"Come to the edge,
he said.
They said: We are afraid.
Come to the edge,
he said.
They came.
He pushed them
and they flew."

- Apollinaire

I dedicate this to all you amazing people out there who find jumping out of fully functioning airplanes the most incredible thing on earth.

Be safe out there.

### **Acknowledgments**

I consider myself the luckiest person in the world and there are so many more I would like to acknowledge here. Thank you dear friends for not making me worry about our friendship even when I have been a terrifyingly narcissistic friend to you.

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Fellow students. My god. We have spent too much time together the last year. But inbetween the horror of endless nights over the computer, there has been moments I will cherish for the rest of my life. Without your insight and thoughts, and the patient feedback and understanding, my work would not have seen the day. Ever.

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That goes for many more. You know who you are.

As we park the car and collect our gear from the trunk, I look over at the wind socket in the landing field. It is slightly crosswind; it might be turbulent today. We continue over to the hangar, greet skydivers on our way, and put our gear bags on the packing mat. As I take my rig, suit and helmet out, I hear the plane coming in over the dropzone. Quickly I go outside to see the first jumpers skydive. After a minute of freefall you can hear the sound of bodies falling towards the ground, and then as they deploy their canopies, the characteristic sound of canopies opening – almost as if you smashed a paper bag filled with air. It sounds like they open abruptly, but you know it's more a feeling of slowing down gently. The skydivers fly their canopies towards the landing field, neatly in a pattern until they are on the final stretch before landing. The winds are still a little rough, but the skydivers do not seem to have too much trouble steering the canopies, so it should be fine. Someone fails to stand up on his landing, and we laugh and make fun of him, well aware it will be our turn any time. Back on the packing mat I thoroughly check every seam, every loose thread, all handles and every inch of webbing on my rig. I turn on the automatic activation device, put on my suit, go over to the manifest and find someone to jump with.

As the plane approaches us, the group discusses once more the plan for the jump. We collectively decide on a leader for the jump, the base, when we will separate from each other so that we have enough space to do so safely, and finally which altitude we will deploy our canopies at. As we make sure everyone is in on the plan, I look over my gear for the third time, touching every single one of the handles to ensure they are still in their place, check that I have routed the chest- and leg straps correctly and that they are tight around my body and finally that my pilot chute is firmly in its place. The roar of the propellers approaches, and as I put my helmet on, someone opens the door of the plane, climbs in and finds their place. The rest of the skydivers follow. When everyone is in their seat, we put on seatbelts, check our gear once more and when everyone is okay, the door shuts as the plane gets back out on the runway. As the plane accelerates and takes off, I think, I feel, I calculate, I visualize. And I breathe. As the plane reaches one thousand feet, we take our seatbelts off so that, in case of an emergency, we can jump out and have enough altitude to open our reserves. With the seatbelts off we can sit a bit more comfortably, and lean back towards the walls of the plane. There is an itch in my body, a sensation that there is more to come very soon. It is not like being nervous before a test, or scared before a fight, it is a state of mind and body, a readiness. And it tingles. As the plane climbs higher up I continue to check my gear every three minutes or so. It helps keep me calm. I lean my head towards the wall and relax. I look at my altimeter after a while, and I check my gear again. I look at my friends. Smiles. We are anxious to get going. It is getting closer. We are at such high altitudes now; when I look outside I can only see tiny fields of grass and forests, a road or two. Perhaps it is a railroad. My hand once more finds my handles, the pilot chute, leg- and chest straps. They are still firmly in its place. Check altitude. Remember exit order. We are group number two. The yellow light next to the door is turned on. Everyone shouts "TWO MINUTES!" to each other. We're at thirteen thousand feet, about four thousand meters above the ground. We laugh nervously, excited, expectant. I check my gear. Turn the camera on stand by. Attach the chinstrap on my helmet. In my mind and with subtle hand movements, I perform a simulation of the emergency procedure. I always do that before I jump, just in case something happens with my canopy. I do the greetings with everyone I can reach around me. There are as many greetings as there are skydivers. No matter how you do them, it involves either a simple handshake or a complex routine of bumping fists and what not. What is important: you do not exit the plane before you have done them. Ever. I wait. Everything is in its place. My goggles are on. I breathe slowly and deeply to calm myself. I wiggle my body, hands, and head and close my eyes. Breathe again, slowly. In - hold, out - hold. The green light will be turned on any time now. Everyone gets up - there is no room. As we get ready, my hand finds the handles and the pilot chute one last time, making sure no one has accidently bumped into them. They are still there. The first group opens the door. It is almost our turn. One of them hangs out of the door checking that we are in the right spot above the dropzone. The light turns green, group number one climbs out, smiles and disappears. Our group has six people. I go out first, hang on the outside of the door and hold on as hard as I can - the winds are pulling on my body, I wait for my friends to get out too. Everyone looks at me as soon as they are in place. I nod with exaggeration, and make eye contact with everyone; making sure they are ready, in every possible way. And as I shout "READY – SET – GO!" I make sure to lean my body and head "out - in - out" as I say the words. The hand I am not using to hold on to the plane also shows the movement that I want the group to copy to make sure we all exit the plane at exactly the same time.

We are in free fall. As we leave the plane I look up at the plane and it gets tinier and tinier as we fall downwards. The feeling of meeting the air is unexplainable. I look around, and see the stunning view; the mountains, the ocean, the sun – the bright and clear colors. It's like a different world altogether. I see my group flying towards me, I look at my friend closest to me, and we get close enough and touch each other's hand. The air is so powerful and you feel so tiny, but in a good way. You can feel the air wrap itself around the parts of your body that is presented to it. There's a tiny bundle of my hair that comes loose from under the helmet and it whips past my

face. All traces of nervousness vanish. I feel like my entire body *breaths* as if it welcomes the void. Intense happiness floods my mind and I feel alive. My eyes are wide open and time is endless. It is like nothing exists, and all exists, all at the same time. No matter what happened in the plane, on the ground, or how long it has been since last time I jumped, this feeling never changes. It does not feel like adrenaline, it feels like you wake up and remove a cover wrapped around your mind. You can feel how it expands as the space expands around you. Like every single brain cell is boosted with energy and every fiber of your body connects and releases all tension. Like your eyes are truly open for the first time.

All I see before me are my friends. I do not think, I just am. My body moves without conscious thought and we fly around each other as planned, smile and make funny faces towards whoever has a video camera on their helmet. We do routines, fly in a pattern, move our bodies as elegant and efficiently as possible. The pressure from the wind that stems from our fall rate makes it hard to move. Time seems to stand still, yet at the same time you acknowledge that time is about to run out. I check my altitude. It is almost at the exact same altitude every time; as if my mind knows that it is time to check it. A few more seconds and I feel that my body is getting ready to finish this part of the jump. As my audible altimeters signal that we have reached the altitude for separation, I am already halfway in turning away from the group. We move as one, everybody finding his or her path away from the others. I fly away and I look around once more. There is nobody to worry about. My hands signal, without really thinking about it, that I am about to deploy. As they do, they continue to move on their own, my body adjusts its position, and I deploy my canopy. The noise disappears as the canopy starts to inflate, and the harness around my body starts to hold my weight as the lines stretch. I am still on autopilot as I look around me, over me, under me, behind me, as the canopy opens to make sure I am ready to maneuver away from anyone if needed. My airspace is clear. The silence is overwhelming. All I can hear is a low whisper that gradually increases as my ears get used to the lack of sound. The wind that up until now was harsh and strong is a mild and gentle breeze against my face.

Autopilot shuts off as I test the canopy for any malfunctions. I breathe deeply, shake loose to relax. I can feel the blood rush through my body, the only sign of adrenaline. I look around me; it feels like a filter is removed from my eyes even though it did not feel as it was ever there, and I am once again very conscious of my thoughts. I calculate and analyze the speed and direction of the wind, continue to look out for anyone else out there. "Fly as if everyone is trying to kill you" is the mantra. In freefall I want to be as close together with my group as possible. Move as one. Now I want to have space – to fly, play and have fun with my canopy. "What if I can not see someone in time and we collide in the air?" my mind wanders. I quickly push the thought away,

knowing that I am skilled enough to avoid a collision. A tiny voice whispers, "Everyone thinks they are skilled enough". I push the thought away again, breathe and wiggle a bit in the harness, forcing my body and especially mind to relax. I remember to look out in front of me instead of at the ground at all times. The view is breathtaking. I fly towards a giant cloud next to me – it is amazing. As I maneuver the canopy around the edges of the cloud, I see my own shade in the cloud and a huge rainbow all around me. When I have the cloud next to me like that I can truly see with my own eyes how fast I fly, and as I rush past its edges, I think of nothing else other than how amazing it is. The air is filled with tiny drops of water that cools my cheek. I smile and cannot help but to shout out in joy. I do not really check my altitude so much anymore, my eyes have gotten used to seeing when I am getting close enough to the ground to start flying in the pattern. Just as if you were driving a car, there are rules for when you should turn, how much and where to fly. I slowly return to autopilot again, but not as intense as before. My eyes quickly gaze every inch of airspace around me. Clear. I steer my canopy down towards the ground after I am finished having fun next to the cloud, examine my speed and angle and position myself so I can maneuver my canopy correctly and land where I want to. I make sure there is no one around me that can turn into a problem. I fly fast toward the ground and my pulse quickens. As I reach the ground, I angle the canopy by pulling the toggles down and thus reduce the forward speed. I fly inches above the ground for as long as possible until there is no more forward speed left to "fly out". My feet touch the ground, and my canopy lands gently next to me. My hands shake and I feel like the master of the universe. Every time I land after a jump like that there is one thought that goes through my mind; it is a pity that more people don't get to experience this.

I meet up with my group, we do the obligatory 'high fives', laugh, and talk and together we walk back to the packing mat to get ready to do it all over again. Those five minutes just spent, feels like a lifetime that passed in a second and lasted for eternity.

### **Preface**

In 2007 I walked through the University doors for my very first time, looking forward to the first lecture in social anthropology. I had just moved to Trondheim and was excited to tackle the studies. I remember the lecture like it was yesterday. The lecturer asked us this one, simple, and yet so hard, question: "who are you?" I was flabbergasted about it and immediately wanted to draw the conclusion "I am myself, of course". He followed up: "why are you you, and are you the same in all situations? How do you make sense of your life?" I could not answer him, but his question rocked the foundation of my sense of self for days to come.

The same week some newfound friends from class and I sat in a park, enjoying a beer, contemplating life, when suddenly an airplane flew over us and some skydivers jumped out. The first thought that crossed my mind was "that is on my bucket list!". I had already done a tandem a few years back when backpacking through Australia and was amazed with the experience. When the skydivers landed next to us, one of them came over to us with a business card. It asked me if I wanted to learn how to skydive. The answer was yes.

A few weeks later it was time for my first solo jump. We had drilled the emergency procedure for a week, had practiced the basic belly-position for hours, not to mention passed the written exam. When I sat in the plane and the instructor asked me if I was ready to jump out of the plane, my inside was screaming. Of course I was not ready! He did not seem to mind my out of body experience and opened the door. The wind filled the inside of the plane and I remember catching my breath as if I could not get enough air. That is the last thing I remember of that jump. My consciousness returned only when I was safely on the ground again and I recall the instructor coming over to me, giving me a "high five", and asking me if I had seen the plane as I jumped. I answered yes. For all I knew, I had jumped from a spaceship crowded by aliens. But I answered yes.

