is a retributive one revolving around the question of whether an individual has wilfully misconducted themselves or acted with gross negligence, in which case that individual may deserve proportionate punishment. Dekker argues for changing the retributive justice mechanism in Just Culture into a restorative justice mechanism that does not focus on rule violations and a proportionate punishment but instead on: (a) identifying who were hurt, both first and second victims (Wu, 2000;

Denham, 2007); (b) determining their needs, and (c) determining whose obligation it is to see to those needs? (Dekker, 2017, p. 1).

Relevance

The retributive justice oriented Just Culture conceptualised by Reason (1997) and Marx (2001) and implemented by the E.U. in its aviation laws is reflected in the official policy on investigating and prosecuting civil aviation occurrences of the Dutch public prosecution service (see Openbaar Ministerie, n.d.). However, with the advent of the Dutch public prosecutor offering some suspects an alternative judicial response (e.g. a presentation about their occurrence to their peers) instead of imposing a transaction (i.e. a fine) or prosecuting them, it appears that the Dutch public prosecutor, in some cases, has turned towards a more restorative justice approach.

Dekker's (2017) argument for using a restorative justice mechanism in a Just Culture is based on the concepts of several scholars. Of relevance here are Sharpe's (2003, pp. S10-S11; 2004, pp. 13-15) and Zehr's (2003, p. 40) arguments for holding people accountable in the prospective sense by giving them the opportunity to show remorse or apologise for their part in an occurrence towards the (first) victims of the occurrence and contributing to preventing similar harm in the future. This second goal is what the Dutch public prosecutor appears to try to accomplish by letting pilots give presentations about their occurrences where they explain how they occurred and what they have learned from them to prevent a recurrence.

Another possible effect of the Dutch public prosecutor letting pilots give presentations is that in preparing and giving those presentations, the pilots can reflect on their actions, giving them the opportunity to show remorse or apologise for their actions. Berlinger (2004, pp. 128-130) argues that when a patient is harmed during medical treatment, the relationship between the healthcare practitioners and the patient is hurt. This hurt may be partly remediated by the practitioners showing responsibility and possibly remorse for the unintended outcome to the patient. As a result, patients may (partly) forgive the practitioners for their hurt, but even when they cannot forgive, the practitioners taking responsibility and showing remorse may help restore the relationship between the hurt patient and the practitioners. A study by Bismark et al. (2006, p. 891) on the desires of patients who got hurt during medical treatment supports this argument. Similarly, this restoring of relationships, recognised as a characteristic of restorative justice

by Braithwaite (2016, pp. 92-93) and Zehr (2003, pp. 38-40), may be happening in the phenomenon under study here.

Previous Research

This research aims to capture the lived experiences of individuals subjected to a justice mechanism and other parties affected by applying this justice mechanism in a system that is said to incorporate a Just Culture. Several studies have similarly researched the experience of individuals (and, in some studies, other involved parties) subjected to either a retributive or a restorative justice mechanism in a system that is said to be incorporating a Just Culture.

Justice Mechanisms in Healthcare

Laarman et al. (2020) asked 294 Dutch doctors who had received a warning or reprimand (a retributive justice characteristic) from the Dutch Medical Disciplinary Board how that procedure impacted their professional functioning and how they experienced the support they received during the procedure. Most doctors perceived their working environment as an open culture where they could safely discuss and report adverse events (Laarman et al., 2020, p. 5). However, 80% of the doctors experienced the procedure as hurting their professional practice, and after being subjected to the disciplinary process, 43% of the doctors indicated that they tried to avoid risky patients, and 37% saw each new patient as a potential new complaint. Thus, one can argue that this retributive justice mechanism is at least partly detrimental to patient safety because of its adverse effects on doctors' professional practice.

The patients of these doctors were not included in this study; however, a study by Bismark et al. (2006) that analysed patient complaints indicates that of 154 New Zealand patients harmed during treatment, only 14% sought to sanction the involved clinician, while 77% sought improvements of the healthcare system to prevent similar harm to future patients and 61% sought explanations of what had happened, or, in some cases, apologies or expressions of responsibility. The results of both these quantitative studies indicate that reprimanding doctors only partially addresses the desires of hurt patients whilst discouraging clinicians from contributing to improving patient safety and providing explanations, expressing responsibility and showing remorse to hurt patients as that may further incriminate them while those reactions are more sought after by patients than sanctioning. The inhibiting of patient safety improvements and post-hoc clinician-patient communication by retributive justice schemes is further

argued by Dekker and Laursen (2007, pp. 53-55), Brborović et al. (2019, pp. 7-9) and Liang (2004, pp. 78-80).

Justice Mechanisms in Construction Companies

Heraghty et al. (2020, 2021) conducted two empirical studies to research how employees in a construction company experience being subjected to either a retributive or a restorative justice mechanism in companies that employ a Just Culture. The first study interviewed personnel involved in workplace accidents and their aftermath. The results revealed that punishment was carried out not only to punish alleged wrongdoers but also to protect the reputation of senior management (Heraghty et al., 2020, p. 11). Furthermore, it showed that managers' views of workers involved in an accident could be a deciding factor in their treatment after an accident, while the amount of risk potential created in an occurrence was not at all influential: some of the least hazardous accidents lead to the harshest treatments (Heraghty et al., 2020, p. 12). Finally, the study revealed that the suspension and punishment of workers negatively influenced workers' trust in management, resulting in less occurrence reporting and workers becoming overly cautious and less productive in their work (Heraghty et al., p. 12), similar to what Laarman et al. (2020, p. 6) reported about doctors avoiding risky patients and giving in to patients wishes earlier as the result of being subjected to a disciplinary procedure.

In the second study, Heraghty et al. (2021) temporarily modified a construction company's justice process to a restorative justice mechanism by: (a) removing language that induces negative connotations from the accident 'exploration' reports, (b) accepting multiple stories to explain an accident and staying away from reductionism, (c) including the involved personnel in determining follow-up actions, and (d) removing suspension and any form of punishment from the process. Five accidents were explored through the modified justice mechanism. For each accident, the involved worker, supervisor, safety professional and senior manager were interviewed, and they mutually agreed that the removal of punishment and participation of the involved personnel in the exploration process had a positive effect on the organisation's learning capacities and culture and increased worker's wellbeing and trust in the accident exploration system (Heraghty et al., 2021, p. 9). However, it also revealed that restorative justice mechanisms are as vulnerable as retributive justice mechanisms to the effects of poor communication and uncompassionate managers (Heraghty et al., 2021, p. 10).

Future Study Needs

In addition to Laarman et al. (2020) and Heraghty et al. (2020)' studies focusing on the experiences of people subjected to retributive justice mechanisms, numerous other studies exploring some form of empirical data describe the negative influence of such mechanisms on organisational learning and workplace safety (Sekhar & Vyas, 2013; Pellegrino, 2019; Dekker & Laursen, 2007; McCall and Pruchnicki, 2017).

Simultaneously, there are several proponents of applying prospective accountability and restorative justice mechanisms to increase safety in safety-critical environments such as healthcare and aviation (Sharpe, 2004; Dekker, 2017). However, there has been little scientific validation of the theories conceptualised by Sharpe and Dekker, particularly concerning how the people subjected to it, and other involved parties such as victims, investigators of occurrences, and administrators of 'justice' (in the workplace, an entity that decides on a worker's culpability and possibly punishment, or in criminal law, a judge adjudging a suspect), experience it; as argued by Bitar et al. (2018, p. 281) and Heraghty et al. (2020, p. 2; 2021, p. 1). The sole exception found by the researcher is Heraghty et al. (2021).

Therefore, further research into the lived experiences of people subjected to justice mechanisms in systems incorporating a Just Culture is warranted, as argued by Bitar et al. (2018, p. 281) and Heraghty et al. (2020, p. 2; 2021, p. 1). As such, the novel way in which the Dutch public prosecutor for aviation started responding, in 2021, to some occurrences that were criminally investigated and wherein the suspected pilots were deemed culpable appeared to be a suitable phenomenon to research through the lens of people their lived experiences with the application of alternative justice mechanisms in a system incorporating a Just Culture.

Methodology

The motivation to study the lived experiences of people affected by restorative justice mechanisms in a system said to incorporate a Just Culture stems from the observations of Bitar et al. (2018, p. 281) and Heraghty et al. (2020, p. 2; 2021, p. 1) that few studies have done so, despite numerous arguments having been made to advocate for prospective accountability (Sharpe, 2003, 2004) and incorporating restorative justice principles in a Just Culture (Dekker, 2017).

The limited amount of empirical research on the effects of implementing such mechanisms on the people involved inhibits our validation and further development of these concepts. Hence, the call for qualitative studies to explore these lived experiences.

Theoretical Perspective

In restorative justice mechanisms such as those described by Braithwaite (1989), Dekker (2017) and Zehr (2003), there is an active role to be played both for: (a) the administrators of justice, (b) people subjected to restorative justice mechanisms, and (c) the victims on whose account justice is being administered. Restorative justice seeks to remedy hurt by healing, not by instigating more hurt (Braithwaite et al., 2008, p. 402; Zehr, 2003, p. 27; Dekker, 2017, p. x). Taking a constructionist ontological approach to studying people's lived experiences involved in (restorative) justice mechanisms implies that each individual constructs their own social reality by interacting with the world. I.e. by being a part of a justice process, each individual constructs meaning about this process out of their interactions with the process, and each individual's meaning-making process is therefore unique. Thus, from a constructionist stance, a (restorative) justice mechanism or process is not an objective truth waiting to be uncovered and described in a falsifiable way. Instead, this study provides rich and vivid descriptions of people's unique lived experiences that policy-makers and theorists can use to further develop the Just Culture concept by gaining a better understanding of how different people, in different roles, experienced being a part of a (potentially restorative) justice mechanism in a system said to incorporate a Just Culture.

Phenomenology

An appropriate methodology to explore these lived experiences was found in phenomenology, whose explicit goal is to study people's lived experiences of a particular phenomenon. 'Lived', in this context, means that the research intends to explore one's experience of a phenomenon directly, the

“originary or pre-reflective” (van Manen, 2014, p. 39) experience, not the informant’s or the researcher’s interpretation of the experience but the experience itself (Creswell, 2018, p. 124). In doing so, phenomenology aims to reveal the essence of human experiences qualitatively through vivid and comprehensive descriptions of those experiences as opposed to quantitative measurements (e.g. scores, ratings or calculations) (Moustakas, 1994, p. 89). This facilitates, in this context, to richly and vividly describe what the people involved in this justice mechanism have experienced.

The research design draws upon Moustakas’s (1994) form of transcendental phenomenology. ‘Drawing upon’ in the sense that executing a complete phenomenological study is not conceivable in the researcher’s MSc thesis project. The following sections describe the research design, drawing primarily upon Moustakas (1994).

Transcendental Phenomenology by Moustakas

Creswell (2018, p. 29) describes two forms of phenomenology suitable for student projects by van Manen (2014) and Moustakas (1994).

Both forms use a systematic process to describe the essence of the lived experiences, as described by a number of informants. However, they differ in that van Manen’s (2014) methodology interprets the lived experiences to establish the meaning of the lived experience, e.g. what does it mean to “to be adjudged to have violated the law and being offered a potentially restorative justice mechanism”, whereas Moustakas’s (1994) methodology does not guide in interpreting the meaning of those experiences and is more descriptive.

There are two arguments for choosing to draw upon Moustakas’s (1994) transcendental phenomenology for the research design:

- First, because it focuses on deriving the essence of the lived experiences of the phenomenon instead of interpreting them; thus, it matches better with the aim of the research, which is to contribute to filling the knowledge gap about how people experience (restorative) Just Culture processes.
- Secondly, Moustakas (1994) provides a systematic description of how to conduct phenomenological interviews and analyse the transcriptions of those interviews. Having clear and systematic steps to conduct the research is valuable because: (a) the researcher has no prior

experience with conducting qualitative, scientific research; (b) the detailed explanation of the process enables the researcher to estimate the time required to complete the process for each informant and thereby ensure that the research can be completed in the given time; and (c) the systematic and clearly described steps make it both easier to follow those steps accurately, and it enables readers of the research to retrace those steps and thereby assess whether the research was conducted in a sufficiently systemic and objective manner, thus is internally valid (Hammersley, 1992, pp. 70-77), because the readers can assess how the chosen methodology was followed.

Formulation of the Research Question

The research question is a phenomenological research question constructed using Moustakas's (1994, pp. 89-90) guidance.

Phenomenon Under Study

The phenomenon under study is pilots being adjudged to have violated the law, being deemed culpable, and being offered to give a presentation about their occurrence instead of being fined or prosecuted.

The Research Question

How do adjudged pilots, and the public prosecutor and policy employee for aviation perceive and describe the experience of a pilot being adjudged, by the Dutch public prosecutor, to have violated the law, and being offered an alternative to prosecution?

Formulation of the Research Question

Moustakas (1994, p. 54) provides guidance on formulating the research question: the primary words in the research question must be deliberately chosen and ordered to capture one's attention and direct the reader in the phenomenological process of seeing, reflecting and knowing. The keywords of the research question are: adjudged pilots and the public prosecutor, perceive and describe, being adjudged, violated the law, and an alternative to prosecution.

- Adjudged pilots and the public prosecutor refer to the pilots adjudged to have violated the law (by the public prosecutor), and the public prosecutor and their policy employee whose job it is to seek justice on behalf of society and who did so in this process through a, for them, novel way.

- 'Perceive' refers to how these individuals experienced this phenomenon, and 'describe' refers to what they experienced.
- 'Being adjudged' and 'violated the law' detail that the public prosecutor has passed their judgment that someone has violated the law in a culpable manner that requires a judicial response.
- 'An alternative to prosecution' refers to the presentation the pilot is offered to give.