The following weeks and months, I spent my weekdays on campus, reading up on issues on identity, ethnicity, society and what not. The weekends I spent jumping out of planes. As my studies progressed so did my skydiving career. I completely fell in love with both, and as the anthropologist in me developed I found that the skydiving community was fascinating in itself, besides the enjoyment I got from the jumps. As I got more experienced, and traveled to other dropzones, I found that skydivers were close to the same everywhere I traveled. We were not risking our lives. We were having fun. I made friends all over the world just by bringing my rig with me, and wherever I went, we could talk to each other about the things we loved the most.

There was a dark side to it. People hurt themselves and people died. Nobody I knew, but still, it felt like losing a friend every time we got the news of a fatality. I got motivated to learn more about how we could affect this in positive ways and engaged in different kinds of forums, trying to bring the skydivers together to discuss what we should do to become safer. At the height of my commitment to some of the community's challenges, it was time for me to start on the master's degree. We received mail that very summer asking us to prepare a project report for what we wanted to study. I had already written a bachelor-paper on skydiving and found that the existing literature on it was slim. I decided that I wanted to explore dimensions of skydiving that had not been examined in the studies I had read.

To me, skydiving was not risk. It was not risk and it certainly was not risk seeking. If it were anything, it was risk avoidance. It was a community in which everybody cared for each other's safety and learning process. I had already spent endless hours discussing freefall-maneuvers, equipment, rules, stupidity and of course, the jumps. We prepared, taught each other new things, challenged each other and jumped together. It was not a race towards death; nobody I knew had personality problems, or was especially prone to seeking risks. We were nurses, engineers, teachers, students, doctors and carpenters having fun on our time off. I decided that I needed to study what skydiving was 'really about', but from an anthropological perspective. Because I did see that there were also many inconsistencies that could prove to be interesting.

I found the emphasis they put on skills and technological aids fascinating, and how this emphasis altered the way they perceived the risks in the sport and their own ability to control them. I asked myself, "can we understand skydivers better if we looked at all the different things they did to control the dangers in the sport, such as training methods and skill development?" I also wanted to figure out if being a part of the community changed the way you experienced the risks – I had a feeling that it did.

I traveled to the western part of the USA hoping to learn all about how skydiving was not about risk at all and the ambivalence towards a risk focus as such followed me all the way back into the doors of the University, where I started out almost five years ago. However, it was exactly the doors of the University that enabled me to put on the anthropological glasses so to speak, and see the sport I loved in a new, but also more interesting, light than I had started out with.

This thesis will therefore concern itself with how we can understand skydivers process of discovering and tackling risks through collective methods of risk negotiation. I will aim to show exactly how they make sense of the risks they face through various forms of narratives, exercisemethods and the use of technological aids. I have tried to emphasize the values they put on learning new skills and acquiring new knowledge, which they claim ultimately will make them

safer participants. I draw on my experiences from the field where I encountered numerous skydivers more than willing to share their insights on the topic. In addition, there were several new and fascinating topics that emerged, somewhat unexpectedly, through the process of writing this thesis.

What proved to be most challenging of all was to translate the skydiving language so to speak, into an academic language. I had to generalize more than I felt comfortable doing, and simplify so many details of how the activity is performed that I ultimately got the feeling that I did my material injustice. How could I analyze skydiving without explaining what skydiving really is? How it developed? How they perform it and last but not least, what equipment they use? Some of these issues were natural to implement in the thesis itself as certain topics were up for discussion. However, I did not feel that it sufficed. I therefore invite the reader to look at the appendix, where a brief presentation is given on the abovementioned topics. A list of terminology is also to be found in the appendix, as there are many terms not easily understood by non-skydivers. However, most of these will also be explained in the text. There are also some pictures to be found in the appendix of jumps, landings and tunnel-sessions that might be helpful.

My readers will first of all be brought into the theoretical and methodological questions of this thesis before we go further to the main discussions of my findings. From the beginning I felt that it was important not to "mess" with the actual happenings from the field too much in order to keep it as understandable as possible. I therefore chose to structure the chapters accordingly; all of them start out with some brief excerpts from my own experiences in the field, before I go further on to presenting the situations that occurred more thoroughly. In some of these there are brief analytical elaborations, but the empirical cases are for the most part left alone. In the end of each chapter, however, I discuss the findings and their anthropological relevance. This is perhaps a dangerous method so to speak, but I thoroughly believe this was the best way to treat my empirical data. I hope that the reader will find him or herself brought into the reality of a skydiver's life this way, and that he or she will really *feel* the ambivalences my informants felt.

There is no reason, in my opinion, to treat skydiving as a "walk in the park". Therefore, after some theoretical and methodological considerations has been made in chapter one and two, the first main chapter will start discussing the most serious parts of the sport – the incidents. I have tried to examine the various methods skydivers engage in while trying to cope with the dangers of the sport. Further on, we will look at how the social universe affects the participants before we go on to the more "hands on"-approach; what they actually do to be safer skydivers. Last, but not least, the reader will be presented with the paradoxical issue of technology.

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## Chapter 1: Approaching the 'How' of Skydiving

Doubt.

I was sitting on a bench when I heard the sound of a diving canopy coming from the wrong side of the landing field. I turned around just to see him smash into the ground. His body made a "thump" as it impacted, and it looked more like a sack of potatoes that had been thrown from a distance, rather than a human body. Time stood still. All sounds, people, and surroundings disappeared and it was like I had tunnel vision. As I managed to zoom out and return to reality, only a few milliseconds had gone by, and I realized we had an emergency situation - I cried out to alert everyone at the dropzone to run over to him, but they were already on their way. They all heard the sound when he crashed. The entire dropzone seemed to stand still, as if it held its breath. Nobody talked. Nobody moved. My body was trembling and I closed my eyes, shocked and convinced I had just seen someone die.

Months later, I can still visualize the incident as if it is happening right in front of me: the sounds, the confusion and most of all, the feeling of utter shock. How is it that the skydivers can claim that this is safe? Why do they insist that they can engage in this without being in danger?

I aim to examine the process that enables them to engage voluntarily in a possible life threatening activity and especially how the discourse on such voluntary engagement with risk manifests itself. This thesis will occupy itself with *how they manage risks*, not why. It will elaborate on *how* they deal with incidents in order to remain certain about their own safety. Further, I will explore *how* the community as such affects the participants' behavior and attitudes towards risk management. Understanding *how* risk is embodied, through attaining skills and focus on the elements within their perceived control will also be elaborated. Additionally, I will discuss *how* technology is to some extent left out of the risk-picture of the skydivers altogether. This study is in other words a thematically oriented study that examines a skydiving community and explores the ways in which they manage the risks they face in the activity. It will investigate how the skydivers achieve their feeling of self-efficacy through disciplined training and thus negotiate the terms of the activity, and the process of discovering and tackling risks with the notion of technology and skills will be emphasized. A focus on skydivers will thus allow inquiring on the relationship *between risk management, technology and embodiment*. First, a review of previous studies on skydivers.

#### Previous studies on skydivers

Although there are not too many studies done, the ones I have found provide an historical context we can use to situate this study.

Arnold's (1976) study in a large examination of skydivers argues that skydivers are not daredevils and that they do look at the sport as dangerous. In the 70's, it certainly was more dangerous than today – 3,2 fatalities per thousand members, versus 0,6 in 2010 (uspa.org). My findings correspond to some extent with Arnold's, and will be elaborated upon in this thesis. Furthermore, Arnold argued that it was not the risk that attracted the members, but the desire for escape and community. They "shared similar experiences, and ... also share a common argot, a common store of knowledge and stories, and common norms" (1976:303). According to him, some of the central issues of the subculture are *technofetishism* (obsession with newest and highest-performance equipment) and *statisticalizing* (preoccupation with jump numbers, hours of freefall time etc.). As skydivers often travel and share experiences, Arnold argues there is little variation in central values and rituals, a central feature of this thesis as well, which will be elaborated further upon in chapter two.

Delk (1980) argues that skydiving is *prototypic* of high-risk sports. He further posits that skydivers object to the perception of non-skydivers of the sport as risky, asserting (a well-known phrase from my experience in the community); "skydiving is less dangerous than driving an automobile on the highways" (Delk 1980:395). Furthermore, he observe that a positive gain of participation in risk activities is the feeling of belonging to an elite group. However, Laurendeau (2000) notes that the emphasis skydivers put on the "other-ness" is a recurring theme in the literature – they feel like they get it whereas non-skydivers do not (2000:16), a phenomenon I am familiar with from my own study.

Lyng and Snow (1986) studied skydivers and discussed the dynamics of subculture and how it could be tied to changes in broader society. They remark that it has changed towards an edgework<sup>1</sup> orientation where skydivers try to maintain control of as much risk as possible, not minimizing risks.

However, this thesis will argue that the sport has gone through quite extensive changes over the last few decades, both in regard to technology and in the general approach skydivers have towards the sport. As the previous studies presented above were conducted as much as thirty something years ago, it seems fair to argue they are outdated due to the major changes in the sport. There have not been many studies concerned with the behavior of skydivers in terms of

<sup>&</sup>lt;sup>1</sup> Lyng (1990) developed the model of edgework, which will be treated later on in the chapter.

group dynamics (Lyng and Snow 1986), and especially *how* they manage risk, not why they take risks as such. I will aim to explore this in relation to social control and technology, an area that has not been given focused attention in recent studies. First, I will examine how voluntary high-risk behavior as such has been contemplated.

#### Earlier models of voluntary high-risk behavior

Lyng (1990) provides a literature review on common methods of dealing with risk-takers and shows that it has been a recurrent theme to classify them according to personality types (see Klausner 1968; Zuckerman et. al. 1964; Bernard 1968), and he argues this approach fails to provide a causal explanation of voluntary risk taking. Lyng (1990:853) further argues that it is assumed that risk takers are predisposed towards that kind of behavior, but that no ontogenetic basis of such a personality predisposition is provided. He assert that motivational approaches offer a more causal explanation; one approach is stress seeking (see Klausner 1968:139) and the other is stimulation (see Farberow 1980:21). In more recent times, Albert (1999) argues that risk-taking behavior has been approached as a mechanism for the assertion and perpetuation of dominant cultural ideologies, and mentions e.g. hegemonic masculinities (Messner 1990,1992; Young and White 1995). Furthermore, athletes willingness to pain and risk has been viewed as a part of a social process of social control positively sanctioned that validates their commitment to team, identity and hegemonic values (see Curry and Strauss 1994; Hughes and Coakley 1991; Nixon 1992, 1994). Albert (1999:158) further elaborates on how the social constructionist perspective has also approached risk taking, which has examined how danger and risk taking are experienced as constitutive features, even routine, of the culture of sport (see Curry and Strauss 1994; Frey 1991; Hunt 1995; Lyng and Snow 1986; Nixon 1992, 1994; Williams and Donnelly 1985). In a culture where taking 'unnecessary' risks is seen as reckless (Lupton 1999), there has been a trend where risk-taking has been somewhat more accepted, and participation in risk sports has been studied (see Celsi et. al. 1993; Kusz 2004; Lyng 1990). Rather than avoiding risk, there is now evidence, according to Laurendeau (2006), that risk is constitutive for many sporting experiences (Albert 1999; Donnelly 2004; Young 1993).

Especially the anthropologist and sociologist LeBreton (2004) have written several works on how one can understand voluntary risk-takers. According to him, risk-taking derives from a feeling of not finding meaning in their life, and that they further put their life in jeopardy in order to exist (LeBreton 2004:1). My findings do not give much support to this claim, as discussed later in the present chapter.

Furthermore, the subcultural issue has been fairly well covered in relation to social resistance in marginalized activities; for example skateboarders (Beal 1995, 1996), surfers (Booth 1994), rock climbers and rugby players (Donnelly and Young 1988). Thornton (1997:204) especially, argues that non-conformity is an important aspect of memberships in subcultures. In more recent studies, Lyng (1990) has shown to be one of the major contributors to risk research on extreme sports participation, and his findings will be thoroughly discussed further on.

However, as presented above, most of the research on voluntary risk-taking has focused on the motivational aspects, in other words *why* people take the risks they do and how it can be understood in a broader societal context. This is however not what I aim to do in this thesis – it is the question of *how they manage the risks they have already accepted to take* that interests me. I aim to examine the processes of identifying risks, learning about them and dealing with them. Transmitting that 'how' includes a way of relating risk to technology, the body and other skydivers. There is a cognitive separation (the human error, not the activity itself) and a process of learning and identification of *new* risks. There is also a process of social control that enforces certain knowledge of risk and discourses on risks that are used as examples in the community.

As there is not much literature from a social anthropological perspective on skydiving as such, the next sections will elaborate on different theoretical perspectives relevant to the concepts in this study. I will start to examine the model of edgework (Lyng 1990) as it has many interesting ideas about *how* extreme sport participants relate to the inherent risks in their activity, and will therefore be relevant to this study.

#### Edgework and risk management practices

High-risk sports are not a new phenomenon, however, its number and variety has greatly increased. Improved technologies and knowledge has created a number of new leisure sports and at the same time we have seen the expansion of an "adventure industry", devoted to such things as rafting, commercial skydiving operations and so on (Holyfield 1997, 1999). The model of edgework evolved to account for the growing popularity in high-risk sports within the USA and other western nations during the last three or four decades (Mitchell 1983; Lyng 1990; Simon 2005). Edgework activities have acquired special cultural significance in the contemporary western world and, according to Lyng, these activities of voluntary risk taking can be applied to various empirical domains and substantive issues.

Edgework started out focusing on risk taking in the leisure realm, but expanded quickly to other domains. The primary conceptual issue was the *voluntary* part of the risk taking, but as the

model expanded and evolved, one realized its potential in explaining and understanding e.g. high-risk occupations. Policemen, firefighters and combat soldiers were studied, and researchers found that their risk-taking experiences were almost indistinguishable from the edgework encounters of participants in high-risk sports (Wolfe 1979; Abolafia 1996; Cetina & Bruegger 2000; Lois 2005; Smith 2005).

What differentiates this model from general theories of risk is the status of the concepts of *risk* and *uncertainty*. It focuses on positive consequences and how actors experience uncertainty. Edgeworkers engage in *risk management practices* in the preparation for doing edgework, they rely on sophisticated equipment and other activities devoted to reducing the likelihood of serious injury or death. It is the uncertainty that is the biggest issue, and edgeworkers value confronting and responding to it, even as they devote significant effort to manage risks. The edgework perspective as such is perhaps better described as a general *theory of uncertainty* rather than one of risk per se (Lyng 2008).

The activities Lyng (1990) characterizes as edgework involve a high potential for death, serious physical injury, or psychological harm. Edgework-scholars conceptualize voluntary risk-taking as involving, most fundamentally, the problem of negotiating the boundary between chaos and order. Practitioners "crowd the edge" by coming as close to chaos as they can without losing control. According to Lyng, it involves the right mix of skill and chance, a combination that maintains the illusion of controlling the seemingly uncontrollable (1990:872). Lyng argues that edgeworkers employ specific skills and that they have a general "surviving capacity". He explains the latter as a form of mental capacity not given to all of us, and only those who inhibit this capacity can control situations that most of us would see as uncontrollable (Lyng 2008:112). Furthermore, he claims that it is the careful planning and organization of the activities that contribute to this sense of control, even though the course of events may in fact be largely a matter of chance. However, I will argue that the definition of Lupton and Tulloch is more to the point when it comes to explaining how risk is *experienced* and *perceived* among the skydivers I studied:

"Risks which are defined as subject to personal responsibility are those which are seen to be controllable. Risks which are conceptualized as external to personal decisions or actions tend to be viewed as non-controllable, as more susceptible to the vagaries of fate" (Lupton and Tulloch 2002:32).

Skydiving can be argued to be a leisure activity where risk is an immanent factor and where the participants rely on the safety of equipment and their own skills. The edgework perspective offers valuable insight into how voluntary risk-takers negotiate the risks they face. It explicitly covers how participants deal with uncertainty in the face of hazard, and provides an insight into participants' ways of managing the challenges they face. Much of my material will discuss how skydivers argue that it is their set of skills that ultimately will keep them safe. However, the notion of a 'general surviving capacity' seems to be somewhat of a shortcoming. I will argue that this concept is to some extent misleading. Is Lyng (1990) talking about *instinct* as such, or *second nature*, which would involve the notion of *learned and embodied skills?* This study will examine the importance skydivers put on experiential knowledge, and argue that they construct control as not only possible, but also central. Further, as Natalier (2001) argues, it is this process that underplays the hazardous nature of a risky activity.

Several informants expressed this explicitly - the only thing that can keep them safe is their own skills, experiences and judgment. I will argue that the idea of relying on something as vague as an innate capacity, unachievable unless you are *born with it*, seems to be counterproductive in their work towards managing as much risk as possible. I will analyze the notion that learned skills is more important for the skydivers sense of self-efficacy than an 'innate survival instinct' and this is something that will be discussed thoroughly in the main chapters.

Wolfe (1979) also argues that the capacity to control is sometimes viewed as deriving from a basic "survival skill", and that this skill distinguishes true edgeworkers from those who are attracted to risk taking but lack "the right stuff" to conduct it successfully. He further claims that in an interesting tautological twist, they view the instances where people get hurt or dies as evidence that they lacked the core survival skills of a genuine edgeworker. According to him, this way of accounting for negative consequences provides them with a sense of confidence about the likely outcomes of their own high-risk pursuits. This departs from my findings, and I will investigate how the skydivers of my study do not view mistakes as necessarily lacking the 'right stuff' in chapters three and four especially.

Laurendeau (2006) on the other hand, discusses the idea that we can conceptualize one continuum of edgework as a range from in control to out of control. He suggests that we conceptualize this continuum underlying a given activity as well. According to Laurendeau, there is a baseline level of edgework that all skydivers engage in, simply by leaving the airplane. Some push the limit, or "crowd the edge" more than others. Jumpers interpret hazards in the context of their "embeddedness" in the community, and they frequently share their ideas on the hazards of the sport. He argues that jumpers acquire a risk management perspective by:

"Testing ideas on each other about managing risk. They discuss things such as new equipment innovations; "old" accepted wisdom and whether it still holds, and numerous variations on this theme. Oftentimes, experienced jumpers do this in overt ways, stepping in to "correct" less experienced or more reckless jumpers" (Laurendeau 2006:591).

We could thus argue that there is some belief in a form of a survival instinct, following Lyng's (1990) ideas. There is according to many skydivers a certain innate quality one must have to negotiate the edge successfully: the ability to maintain cool in the face of chaos. However, the absence of this survival capacity does not, by itself, serve as any explanation for mishaps (Laurendeau 2006). When skydivers avert a close call, the experience is used as evidence that even when something goes wrong, they can control the situation with their own actions: they are in control of their own destinies. Another dimension of learning about the edge is by an interactive process between jumpers. They will continuously entrench the idea that they are in control of the hazards, by discussing their own or others mishaps, pointing to errors but also how they were handled, and if they weren't, what the mistakes were. The process of generating new knowledge through this interactive process is something that will be investigated throughout the thesis.

Departing from Lyng's (1990) analysis, Laurendeau's data reveals that jumpers engage in strategies to redefine their emotions such that the event in question does not threaten their selfcontrol (2006). When mishaps occur, the skydivers do not judge themselves as incapable of negotiating the edge, they rather frame it as a momentary lapse in concentration. The experience becomes part of the knowledge base from which they draw in determining future practices. Jumpers isolate the event from their identities as skydivers by insisting that the injury was a function of a particular poor decision rather than an indication that they are ill equipped to skydive (Laurendeau 2006:597). My findings shows that in the case of a serious accident, the skydivers will scrutinize the performance of the victim as well as his or her choices. If jumpers can hold that the victim was doing something they themselves would not, it is possible to distance one's self from the accident as a fellow jumper. This strategy is especially important in the instances of fatalities. They will mourn their friend as people, and compartmentalize the incident as skydivers - and keep on jumping. Drawing on fate seems to appeal to many skydivers. It makes sense of the hazards of the sport, and is a strategy they use especially when blame cannot be placed. This was a recurring theme I encountered and will be discussed further, especially in chapter three where I will elaborate on how they identify and create new risk factors. Further, to me it seems too strong

a statement to claim that skydivers subscribe to a simple notion of an innate survival instinct, as Lyng argues. As Laurendeau (2006) claims, there is an element of this as they make sense of incidents in the sport but they also emphasize very strongly that it is not just how one performs on the edge, but *where* on the edge one chooses to operate. Negotiating it is about understanding how close to it one is equipped to walk and this understanding is developed through interaction with other jumpers, and this will be discussed in chapter four.

If we look at risk perception research, it shows that the perceived seriousness of risks (expected number of fatalities) and the catastrophic potential influence the acceptance of risk, even when its probability of occurrence is low (Zinn 2008). Risks with low probability but very high consequences are perceived as more threatening than more probable risks with low or medium consequences. Additionally, having personal control over a risk or familiarity with a risk decreases the perceived risk (see Rohrmann & Renn 2000; Slovic 2000; Zinn & Taylor-Gooby 2006: 29-31). Zinn (2008) shows that there is a lack of knowledge regarding the conceptualization of the dynamic processes of risk perception and responses to risks. The edgework approach e.g., see human actors not as calculators of risks and rewards, but as symbolic beings transacting with the material relations of their physical and social environments (Lyng 2008:115). Edgeworkers describe a blurring of the boundaries between themselves and the technologies they use, that further lead to a sense of mental control. They cultivate a mindset that allows them to act skillfully and competently to maintain a focused attention and creative responses to the immediate challenges they face (Lyng 2008:118).