Interviews

Phenomenological interviews are distinct in that they aim to capture an individual's lived experience with a phenomenon. Therefore, they are open, unstructured interviews, beginning with the question: please elaborate on your experience with this phenomenon? Next, the researcher must guide the informant in narrating what it was like for them to, in the case of the presentation pilots (see Table 2), be adjudged to have violated the law and be offered an alternative to prosecution that requires them to publicly, in attendance of their fellow club members and pilots, elaborate about their occurrence and what they learned from it. They may be habitually poised to give their opinion about this process whilst the researcher must guide them in not telling their opinion but explaining what they experienced: what did this experience do to them, how did they experience it, which emotions did they feel, how did those emotions progress during the experience, how did they react, what did they do, how did they reflect on it when they were lying awake at night or sitting in front of their fireplace, how did it affect their behaviour or views?

Because these interviews do not answer specific questions, the researcher should not prepare such questions beforehand. The fundamental question is: please tell me how you experienced this phenomenon and what it is you experienced? Moustakas (1994, p. 95) explains that the phenomenological interview usually starts with a social conversation or a brief meditative activity to create a comfortable atmosphere conducive to the informant narrating their possibly intimate experience with the phenomenon. For this purpose, the researcher conducted the interviews at locations where the informants felt comfortable, e.g. for the public prosecutor in their offices, for the pilots at their club or airfield, or in their home. However, it was essential that the space where the interviews were conducted gave complete privacy and was free of distractions and disturbances.

Epoche (Bracketing)

Epoche: the Greek word meaning abstention (Husserl, 1931, pp. 99-100), by which Husserl means that the researcher attempts to set aside prior knowledge, judgments and experiences about the world as we know it exists and as we experience it. The intention is not to deny its existence or our experience of how it exists but to attempt to place the researcher's knowledge and experience in brackets to, to the best of our limited ability, free ourselves to view the phenomenon under study purely, free from dispositions, as if seeing it anew.

Although the researcher has no experience deciding on the judicial response after a person has transgressed the law nor any experience with being criminally investigated for transgressing the law, the researcher has studied a number of different forms of Just Culture propagated in the safety science discourse and has, through that, formed judgements and in doing so, created biases about these forms of Just Culture. Furthermore, as both a recreational and professional pilot, the researcher also holds views about the aviation domain and their fellow pilots.

To attempt to achieve Epoche (abstention), prior to conducting the interviews, the researcher conducted two meditative sessions to let all their thoughts about the phenomenon under study and Just Culture in general come into their mind and subsequently wrote them down to have a written description of the researcher's views, judgements, and thereby, biases about the subject.

Next, before each interview, this description was reviewed by the researcher to attempt, to the best of their (limited) ability, to place imaginary brackets around their views to enter the interview being aware of them to recognise and deny them when they came to mind and not to let them interfere in the way follow-up questions were asked during the interviews to deepen out the informants' experiences. Finally, in the following process of phenomenologically analysing the interview transcripts, the description was also referenced when in doubt about whether a part of an informant's experience constituted a description of the informant's experience or something else, possibly influenced by the researcher.

Moustakas (1994, p. 78) argues that although true Epoche is rarely achieved, going through the above-described process "significantly reduces the influence of preconceived thoughts, judgments, and biases".

Informants

The research was performed in the Netherlands. The Dutch public prosecution service has one public prosecutor, assisted by a policy employee, who handles all cases where aviation-related laws were violated, from misbehaving passengers aboard commercial aeroplanes to pilots endangering others in flight. Both were found willing to participate in this research. Next, the researcher found three cases (see Table 1) where a pilot was offered and accepted a presentation instead of a fine or prosecution, and all were willing to participate in this research as well.

Next, the researcher attempted to find at least three pilots adjudged to have violated the law who were not offered the option to give a presentation but were offered a fine or prosecuted to participate in this research to narrate their experience of being fined or prosecuted. However, out of six potential informants, only one such pilot could be found willing to participate, and that number was deemed insufficient to form a group of informants.

Finally, the researcher attempted to contact the victims of cases I and III (see table 1) to explore their lived experiences of being a victim of an occurrence wherein the party adjudged to have caused the occurrence was offered an alternative judicial response to account for the harm and or danger they had brought about. However, since the victims of case III were, despite multiple attempts, not responsive to inquiries, only one potential informant remained (of case I), which was also deemed insufficient to form a group of informants.

An overview of the informants who participated in the research is given in Table 2.

Table 1

The three cases to which the informants belong

Case	Informant	Title	Description
I	Pilot 1	Hot air balloon in a thunderstorm	The pilot of a hot air balloon carrying passengers who were paying for the expenses could not prevent flying into a developing cumulonimbus (thunderstorm) cloud. When the hot air balloon managed to vacate the cumulonimbus cloud, the wind had picked up sufficient velocity to make it challenging to land, requiring the pilot to abort the first landing attempt to avoid a treeline, after which it landed safely.

Case	Informant	Title	Description
II	Pilot 2	Invalid certificate of airworthiness	A pilot operating their self-owned aeroplane was found to be flying it without a valid airworthiness certificate.
III	Pilot 3	Traffic pattern conflict	While one aeroplane was about to conduct a low-pass over the runway, lined up on final (straight ahead of the runway) without having followed the traffic circuit ² , it nearly collided with another aeroplane that had been following the traffic circuit and was turning to align with the runway when the two pilots saw each other, realised they were on a collision course and could just avoid a collision.

Table 2

Informants

Category of informants	No.	Relation to the phenomenon	Explanatory power
Pilots adjudged by the public prosecutor to have violated the law and offered the option to give a presentation	3	The persons subject to the justice mechanism	<p>These pilots can narrate the experience of being adjudged to have, unintentionally, violated the law, for which they are later deemed sufficiently culpable by the public prosecutor to require a judicial response. Next, they can narrate the experience of being offered the option to give a presentation instead of being fined or prosecuted and narrate the experience of preparing and eventually giving that presentation to their fellow club members and pilots.</p> <p>In the case of pilot #1, the pilot had already given a presentation before the hearing with the public prosecutor, which was taken into account in the decision of the public prosecutor to dismiss the case.</p>
Public Prosecution Service: public prosecutor and policy employee	2	The persons who initiated this alternative judicial process	These two co-workers can narrate the experience of offering pilots an alternative to prosecution, seeing the end product of that; and the experience of meeting pilots who deny responsibility in their cases, which they then usually offer a financial transaction, or in some cases, whom they subpoena directly.

² The (aerodrome) traffic circuit is a pattern that aircraft flying by visual references (most recreational flying) use to approach, land, and depart from an aerodrome. Following the traffic circuit is compulsory in most cases. For more information, see Skybary (n.d.).

Validation of the Data Gathered From the Informants

Each interview was audio-recorded in Dutch, transcribed and translated into English after the interview. After creating the individual textural description from the transcript of each interview, the individual textural description was shared with the informant, who was heartedly invited to inform the researcher about any statements they believed not to be an accurate description of their experience and how the description should then be altered. The researcher also invited the informants to share any possible omissions about their lived experience, which were necessary to provide a complete picture of their lived experience. See Table 3 for an overview of the amount of feedback provided by the informants. The researcher accepted all feedback and suggestions unadulterated, except for some grammatical and sentence-building suggestions.

Table 3

Feedback from the informants

Informant	Feedback received	Feedback provided
Pilot #1	Yes	No comments or changes.
Pilot #2	Yes	Two minor comments (restricted to single sentences).
Pilot #3	Yes	No comments or changes.
Policy employee	Yes	Two major comments (concerning a passage) and several minor comments (restricted to single sentences).
Public prosecutor	Yes	Five minor comments (restricted to single sentences).

Phenomenological Analysis

The phenomenological analysis of each interview consists of systematically executing the following steps, derived from Moustakas' (1994, p. 102) modifications of the Van Kaam and the Stevick-Colaizzi-Keen methods of analysis of phenomenological data. Moustakas provides extensive examples of each of the below steps to help execute them.

The resulting findings of this analysis are presented in the Findings chapter. The relationships between the individual textural descriptions, composite textural descriptions, composite structural descriptions and essences are explained in the Findings chapter.

For each interview transcript:

1. Horizontalisation: listing every expression relevant to the experience as expressions of equal value to determine the width of the experience of the phenomenon.
2. Next, reduction and elimination to determine the invariant constituents of the experience. Test each expression for two requirements:
 - a. Does the expression contain a moment of the experience necessary to understand the experience?
 - b. Is it possible to abstract and label the expression?
3. If the expression does not meet both requirements, it is eliminated. In addition, overlapping, repetitive, and vague expressions are eliminated unless they can be rephrased in more descriptive terms. The remaining expressions are the horizons, the invariant constituents of the experience.
4. Clustering the related invariant constituents into themes and giving those themes a label. These are the core themes of the experience.
5. Validation of the invariant constituents: are the invariant constituents either explicitly expressed in the interview transcript or, if not, are they compatible with the transcript's content? If they are neither explicitly expressed nor doubtfully compatible, they are deleted.
6. A textural description of the experience is constructed using the themes and validated invariant constituents, including verbatim examples from the transcription. The textural description of the experience narrates the nature and focus of the experience as experienced by the informant (Moustakas, 1994, p. 109).

After all informants' textural descriptions have been constructed:

7. The individual textural descriptions for each category of informants are integrated into a composite textural description of what each category of informants experienced.
8. Using the composite textural description of each category of informants and imaginative variation (Moustakas, 1994, pp. 83-84), a composite structural description of each group of informants' experiences is created. The structural descriptions provide a vivid account "of the underlying dynamics of the experience, the themes and qualities that account for 'how' feelings and thoughts connected with [the phenomenon] are aroused" (Moustakas, 1994, p. 110). I.e. whereas the textural

description narrates what the informant experienced, the structural description narrates how this experience emerged.

9. The final step for each category of informants is to integrate the composite textural and structural descriptions to create a synthesis of the essences of the experience of each category of informants, which features the elements without which the phenomenon would not be what it is (Moustakas, 1994, p. 84).

Construction of the Descriptions of the Lived Experiences

All individual and composite descriptions were constructed based solely on the interview transcriptions by strictly following the steps described above. Where appropriate and opportune, informants' words were quoted directly. However, most sentences were constructed by the researcher from the individual horizons derived from the interview transcripts. Thus, all words, sentences and views in the findings represent the lived experiences of the informants, as narrated by the informants, and not the interpretation of those experiences by the researcher, but one exception: in the composite textural descriptions, some use was made of the researcher's imagination, in accordance with Moustakas's guidance on imaginative variation, which is a vital part of developing how the underlying structures of the experience likely developed (1994, pp. 82-84). To reduce the influence of the researcher's biases as much as possible, the researcher reviewed a sheet of their own views on Just Culture and justice mechanisms before each writing session. Furthermore, all informants were heartedly invited to review the descriptions of their lived experiences critically, and their feedback, except for grammatical matters, was taken over entirely (see Table 3).

Limitations

Below is a description of the limitations of this research.

Experience of the Researcher

The researcher had no prior experience with conducting qualitative scientific research. Therefore, most steps the researcher undertook to conduct this research were their first. Because of that, the process of phenomenologically analysing the interview data was designed to be a systematic, retraceable process, drawing on Moustakas's (1994, Chapter 6) systematic description of how to conduct a phenomenological study.

A second way in which the lack of prior experience of the researcher presents a limitation is that the researcher must examine each statement of each informant to determine whether it constitutes a horizon: a statement that describes a part of, and is necessary to understand, the lived experience. Factual statements about something that occurred in that experience may or may not be necessary to understand the lived experience of the informant. Furthermore, a statement may reflect an informant's opinion rather than what they experienced, but any opinion is, in part, the product of their experience. Thus, it may also constitute something that the informant genuinely experienced and later became a piece of experience informing their opinion. For every statement, the researcher had to decide whether it was a part of the informant's experience necessary to understand the informant's experience. When in doubt, the researcher used the following question: is this a part of someone's (unique) experience, or is it an opinion about an experience of which someone else may hold a different opinion?

Epoche

Moustakas (1994, pp. 74-77) and van Manen (2014, pp. 41-42) agree that reaching epoche requires considerable practice and, even then, is rarely truly achieved as any description of a lived experience stems from a reflection or interpretation of that experience, first by the informant narrating it, and secondly by the researcher studying it. I.e., the only unaltered lived experience exists in our minds and cannot be narrated because to narrate, we first have to find a way of describing it, thereby implying that we are interpreting it. Therefore, as reflected by a former Lund HFSS student who conducted a phenomenology-inspired study (Sønderby, 2015, pp. 13-14), the researcher did not expect to be able to completely describe others' experiences without their own experience influencing them. However, the researcher attempted to mitigate this to the best of their abilities through two approaches:

- By reviewing a description of the researcher's views on Just Culture, which was created before starting the interviews, before conducting each interview and during the phenomenological analysis process, to be aware of the researcher's views and beliefs, bracketing those, and in doing so, try to abstain from it while conducting the research.
- Having the informants provide feedback on the individual textural description created of each interview transcript and heartedly inviting them to inform the researcher about any statements

they believed were inaccurate descriptions of their experience and how the description should be altered.

Generalisability

Phenomenological studies are not intended to develop findings generalisable to a larger population; instead, they are intended to give detailed and vivid descriptions of people's lived experiences with a specific phenomenon, which implies that they cannot be generalisable, as their lived experiences are unique. Furthermore, the number of informants in this study is limited because of the limited number of persons who have experienced this phenomenon in the Netherlands since the public prosecutor began exploring these alternative judicial responses to violations of the law in the Dutch aviation domain.

Lack of Victims' Lived Experiences

Both the literature on restorative justice (Zehr, 2003, pp. 27-28) and restorative Just Culture (Dekker, 2017, pp. 13-14) argue the importance of victims' role in restorative justice processes, which is also narrated in the textual descriptions of the public prosecutor and policy employee. However, as discussed in the subchapter Informants, after the victims of case III did not respond to enquiries, only one victim left could have served as an informant, and that number was deemed insufficient. Therefore, this study lacks the lived experience of the victims, which would have been a valuable addition to provide a different perspective on how people involved in restorative justice mechanisms experience those mechanisms.

Research Ethics

The following ethical considerations applied to this research:

- Informed consent. In line with Lund University's (2022) research ethics, all informants were asked, before conducting the interviews, to sign an informed consent form that details why they were asked to participate, what the research entailed, how the data they provide was protected, the anonymisation of their participation and their right to withdraw at any moment from the study.
- Exploitation. The informants did not receive any form of reward for their participation, and because the legal processes concerning the occurrences had already taken place and could not be repealed, the research cannot post-hoc influence the judicial processes.

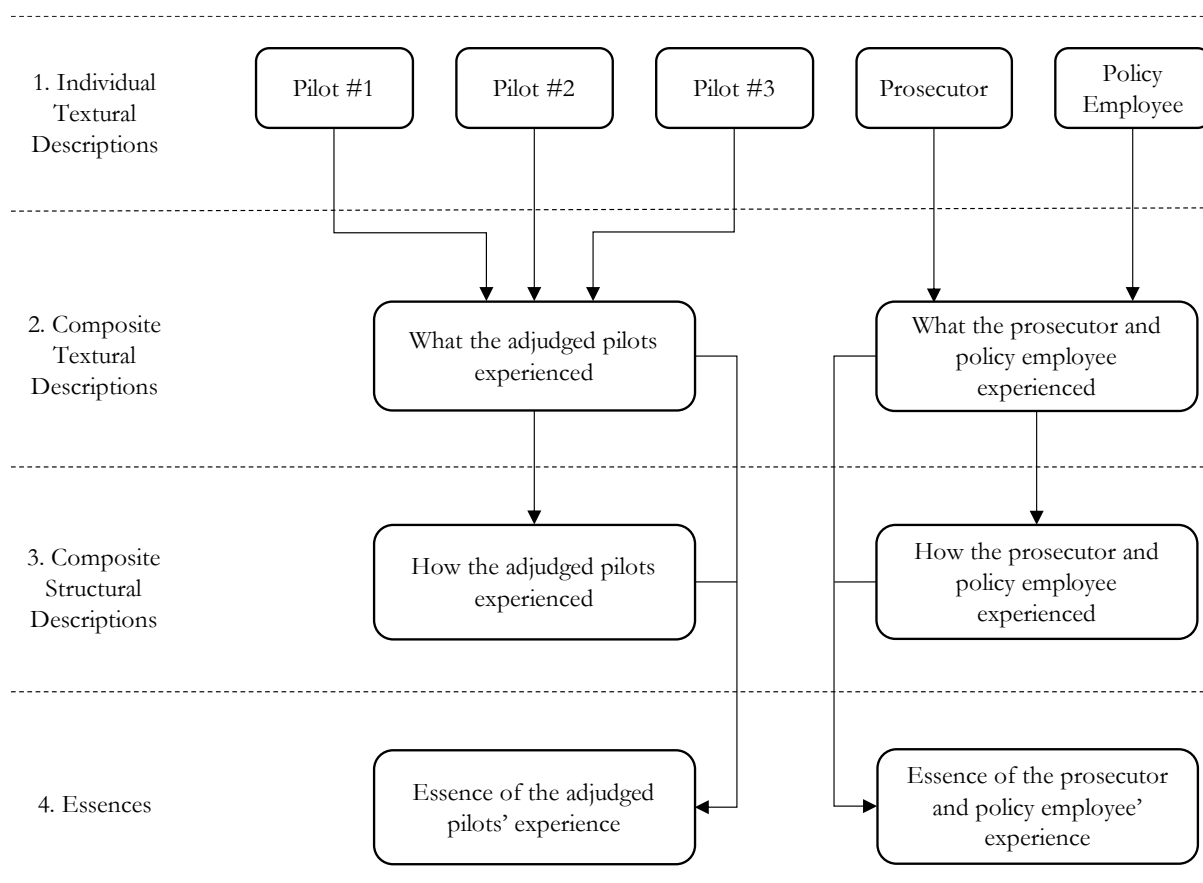
- The research was conducted independent from the Dutch public prosecution service. The sole assistance received from the Dutch public prosecution service is that they forwarded the researcher's letters to pilots and victims to help establish contact with them, and the willingness of the public prosecutor and the policy employee to participate in the research themselves. Other than that, the Dutch public prosecution service did not influence nor have any say in the research's design, conduct or outcome, nor has any ownership of or influence in the eventual thesis.

Findings

The findings of the interviews are presented in this chapter. Together they represent the lived experiences of the informants. They are presented in four dimensions, following Moustakas (1994). See Figure 1 for an overview. Each box represents the description of an individual or group their lived experience, starting with descriptions of the individual informants' lived experiences on the top level to composite descriptions of the two groups of informants on the two middle levels, culminating in the essences of the lived experiences on the bottom level.

Figure 1

Levels of description presented by the findings, in the order in which they are presented in the chapter



The first level is the individual textural descriptions, narrating *what* each individual informant experienced. E.g. for the pilots, what happened when the aviation police informed them that they were being criminally investigated, and what happened during the hearing with the public prosecutor? How did that come across to them? What did they feel? How did they feel beforehand and afterwards?

Next, these individual textural descriptions are combined (synthesised) into two composite textural descriptions of *what* both groups of informants experienced. These are the composite textural descriptions of the pilots and the public prosecution service employees and are a synthesis (composite) of their individual textural descriptions.

Thirdly, whereas the composite textural descriptions narrate *what* both groups of informants experienced, the composite structural descriptions narrate *how* those experiences developed and progressed over time, i.e. “the universal structures that precipitate feelings and thoughts with reference to the phenomenon, such as the structure of time, space, bodily concerns, materiality, causality, relation to self, or relation to others” (Moustakas, 1994, p. 84).

Finally, the fourth and final level of the findings is the synthesis of the composite textural and structural descriptions that narrate the essence, the defining characteristics, of the lived experiences of these groups of informants, i.e. the features of the experiences without which they would not be what they are.

Individual Textural Descriptions

Each informant’s textural description of their experience was constructed using the themes and validated invariant constituents derived from the interview transcript, including verbatim examples. The individual textural descriptions narrate the nature and focus of the experience as experienced by each informant (Moustakas, 1994, p. 109). Each individual textural description was reviewed by their respective informant, and the researcher took, overall, their feedback (except for some grammatical and sentence-building suggestions) to ensure accurate descriptions of the informants’ lived experiences.

Adjudged Pilots

Pilot #1. The experience of pilot #1 of being adjudged, by the police and public prosecutor, to have neglected the duties of a (balloon) pilot was an experience of feeling responsible, guilty and relieved, in a multitude of ways. Guilt and responsibility because of having missed the final issue of the weather forecast broadcasted shortly before departure that otherwise would have led to a decision not to fly. And relief, early on in the process, because the passengers were not hurt and did not suffer mental trauma.

Relief was also experienced as a result of how most of the police officers and the public prosecutor were perceived as listening to pilot #1’s story. Recounting the hearing with the public

prosecutor: “That was a very pleasant conversation. Because they let me tell my story and understood my situation”. Thereby giving pilot #1 the feeling that the prosecutor took their rationale, at the time of the accident, into account into their judgment, leading to him being open and telling the complete, unadulterated story about what had happened. Furthermore, it was also relief because, although going to the hearing unprejudiced, i.e. without expectations concerning the treatment, position or judgment by and from the public prosecutor, pilot #1 knew that there could be consequences, like a fine, revocation of their license or community service, and this was in the back of their mind, although they did not worry about it: “I will not worry myself about that what has not happened yet”. Furthermore, pilot #1 experienced considerable interest from the prosecutor in whether and how their contact with their passengers had progressed after the occurrence and felt satisfaction from the prosecutor when they elaborated that they had been in touch multiple times until the passengers indicated they no longer wished to be in touch.

However, the exchanges with the aviation police and public prosecutor were not an experience of solely feeling relief. Pilot #1 also experienced “immense irritation” after getting hold of their case file after they had met with the public prosecutor, which contained an expert opinion from a police officer who also is a balloon pilot who stated that they should never have departed, without having asked the balloon pilot why they did depart: “That is easy for you to say, you get the information provided to you, half a year after the fact, and then you take a decision”. It was the feeling of being put down by a fellow balloon pilot: “You can be a police officer, but as a balloon pilot, you know that such a situation can change rapidly”.

Another part of pilot #1's experience was media attention. Various media outlets reported the accident, and the attention pilot #1 got from journalists was “far from pleasant” as they, despite pilot #1 not giving in to their attempts, repeatedly tried to blame pilot #1 for what had occurred.

Finally, the experience of pilot #1 of telling what had happened to their fellow pilots at a seminar was one of being at ease, despite telling their story in front of a large audience, and relieving because most attendees sympathised with the experience narrated to them: “It's this feeling that you're not alone. That you are not the only one making such mistakes”. Pilot #1 left that day feeling “Satisfied ... from people who valued that I shared my story openly and honestly”. Although there also were critics who questioned

what they could or should have done differently, that was not as bothering as the police expert's judgement, "there are always critics", but to them, they could reply, "But it's all in hindsight, is it not?".

Pilot #2. For pilot #2, the experience of going through the judicial process after a violation of the law started with a profound feeling of being treated unjustly by the aviation police; however, this feeling was later ameliorated by how pilot #2 was treated by the public prosecutor and experienced giving the presentation.

The manner in which the aviation police instantly formulated their finding, namely, that pilot #2 was flying an aircraft that was not airworthy, and the fact that this conclusion had been drawn before having talked to pilot #2 gave pilot #2 the strong impression that the aviation police was out to prosecute them, that they had done something reckless:

I felt it was unjustified. Conclusions were drawn too early – with the intent to prosecute – and also a kind of fear – not really fear, but more a caution: I have to be careful now because this police officer has different intentions. This is not Just Culture, which you read a lot about; that is not what is happening here. This is prosecution, really, which can gravely affect my day-to-day work.

As a result, pilot #2 reduced their instruction flight activities to reduce their exposure to potential small mistakes, which they feared may lead to another encounter with the aviation police: "I began to fly much more risk-aware". Another experience that feeds this feeling for pilot #2 is their experience with how the aviation police investigates, in their eyes, non-events, e.g., closing a commercial airport's runway for hours to take pictures of a sports aeroplane's blown tyre: "that gives me the feeling that the aviation police is more on the mind of prosecuting".

On the contrary, pilot #2's experience of the hearing with the public prosecutor was "something different entirely. That was nice and pleasant". In that conversation, pilot #2 could explain what had happened and felt that they were understood and that the prosecutor fairly quickly gathered what was at play, first letting them explain and only then drawing conclusions, which led to a different experience:

I feel that we should cherish the current public prosecutor because it [Just Culture] does live with the prosecutor in a certain kind of way ... the safety culture school of thought is in there. So I

believe we should cherish that; I also had the impression that that is the message they want to send out.

A different aspect of the experience for pilot #2 was the formalities, both the formal letters and the formal judicial procedure, which, in general, gave a disappointing feeling: “we just had an excellent conversation, a presentation is fun, I enjoy giving one, and then you still get the formalities”. The wording in the letters from the aviation police and public prosecutor also attributed to pilot #2’s experience about how they were treated. For starters: “It is a choice of words, they say: you are suspected of this and that. They do not say: you did this and that. But you do get a certain feeling from it, it was pushed in that direction”. After the hearing, pilot #2 received another letter to confirm the arrangements made, i.e. the presentation, but it also contained additional conditions, such as that the arrangement [dismissing the case in exchange for the presentation] could be withdrawn in case of a future violation. This gave pilot #2 an awry feeling because it still leaves the door open to prosecution, thereby also enforcing a sense of compulsiveness, which pilot #2 feels is at odds with the concept of Just Culture.

Finally, being asked to give a presentation before their fellow club members felt reassuring: “this is how we do it in the general aviation community. This is what I am used to, where I feel at home”. Giving the presentation, in concert with the public prosecutor, was an experience pilot #2 thoroughly enjoyed because it befits pilot #2. I.e., pilot #2 takes joy in conveying lessons and knowledge, and they appreciated the prosecutor joining them to explain how they work and what drives them.

Pilot #3. The experience of pilot #3 with being criminally investigated for nearly causing a collision between two aeroplanes is one of acknowledging one’s responsibility, of stepping aboard an unknown train (the judicial process) that led to feeling remorseful for the trouble and insecurity of the other pilot and being appreciative of the solution proposed by the public prosecutor to remedy that situation, and finally, a feeling of relief that the occurrence had not become a (fatal) accident.

At first, the investigation by the aviation police was an unpleasant surprise because pilot #3 believed they had settled the matter informally with the other pilot after the flight but suddenly, several months later, was confronted with a police investigation. However, subsequently learning how the other pilot was still troubled and feeling insecure when flying because of the incident made pilot #3 feel

dreadful: “That that pilot was walking around with this awful problem, made me feel dreadful. ... I do not know him that well, but I find that very regrettable”.

As the questioning by the aviation police drew nearer, “you go into a mode of: what can I say, and what cannot I say? It is a formal questioning”. Revisiting the occurrence, pilot #3 considered which stance to take: be forthcoming? Or go on the defensive, as some fellow pilots had encouraged them? As pilot #3 collected and structured their thoughts, they concluded:

But of course, I was in the wrong. I thought, were there mitigating circumstances? And then I decided: no, I am not going to tell a story. I am not going to make up an excuse. I should not whine, period. ... I am going to tell exactly what happened.