Especially chapter four and five will aim to articulate that the mindset they cultivate is developed exactly through a thorough process of acquiring a certain set of skills which enables them to feel in control and evaluate which risks are seen as controllable or not. This mindset is cultivated through the process of interacting with other jumpers. Lyng (2008) talks about a transacting between the person and his surroundings (certainly there is one), and to me it does not seem far-fetched to consider that skydivers perform calculations, at some cognitive level, of every single perceived risk they come across, individually and collectively. Some risks are seen as too risky, where the potential outcome can be fatal due to their inability to cope with them. The factor of uncertainty is immanent in this process – "can I handle it, or can I not?" Having personal control will, as previously mentioned, decrease the perceived risk. However, much of my material suggests that having personal control is just as perceived as the risk itself. In other words: skydivers perceive that they are in personal control through a sense of self-efficacy, even when they are not. Furthermore, when something goes badly due to actual lack of control, other skydivers refer to it as the most risky aspect of the sport; namely the inability to correctly perceive

one's limitations. Indeed, this corresponds with Laurendeau's (2006) findings that it is where on the edge one operates that is of value.

The community of skydivers emphasizes every skydiver's responsibility to the community itself. Every skydiver owe it to their fellow skydivers and themselves, to act with caution, to tell the tales of their own mishaps, and to rely on the collective knowledge base of what risks are controllable and not. To understand this phenomenon we need to understand more about how the institutional framework of the community can affect skydivers relationship to risk and its management.

#### Collective risk management practices

Central to risk research in the social sciences is the sociocultural dimension of values, knowledge, rationality, power and emotions. Even in the highest technical application, values concerning the acceptability of a specific level of risk or uncertainty are involved (Zinn 2008:13). Douglas' work on risk and culture introduced the cultural dimension into discourse. She showed that selection and responses to risk are influenced by the sociocultural organization of the group and that defining and negotiating risk also involves emotions, as acknowledged in the interdisciplinary discourse (Zinn 2008:14). Emotions covers more than just worries, fear, concerns and so on; it also concerns the physical experiences of risks – it can be embodied excitement, as in Edgework (Lyng 2005), or in social suffering (Bourdieu et. al 1999). Emotions also functions as an advisor, referring to complex experiences, which cannot be transformed into formalized objective knowledge (Zinn 2008:14). In chapter three I will discuss how uncertain elements and anomalies are removed collectively, providing a sense of control and immunity.

One could argue that anyone who lives in a community is monitored – the more close-knit, the more mutual monitoring takes place. The social processes slide the decision-making and the prior editing of choices onto social institutions. Shared values do more than weight the calculation of risks. They work in the estimates of probabilities as well as on the perceived magnitudes of loss (Douglas 2003). Douglas argues that serious risk analysis should focus on the institutional framework of decision-making. Do others constantly make individuals aware of the limitations on their own possible achievements? Who makes them aware? She further claims that decision-making should be so collectivized that no one is seen to decide. How can we understand the mutual influence the participants bestow on each other? This has been a difficult task and will be discussed in chapter four.

Pollnac, Poggie and Cabral (1998) suggest that accounts of near-misses and actual accidents form an important verbal interaction, and that this type of interaction functions as group-therapy within the subculture of fishermen. Further, they note that the detailed discussions of hazardous incidents can also be viewed as traditional, informal training sessions, where knowledge of how to respond to similar problems is acquired. This knowledge can serve to reduce both perceived and real dangers of incidents discussed. The vicarious experiences gained from onshore interaction with other, similarly experienced captains in the cafes and bars where they recount incidents at sea, add to their store of information. This further contributes to their feeling of self-efficacy – a belief that they can accomplish certain tasks in risk-taking situations (Priest 1994, cited in Pollnac, Peggie & Cabral 1998). Chapter three and four will discuss this further.

Celsi, Rose and Leigh (1993) argued that the function of experience and socialization can be studied with narratives and discourse: skydiving instructors emphasize and associate the risks and rewards of skydiving by deviance neutralization; it is people who fail, not the equipment. Almost immediately, acculturation to the belief that skydiving risk is psychologically manageable begins. The initiate normatively hears and «parrots» from respected skydivers that «skydiving is probably safer then driving to the dropzone». Virtually any skydiver will tell you that ninety-nine percent of the time it is people who fail, not the equipment. Most interesting of all, experienced participants believe that their odds are better than average as they rule out whole categories of incidents that they feel would not happen to them, because of their particular equipment, their reasonableness in planning, or their perceived ability. One should therefore examine concepts of 'blame' and 'human error', which seems to be of crucial importance. There seems to be an ambivalence here: the skydiver needs to maximize his or her trust in their own skills and use of technology, while at the same time have explanations of «human error» based on the very same things when something goes wrong. These phenomena are vital in understanding skydivers and will be elaborated on throughout the thesis. However, chapter six will discuss more thoroughly the process of neutralizing the equipment as a source of uncertainty.

The personality trait 'fatalism' is believed to be more immanent with these kinds of people. (Binkley 1995:139) indicates that a fatalistic attitude – "the perception of being unable to control the forces of the sea and an acceptance of the things they cannot change" – functions as a psychological protective mechanism for the fishermen he studied. Similarly, as Follo argues:

"The risk phenomenon exists as a cultural fact if people in the society anticipate scenarios of possible, future occurring losses. To conclude that the risk phenomenon exists as a cultural fact,

does not say anything about its distribution or how much attention persons in the specific society pays to risks. It only says they are able to construct risk – which implies that they have the potential to understand a given phenomenon as risk. How much, how many, and who realizes this potential and in connection with what phenomenon, is another matter" (Follo 2005:30).

Furthermore, I argue that skydivers *know* they engage in a risky activity, and they repeatedly experience friends getting injured or even die in the sport. The risk is *there*. How much attention they give it, and how they distribute it, is what is interesting – not to mention what aspects of the activity is decided as risky. The dialogues between skydivers can thus be seen to contribute to a continuous production of knowledge. Perin (2005) argues that *'real-time logics'* mobilize evidence, knowledge and that the methods are usually experiential and substantive. This type of logic confronts technological and contextual ambiguities and disappointments in much the same way as people confront the same phenomena in life. People discuss, observe, experience, judge and interpret (Perin 2005:203). She explains how this type of logic gets into gear:

"[...] When local experts draw on memories, observations, experience, judgment [...] and on the skill of the craft; on others' best practices and lessons learned [...] and on professional experience; on handy heuristics and rules of thumb' (Perin 2005:201).

Even though Perin talks about real-time logics in the context of a technological industry, I believe it is useful when we discuss an activity as skydiving. As workers talk, discuss, observe and what not when bad things are about to happen, or have happened, so do skydivers. Making rules and formally investigating incidents is a substantial part of the regulation of the sport. However, I believe the outcome of imposing new ideas on each other, and indeed discussing the implications of each others actions, affects the skydivers in a more profound way compared to formal regulation as such. This feature of the skydiving community will be examined in chapter three and four.

Social constructivists thus argue that rules of emotion are learned and that emotional performances are affected by culture specific sets of rules (Cornelius 1996). E.g. D'Andrade (1995) argues that cultural norms differ in terms of what is defined as a dangerous situation; hence, an identical situation may engender no response or fear depending on the experiencer's cultural or subcultural background. We shall go further into the exploration of this in the next section, where I shall examine how the dialectics of risk and responsibility can affect the participants in their endeavors to safely engage in the sport.

#### Reciprocal responsibility

As mentioned, there is a strong belief that every skydiver holds a responsibility towards their fellow practitioners. The skydiving community is highly preoccupied with risk management practices and as mentioned, those practices are the main focus of this thesis.

Sørhaug (1996) elaborates on different kinds of knowledge traditions and argues that a main dimension of this will be the conflicts and tensions that lie between the development of a knowledge seeking discussion and the operational running of the activity. He further argues that seeking knowledge is in principle an indefinite process with a conclusive egalitarian aspect, but that this process requires hierarchies of existing preferences and positions. Sørhaug claims that it is the best argument that shall win, and that it is best reached through dialogue. In these types of collegial organization logics, insight and respect for each other's experiences creates the opportunity for everyone to participate in discussions. There is a factor of a horizontal and mutual reciprocal process when they work out that which is the state of the art within a field (1996:137).

The rhetoric around leadership that Sørhaug here presents is illustrative of the skydiving community. In principle, everyone is allowed to express concerns about safety issues, and all concerns are heard. If they prove to be legitimate, measures will be taken. If not, a chance of learning is created instead, and the concerns are made sense of as misguided lack of knowledge. An important part of this is that one is never sanctioned if one express concerns. However, they are rewarded for bringing up the issue and thus creating a fruitful discussion. It should be noted that skydiving is a highly regulated activity with hierarchical positions; dropzone owners, chief instructors, employees, ground control and other formal roles. Nevertheless, these functions on a more pragmatic level; they are necessary in order for the dropzone to function properly. They participate in knowledge seeking discussion, as you would expect. These issues aside, what I am concerning myself with is the processes that happens in the informal sphere, and in this there is an entire, all-consuming process of knowledge exchange that surpasses the sphere of operational concerns as such.

Giddens (1999) argues that the ideas of risk and responsibility are closely linked. He emphasizes the importance of separating risk from hazard or danger. A risk society is not intrinsically more dangerous than other forms of social order. He further asserts that the idea of risk is connected to the aspiration to control, especially, the future. In a society that is preoccupied with the future, the meaning of a risk society is thus bound up with the preoccupation of risk and safety. Most importantly, Giddens notes that risk cannot be described without reference to value. What the value is can vary from the preservation of human life, to more complex matters. Clash of risks also gives clash of values – and thus a political set of questions. Therefore, when people

have active orientations to their lives they also tend to have a more active orientation to the management of risk.

This can be seen with fishermen as well; the mode of work organization where they deemphasized formal authority distinctions and where they consulted across status levels were found to strengthen the social bonds among them. It gave them a strong sense of identity and promoted group solidarity through common experiences, goals and shared values. Finally, Binkley (1991) argues it gives workers a sense of personal control of their working conditions as it enhances trust in fellow workers and satisfaction in safety.

Binkley (1991) also found that the fishermen who had experienced exceptional risks seemed to be more conscious of safety. These occasions made them rethink their basic assumptions about safety at sea. This could be compared to skydivers reactions to experiencing serious incidents and fatalities – not only when they were involved themselves, but also when they experienced it happening to others. Several informants expressed that witnessing grave errors and near-fatalities made them reflect on the activity they participated in, and further that it made them ask themselves some difficult questions. More importantly, they felt that one should use these incidents for learning. Hence, after a serious accident, it would be posted on online forums as well as discussed on the dropzone, trying to figure out all aspects of the reason for the incident occurring and further discuss how it could and should be avoided. They would also tell the tales of their own mishaps in more formal get-togethers, and chapter four will elaborate on how these moralistic stories affected the participants.

Celsi (1992) argues that skydivers speak of a special bond regardless of background and other "common" factors. Skydivers travel a lot, and find other skydivers immediately whom they share common experiences with and whom they trust. They have gone through the same ordeals and have similar stories to tell. Interestingly, as most skydivers share these bonds and the feeling of belonging to a group with mutual responsibility to each other, the training of new skydivers often takes on a collaborative style so to speak, and one can almost picture a group who has adopted a child and decides all should participate in its upbringing. We can compare this idea of a shared responsibility towards new participants with Foucault's and Sheridan's (1977) notion on disciplinary power. They argue that the chief function of this power is to train, and that this is dependent on three elements: hierarchical observation, normalizing judgment, and examination. One can, according to Foucault and Sheridan, control individuals through constant observation, and incorrect behavior is punished so as to realign the individual with a "norm" of average behavior. This will mostly be examined in chapter four, but chapter five will also show how we are dealing with a normative system of how techniques and skills should be acquired.