Subsequently, pilot #3 went to the hearing with the public prosecutor, accompanied by a club member, not knowing what to expect, but with the mindset, “I will hear their verdict. I cannot change it, it is what it is, and I accept that”. Being accompanied by a member of the aeroclub’s board was “a very positive experience ... some form of support”; the feeling of not being left out or rejected by your fellow club members. The experience of the hearing with the public prosecutor was that of a mature, contemplative conversation to understand what had happened, “it is not like you are sitting there with your buddies ... I was clearly the person being heard; that was obvious. A civil servant sitting across the table will determine your punishment based on your story”; however, it was not an “intimidating” or “threatening” conversation, rather “I had the feeling there was empathy, that I was being listened to”.

As a result of the hearing with the public prosecutor, pilot #3 got in touch with the other pilot, the victim. “Those first contacts were rough”, and the subsequent meeting was difficult, “In the beginning, the other pilot was very distant, nearly hostile; I mean, they had nearly lost their family – I understand that”. In addition, it was difficult because “it is not easy to apologise to someone because you do not want to have done something wrong”; nonetheless, pilot #3 apologised and conveyed their regret for almost creating an accident and causing the other pilot to feel insecure when flying. Furthermore, pilot #3 felt and expressed relief that it had not gone wrong, as they told the other pilot, “I am so relieved that nothing happened. I cannot bear the thought that you and your family..”. After a while, the conversation “slowly cooled down”, and eventually, that meeting left the pilots leaving differently than they had begun, “we did not part as friends, but we did part as fellow pilots. We parted with respect for each other; that is

how I experienced it”. Finally, pilot #3 did “absolutely not resent that pilot for filing a report. You must be able to do that”.

Finally, pilot #3 was “a bit surprised by this verdict”³, not getting, at the least, a fine, but rather the case being dismissed because of the positive experience of the other pilot after their conversation and on the condition of giving a presentation:

I felt this was a much better punishment, a much better approach, much more mature. ‘Mature’ sounds a bit strange, perhaps. But what counts in the end? It does not concern punishing; it concerns preventing that it happens again, and that you learn.

Public Prosecution Service

Public Prosecutor. The prosecutor’s experience with employing alternatives to fining or prosecuting pilots who have violated the law is one of exploring uncharted waters. When it works out, it is a feeling of achievement, of benefitting all parties involved. Nevertheless, it can also be an experience of disbelief when pilots deny responsibility for an occurrence. Secondly, it is a struggle to overcome how the general public perceives them: “people are scared of the aviation police and the public prosecution service ... sitting behind this table, judging: what this person has done is inexcusable, and they shall pay for what they did”.

The beginning of the hearings with pilots and possibly their counsel (a lawyer or a representative from the pilot’s aeroclub) were experienced as somewhat tense moments as they did not know how the conversation would go and what stance the other party would take. While the prosecutor is more knowledgeable about the law and well-informed by the case file from the aviation police, the other party is generally more knowledgeable about their particular field of aviation (e.g. gliding or ballooning). As such, the first moments of these hearings are “quite determining for my feeling about the conversation” as they gather to what extent they can make contact with the suspect and, as a result, what stance they [the prosecutor] take onward into the conversation.

³ The public prosecutor decided to offer dismissing the case, on the condition that pilot #3 would give a presentation at their aeroclub about the occurrence, weighing in the positive feedback from the victim pilot about the conversation that they had had. In the interview, the policy employee recounted the victim pilot making an lasting expression: “I do not know the position of the public prosecution service, but in my view, this has been resolved among pilots”.

Next, the prosecutor experienced the hearings where the pilots plainly tell what happened, acknowledging their responsibility and role in their occurrence, as pleasant, open and sincere conversations, where the tension at the beginning of the conversation quickly dissipated. “It conveys sincerity when somebody says they did something wrong or should have done something differently”. When the hearings progressed in this manner, it led to mutual understanding and agreement on what happened, which accommodated the prosecutor’s decision to offer to give a presentation instead of a fine or prosecution (see the Appendix for a description of the judicial process). Although giving a fine is much less time-consuming for the prosecutor, offering a presentation gives “a good feeling, because we all benefit”. In the prosecutor’s experience, the pilots also experience these hearings, despite not knowing the potential outcome (that an alternative to a fine or prosecution may be offered), as positive: “They were positive about the way we handled the case, how we conducted this formal hearing at the prosecution office. They were reassured because we had a normal conversation”, and in another case: “I believe that they felt treated humanely”.

However, to their surprise, the prosecutor also experienced hearings where suspects denied responsibility entirely. The prosecutor experiences such a stance as highly irritating because it inhibits reaching a mutual understanding about what had happened; reflecting on one such case:

I progressively felt more amazement, like, how is this possible? Apart from the facts that were established objectively ... I thought, how is it possible that you don’t realise that you were in the wrong? And well, that is how we felt, a sort of utmost astonishment.

In these cases, the prosecutor usually resorts to offering a transaction, i.e. a fine, though they sometimes choose to issue a subpoena to prosecute the suspect in court. However, such outcomes are not satisfying because they do not result in learning, “it just does not feel right because you don’t know why somebody does something that can influence safety. When somebody violates certain rules in aviation, it makes you question, how seriously do they take it?”.

One case where a pilot accepted to give a presentation also became an opportunity for the prosecutor to explain how the aviation police and public prosecution service work and what drives their decision-making. The prosecutor and policy employee were invited to give a presentation after the pilot’s presentation, which they did and have done on numerous other occasions, such as at general aviation

conferences. At the beginning of such meetings, the prosecutor often experiences considerable distrust or scepticism, fed by, they believe, old-fashioned beliefs about the role of the police and prosecutors in aviation. However, they left those meetings experiencing being seen as fellow human beings, accessible, with the audiences being receptive to and appreciative of their explanation about how they work.

Overall, the prosecutor feels proud about this alternative handling of cases where this was appropriate and is convinced that in those cases, it is a better judicial response than a fine or prosecution: “It really is a multi-edged sword”.

Policy Employee. For the policy employee, the experience of talking to pilots who openly discuss their occurrence and acknowledge their responsibility, which is usually the case, is a very positive, sometimes disarming experience that leads the policy employee to sympathise with the person opposite of them: “You start to understand someone much better because they explain why – sometimes, it just happened to someone, it started small, and the consequences were substantial”. In another case, the policy employee reflected: “When somebody plainly tells that, so disarmingly, you start sympathising with how that must have been for that person, because it was terrible for them too”. Furthermore, it raises respect for those pilots because of their willingness to expose themselves, reflect on what happened, and learn from that. Even more so when it is difficult to do so because, as in one example, a fatal accident could possibly have been prevented. Thus when a pilot reflects on that honestly, it gives the feeling that: “these people do truly take safety seriously, and this accident very strongly impacted this community”.

When pilots feel comfortable giving a presentation, “That gives a really good feeling. At least for me. Then somebody shows that they want to take responsibility, and they are willing to invest time and effort into that”. Furthermore, in the case of the near mid-air collision, where the suspect pilot agreed to give a presentation after the public prosecutor brought them together with the other pilot to see to their needs (which resulted in exchanging experiences, offering apologies and extending help), gave the policy employee a sense of fulfilment because practically all the punishment purposes of the criminal law system were fulfilled: the norm was made known, there was general prevention (i.e. other pilots were made aware that they should not fly with aeroplanes without valid certificates of airworthiness), and there was restoration as these pilots discussed the occurrence afterwards, to the satisfaction of both parties (De

Rechtspraak, n.d.-b). I.e., it was resolved among pilots: “Beautiful, it does not get better than this. And that makes me very happy, such a solution”.

One occasion where the pilot invited the public prosecutor and the policy employee to give an additional presentation on behalf of the public prosecution service was a very satisfying experience for the policy employee:

I got the feeling that this was not a one-way street; there were many questions, and a lot of information came up from the audience. That instantly gave gratification because you are actually discussing, in the group, what is necessary to maintain or improve safety in aviation.

This gratification was strengthened by the positive reactions of both the pilot giving the presentation and the audience; and by the fact that a case, for once, has been resolved in a creative fashion, albeit an unusual way: “that is a wonderful way of closing a case”. Lastly, as these presentations also led to discussion and information being spread about the role of the aviation police and the public prosecution service, it is also gratifying for the policy employee because the audience gets a better understanding and in the policy employee’s belief, a rightfully more positive view, about the objective and the methodology of the aviation police and the public prosecution service.

However, in some rare cases, to the surprise of the policy employee, pilots take the position that they did nothing wrong or were the ones to resolve a dangerous situation, while the public prosecution service believes they clearly were the cause of that situation. Such hearings give a sense of disappointment because the public prosecutor and policy employee enter these hearings hoping that the pilots will show self-reflection, hoping to achieve “the maximum effect” as they have with other cases; however, they quickly gather that that will not be possible in these cases, “Which is annoying, disappointing. Because, our intention is to achieve the most, and in such cases, we are not going to achieve that”. Furthermore, such hearings are surprising because the public prosecution service only follows up on cases that are, in their eyes, “clear cut” to prevent (technical) discussions about what happened and why. These hearings tend to be shorter; in one case, two hours had been reserved for a hearing that lasted 30 minutes because “the pilot showed no self-reflection and soon there was nothing left to talk about”.

For the policy employee, the most bothering aspect of pilots taking such stances is that it does not lead to the entire story being discussed and thus little or no learning. In these cases, the public prosecution service usually resorts to a fine:

Which feels like some sort of necessary evil. I am not sure if that is what it is, but it is like, well, we will just have to do it this way because we need to make ourselves heard by this pilot. They should know that this is the standard.

Composite Textural Descriptions

The composite textural descriptions were created using the individual textural descriptions of each informant, which narrate the experiences of the three adjudged pilots combined into one composite textural description and the experience of the public prosecutor and policy employee combined into another composite textural description.

Adjudged Pilots

The experience of being adjudged to have violated the law and being criminally investigated is one of stepping outside the familiar aviation community and into an alien judicial process, realising that the outcome may be a considerable fine or a revocation of one's license, and such an outcome may have repercussions for one's professional life⁴.

For all informants, the knowledge that you are under criminal investigation is something they duly realised, but how they felt about that differed. One of the informants, at first, thoroughly felt being treated unjustly because they felt the aviation police had already drawn their conclusions when they contacted them, which gave the informant the strong feeling that this was not Just Culture; rather, the police were out to prosecute them. The other informants were more at peace with being the subject of a criminal investigation, despite not intentionally having endangered others or violated the law, because the gravity they ascribed to their occurrence gave them a strong sense of responsibility and their relief that nothing worse (e.g. injuries) had happened prevailed. Still, one of the other two informants also had a similar negative experience, of "immense irritation", after his case had been closed [by the public

⁴ A fine or conviction may be recorded for a set amount of time in one's judicial dossier which may be reviewed when requesting attestations from the government for certain jobs, e.g. when working with children or vulnerable people, or when working in security, defense or safety-critical industries (Government of the Netherlands, n.d.)

prosecutor] when they got to read their police dossier, which contained an expert opinion from a police officer, also a balloon pilot, who stated that they should never have departed, reasoning in hindsight, without taking the informant's situation at the time into account. However, both these negative experiences were remediated by how the public prosecutor handled the case.

The two informants whose case involved victims who had been endangered felt sincere guilt and responsibility for endangering another party which made talking to one's victim(s) "difficult" because they knew they had endangered those persons, and they realised it could have ended (much) worse. Regardless of not having caused physical injuries, one of the informants felt dreadful that they had still caused another pilot to feel insecure when flying months after the occurrence, while the other informant was relieved that they had not caused mental trauma. Realising that they had endangered another party while not entirely controlling the outcome strengthened a distinct feeling of "being in the wrong", which in part made them accept whatever judicial response the public prosecutor felt appropriate. They realised that that verdict was out of their hands and accepted that without feeling resentment or fear; on the contrary, the relief that nothing graver had happened to their victims prevailed firmly over their concern about the judicial consequences. Finally, talking to their victims, despite being difficult, gave them some sense of closure: they had done what they could to remedy the damage they had done.

Going to the hearing was the culminating event of their experience, with, in most cases, quite some time between the initial notification of the aviation police and the eventual hearing with the prosecutor. Thus, one goes in without expectations because they do not know what to expect, but they realise that punishment could be a consequence. Then, when the conversation starts, they all quickly felt relief. Relief because they were given the opportunity to explain their story without being interrupted: they were listened to without being asked counterfactual questions, which made them experience it as a mature and amiable conversation. Furthermore, they unanimously experienced empathy from the public prosecutor and policy employee, and, finally, although it was clear that it was a formal conversation, in part to determine their possible punishment, they all experienced the conversation as pleasant and explicitly not as threatening or intimidating. One informant expressed the feeling that the aviation community should "cherish" the public prosecutor because the concept of Just Culture "lives with them".

All pilots felt some form of relief for not being punished in the conventional way of a fine (or worse, revocation of one's license) and felt that the offer to give a presentation (or the prosecutor's consideration that they had already given one) was a much more mature approach. Mature because they felt they contributed to aviation safety and remedied the situation, whereas a fine achieves nothing, i.e. "what counts in the end? It does not concern punishment; it concerns learning".

Giving the presentations was a unique experience for each informant, but all felt it was a positive, satisfaction-giving experience. Varying from receiving sympathy from the audience: "it is this feeling that you are not the only one making such mistakes", to enjoying sharing lessons learned amongst pilots: "that is the way we do things in our aeroclub", as in, this is the way Just Culture is supposed to work, quite the opposite of the way the aviation police initially approached this informant.