Susanne Ådahl (2008:30) further argues that if we follow this preordained manner of viewing human action, we can assume that control is facilitated by the workings of the habitus in individuals: this unconscious, habituated generation of dispositions (Bourdieu 1977). Adahl (2008) claims that it is not discourse and control enacted though observation and the deterministic force of dispositions, but rather social performance and the desire to act honorable that guides the motivations of, in her case, trainers. Discipline is linked to practice, a social technology aimed at transforming behavior to achieve an outcome that reflects a certain locally anchored morality and preferred local values (Ådahl 2008:34). One conforms to a social role assigned by the social group and one is expected to meet certain standards set by the group. Discipline entails a set of practices aimed at achieving specific results. According to Laurendeau (2000) participants understand their surroundings as members of a social group, not as isolated individuals. They draw on their social groups to understand what constitutes danger in the course of their everyday life, and they share beliefs and values and justify different ways of behaving (Dake 1992). Frey shares this idea and argues "risk is whatever is defined as risky at a particular time, in a particular place, by a particular group of people" (Frey 1991:139). Dake (1992) further asserts that he has "no doubt that risk perception is socially constructed and culturally biased in the sense, and to the degree, that individuals respond to and reshape the prevailing opinions in their own social circles" (1992:32). Laurendeau (2000) adds that in tight-knit groups like skydivers, the ways they rationalize risk are shared between experienced members, both implicitly and explicitly, and further passed down to the newcomers as part of the process of achieving membership, which corresponds with my findings as well.

The implicit beliefs of being in control of the experience (Ewert and Hollenhorst 1994:188-89) are manifestations of collective beliefs of the sporting group, since "relational forms, together with the cultural biases that justify them, are each hypothesized to engender shared representations of what constitutes a hazard and what does not (Douglas 1970b, 1978, cited in Dake 1992:28). In the next section I will elaborate on how this sense of perceived control can be achieved among skydivers. I will debate different findings from other researchers that can provide an understanding of this matter.

#### Playing with Death or a controlled activity?

While reading up on literature relevant to my research, I have many times struggled with the feeling of ambivalence towards much of it. As mentioned above, researchers have aimed to explain *why* people take risks. Some have emphasized how we can understand these forms of risk

seeking in a broader perspective, and among those there have been multiple other perspectives as well: too many to provide a fair demonstration here. The reason for my ambivalence, however, has been the extent to which they have interpreted their findings in the direction of "playing with death" and so on, whereas my own impression, as well as experience, indicates that this analysis is insufficient. LeBreton, e.g., claims that risk-takers seek risk because there is something lacking in their lives (2004:1) or that the fulfillment they feel derives from the immediate possibility of death:

"The test of truth that emerges from playing on the razor's edge is an elegant way of putting one's life on a par with Death for an instant in order to steal some of its power. In exchange for exposing oneself to the loss of life, the player intends to hunt on Death's territory and bring back a trophy that will not be an object, but a moment; a moment impregnated with the intensity of self because it bears within it the insistent memory that, through courage or initiative, he or she succeeded for a moment in extracting from Death or physical exhaustion, the guarantee of a life lived fully. [...] The symbolic play with Death is what gives power to the experience" (LeBreton 2000:8-9).

I find this claim difficult to relate to in comparison to my findings. The skydivers I met while conducting the fieldwork, and the ones I have met during my time as a skydiver, strongly express that, first of all, everyone has their own reasons for getting in to the sport in the first place. Secondly, most claim they do it because it gives them a feeling of mastering, and that it is challenging, not to mention that it gives them great pleasure. *To argue that it revolves around a play with Death so to speak seems to be a valid statement only among non-skydivers.* Be that as it may, the suspicious feelings towards the validity of these kinds of claims do not lessen as LeBreton, among other things, explains free-fall as a sensation of weightlessness:

"Many studies show, in fact, that anxiety is high just before the jump, disappears afterwards, before returning as the chute opens and unfolds, abruptly ending the pleasant sensation of *weightlessness;* this is the most dangerous moment of the procedure as the parachutist discovers whether he or she waited *too long before pulling the ripcord*" (my emphasis) (LeBreton 2004:4-5).

Obviously I cannot argue that I know how free-fall is experienced for everyone, but I will argue that weightlessness is the very last thing one normally feels when falling like a rock at speeds of more than two hundred and fifty kilometers per hour. A more correct term would be the feeling of being pushed by a hard, invisible and powerful force that wants to move your body around. Furthermore, LeBreton asserts that the most dangerous part of the jump is when the skydiver is to

discover whether he or she waited for too long before opening the canopy to stop the descent. Pulling the ripcord is not something one *waits for*. Skydivers today jump with all kinds of technological aids, some of them even sound out alarms at different altitudes to remind the skydiver that he is loosing altitude – a reminder few need. Again, I cannot speak on the behalf of skydivers in general, but I do have to point out that claims like these are hard to understand, both from a theoretical perspective, from my own data and from having experienced it myself many times. Unfortunately, LeBreton is not here to defend himself – it would have been interesting to know what he based his conclusions on, as they are quite contradictory to my own.

The ultimate challenge for me is therefore to adequately give my readers an insight into this, and an understanding of the concept that skydivers do not get their fulfillment from the immediate possibility of death, at the same time as I acknowledge death's presence. Previous studies have misunderstood a fundamental aspect; close to every skydiver I talked to during my fieldwork would argue that *they skydive despite the risk, not because of it.* I firmly believe that if we are to understand *why* we need to understand *how.* Skydivers in fact claimed that they are fully aware of the dangers connected to jumping out of planes, and that they are aware they can die, but they do not jump out of that plane in the belief that death is a likely possibility, and especially not because there *is a chance of dying.* My fieldwork shows in fact that skydivers are very much risk-aware, and that they receive great pleasure from managing the risks – actually, they argued that one of the aspects of the sport that made the risk *worth it*, was being able to train hard and reach goals – to be in control over a demanding activity. They claimed that the reason why people start in the first place is irrelevant, what is more interesting, according to them, is how they continue, and it is in the process of 'how' that we can understand the 'why' of skydiving in my opinion.

An important notion of the risk management processes among skydivers, in my opinion, is that risk, as a concept, is not something skydivers actively relate to. They relate to the dangers as such involved in the sport, and admit that the sport is risky, but they also argue that the sport is not particularly risky to them, personally. This is something that will be emphasized especially in chapter five. The following sections will contribute in our understanding in this.

Lyng (1990:874) states that "skydivers spend more time preparing for a jump than they do making it". In other words, they do what they can to not feel a lack of control over the situation. For this reason, Lyng further argues that skydivers and other risk seekers would not typically be interested in gambling, due to the perceived lack of control. Paradoxically, many of the skydivers I met during my fieldwork would tell me that they would never have tried e.g. bungee-jumping – how could they know that the bungee would function? How could they trust other people completely with their lives? They actually argued that they had a hard time understanding

activities where people "mindlessly" threw themselves into dangers way, without being in personal control of the situation. The same would account for doing a tandem jump with an instructor. Skydivers are often asked to do these jumps with skydivers who are training to be a tandem instructor, in order for him or her to train without having to worry about the tandem student as such. Many skydivers would refuse to do these jumps, as they could not imagine throwing themselves out of the plane, 'strapped on the belly' of someone else, and not be able to control the situation by themselves. This is quite an irony because skydivers view their activity as profoundly different from other types of "mindless and dangerous risk-taking". Indeed, LeBreton's (2000) efforts in defining risk behavior suddenly becomes somewhat valid after all: at least insofar as it relates to skydivers' way of making sense of "the others" that they do not want to be associated with.

This corresponds with my findings, which show that *control* is what skydivers value the most and what enables them to have good experiences. Understanding how they acquire this feeling of being in control is crucial. Rinehart and Sydnor quotes a skydiver describing her training for a championship:

"With the power of a jetliner, the plane surged forward and I watched the ground peel away. "Concentrate," I thought to myself. I closed my eyes, rehearsing every detail of the dive. "Pinwheel launch, shifting the weight straight forward out the door, staying upright, believing in the relative wind, then bringing my right arm forward to stop back looping, and assume the side stag position..." I knew that I had barely enough time to mentally practice the dive twice before performing my last gear check" (2003:107).

This quote provides us with a fair idea of the preparations involved in doing a jump, regardless of what level. This can be seen as a form of routine; before every jump the skydiver will go through the jump countless times, thinking about every movement. He or she will also perform gear checks multiple times, rechecking that everything is in order. This happens simultaneously, and I argue that skydivers, through these routines, actually *normalize* the action of jumping out of planes and further enable them to feel in control. By checking every detail over and over again, they normalize it to themselves and *attempt to render it harmless*. My study will show how they to some degree attain the perception of harmlessness, and it is in this the link between *actual* efficacy and *perceived* efficacy becomes clear, something chapter five will discuss more thoroughly.

Another important aspect of feeling in control that will be elaborated in chapter five as well, is provided by Mattingly and Garro (2000) who assert that when faced with uncertainty, individuals tell a story through their own enactment, through a performance of the known and the familiar. By trusting the present, they construct a trust in things to come. One builds trust through *repetition*, as well as familiarity and a feeling of safety. It is the familiar that keeps the performance going and is the source of innovation and motivation. Much of my findings in this research will elaborate further on this.

Several social scientists point out that where there is doubt, uncertainty, and risk in the human conditions – are areas in which ritual practices abound (Horton 1960). Poggie and Gersuny (1972) claim that taboos among fishermen in New England resulted from risk associated with the protection of life and limb, and not the production of fish itself. Burgers (1975) argues that both humans and nonhuman animals continuously struggle against randomness, trying to achieve a freedom to make choices or exercise control. Further, Perlmuter and Monty (1973) discuss that it was not real control that was the issue, but perceived control one was trying to acquire a sense of. Psychological theorists in general have long asserted that lack of feeling in control stresses humans to the extent that they become dysfunctional, reduceing the ability to deal with the given environment (Poggie et. al. 1976). Poggie, Pollnac and Gersuny (1976), who studied fishermen, found that the greater amount of risk associated with trip fishing results in greater anxiety, which is lessened by more extensive ritual behavior. They also discovered that having other relatives as role models helped to pre-adapt and adapt individuals to the personal risk involved in fishing.

When skydivers prepare for jumps, there are many similarities to ritual behavior. Preparation is a dominant factor of the activity, and most would have a rigid routine they never departed from, believing that if you did, something bad could happen. There are several different 'rituals' they perform, one regards the gear check, as mentioned, whereas other was bumping fists with those they were to perform a jump with, before leaving the plane. If one did not greet the others on the plane, although not explicitly expressed, they would feel a sense of unease – of not being able to do the thing they always do. Another thing I never heard anyone say before a jump was "good luck". Wishing someone good luck could seem to imply that luck was needed. Instead, they would say "have fun", "rock it" and so on. Chapter three will examine how some of the processes of dealing with uncertainty can be compared to ritual behavior and this may provide us with a better understanding of how they relate to the risks in the sport.

Most important of Binkley's (1991) findings in my opinion, was that workers attributed the greatest importance to *those factors which were directly associated with their work environment and working conditions* – in other words, factors perceived to be under their personal

control. In my own material, I found much of the same belief among skydivers. Problematic factors like winds, turbulence and such that can prove to be disastrous, were deemphasized as the skydivers could only control it so far (e.g. whether or not to do a skydive in bad weather conditions). Factors like group sizes, types of jump, equipment choice, type of landings and general skills were of much greater importance to them. A certain element of luck was certainly a belief among skydivers, however, this was deemphasized as much as possible, and controllable factors like their own skill-set and activities were identified as being of much greater value when it came to safety. Also, Binkley (1991) argues that as many fishermen told them that fishing was safer than driving a car, there was a recognition that some physical risks can be reduced by the individual – but, that there seemed to be a fatalism underlying fishermen's perception of all risks. These findings correspond with my own – skydivers seem to have a certain element of passive acceptance when it comes to the risks they expose themselves to. Almost everyone I talked to would admit that skydiving is dangerous, and that they can only do so much trying to avoid the dangers. At some point, it could be a 'freak accident' that got to them, no matter how good they had become. This is a vital aspect of the skydivers risk management practices and will be elaborated especially in chapter five. However, the notion of fatalism is a recurring theme throughout the thesis.

According to Binkley (1991), fishermen do not acknowledge the dangers and actually trivialize them. When they were asked if they ever had a serious accident, almost everyone answered 'no' to this question, yet in all cases, they had experienced one in the interviewers opinion. When the interviewer changed the question to 'have you ever had an accident', more answered 'yes'. It turned out that fishermen regarded a substantial amount of accidents as 'routine accidents' - and Binkley argue that this attitude reinforces the acceptance of risk in more extreme fishing conditions. I found many similar ideas of 'routine accidents' and general deemphasizing of hazard with skydivers as well. Many of the informants had experienced sprained ankles, wrists, severe bruising, dislocated shoulders and so on, but these accidents were downplayed if not mentioned at all. If they did mention them, they explained them as a 'momentary lapse in concentration', and something one had to expect when jumping out of planes. I was told countless times that compared to other sports and activities, skydiving was less dangerous - many would also mention statistics on traffic-accidents and such to validate their statements. Binkley (1991) argues that this attitude can be seen as a psychological coping mechanism to deal with high stress associated with dangerous working environment. Fishermen also explained men "breaking up", when they did not cope with the pressure. These 'broken' men were regarded as dangerous because others could not trust them to act predictably. They also explained that being "broken up" was the reason for the accident – they used the term to describe unusual behavior and to explain why accidents happened.

Skydivers often encounter accidents where the involved participant has demonstrated severe lack of judgment in their opinion. These skydivers are often pictured as lacking the right set of skills to be skydivers. An often-used phrase is "if at first you don't succeed, skydiving is not for you". This is not to be confused with Lyng's (2008:112) notion of an "innate survival instinct" in my opinion. Rather, it can be seen as a moralistic explanation they use for skydivers who "just don't get it". I heard them use the phrase in several different contexts; when someone neglected to uphold their responsibility towards the community, when they had bad attitudes towards safety, or when a skydiver continued to hurt himself or be close to over long periods of time. They would say things like "skydiving is not for everyone" and I was told that you do need to be able to keep cool in the face of chaos – but they would also complete the saying with the argument that "one learns how to keep cool. It's an issue of experience and of being relaxed and confident about your skills". Cassidy (2002) argues that risk is a way for individuals to exercise short-term control and can be understood as an idiom by which they progress in the context of their lives (in racing) (2002:172-173). Cassidy also stresses that the perceptions of risk among those at the racetracks differ from the standard definitions of risk presented in recent studies (Beck 1992; Douglas 1992; Lash, Szerszynski et al. 1996). The practice of living with uncertainty is a form of knowledge one can only get from experience and from advice passed down from one generation to the next (or from mentor to rookie) (Ådahl 2008:33). I believe this is why they value discussing the incidents so much, and it will be an important matter to discuss further in the thesis.

Dyck (2008) asserts that a domain of instruction, learning or knowledge may be said to constitute a discipline. Discipline does not refer exclusively around forms of externalized control and punishment as previously associated with institutional contexts. It does not entail only technical means for exercising power over self and/or others but also an essential symbolic medium for defining preferred social practices, objectives and ways of being. Skydiving is a very technical sport with all its rules, routines, equipment, and so on. The activity itself is highly demanding, both mentally and physically. I argue the technicality of the sport could result in the high level of discipline one finds in the community. Skydivers seems to be quite disciplined athletes, and by enhancing the performance in as detailed manner as possible, I argue this can be a form of discipline in it itself. Dyck (2008) argues that there remains a tendency among social scientists to conceptualize discipline narrowly in terms of the abovementioned factors. There are stylized and innovative ways in which regimes of self-discipline are being cultivated within voluntary realms of leisure and self-development. He argues this is especially easy to find within

somewhat autonomous and individuated venues of professional, working and domestic life. Foucault and Sheridan (1977) will be important in attaining a better understanding of this, as they hold that in the regime of disciplinary power, the art of punishing refers individual actions to a whole that is a field of comparison, a space of differentiation and with a principle of a rule to be followed. In other words, the disciplinary power *normalizes*. Chapter four will discuss this element of managing risk in greater details.

#### **Final comments**

It should be mentioned at this stage, that in order to write this thesis, many generalizations has been necessary. How skydivers relate to the risks varies greatly according to their level of experience, and how often they jump. The feeling of self-efficacy also seems to come in waves in their careers as skydivers. Some struggle with great uncertainty at the beginning which passes after some more experience have been gained, some become more uncertain as they gain experience and realizes that there are a lot of uncontrollable factors they cannot control and so on. To use the metaphor of driving a car, one could compare it with the unease the newly licensed driver feels, the feeling of being in total control that sometimes occurs with a few years of experience, but does not necessarily carry over, and last, with the experienced driver that is much more nuanced in regard to both his or her skills and the dangers of driving in general. This is unfortunately something I cannot emphasize too much in my analysis, as it would be a tremendous work too substantial for this thesis. It would however, be an interesting topic to study; how experience as such affects ones feeling of safety and self-efficacy.

Through a thorough presentation of multiple theoretical concepts and how these can be used to understand skydivers processes of risk management practices, we are better equipped to continue the quest. What we have learned so far is that skydivers can be comparable to edgeworkers and that they engage in substantial risk management practices. Risks that are defined as subject to personal responsibility are controllable, and those external to it are uncontrollable and susceptible to the vagaries of fate. They interpret hazards in the context of their 'embeddedness' in the community and share ideas on the hazards of the sport. Furthermore, they entrench the idea that they are in control by discussing others mishaps. To avoid threatening their self-control, they must redefine their own emotions. When acquiring skills and exchanging ideas, a mindset is cultivated that enables them to feel this control.

Decision-making and editing of choices are slided onto the social institution. If we are to understand the skydiving community, we need to focus on the institutional framework of decision-making. Verbal interactions functions as group-therapy and informal training sessions, which in turn serve to reduce both real and perceived dangers. These interactions contribute to the feeling of self-efficacy. The concepts of blame and human error are used to acculturate skydivers to the belief that risk is psychologically manageable. Fatalistic attitudes on the other hand, also contribute as a psychological protective mechanism and are used in the incidents where risk is seen to be external to personal control. Through culture specific sets of rules, emotional response and performance are learned. The concept of risk is further closely connected to responsibility and value. When people have an active orientation to their lives they tend to have an active orientation to the management of risk as well. When authority distinctions are de-emphasized, it strengthens the social bonds and leads to a sense of personal control and satisfaction with the safety among the members of the group. When new skydivers enter, they want to become a part of the group and thus want to act honorably. The other members can be seen to use a form of 'disciplinary power' to affect newcomers and indoctrinate them with the shared ideas of what is important and valuable in the community. Skydivers understand themselves as members of a group, and it is the group that can be seen to constitute what is risky and how it should be managed.

As I continue with this thesis, I will discuss that through ritual behavior towards disciplined training and routines, skydivers gain a feeling of being in control and thus gain a heightened sense of self-efficacy. I will also elaborate on those elements external to their personal control, and show how these are deemphasized and even seen as less valuable and unworthy of their attention – something that can seem to further lead to a general fatalistic attitude towards those risks. I will examine how dangers in general are deemphasized and explained as routine-accidents, and if they occur they are explained as a momentary lapse in concentration in order for them to be psychologically manageable. I aim to discuss these contemplations by examining the incidents and the participants' methods of dealing with those in chapter three. In chapter four, I will discuss how skydivers perform social control on each other and the implications of that social control, while chapter five will present the various methods of acquiring skills and how this directly influences their perceived self-efficacy. Finally, chapter six will examine how technology substantially alters the sport and its participants. Before the challenge of this can be tackled, the next chapter will present the methodological implications I faced of being an "insider" conducting a fieldwork on her 'own people'.

# Chapter 2: The Methods of a Skydiver Studying Skydivers

### Introduction

I don't want what you want
I don't feel what you feel
See, I'm stuck in a city
But I belong in a field

The Strokes - Heart in a Cage

When I initiated the work on the thesis, I fought against the idea of a risk focus. As a skydiver it felt irrelevant for the experience of the activity, and doing a risk research felt like reducing the entire thing to something it was not. To me, skydivers and the community was a sanctuary sphere where one focused on the joy of skydiving, mastering the challenges of flying one's bodies and canopies, not to mention meeting like-minded people that only cared for one thing: skydiving. Risk as such, is not what skydiving is about. With more than four years of active participation in the Norwegian and Scandinavian skydiving community and around two hundred and fifty skydives, I was sure that risk was not what I should write about. My insider position, which I will discuss more thoroughly as we go, could give me access to an activity not easily accessed to other non-skydivers, and I wanted to really use that to my advantage. I therefore planned to examine the exercise-methods of the skydivers and how they related to the technology they rely on in their activities. I wanted to explain that skydivers jump out of planes despite the risk of death, not because of it. And 'knowing' that most non-skydivers tend to confuse the placement of the words despite/because when they categorize 'us', I felt almost an obligation to take the research seriously in that it was my 'duty' to conduct my research in a manner that would argue the "despite-stance". However, when considered in retrospect, my position here appears pre-mature, dogmatic and biased, and worked to obstruct exploration and analysis of the issues in the manner I intended when initially triggered by my witnessing of a "close call".

When I arrived at my first field-site in the western part of USA, I had only been on site for a couple of days when I witnessed my very first near-fatal incident, referred to as a "close call" in the community. It was a truly disturbing experience and it shook the very foundation of my feeling of safety. On the other hand, I quickly managed to move on; as I realized the incident did

not affect my participation, and me, as I told myself I did not do the same maneuvers as the person it happened to. I told myself that would never happen to me, as I was 'much more safety-minded and conservative in my approach to the sport'. In the aftermath of the incident, I talked a lot to the other skydivers who witnessed it, and to the skydiver involved. We discussed in great detail what he did wrong, what he should have done instead, how one could avoid such terrifying experiences through attending courses, choosing different equipment, do other types of landing and what not.