Public Prosecution Service

For the public prosecutor and policy employee, the experience of offering pilots an alternative to a fine or prosecution that comes to fruition is one of achievement, "a really good feeling". In part, because they see a pilot acknowledging their responsibility and, beyond that, being willing to invest time and effort into sharing their lessons learned. In a case of a near mid-air collision where the suspect pilot afterwards talked to the victim pilot, offering apologies and extending help, the policy employee believed they had simultaneously fulfilled nearly or all the punishment purposes in the criminal law system, which adds to the feeling of achievement. Thus, although giving a fine is much less time-consuming for the prosecution service, offering an alternative gives "a good feeling, because we all benefit".

The prosecutor experiences the beginning of the hearings with pilots and possibly their counsel as somewhat tense moments as they do not know how the conversation will go and what stance the other party will take (who is generally more knowledgeable about their field in aviation). Thus, the first moments of these hearings shape how the conversation will unfold, which can be a difference like night and day. When a pilot plainly explains what happened and expresses responsibility and remorse, it conveys sincerity, and the meetings are experienced as pleasant and open, sometimes even disarming conversations. Disarming, because they raise sympathy for the situation the pilot found themselves in, and when those pilots subsequently take on their responsibility, reflecting on and learning from what happened, such an attitude raises respect.

For the prosecutor and policy employee, presentations from pilots as a judicial response to their cases are satisfying because they create dialogue about aviation safety, thus general prevention, and show how there are other, in the prosecutor and policy employee's experience, better ways to resolve a violation than fining and prosecuting. Furthermore, it is gratifying when the role of the aviation police and public prosecution service is better understood as a by-product of the hearings with the pilots and the presentations by the pilots, and when that is shared within the aviation community.

Nevertheless, on rare occasions, the prosecutor and policy employee also experience hearings where pilots deny responsibility or argue that they resolved a dangerous situation as opposed to having caused one. Such hearings are disappointing because the prosecutor and policy employee realise they will not reach a mutual understanding with the pilot. They thus tend to be shorter and irritating. In one instance where a pilot took such a stance, it led to "progressively more amazement" and disbelief on the side of the prosecutor and policy employee. Those hearings can give them an awry feeling because such a stance makes them question how seriously such pilots take safety. In these cases, the usual judicial response is a transaction (i.e. a fine) or, sometimes, a subpoena, which is far less pleasing because the entire story does not surface, and they thus expect little or no learning from the pilot.

Composite Structural Descriptions

Whereas the composite textural descriptions narrate *what* both groups of informants experienced, the composite structural descriptions narrate *how* those experiences developed and progressed, i.e. "the universal structures that precipitate feelings and thoughts with reference to the phenomenon, such as the structure of time, space, bodily concerns, materiality, causality, relation to self, or relation to others" (Moustakas, 1994, p. 84). Imaginative variation was used to create the composite structural descriptions using the composite textural descriptions as the basis (see Moustakas, 1994, pp. 83-84).

Adjudged Pilots

As a general aviation pilot, being notified that you are criminally investigated to have culpably violated the law while piloting an aircraft⁵ is as if one suddenly enters a different realm. In a matter of seconds or minutes, one goes from being just any pilot of unquestioned behaviour to being a *suspect* in a

⁵ An aircraft refers to any device capable of flight, thus both aeroplanes and hot air balloons are aircraft.

criminal investigation. Suddenly, one's professionalism as a pilot is being questioned by the public prosecution service, whose job is to investigate crime and prosecute suspects.

The criminal investigation process takes time, and all the while, one does not know how long it will take or what to expect from the next step in the process. During this time, there will be at least two meetings, one with the aviation police and eventually one with the public prosecutor, and one has to decide which stance to take. In the community, there are prejudgments about the police and prosecutor; thus, peers may advise one to go on the defensive. However, particularly pilot #1 and pilot #3, and to a somewhat lesser degree, pilot #2, sincerely believed they were responsible for what happened and felt obligated to take responsibility, despite also believing that they did not solely have agency in their occurrences⁶. But will the prosecutor be receptive to their story? Will it be taken into consideration? Is the questioning by the aviation police and the letters in-between telling about what to expect? One does not know, so one lives with that uncertainty for months or sometimes over a year, all the time being somewhere in between the realms of pilots who are of unquestionable behaviour and pilots whose professionalism is in doubt. For all informants, this uncertainty lasted until the hearings with the public prosecutor. After knowing the outcome of the judicial process and because of their experience with how the public prosecutor treated them, i.e. humanely and with dignity, the self-perceived uncertainty about the pilot's professionalism was largely ameliorated.

Public Prosecution Service

Adjudging a pilot to have culpably violated the law and hoping to draw out the option for an alternative judicial response, such as a presentation, instead of fining or prosecuting, is a process that is considerably dependent on the reaction of the pilot being adjudged. Therefore, it brings about a form of uncertainty for the public prosecutor and policy employee, particularly when the hearing commences, as the stance of the pilot on the case is yet to be seen at that moment, but also later on about how the presentation will be given, and how the audience will receive it.

⁶ All three pilots narrated how their occurrences were also influenced by factors external to them, e.g. for pilot #1, air traffic control's instruction to climb to a higher altitude where a different wind direction prevailed, for pilot #2, the maintenance company that did not inform them that the paperwork was not completed yet, for pilot #3, the other aircraft could have observed them earlier too.

Meanwhile, the public prosecutor and policy employee endeavour to change the, by them perceived, aviation community's perception of the aviation police and public prosecution service being out to hand out sentences whenever possible, regardless of the circumstances.

These two parts of the phenomenon under study influence each other as the judicial process may initially, to a certain level, reinforce this perception because of the formal language when a pilot is suspected of having violated the law while the public prosecutor and policy employee are trying to change that perception by demonstrating that they are out to improve safety and that they rather do so through an alternative judicial response than through a fine or prosecution. However, when a pilot denies responsibility and is fined or prosecuted, this may reinforce that pilot's perception and possibly too the perception of that pilot's social circles in the aviation community. On the contrary, when a pilot acknowledges responsibility and receives an alternative judicial response (e.g. the case being dropped or a presentation being given), the perception is countervailed as that story gets out into the aviation community.

Regardless of how the public perceives the actions and motives of the public prosecutor and policy employee, the public prosecutor and policy employee' desire is to safeguard aviation safety. When this can be achieved through an alternative to prosecution, they experience a very positive feeling about succeeding in that goal and possibly working towards their secondary goal of changing the aviation community's perception of the aviation police and public prosecution service. This positive experience is one of slowly making progress and achieving small successes in the sense that they make an impact with each alternatively handled case (i.e. not a fine or subpoena) but cannot change aviation safety or the community's perception of the aviation police and public prosecution service all at once.

When a pilot denies responsibility and thus is fined or prosecuted, this is not experienced as a failure; rather, it is one of falling back on the conventional methods, which also make do: "The norm is made clear", but it is much less satisfying because it is difficult to tell whether a pilot has learned and whether an occurrence might happen again.

Textural-Structural Synthesis: The Essences of the Lived Experiences

The textural-structural synthesis, i.e., the essence of the lived experiences, is the culmination of the process of phenomenological analysis, which is created by integrating the fundamental features of the

textural and structural descriptions into a unified statement. I.e., “Essence, as Husserl (1931, p. 43) employs this concept, means that which is common or universal, the condition or quality without which a thing would not be what it is.” (Moustakas, 1994, p. 85).

Adjudged Pilots

The experience of being criminally investigated and eventually adjudged to have culpably violated the law while piloting an aircraft and then being offered and accepting an alternative judicial response is a process one consciously lives through, all the while dealing with the uncertainty of how long it will take, what the next step will be like, and how it will end; as such, it can be characterised as a psychological burden an adjudged pilot carries with them for the duration of the process.

It starts with the notification of being criminally investigated to determine whether one has culpably violated the law, which is experienced as entering a different realm: suddenly, one goes from being just any pilot of unquestionable behaviour to being a suspect in a criminal investigation where one’s professionalism as a general aviation pilot is questioned. Especially in the beginning, one feels that their actions as a pilot, and to a lesser level, also themselves as pilots, are criminalised⁷ for something that, arguably, to a degree, occurred to them and was neither an outcome they chose nor desired. The feeling of being criminalised was strengthened for two pilots because of how two aviation police officers, in their experience, drew conclusions about them: being second-guessed based on hindsight reasoning and drawing conclusions without having heard the pilot’s story. Nevertheless, on more occasions, pilots also experienced empathy and the relief of explaining their story to someone who understood them when talking with the aviation police. Still, those negative encounters resonated strongly in the pilots’ experiences.

The feeling of being criminalised profoundly contrasts with how the pilots experienced the formal hearings with the public prosecutor. Here, they experienced empathy, felt listened to, and were not second-guessed nor asked counterfactual questions about what they could or should have done. This gave them the sensation that they had a “mature” conversation, intended to understand what happened, not to judge them. They experienced those conversations as similar to talking to the researcher. Furthermore,

⁷ Being criminalised is commonly explained as “the process by which behaviors and individuals are transformed into crime and criminals” (Michalowski, 1985, p. 6)

one pilot felt that the aviation community should “cherish” the public prosecutor because the concept of Just Culture “lives with them”.

All pilots felt responsible for the act they were being criminally investigated for, and two pilots experienced strong feelings of guilt for having endangered other persons, despite never having intended to do so and believing that what had occurred was not solely attributable to them. This feeling of responsibility and guilt was accompanied by a strong feeling of relief that nobody had been injured or worse during the occurrences. Those feelings outweighed and thereby partly made irrelevant the uncertainty of the outcome of the criminal investigation, an uncertainty which was nevertheless always in the back of the pilots’ minds during the criminal investigation.

Talking with one’s victim(s) about their occurrence is difficult because one knows they have endangered those persons in a potentially fatal way; thus, they understand they are upset. Learning whether this did or did not (still) affect the victim(s) mental wellbeing respectively made one feel either dreadful, strengthening the feeling of guilt, or made one relieved. Notwithstanding this, those conversations did lead to better mutual understanding, which provided varying levels of closure for the pilots, particularly in one case where the victim pilot later stated that, in their opinion, the matter had been resolved amongst pilots.

Giving a presentation about one’s occurrence was a unique experience for every pilot. Some genuinely enjoy sharing lessons learned and are comfortable in that role, while others experienced relief from the audience’s feedback, realising they were not the only ones to make mistakes, thereby partly deconstructing the perceived gap between the realms of pilots of unquestionable behaviour and pilots who are suspects in criminal investigations. Finally, all pilots felt that this solution offered by the public prosecutor was a much more appropriate approach, “how a Just Culture is supposed to work”, aimed at learning, not at punishment, which, in part, therefore still sticks with them as a success, as opposed to earlier negative or oblivious experiences with fines outside of aviation that quickly become forgotten.

Public Prosecution Service

The experience of offering pilots who have culpably violated the law an alternative judicial response can be likened to being a veteran captain on a ship entering uncharted waters: although the public prosecutor is an experienced professional who has been in the profession for over two decades,

assisted by a similarly experienced policy employee—determining whether it is appropriate and possible to offer an alternative judicial response for a suspect pilot depends heavily on the position the pilot takes during the hearing, which implies a considerable amount of uncertainty on how the hearing and subsequent judicial process will evolve. Moreover, every case where a presentation is offered and accepted is a new unique instance of such a judicial response, with a different pilot giving a different presentation to a different audience (with their own views of safety and accountability).

The start of the hearing with a pilot is a somewhat tense moment because of the uncertainty about the stance that the pilot will take and, thereby, the uncertainty of how the conversation will develop—all the while being the generally lesser knowledgeable party about (that field of) aviation, although being more knowledgeable about the law. However, the tension dissipates quickly when pilots plainly explain what happened and express responsibility and remorse. Such a stance results in open and pleasant conversations, conveying sincerity. These conversations may even solicit sympathy for the pilot because they may too have had an awful experience, and did not desire the outcome. Sometimes, this resulting sympathy can make such a conversation a disarming experience, commanding respect for the pilot because of their forthcomingness and responsibility.

Witnessing one of the presentations of a pilot started with a feeling of uncertainty for the public prosecutor about which message the presentation would convey and how the audience would react. However, that one witnessed presentation turned out to be a very satisfying experience for the prosecutor and policy employee because of the dialogue it created about aviation safety, reinforcing the belief that this can indeed be a better alternative to fining or prosecuting. Additionally, that presentation was gratifying because it yielded a better understanding of the role and goal of the aviation police and public prosecution service among the audience, which works towards a secondary goal of the public prosecutor and policy employee, to create a better understanding of how the public prosecution service operates in the general aviation domain.

Altogether, the experience of offering pilots an alternative judicial response gives a sense of achievement, “a really good feeling”, because the pilots acknowledge their responsibility, invest time and effort to give a presentation, and in doing so show that they learned. Moreover, when this is complemented with pilots engaging with their victims and offering support, the policy employee believes

such judicial responses basically fulfil all punishment purposes of the criminal law system. Finally, when pilots' perception of how and why the aviation police and public prosecution service operate changes positively as a result of a hearing and or a presentation, this too is a gratifying experience for the public prosecutor and policy employee as they generally experience a negative public perception about their role and goal in the aviation community.

However, adding to the experience of being a veteran captain on a ship entering uncharted waters, the public prosecutor and policy employee also, in rare cases, experience disappointment and, in one case, "a sort of utmost astonishment" when pilots deny responsibility in cases the public prosecutor and policy employee believe are clear-cut. Such a stance makes the public prosecutor question how seriously such pilots take aviation safety. In those cases, the public prosecutor and policy employee still have a viable instrument, namely fining or prosecuting, and although this "makes the norm known", it is a much less satisfying experience because they do not reach a mutual understanding with the pilot about what happened and which lessons could be learned from that, rather "it makes you question, how seriously do they take it?". Lastly, such cases may regrettably strengthen negative perceptions about the role and goal of the aviation police and public prosecution service.