Reluctantly, it dawned on me. The entire activity of skydiving is founded on the subtle, but nevertheless immanent, principle of avoiding as much risk as possible while still engaging in the activity. What skydivers want to do, is skydive as much as absolutely possible, for as long as possible, as often as possible. They want to challenge themselves, learn new things, jump with bigger and more advanced groups and do better and better landings. In their effort of achieving this, they literally discuss every single detail of the activity of jumping out of fully functioning airplanes. I realized that skills equals safety, and that fun equals skills. Slowly I fathomed the contours of a greater, and obviously, more realistic focus. Risk as such was rarely discussed. Skills, on the other hand, in all its forms and variations were.

It was disturbing to move in the direction of a risk focus. Not because I initially was so sure it was the wrong way to go, but because I had to start focusing on the *dangers* of the activity I loved so much. Interpreting the material felt like an attack on my self-efficacy as a practitioner and it dawned on me that my relationship to the sport was to be changed forever. When incidents happened, and when I discussed the practitioners doubts with them, I *felt their doubts and their anxieties* and I realized that learning about their experiences made me learn more about myself too.

In generating data for this research, I conducted close to six months of participant observation. I drew on my skydiver identity to gain access to the dropzones, camps and other events I attended. I did not conduct any formal interviews, however, the data in this study developed in the interaction between myself and other skydivers – hence the word "generate" as opposed to "gather" or "collect". As pointed out by e.g. Laurendeau (2000) one can only gather or collect something if it is already in a "collectible" state. The data in his study was developed in the same way as mine, and as him, I feel it is important to clarify that with my choice of language.

This chapter will discuss the implications of doing research "at home", and how I experienced being a native influenced the fieldwork and the findings. Furthermore, I will elaborate on how I executed the research. Early on I decided to conduct fieldwork at multiple locations, and I will debate the consequences this had on the research. At this point I also wish to

remind the reader of the opportunity to look at the appendix, which will provide information on the practice of skydiving, equipment being used, safety, disciplines and terminology – as it may make it easier for the reader to understand the different dimensions of what this thesis will occupy itself with.

After thorough considerations I have decided to keep the dropzones of my study anonymous as I feel the actual geographical location as such is irrelevant for the analysis and its possible implications. It is important to me, and it feels more ethically legitimate to protect the identity of both the dropzones and the informants as well as I possible can, as I am doing a thematically oriented study on the processes of risk management in a skydiving context, not skydivers per se. If I had chosen to explicitly describe which dropzones I were at, I would feel that I brought the focus over on *where* rather than *how*. To my anthropological readers, this will not make any substantial difference, but as I am aware this thesis will be read by skydivers, I feel it is necessary to at least attempt, to some extent, to focus on what I feel is of importance, instead of discussing the dropzones as they are perceived by me. That being said, my focus must remain on my anthropological readers, as those are my main concern.

I have included several empirical situations and informants' sayings and thoughts on various themes. Usually, informants are presented quite detailed in anthropological writings. In this thesis however, I felt this was impossible as most of my informants are quite known in the community due to their experience and skills. Furthermore, there are several 'personas', which would be easily identifiable. I have tried my best to keep them as neutral as possible and avoid any significant details in order to keep them anonymous. All informants have been re-named in this attempt. That being said, the skydiving community is small but big, and there will always be someone who knows everyone.

However, before we go further into the methodological challenges, I will elaborate upon whether the skydivers of this study can be generalized to account for 'the skydiving community' as such.

### The skydivers

First of all, I feel that I need to clarify one fundamental aspect of this thesis. Although I did the fieldwork on north-American dropzones, I have not studied Americans per se. The informants of the study were a broad-ranged mixture of Americans, Brits, Scandinavians, south Americans, Germans, Italian, French, Dutch, Russian and so on. In other words, it was an international sample of skydivers, mainly from western countries and the majority of the

informants fell between their mid-twenties and late-forties in age. The dropzones in general were quite similar when it comes to the range of nationality the jumpers had, including the staff. The more specific "American" culture as such is thus likely to have some influence on the operation of the dropzones, as they were owned and regulated by Americans.

However, I have chosen not to focus on gate-keeping concepts regarding a north-American culture as such, as I do not find it relevant due to the scope of this thesis, which is aimed at examining how the skydivers of this study managed risk. In the text, I will therefore refer to the informants as "the skydivers" or simply "skydivers". The choice of language, does not however, imply that I state that the informants should be generalized to count for all skydivers in general. It is simply done that way for the sake of simplicity. I have not seen it as especially advantageous to problematize the geographical location the informants are situated – but rather concern myself with the relational and contextual localities they are a part of as a point of departure. I argue that a geographical, space-specific focus would actually be limiting and further confusing on an already fragmented group of informants. This way, Appadurai's (1996) concept on *scapes* is a more fruitful approach than what the traditional fieldconcept implicates of spatiotemporal productions of locality.

Other researchers who have studied skydivers have commented on much of the same, among them Laurendeau (2000), who argues that in the development of skydiving as a leisure activity, the increased level of communication between jumpers from different dropzones, regions, or even countries, contributed to and was facilitated by shared meanings, rituals, and symbols in the sport culture (2000:13). He further notes that representativeness in his study did not mean to say with certainty that a particular percentage of skydivers espouse a specific perspective on risk, rituals or any other aspect of his research. What it means is that the participants of the study captured a relevant range of experiences and characteristics, and the *processes* by which these participants make sense of their worlds are representative of the processes taking place in this particular social context (2000:64). Anderson and Taylor (2010) argue that the subcultural identities of skydivers are created among the members in the context of ongoing collective experiences and discourse that provide what Tomlinson (1993:6) refers to as "cultures of commitment". They assert that skydivers construct "identity stories" (Loseke 2007) that shape the meaning of their experiences in these communities. These issues will be elaborated further in this thesis.

## **Choosing sites**

Studying an activity so close to my life, I decided to conduct a field study where I could adopt the 'complete participant' role (Hammersley and Atkinson 1995; Young 1991) and where I based my participation on what Sands (1991) refers to as 'intense participation'. Carocci (2009) argues how she felt the nature of her object of study dictated this very form of fieldwork, and I could not agree more. An insider I was, and an insider I would have to be. Because of that, I travelled to the 'Mecca of skydiving' if you will – the USA, where skydiving is performed on a big scale across the nation. The weather and climate is obviously of importance in the sport, and the west part of the USA could provide me a steady level of activity. From mid January 2011 to the beginning of June, I lived like any other skydiving 'bum'; travelling between dropzones, hanging out in the evenings around the bonfire, participating in heated discussions about whatever occupied our minds and of course, jumping. Most of the time I would live, eat and sleep together with the other skydivers. Usually, my residence was in the dropzone's bunkhouse, if not, I was living in a tent among the other campers. In other words, I spent every minute of the day for the entire length of the fieldwork at location.

As I planned the fieldwork, I was still not sure if I were to stay at the same dropzone for the entire length of the stay or if I should move around. My gut feeling told me that it would be interesting to check out some of the other dropzones in the area as well, since they were of a different character than the one I chose as my main field site. I also had in mind the difficulties I was likely to meet in feeling too much at "home". Hammersley and Atkinson (1995) argue that the researcher must resist this tendency since the work of analysis is produced in the very distance created by being apart. This became very clear to me as the fieldwork went on, and almost three months in, I decided to grab an opportunity that was given to me. Some organizers I was familiar with asked me if I wanted to work for them at a training camp they were planning. Some forty skydivers were travelling to this dropzone to conduct extensive training for two weeks. The dropzone in question was also one I had wanted to go to, as it was one of the more professional businesses in the area.

Ideally, an investigator in social research endeavors to obtain samples that allow them to make claims about broader groups of people (Laurendeau 2000:55). However, practical considerations and limitations can prevent one from obtaining a truly 'random' sample, one that would permit the researcher to draw conclusions about a broader population with a known probability of being wrong. How do researchers know that participants not involved in the research share these perspectives (Bryman 1988:117)? According to Mason, one possible approach is to establish:

"... a relationship where the sample is designed to encapsulate a relevant range of units in relation to the wider universe, but not to represent it directly. The range referred to here might incorporate a range of experiences, characteristics, processes, types, categories, cases or examples, and so on. [The researcher] should have a strategic purpose in selecting [a] specific relevant range which means that the relationship between [the] sample and the wider universe is not *ad hoc.*.." (Mason 1996:92-93).

Laurendeau (2000:55) discusses how he felt that this logic was the best he could employ in his examination of the skydiving community. He was not interested in obtaining a simple random sample of skydivers (if that is even possible), because it is not "the skydiver" in which he was interested, but rather the processes by which skydivers make sense of their experiences. This approach made more sense to me as I am writing about the processes of risk perception and management. My aim was to describe how the skydiving community deals with its challenges, and how this knowledge hopefully can say something about broader groups of people as such, not how "the skydiver" per se deals with this. However, how do you *know* that your sample is *relevant* if you have not covered *representativeness* and *range*? Perhaps this is more of an intuitive and abductive form of reasoning with the anthropologist? Maybe we can understand this method as a legitimate form of generalization, that in many cases will be just as accurate as representative samples in regard to fieldwork, which de facto most anthropologists use without awareness.

In order to explain how the choice of dropzones affected the sample of data, I need to explain how I categorized them. There are numerous ways of categorizing dropzones; size (of the dropzone itself and in regard to number of jumps done per year), how many jumpers, type of jumpers (professionals, beginners, teams, and so on), how many airplanes, and whether it is a local skydiving club or a business. To simplify, I categorize them according to size, level of professionalism and what kind of jumpers the dropzones attract.

The main site I spent most of my time at can be categorized as a mid-sized dropzone. It is organized as a business, meaning you have dropzone owners, a rather big staff (depending on seasons, from ten to thirty people), a considerable amount of locals (regulars) and quite a number of visiting groups each year. In addition to this, they perform many tandem skydives that generate a substantial amount of income for the dropzone. On a good day, this dropzone could perform around sixty tandems a day at a price of about one hundred and fifty USD each. The dropzones of this type usually have long business-hours each day of the year – one of the main reasons I chose

this as my main site as I wanted to be located at a dropzone where it was a steady level of jumpers and activity.

The other type of dropzone I visited is a lot bigger, and even more professional, also with jumping throughout the year. This dropzone can perform more than one hundred tandems each day, and as much as around fifteen hundred regular jumps a day when it is busy. They have a wind tunnel situated near the dropzone, a feature that makes it more interesting for serious participants such as training-camps, teams, bigger groups and so on. There is a big team of staff, packers available to the teams and serious participants, a professional running of the operation (specific roles for everyone), and thorough routines on how everything is organized. They usually have 'organizers' each day, available to all jumpers for free, to sample bigger and more advanced groups to perform jumps together. Perhaps the biggest difference from this type of dropzone and the first is that they maintain a very professional angle on how to run the operation. Safety is extremely important and all routines are strictly standardized.