Discussion

This study describes what adjudged pilots, the public prosecutor, and the prosecutor's policy employee experienced when the public prosecutor decided not to serve fines or prosecute pilots who violated the law but instead offered an alternative: giving a presentation.

Because of the limited number of informants in this study and the lesser suitability of generalising the findings of phenomenological studies, the arguments made in this discussion have been written in a suppositional manner to communicate that the arguments made are not firm conclusions, but implications derived from the findings on some existing discourses of Just Culture, the application of restorative justice mechanisms in a Just Culture, and the balancing of accountability and safety improvement in general, ending with a number of emerging considerations (Lester, 1999).

The Role and Effects of Expressing Responsibility, Remorse and Forgiveness

Prospective Accountability Towards Victims

The textural descriptions of the adjudged pilots reveal that all three believed they were responsible for their actions. Moreover, in the two cases with victims (cases I and III), both pilots felt strongly responsible for the mental harm they may have caused their victims, let alone the potential bodily harm, even though they believed factors external to them also had agency in those occurrences. In both cases, albeit on the initiative of the public prosecutor in case III, the pilots contacted their victims more than once to: (a) offer their remorse and express their feeling of responsibility for what had happened, (b) see how they were doing, and (c) inquire whether they could be of any help. Pilot #3 had an actual meeting where they offered support (a flight with a local instructor paid for by pilot #3) to help the victim with their self-confidence when flying near the airport of the occurrence, which the victim pilot accepted. The public prosecutor appreciated these actions in their decision on the judicial response.

These findings show how an inclination of pilots and prosecutors to see to the needs of victims can be not only a contributing factor to the process of healing and, as a part of that, possible forgiveness by the victim, but also an important factor for pilots themselves to repent for the harm they have caused to victims (Berlinger, 2004, pp. 128-130; Braithwaite, 1989, pp. 81-83) by offering their remorse, acknowledging their responsibility and offering support.

This most strikingly shows in case III, where, after pilot #3 expressed remorse and expressed that they had learned to the victim and offered support by offering the victim an instructional flight with a local flight instructor; the victim's perspective changed from "that pilot deserves a fine and a strong conversation" to "for me, this issue has been resolved among pilots". Regardless, in both cases with victims, the public prosecutor weighed how the adjudged pilot cared for the victim(s) in their decision to offer the adjudged pilot to give a presentation as an appropriate judicial response to their case.

Furthermore, the pilot of case III narrated how difficult it had been to express apologies and remorse for their actions to the victim because they knew they had acted wrongly and had gravely endangered the victim. However, as difficult as it had been, the reward of doing so was similarly big, not in the way the prosecutor subsequently decided not to serve a fine or prosecute—that was more a secondary benefit, but the fact that, after they knew the mental harm they had caused, they now also knew that that harm had been considerably remediated; in part through the pilots' joint reflections about what had happened, and in part by offering the victim help in getting to know the airport and its peculiarities better. These findings agree with Dekker's (2017, p. 22) argument that a restorative process does not let people off the hook easily. On the contrary, being confronted with the consequences of one's actions in a restorative process is, as exemplified in the individual textual description of pilot #3, quite difficult, arguably (much) more difficult than if pilot #3 had only received a fine and would never have met the victim.

The Undervalued Role of Forgiveness in Just Culture

While the cases of some form of negligence in this study differ from most of the crimes discussed by Braithwaite in his general theory on crime, shame and reintegration (1989) in the sense that there is no intent to cause harm or better oneself at the cost of someone else; nevertheless, the function of expressing responsibility and showing remorse to repent for the harm caused towards the victims observed in this study resonates with Braithwaite's (1989, p. 100) theory of how shaming—any social process to express disapproval, in this study, this is done primarily by the public prosecutor—is a powerful way to invoke remorse (although arguably, all three pilot informants already felt some level of remorse). When this remorse is diligently channelled not to stigmatise the offender but to heal the hurt of the victim(s) and potentially of the offender (a second victim), shaming is indeed shown to be a valuable social function to

hold people accountable for their actions and as a result of that, possibly invoke forgiveness from a victim.

Somewhat similar to pilot #3's case, Bosk (2003, pp. 177-179) describes how U.S. physicians invoke shame upon one another (as opposed to the prosecutor invoking shame) during mortality and morbidity conferences by following rituals where physicians 'confess' their mistakes and criticise their own actions in attendance of their peers and superordinates, after which those people forgive them, and the physician returns to the group with a sincere pledge to pay more attention and try harder in the future to prevent a recurrence⁸. I.e., they are shamed (in Braithwaite's meaning of the word) by the interaction of their self-critique and the attendance of their peers and superordinates; in and while doing so, they show repentance; and their peers and superordinates forgive them. Berlinger (2004, pp. 124-127), based on her interviews with physicians and nurses, critiques this form of forgiveness as the role of forgiving is taken away from the injured party and given to a third party. Furthermore, building on theological premises, Berlinger (2004, p. 126) recites a critique of self-forgiveness as that takes the agent of salvation even further away from the victim and places it at oneself instead of a third party or the victim.

In all three cases, the prosecutor can be argued to be the party invoking shame by disapproving the pilots' actions in deeming them culpable law violations, but they are not explicitly forgiving the pilots on behalf of the victims (in the cases of pilot #1 and pilot #3). Through the pilot's sincere acknowledgement of the wrong of their actions and their efforts to help prevent recurrence by giving a presentation, they arguably absolve themselves of their debt to society through the criminal law system. However, they are not, and arguably cannot be forgiven by society for the hurt they have done to the victim because, as Berlinger (2004, p. 127) argues, forgiveness, to the party receiving it, can only truly be given by the harmed party, and thus only reaches its true potential for the party seeking forgiveness when given by the harmed party.

Pilot #3's case arguably demonstrates that forgiveness can be a powerful medium in the context of Just Culture to heal both the hurt of victims and second victims when invoked through some form(s) of action on the part of the causer of the hurt (in pilot #3's case, expressing remorse, acknowledging

⁸ There are no notions of systems-thinking nor a discussion of the amount of agency individual physicians have or do not have in medical errors in Bosk's description of these conferences.

responsibility, showing learning and offering the victim a local instruction flight). This one case underscores Dekker's (2017, pp. 19-21) argument that forgiveness, although not a necessary part of restorative justice (Braithwaite, 2016, p. 79), can be powerful in restoring relationships after an occurrence and thus, the argument can be made that the safety science field needs a better understanding of how forgiveness can be incorporated into Just Culture. Albeit with the key remark that forgiveness can arguably never be an obligation of the victim, as making it compulsory for victims to forgive would take the meaning and thereby its function and sincerity away from it (Dekker, 2017, p. 19).

Concerning the role of forgiveness, Braithwaite (2016, p. 89) critiques the western criminal justice system as having commodified Judeo-Christian law principles such as forgiveness, taking the 'right' to forgive away from victims and giving it (exclusively) to those in power positions, e.g. the judiciary. Whereas in other religions such as Islam, forgiveness is an option presented as an alternative to retribution, to be chosen by the victim and not by a third party (or god) (Qur'an, 5:44-45). Thus, Braithwaite (2016) argues "that it would be a wonderful concession to Islam to introduce ... a new right for victims to choose forgiveness that has a capacity to trump state punishment" (p. 89). Arguably, the case of pilot #3 demonstrates that this would be a wonderful enhancement of Just Culture too, facilitating restorative justice practices as at least an option equal to retribution, when the law was violated in a system incorporating Just Culture⁹.

Furthermore, if a formalised role for forgiveness in Just Culture were implemented, it could incentivise people who have caused hurt to engage in meaningful dialogue with the ones who suffered hurt and offer help when possible, i.e., engaging in forward-looking accountability (Sharpe, 2003).

The Role of Communitarianism

All three cases show how the aviation communities where the adjudged pilots are a part of, play a role similar to Braithwaite's (1989, p. 87) description of communitarianism in reintegrating offenders into their communities. At various points during this process, they received support from people within their communities, e.g. pilot #1 experienced sympathy in the form of recognition of a difficult situation from

⁹ The researcher would be remiss to not acknowledge how the public prosecutor and policy employee in this study have taken the forgiveness by the victim pilot in the case of pilot #3 into account in deciding on the judicial response, which the researcher believes is laudable, it is however not formalised in the sense that Braithwaite proposes.

their peers during their presentation at a national hot-air balloon conference; pilot #2 expressed how they enjoyed giving a presentation to share lessons learned and how that is “how we do it in the general aviation community”; and pilot #3 was accompanied by fellow club members to the questioning by the aviation police and the hearing with the public prosecutor and experienced that support as “a very positive experience”.

Firstly, this shows how communities can already have important roles in supporting a pilot in taking responsibility and repenting for the hurt they may have caused, as discussed in the previous section (i.e. expressing responsibility and remorse, offering support).

Secondly, these findings may indicate that these aviation communities, because of the support they show to their adjudged pilots who have violated the law, have the potential to host another form of communitarianism, described by Bosk (2003, p. 179), where groups of practitioners (in Bosk’s example: hospital staff) hold regularly recurring meetings where group members “confess” errors, regardless of their severity, to their peers, humbling themselves and in turn, are forgiven. Bosk argues that such processes realise several gains: (a) forgiveness after confessing “binds the confessor to the group and exacts a pledge ... to live up to the standard in the future” (p. 179), (b) they reinforce individuals’ knowledge of the group’s standards and expectations of confessing errors, (c) the confessions simultaneously serve to ensure self-punishment and prevent immobilisation-by-guilt because of the group’s forgiveness. However, as discussed in the previous section, forgiveness from the group cannot substitute forgiveness from a victim. Hence, forgiveness in the context of communitarianism must not be utilised as a substitute for forgiveness by a victim but rather as forgiveness from the group to the individual for not having lived up to the standard, after which the individual—the confessor, in Bosk’s terms—continues being a member of the group, thereby reinforcing the process of humbly sharing errors and learning from them in the group.

Thirdly, it raises the question of whether a pilot who is not a part of a similar aviation community, e.g. a pilot privately owning a plane and renting a hangar spot outside of an association or aeroclub, runs more risk of experiencing being stigmatised when involved in an occurrence that is criminally investigated because of the lack of a community to support them at the beginning of the criminal investigation and throughout the judicial process (Braithwaite, 1989, p. 102).

The Analytic Lens of Shame, Reintegration and Stigmatisation

After thoroughly experiencing entering a different realm by being a formal suspect in a criminal investigation and having their professionalism questioned, the adjudged pilots experienced the hearings with the public prosecutor as pleasant conversations (despite being adjudged at that moment) and, looking back on the whole judicial process, believe that they have learned and that this judicial response was a better, more mature solution than a fine. I.e., after being shamed—any social process to express disapproval—they felt that they continued to be a part of their communities as opposed to feeling stigmatised (Braithwaite, 1989, pp. 101-104).

However, the initial part of their experience of leaving the realm of pilots whose behaviour had not been questioned by the public prosecution service and entering the realm of being a suspect was, nonetheless, a strong experience for all three informants. This part of their experience can be inferred as that they felt themselves shamed, as opposed to feeling their actions being shamed, thus running the risk of them feeling stigmatised by the letter informing them that they are a suspect in a criminal investigation. This raises the question of whether designating a pilot a suspect of some form of negligence in a criminal investigation— although this is part of a very much set-in-stone judicial procedure going back to at least the Napoleonic Code—is potentially harmful to the pilot's inclination to have an open and forthcoming conversation with the public prosecutor about their occurrence, even before that conversation has started.

Other pilots suspected of violating the law, to whom the public prosecutor had also considered offering an alternative judicial response (referred to in the prosecutor and policy employee their textural description) but who did not acknowledge their responsibility may, in part, have done so because they felt themselves stigmatised. This study cannot investigate that potential claim; thus, this may be one area warranting attention in future research.

The Importance of Respect, Understanding and Compassion From the Prosecutor

All three pilot informants narrated how they experienced the hearings with the public prosecutor and policy employee as mature, pleasant conversations where they experienced empathy and sometimes also sympathy for what situations they had ended up in, in part through their own actions, but also in part to factors outside of their control. The public prosecutor and policy employee similarly narrated this themselves as they reflected how, when hearing the entire, outwardly unadulterated story of what had

happened from the adjudged pilot's perspective, in some cases, solicited sympathy for the situations those pilots had found themselves in and respect for the self-reflection they showed.

These findings underscore Denham's (2007, p. 116) argument for treating those who caused some form of harm (the second victims) with respect, understanding and compassion. Whereas Denham's argument concerns nurses and physicians in the immediate and near aftermath of an event, the findings of this study show how such treatment is just as vital in the more distant aftermath¹⁰. Arguably, the finding that the adjudged pilots in this study felt treated respectfully and experienced empathy from the prosecutor and policy employee contributed to how those hearings progressed to both parties' satisfaction and the pilots' willingness to share their lessons learned with their peers, which implies exposing themselves.

Although this cannot be falsified in this study, Heraghty et al. (2021, p. 9) made similar observations concerning the willingness of workers to participate actively in the post-accident process when their supervisors treated them compassionately. Conversely, another study by Heraghty et al. (2020) found that workers who felt their managers did not believe them felt treated "appallingly" (p. 8). Moreover, workers who experienced this believed their managers were more motivated by commercial and managerial incentives (e.g. LTI¹¹ statistics) than safety. This was perceived as negatively impacting the trust of the people adjudged (the workers) in the people adjudging them (their managers), while van Dam et al. (2019, p. 48) argue that mutual trust between the parties administering justice, and the workforce and advocates for safety is crucial in making a Just Culture succeed.

This stark contrast in how professionals, be they general aviation pilots or workers on a construction site (Heraghty et al., 2020, 2021), feel treated by those judging their actions in the aftermath of an occurrence (respectively, the judiciary or managers) emphasises the importance of treating anyone in the aftermath of an occurrence with respect, compassion and understanding to enable learning from those occurrences through the honest and unadulterated stories about what happened.

¹⁰ The hearings between the public prosecutor, policy employee and the three pilots occurred between six months to over a year after the occurrence.

¹¹ Lost Time Injury

The Experience of an Alternative Judicial Response Versus a Fine

All three pilot informants narrated how they felt that their cases being resolved with a focus on learning from the occurrence, for themselves and other pilots, by sharing their lessons learned, was a mature, learning-centred judicial response to their case. Furthermore, it appears to have given them a lasting memory of both the occurrence and the judicial process culminating in the presentation, as opposed to getting a fine which for some pilots is “quickly forgotten”, while for others, it could mean jeopardising their daily work because of the potentially resulting difficulties getting government attestations (see Footnote 4).

For pilot #1, the presentation also showed them that they were not the only pilot that had experienced such an occurrence, as they received sympathy from their audience and learned how others had ended up in similar occurrences but had not come under the scrutiny of the public prosecution service.

For the public prosecutor and policy employee, witnessing one of the presentations strengthened the belief that the path they had chosen to resolve that particular case was the right path as they saw how a discussion about safety unfolded, which they believed to be more valuable to society than a pilot paying a fine. Hence, this was a rewarding experience for them. Furthermore, the fact that organising, preparing and giving such a presentation required considerable effort from a pilot is experienced as a testament to those pilots’ willingness to show responsibility for what had occurred and improve safety by sharing their lessons learned, and thereby a testament to this kind of judicial response to resolve a case of negligence in the aviation domain. The pilot informants share this view as all three narrated how sharing lessons learned is more valuable because it creates learning, as opposed to a fine “that is easily forgotten”.

The Prosecutor Judging Normative Performance Rather Than Actions and Consequences

A Short Introduction to Bosk

The experiences of the public prosecutor and policy employee concerning how they determine whether to offer a pilot to give a presentation, or to fine or prosecute them shows similarities with Bosk’s (2003) study of how attending physicians treat their residents’ errors differently based on how they erred. Bosk (2003) narrates how attending physicians argue that technical and judgemental errors, respectively, lacking skill in executing a plan or lacking wisdom in devising an appropriate plan, are tolerable because

the attending physicians see such errors as necessary to learn the craft of being a physician, so long as they are made within certain boundaries, e.g. not repeating the same errors again and again (Bosk, 2003, Chapter Two).

Normative errors, on the other hand, are errors that make attending physicians question whether a resident physician befits the role of being a physician because they “break universal rules about how a doctor acts” (Bosk, 2005, p. 6). I.e., hiding or covering up technical or judgmental errors, or not timely reporting such errors so they can be remedied. Ultimately, normative performance, i.e. not making normative errors, is used to judge whether a resident acts honestly and responsibly, and if a resident does not do so, they may be deemed not fit for the job as a result of a character deficit (Bosk, 2003, p. 60).

Similarities Between Attending Physicians and the Public Prosecutor

When a pilot violates the law in a way that could be classified, in Bosk’s taxonomy, as a technical error (case II: forgetting to check if an aeroplane is administratively airworthy) or a judgmental error (case I: failing to anticipate bad weather, and case III: adjusting the traffic pattern without taking into account another aeroplane that has the right of way), that negatively impacted safety, it is considered a potentially culpable and prosecutable law violation by the public prosecutor and policy employee, from which that pilot, depending on the context, may need to learn and which should not be repeated.

However, they are not unforgivable (in Bosk’s terms) for the public prosecutor, nor necessarily warranting a fine or subpoena, provided the pilots acknowledge their responsibility, show self-reflection, ensure they and others learn from them, and see to their victims’ needs (when applicable).

On the contrary, in another case the public prosecutor referred to in their interview (of which the pilot was unwilling to participate in this study), a pilot overflew a gliding airfield while a glider was winched up¹², nearly creating a mid-air collision. That pilot denied responsibility for their part in that occurrence and contrarily claimed they were the saviour of the situation, leading to a “form of utmost astonishment” on the side of the public prosecutor and policy employee. Both the public prosecutor and policy employee believed that this individual did not take their responsibility as a pilot seriously and questioned whether such pilots belonged to be in the air, e.g., the public prosecutor stated: “When somebody violates certain rules in aviation, it makes you question, how seriously do they take it?”. Quite

¹² Taking off along a 45-degree climb angle by being attached to a long cable that is winched up.

similar to how an attending physician may judge a resident not to be suitable for the job because they make normative errors (Bosk, 2003, p. 60).

Adding to the similarity, both the public prosecutor and policy employee in this study and the attending physicians studied by Bosk prize honesty and responsibility. Both acknowledge that it is not easy to admit errors and reflect on one's actions in an environment where a mistake could result in injury or loss of life; hence, both respect pilots and resident physicians who do so.

Furthermore, from the description of Bosk and the lived experience of the public prosecutor and policy employee, the observation can be distilled that the attending physicians and public prosecutor and policy employee believe that people who do behave in this manner deserve to be in their positions, e.g. "it's the people who have these qualities who make outstanding surgeons" (Bosk, 2003, p. 60).

Prosecutorial Discretion Versus Obligatory Prosecution

Synthesising the findings from this study and Bosk's findings, a structure forms of one party who is charged with scrutinising the behaviour of another, in some way subordinate party, does so not solely by weighing their actions, the consequences of their actions or their volition but also, or even more so, by weighing the way they take responsibility for their actions (see Yamuza, 2019, p. 53, for an explanation of actions, consequences and volition in negligence).

Both Bosk's attending physicians and the Dutch public prosecutor have the latitude to do so, but this is not a given in any criminal law system. For instance, in some European jurisdictions, prosecutors do not have prosecutorial discretion to decide whether to prosecute a suspect deemed culpable (De Rechtspraak, n.d.-a) but are obliged to prosecute whenever they can (see Article 7 of Swiss Criminal Procedure Code, 2007; see also European e-Justice Portal, n.d., for German prosecutors' obligation to prosecute).

When a prosecutor is obliged to prosecute if they can, it limits or inhibits them from judging normative performance (the way people take responsibility for their actions) by withholding the option to refrain from fining or prosecuting, and instead forcing them to solely judge actions and consequences, which can be explained as being an instigator of the criminalisation of error (see Institute for Safe Medication Practices, 2022, or Rolfsen & Tvedt, 2023, for recent examples), which is an inhibitor of

furthering the Just Culture concept in the European aviation domain, as argued by Pellegrino (2019, p. 125).

To summarise, an obligation to prosecute can lead to the criminalisation of error (Dekker, 2017, Chapter 4), which in turn can lead to pilots experiencing stigmatising shame (Braithwaite, 1989), damaging those pilots and possibly the aviation community's trust in the Just Culture concept, e.g., see Pellegrino (2019, p. 108), for how airline pilots and air traffic controllers trust in Just Culture was damaged after two Italian controllers were convicted and jailed following a crash under their watch.

On the contrary, the findings of this study exemplify how the use of prosecutorial discretion to judge normative performance in addition to actions and consequences can lead to both pilots, victims and prosecutors experiencing how a pilot's error that is culpable and prosecutable does not need to be prosecuted but can instead be used to share safety lessons learned amongst pilots and meaningfully contribute to the healing of victims (see case III of this study), which arguably led to the most desirable outcome for all parties.

Holding Pilots Accountable Prospectively

From the findings, it can be inferred that the public prosecutor and policy employee want pilots to conduct themselves in a manner they believe to be appropriate for a general aviation pilot, which, in the aftermath of an occurrence, amounts to ensuring that learning takes place, both for the pilots themselves and the aviation community, and they want, to the extent possible, victims' needs to be seen to. In deciding on the appropriate judicial response in the three cases in this study where the public prosecutor and policy employee indeed perceived this behaviour (partly after some encouragement from them), they either chose to judge that behaviour instead of judging the combination of actions and consequences of the pilots, or they judged both, but the behaviour of the pilots outweighed the combination of actions and consequences of the pilots. In other words, in the three cases in this study where the desired normative performance (taking responsibility for their actions) was observed, the public prosecutor chose to trump retributive justice (e.g. giving a fine) in favour of restorative justice (e.g. a presentation by the pilots). They did so because they, as stated in their individual textual descriptions, believed this achieved more for safety, a belief that the pilot informants too unanimously narrated. Thereby arguably prioritising safety over justice or judging that improving safety and administering justice, in some cases, can be combined;

i.e. justice was also administered by having those pilots give presentations and see to the needs of victims. What do these observations tell us about the actual application of accountability in a Just Culture, and which questions arise for the future of Just Culture in the European aviation domain?

The Accountability Required by the Regulation

The reporting, analysis and follow-up of occurrences in civil aviation (Regulation 376/2014) requires that any pilot¹³ reports (potentially) dangerous occurrences. This is their responsibility, and by adhering to this, they are held accountable by giving their account, for which they, in turn, are given limited protection against disciplinary, administrative and criminal sanctions (Daniels, 2017, pp. 117-118; Woodlock & Hydén, 2020, pp. 57-58). However, the Regulation also has provisions for the judiciary to hold people accountable in a criminal court. Hence, there are at least two sides to the coin of accountability imposed by the Regulation: accountability through giving an account, i.e. reporting (potentially) dangerous occurrences, and accountability through being prosecuted in a criminal court. In other words, respectively, prospective and retrospective accountability (Sharpe, 2003, p. S10).

Going Beyond the Accountability Required by the Regulation

The findings and some parts of the discussion show how the public prosecutor and policy employee in the three cases in this study arguably asked and incentivised the pilot informants to go beyond the prospective accountability required of them by Regulation 376/2014 by letting the pilots give a presentation about their occurrence, as opposed to solely reporting it¹⁴, and by seeing to the needs of victims. A form of accountability that appears to be novel¹⁵ in the European criminal justice system in the aviation domain, but the desire for which has precedents in the New Zealand healthcare domain (see Bismark et al., 2006). Both the individual textural descriptions of the public prosecutor and policy employee and the pilots can be inferred as narrating this way of satisfying pilots' accountability, which was shown to be contingent on the respectful and compassionate treatment of the pilots by the public

¹³ Not only pilots. Most sharp-end employees who work in European aviation fall under the scope of Regulation 376/2014, e.g. from engineers working in a powerplant manufacturing plant to baggage handlers working on the ramp to air traffic controllers in aerodrome control towers and radar centres.

¹⁴ Reporting an occurrence in accordance with Regulation 376/2014 arguably too is a (very limited) form of prospective accountability in the spirit of Sharpe (2003, p. S10) because by reporting the occurrence they contribute to potential learning from their occurrence.

¹⁵ The researcher could not find literature describing similar resolutions to law violations in the European aviation domain.

prosecutor and policy employee, and the pilots acknowledging their agency in the occurrences and thereby their responsibility to help prevent recurrence and see to the needs of victims.

Questioning how Just Culture ‘Draws the Line’ and Why

Considering the above, an argument can be made that the accountability Regulation 376/2014 currently imposes is only very limitedly prospective (i.e. the reporting of occurrences¹⁴), while the prospective accountability asked for and incentivised by the public prosecutor and policy employee observed in this study yielded more for both the public prosecution service, the pilot informants, the general aviation community, and the victim of case III.

However, Just Culture, as made into legislation by the E.U. (Regulation 376/2014), ‘draws a line’ between acceptable and unacceptable behaviour based on a combination of actions and consequences to satisfy society’s task of holding people accountable for their actions. It does so because, as Reason argues, “it would be quite unacceptable to punish all errors and unsafe acts ... Second, it would be equally unacceptable to give a blanket immunity from sanctions to all actions that could, or did, contribute to organizational accidents” (1997, p. 205), but how does the judiciary distinguish between acceptable and unacceptable behaviour—essentially, “the Just Culture deadlock” as described by Schubert (2009, p. 6)?

The findings of this study make an argument for questioning whether society’s task of holding people accountable for their actions in a Just Culture is better served by retributively sanctioning ‘errors and unsafe acts’ or whether that would be better served by holding such people accountable in a (solely) prospective way whenever possible (i.e. when pilots acknowledge responsibility and are open to taking prospective accountability), as argued by Dekker and Breakey (2016, pp. 191-192)?

The previous section exploring how the pilot informants in this study were held to account can be explained as still drawing a line between acceptable and unacceptable behaviour in deciding whether to apply retributive sanctions (i.e. a fine or prosecution). Only, the behaviour under scrutiny concerns taking (or being willing to take) or not taking prospective accountability for the consequences of one’s actions instead of judging whether the combination of actions and consequences amounts to ‘gross negligence’. The findings and discussion show that for this to work, it is crucial that people involved in occurrences are treated respectfully and compassionately, in a non-judgmental manner, from the onset, by those

scrutinising their occurrence so that they do not feel stigmatised and are incentivised to take prospective accountability.

There are caveats to taking this approach. Firstly, when someone intentionally commits ‘destructive acts’, there is no need for Just Culture, as such behaviour falls outside the scope of honest mistakes or negligence and safety improvement. Secondly, the graver the consequences of an occurrence, e.g. the case of the grounding of the Costa Concordia, the bigger society’s demand for holding someone accountable in a criminal court may be (González-Almeida & Padrón, 2017). Thirdly, the same concerns regarding who judges whether someone’s normative performance is acceptable and how this judgment process is organised, i.e. substantive and procedural justice (Dekker & Breakey, 2016, pp. 189-191), are valid here too.

Notwithstanding, the benefits of reconsidering how people are held accountable in a Just Culture and thus, how a prosecutor decides whether to administer retributive sanctions or whether a restorative-oriented judicial response is appropriate may be considerable. The aviation community arguably consists of a large share of people who exercise their sport or profession passionately and are committed to continuous learning and improvement, which has led to a high safety level (Sirena, 2014, pp. 9-10). When such people are involved in an occurrence attributed to negligence, provided they are treated compassionately and with respect, they may be likely to acknowledge their responsibility and be willing to take significantly greater prospective accountability than currently required of them by Regulation 376/2014, as illustrated by the findings of this study and argued by Dekker (2017)—people who are now, in jurisdictions outside of the Netherlands, likely to be subjected to retributive sanctions regardless. Doing so may partly alleviate the Just Culture deadlock described by Schubert (2009, p. 6) because it holds people accountable in a way the findings indicate may be acceptable to all parties involved, notably the judiciary, victims and sharp-end operators.

Emerging Considerations

Pilots not Taking Responsibility During the Hearing With the Public Prosecutor

As the individual textual descriptions of the public prosecutor and policy employee’s experience also show, they also sporadically encounter pilots who, in the prosecutor’s and policy employee’s view, do

not show responsibility for their actions, while the public prosecutor may otherwise have intended to offer those pilots an alternative judicial response too.

This raises the question of why these pilots take such a stance. Both the public prosecutor and policy employee narrated that they only follow up on cases that, in their eyes, are clear-cut as to what happened, how it happened, and who should be deemed culpable. This study cannot falsify or judge that statement. However, of the two such cases known to the researcher, one pilot, after the hearing, accepted the transaction (a fine) without challenging it in court (the case narrated by the public prosecutor and policy employee in the findings), while the other pilot did challenge the transaction (a fine) in court, where the judge doubled the fine (the second half being conditional) because of the pilot's "most disturbing attitude" (Openbaar Ministerie, 2021).

Therefore, assuming for the sake of argument, that these cases wherein the pilots did not acknowledge responsibility were indeed clear-cut, the question remains—why did they not acknowledge responsibility and enter into meaningful dialogue with the public prosecutor to discuss an appropriate solution? Possibly, a part of the answer can be sought in the experiences narrated by the pilot informants of this study, who all three (pilot #1 to a lesser degree than pilots #2 and #3) initially felt shamed as persons (i.e. leaving the realm of pilots of unquestionable behaviour), possibly stigmatised to a certain level, because they were designated a 'suspect' in a criminal investigation. Even more so, pilot #3 narrated how they considered whether to put up a defence, i.e. make an argument against their (sole) responsibility and that only they were held accountable by the public prosecutor.

Thereby, the following hypothesis is formulated: if the two fined pilots had the same experience of feeling shamed, possibly stigmatised as malevolent individuals, rather than feeling that they were general aviation pilots caught up in dangerous situations wherein the law was violated, they may too have considered putting up a defence to argue against their (sole) responsibility and eventually decided to take that stance indeed and deny responsibility. That could explain why, in the case narrated by the public prosecutor and policy employee, despite the public prosecutor intending to offer that pilot to give a presentation, that hearing never reached the point of making that offer because both parties could not agree on what had happened and why, which is one of the conditions the prosecutor desires to be able to offer a presentation as the judicial response. In other words, the hypothesis is that some pilots may feel

their errors are being criminalised as a result of the criminal investigation, which makes them take a defensive stance, arguing against their (sole) responsibility, while the public prosecutor, after a review of the completed investigation, may desire not to prosecute them but instead had hoped to be able to offer an alternative judicial response that focuses on learning (i.e. a presentation) instead of traditional punishment (i.e. a fine or prosecution).

This study could not test this hypothesis. However, it may warrant attention in future research. Even if demonstrated to be not true, understanding how people react to being criminally investigated for some form of negligence in a justice system incorporating a Just Culture can improve our understanding of inhibitors of learning that may too inhibit or limit healing of possible victims and second victims. In contrast, the case of pilot #3 demonstrates how learning and healing can be achieved when employing alternative judicial responses (i.e. learning and healing versus a quickly forgotten fine).

Second Victims

The findings of this study attempt to narrate a rich and extensive description of the lived experiences of the pilot informants. One dimension of this relates to second victimhood.

Second victimhood, i.e. the suspect pilot who caused the harm is the second victim of the actions that caused that harm (Wu, 2000, p. 726), can be argued to have a number of rights, as conceptualised by Denham (2007, pp. 115-116). The pilot informants in this study arguably experienced getting four of those five rights up to some level: their treatment can be judged as just (as they themselves narrated); they were treated with respect for most of the judicial process (some exceptions described in the findings); they experienced understanding and compassion from the public prosecutor, policy employee and some aviation police officers; and they were given the opportunity to contribute, primarily through their presentations. That they arguably already received this extent of second victim's rights is laudable, and the researcher believes that the Dutch public prosecutor and policy employee, and to some degree, the aviation police, deserve praise for their conduct.

However, there is one remaining second victim right (of Denham's five), which, as far as this study could find, was not yet accounted for in the studied cases and which, in some cases, may be important too: supportive care in the form of psychological and support services. None of the pilots interviewed in this study received or was offered such care, nor does there exist a peer support

programme (Gibbs, 2016) for general aviation pilots in the Netherlands, while, for example, pilot #1 quit flying hot-air balloons for reasons originating partly from their occurrence.

Although this study did not further research why pilot #1 quit flying, nor the amount or type of psychological (peer) support that may be desirable for general aviation pilots who experienced an occurrence, the case of pilot #1 does indicate that the availability of some form of psychological or peer support may be desirable. The earlier subchapter on empathy and sympathy from the public prosecutor makes the same argument based on the findings of Heraghty et al. (2020, 2021).

Issues and Implications

In keeping with phenomenology, this chapter replaces the traditional ‘Conclusions’ chapter as ‘conclusions’ suggests a too definitive answer to the research question (Lester, 1999). Rather than providing a firm conclusion, this chapter draws the reader’s attention to a number of issues and implications from the discussion section, which the researcher believes are most relevant to the Just Culture discourse and its further development.

This study undertook to gain deep insights into how a small number of people experienced the phenomenon of general aviation pilots who violated the law being offered and accepting an offer from the public prosecutor to give a presentation about their occurrence instead of being fined or prosecuted. The direct answer to the research question is the findings, particularly the last subchapter, describing the essences of the lived experiences of the pilots, public prosecutor, and policy employee.

The issues and implications inferred from the discussion chapter that are most significant to furthering our understanding and development of Just Culture are described below.

Issues and Implications for Just Culture

The findings demonstrate how holding pilots accountable in a forward-looking way (Sharpe, 2003, p. S10) results in lessons learned being shared by those pilots with their peers and, in one case, a pilot entering into meaningful dialogue with a victim resulting in healing taking place for both the victim and the pilot (a second victim; Wu, 2000) whereby the victim’s opinion changed from “that pilot deserves a fine and a good conversation“ to “this has been resolved among pilots”. In addition, the findings reveal how both the public prosecutor and policy employee, the pilots, and in one case, the victim, all believe that the pilots have taken responsibility and thus were held accountable in a considerably more meaningful way than by paying a fine, which “is easily forgotten”. I.e., the findings show that it is the experience of the informants that prospective or forward-looking accountability by sharing safety lessons and helping victims heal their hurt (both restorative justice elements; Braithwaite et al., 2008; Zehr, 2015) was (considerably) more valuable to them than retrospective accountability through a fine would have been.

Several factors are argued to have been crucial in facilitating this process.

Firstly, the findings of this study demonstrate, in line with the findings of a study from Heraghty et al. (2021), the importance of treating people who unintentionally found themselves playing a causal role

in an occurrence with respect, understanding and compassion (see the five rights of the second victim; Denham, 2007) because it creates an atmosphere in which they feel comfortable and safe to share their complete, unadulterated stories of what happened; thereby enabling learning and entering into meaningful dialogue with people who were somehow harmed by the occurrence, whereas treating such people in the opposite way (i.e. disrespectful, without compassion, using hindsight bias) leads to ill will on their part in contributing to improving safety and healing hurt (Heraghty et al., 2020).

However, the findings also indicated one potential issue regarding how a pilot who unintentionally violated the law is treated. The experience of suddenly changing from being just any pilot to being a suspect in a criminal investigation because one has erred was an experience the pilot informants lived through very consciously, arguably feeling stigmatised to a certain degree. Two informants had considerably negative experiences with the conduct of some aviation police officers because they felt their actions were being judged without having had the opportunity to explain their perspective on the occurrence, i.e. they felt 'hindsight biased'. The findings indicate that such behaviour threatens pilots' belief in Just Culture; although the cases of these informants were eventually resolved to their and the public prosecution service's satisfaction, other cases of pilots who erred did not result in meaningful dialogue and mutual agreement between the public prosecutor and pilots. Instead, they ended with a financial transaction or in court (e.g. Openbaar Ministerie, 2021). If the experiences of these pilots outweigh the experiences of pilots who believed they were treated justly by the Public Prosecution Service in the public debate in the (general) aviation community, it could strengthen rather than weaken the narrative of the public prosecution service being out to prosecute at the expense of safety improvement (i.e. the criminalisation of error), thereby risking impeding safety improvement because pilots would be less willing to share their stories.

Secondly, this study demonstrates that forgiveness can play a valuable role in Just Culture, as argued by Dekker (2017, pp. 19-21) and supported by Berlinger's (2004, pp. 128-131) theory of forgiveness after medical harm and Braithwaite's (2016) argument for redeeming the role of forgiveness in restorative justice. The findings indicate that for forgiveness to be of value, it must be sincerely given by the hurt party, which requires a sincere effort from those who caused the hurt to see to the needs of the hurt party. This assertion argues for a more important role for forgiveness in Just Culture as the findings

demonstrate that victims value prospective accountability through sincere expressions of remorse and responsibility and extending help. Although researched in the context of Just Culture in the criminal justice system, this argument can be just as valuable for Just Culture inside organisations (i.e. organisational justice). As such, Braithwaite's (2016, p. 89) argument for letting forgiveness by hurt parties trump retributive punishment (from the judiciary or an entity reviewing occurrences inside an organisation) arguably fits well in a Just Culture.

Thirdly, the findings showed a similarity between how the public prosecutor judged the actions and behaviour of the pilots and Bosk's (2003) findings on how attending physicians treat errors from their resident physicians. The findings show that both attending physicians and the public prosecutor and policy employee condone technical or judgmental errors in the sense that such errors do not require punishment nor mean that those people do not belong in a hospital or a cockpit as long as they take their responsibility for fixing those errors. In the case of the pilots, by ensuring that they and others learn from them and entering into meaningful dialogue with victims to explain what happened and why, express sincere remorse and possibly extend help. I.e., the prosecutor and policy employee weigh the pilots' normative performance (Bosk, 2003, p. 60) more than their technical or judgmental errors in deciding on the judicial response. Notably, the findings also directly narrate how the public prosecutor prioritises improving safety through learning over punishment through a fine or prosecution (taking into account how possible victims have been treated). Lastly, this implies that for the phenomenon under study here to be at all possible, a public prosecutor needs to have prosecutorial discretion (De Rechtspraak, n.d.-a) to decide to offer an alternative judicial response and must not be obliged to prosecute, as is the case in some European jurisdictions (see Swiss Criminal Procedure Code, 2007, Article 7; European e-Justice Portal, n.d.).

Finally, the findings arguably demonstrate that for the further development of Just Culture, holding people accountable prospectively rather than retrospectively may better meet society's wishes, possibly enabling partly alleviating the Just Culture deadlock (Schubert, 2009, p. 6), provided people acknowledge their responsibility and are willing to take prospective accountability, which the findings have shown to be contingent on them being treated compassionately and with respect.

Areas Warranting Further Research

The discussion section touches upon several areas that may warrant future research. For the sake of completeness, they are summarised here.

- Firstly, although providing rich and vivid accounts of the experiences of adjudged pilots and the public prosecutor and policy employee, this study only narrates the experiences of five informants in a single nation (the Netherlands). To further develop the Just Culture concept, research similar to this study is warranted, both in and outside of the Netherlands, and when possible, victims and adjudged pilots who were fined or prosecuted in court may also prove valuable informants.
- Secondly, the findings of this study, as well as the findings of Dekker (2017, pp. 19-21) and Berlinger (2004, pp. 124-127) and the argument of Braithwaite (2016) for giving more attention to the role of forgiveness in restorative justice, all highlight the potential of forgiveness as a medium to heal the hurt of both first and second victims in criminal justice cases of negligence in a Just Culture. However, although described in the Just Culture discourse by Dekker (2017), there is little, if any, empirical research (Dekker has a number of anecdotes in his 2017 book) which hampers developing the potential for a (more formal) role of forgiveness in a Just Culture. Therefore, this is an area warranting further research.
- Thirdly, the discussion chapter develops a hypothesis that some pilots may feel their errors are being criminalised as a result of being designated a suspect in a criminal investigation and the language associated with that in letters from the aviation police and public prosecution service, and the language used by some aviation police officers. The hypothesis is that this may incentivise some pilots to take a defensive stance, arguing against their (sole) responsibility. This may prematurely preclude an alternative judicial response because it inhibits the pilot and public prosecutor from reaching a mutual understanding of what happened and why. This study could not test this hypothesis as no pilots who received a transaction or were prosecuted in court were willing to participate in this research. Hence, future research in this area is warranted to increase our understanding of whether this indeed is an inhibitor of learning and, because of that, also an inhibitor of healing the hurt of possible victims (first and second).

- Finally, the discussion argues that there may be a case for offering professional psychological or peer support for general aviation pilots (as is by law required for professional pilots, see Gibbs, 2016) who, as second victims, have experienced some form of mental hurt themselves (Wu, 2000; Denham, 2007). This area may too warrant future research.

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Appendix

The Judicial Process From Occurrence to a Decision by the Public Prosecutor