The first dropzone is somewhat more "local" in that the regulars participate in a higher degree in the operation. At the latter dropzone, you would arrive, register and start to jump. In other words: it is strictly a business that provides skydiving. Mid-sized dropzones are more prone to have a closer connection between the employed and the jumpers as most of them know each other to some degree and usually shifts between working for the dropzone and jumping for fun. Therefore, most of the employees at this dropzone were local jumpers who had been there for most of their career, where at the latter dropzone, skydivers would travel from all over the world to work for them, as it was of such a different caliber. The staff at the biggest dropzone included many previous world champions and internationally renowned skydivers.

The third dropzone I visited is harder to categorize. It is a mix of both of the previously mentioned dropzones, but differs in the way it is organized. The two other dropzones were regulated under the national organization for skydiving, USPA (United States Parachute Association), whereas the latter was not. The staff at this location was mostly locals, but the dropzone itself was visited from all over the world. It was run extremely professionally in that the visitors had little contact with the staff and it was therefore an interesting mix of the two above.

It should be noted that categorizing dropzones in this manner is to some extent a subjective task, as they are all somewhat alike and somewhat not. There will be elements of all categories at every one of them. Not to mention the fact that I have completely singled out the smaller dropzones that are run by skydiving clubs and have a rather different way of organizing its operation. However, I did not conduct fieldwork at any dropzone of this type, as they rarely have jumping all year around, every day. Furthermore, I come from a club dropzone myself, and

felt it would be more sensible for me to go to organizations I had never visited before, as they would be more different in most aspects and thus hopefully make it "easier" to be an insider. Getting access to these dropzones is usually quite different as well, since most of them are run by volunteers, and by locals only. I felt I had a bigger chance of conducting a successful study if I was a regular visitor, instead of a person no one knew of, and one that was not a member of *their club*.

# **Activity**

I spent much of my days just sitting around at the dropzone, talking to the visitors, locals and staff and on slow days I spent time on online skydiving forums, reading up on debates about safety, training, incidents and fatalities. Often there would be interesting themes I would discuss further with the skydivers on the dropzone.

At several points in time during the fieldwork I thought of conducting formal interviews, but never went through with it. Those of whom I got the closest to strongly advised me not to do it, as they were concerned the dropzone owners would interfere if I did. A lot of the subjects that we discussed directly connected to the regulation and leadership of the dropzone, and the informants who I trusted most, explicitly warned me that interviews could be interpreted as "interfering" and "nosy" from the management's perspective. Therefore, I never conducted formal interviews with participants; instead, I took advantage of every situation I could, bringing people together to discuss events and issues of interest. This was not hard nor was it perceived as strange from the skydivers view. We would usually sit around the bonfire at night anyhow, with beers and music and talk loosely with each other in a relaxed setting. The discussions would go on without me interfering and it was usually them that encouraged me to ask them questions about specific subjects so that I could write about it "in my thing".

During my fieldwork, the American skydiving community experienced around seven fatalities close to each other across the nation – a number that shook the entire community, worldwide (several of the deceased were in fact foreign jumpers). These incidents naturally occupied most of the skydivers, and heated discussions about what was the reason for the dramatically high numbers were thoroughly debated in addition to what should be done to avoid such disastrous incidents. On the online forums this was a recurrent theme throughout my fieldwork and using these debates actively helped me grasp sensitizing concepts, grasp particular issues and especially give me new ideas for enquiry. Carocci (2009:59) explains how written documents helped her grasp different ways of reacting to fatal accidents and the different mental

attitudes of pilots – which she further tested through conversations with informants, a method also discussed by Hammersley and Atkinson (1995). In the same way as with Carocci, these sources helped me pin down mainstream values. Especially an online skydiving forum, called "dropzone<sup>2</sup>", proved to be a major contribution in my research. At this forum you can literally find debates on every single aspect of what occupies skydivers in general, from equipment discussions to debates around specific fatalities, and skydivers use this to discuss safety, performance, techniques and other organizational challenges and issues of regulation. Due to the high number of fatalities that period, this naturally affected the debates in the community, both on- and offline.

As the fieldwork carried on, I traveled as mentioned to two other dropzones, together with some newfound friends. On our way to the biggest dropzone, we stopped at the one not regulated by the USPA. Although I did not spend more than a few days there, it gave me invaluable insight into the complex processes of how different ethos of regulation can affect the operation. This dropzone is debated among the general skydiving crowd due to its lack of membership within the organization, and the visit contributed to interesting discussions with many skydivers in retrospect of the visit. At this dropzone I also got to be "just a fun-jumper"; nobody knew me, or cared to get to know me beyond the normal degree of just jumping together. I got to be just any other skydiver, and it was a longed for interruption from the normal role as the researcher/local-role I had at the first dropzone.

After the visit at this dropzone we continued our trip to the one where I was going to work for the training camp. The organizers of the camp were renowned as they were professional skydivers and a team competing at an international level. Ironically enough, my involvement with them gave me access to the other highly skilled and professional skydivers at the dropzone, a group I would not have gotten to know without my affiliation with the team. I decided to stay at this dropzone for almost two months, as it provided me with more insight and material than I could have dreamt of. As with the other dropzones, I spent my time talking with skydivers, jumping with them and writing down field notes. An unexpected effect of leaving the main site for a period of two months was that I got the distance and separation to review my data quite extensively. The interruption from the main site was recuperating and I felt that the dropzones complemented each other in such a way that they provided me with a more nuanced understanding of the community and its processes.

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<sup>&</sup>lt;sup>2</sup> This forum can be found on the domain <a href="www.dropzone.com">www.dropzone.com</a>. However, I will not refer to the actual links in the text or in the bibliography, as this forum is meant for skydivers, and sensitive information like names on deceased and alike will be found there.

Last, but not least, I returned to the main site and stayed there until it was time to go home. I spent this period nesting up as much uncertainties in my material as possible and took part in over fifty skydives. One could say I was a 'complete participant' (Hammersley and Atkinson 1995; Young 1991) at this time, compared to when I was on crutches with a fractured ankle (an incident I will explain further in the next section). Being able to literally dive into what the activity is really about made me realize that this very part of the sport has substantial effects on how the participant views risk management – obviously. Throughout the fieldwork I had spent so much time discussing all aspects of the activity, and through that almost lost touch with the actual performance of it. Throwing myself out of planes with fellow skydivers brought me back into that, and added a final touch to my understanding of the phenomena I am now writing about.

# Getting in as an insider

As mentioned, I stayed most of the time at the mid-sized dropzone. I was astounded with how quickly I gained access and in just a few days I had met most of the staff, been invited to parties and what not. The fact that I came there alone, with nothing but my 'rig' on my back also seemed to fascinate the skydivers. Usually, when one travels abroad to skydive, one travels in groups. Coming alone probably helped tremendously in gaining access. Interestingly enough one incident proved to be a major advantage in the process of getting to know so many people in such a short time. Just a few days after arriving, I had done my first skydive at the dropzone and was walking back from the landing area. In some unexplainable way I managed to step into a rather big hole in the ground. The dropzone is troubled with many "gophers", also known as ground squirrels, which digs holes in the landing field. Obstacles in the landing field generally increase the risk of injuries. Anyhow, I fell over and fractured my ankle. After a visit at the emergency room I was equipped with a pair of American style crutches (which in itself was quite a challenge as they are designed to be used differently than what I was used to) and a receipt for several thousand dollars (having an insurance coverage finally proved to be useful). Be that as it may, in the following weeks everyone would come over to me at the dropzone, asking me what had happened and especially if it was skydiving related. The fractured ankle likely gave me access in a much quicker fashion than any other approach would have. People found it humorous that it was walking back from the jump that had gotten to me, and not skydiving. One would have to agree.

Another aspect of the access that should be mentioned, despite that I feel somewhat personal when admitting it, is the fact that I am a female skydiver. In general, women skydivers

<sup>&</sup>lt;sup>3</sup> Skydivers refer to the complete system of the container, canopies etc. with 'the rig'. See appendix for more information on equipment.

are a minority and the percentage range from about ten to thirty percent, depending on nation. Laurendeau (2000) elaborates on how he had key informants that would vouch for him to give him the access he needed. He discusses the problem of gaining trust quite extensively in his work, a problem I never really had. Obviously, I did not make friends with everyone, but I rarely faced any difficulties getting in contact with those I wanted to get in contact with (there are however some exceptions; my level of experience made it somewhat difficult to get to know professional skydivers. In the instances where I needed to contact them, it was more efficient to go through other, more experienced skydivers). The female participants would welcome me – they usually appreciate each other, as they are a "minority", and the men – well, most of them appreciate the few women there are to find. That being said, the fact that I was also young, not a competitor in regard to work-situation at the dropzones and also only mid-experienced, likely affected the others view of me. Laurendeau (2000), who studied skydivers, does not elaborate on him being a male participant as far as I know, but I believe this might have made his access somewhat more difficult all in all.

I knew from my own experience that skydivers dislike discussing skydiving with "whuffo's" (non-skydivers). More than that, they dislike talking about it in an over-analyzing way. I was anxious they would see me as an enemy, another one of those researchers who just want to shed bad light upon the sport, and explain it like "a contract with death, a search for adrenaline and so on". Many of them seem to be updated to an extent on former research done on skydiving and extreme sports, and I almost expected to be challenged on methods, perspectives and what not. My concerns proved to be redundant. When I arrived, I had already decided to be open about my position as a researcher, hoping to be accepted only because I was myself a skydiver and therefore had a better starting point in explaining skydiving "correctly" in their view. When they realized I was there to conduct a study, they were almost over-excited that I was able to do a study for so long, with funding. They were absolutely oblivious to my status as a researcher, they just thought of me as, and I quote, "a god damn lucky skydiver".

What probably enabled me to do the kind of informal, focused discussions I did, instead of formal interviews, was my status as a skydiver. Lyng (1998), who has studied extreme sport participants, argues that some social groups consider their lived experiences as so different from those who do not share their activities that it is not worth their time to even engage these "others" (in this case, non-skydivers) in conversations about their worlds. He further claims that in the face of an experience that they regard as largely ineffable, edgeworkers feel that little can be gained from discussing the phenomenon with non-practitioners (1998:230). Being a skydiver made me able to discuss with them, fully understand the nuances of their opinions and also further

challenge them on thoughts and behavior. It is particularly important to be seen as "one of them" (Laurendeau 2000:58) as they understand that I feel what they feel too.

When a skydiver almost got killed in a landing, the others who witnessed it would gasp and feel sick – as would I. I felt the terrifying feeling of what it would feel like, I pictured the visuals as if it was *I* who was about to hit the ground. My body ached and I felt sick as if *I* was the one it happened to, just as the others who witnessed the same thing around me. When someone did something 'stupid' that could potentially be dangerous, *I* reacted with annoyance, as did the informants. When someone landed after a perfect jump and was thrilled about a new move, a new level of skill finally reached after months of training, I celebrated with them – knowing the hard work that was behind it. When watching a video online of a skydive with some of the most skilled participants in the world, I would shout in awe and be astounded – together with the others, realizing the incredible accomplishment it was to do the maneuvers they performed. Would I have been able to grasp these phenomena in the same way if I had not been a skydiver myself? I would probably have been able to conduct a fieldwork among skydivers, but I truly feel that the results would have been profoundly different. Not necessarily less, but different. Carocci notes:

"Like them, I was also under the 'spell' of the activity as a social practice normatively dictating just what is hazardous and what is not. The subcultural values of the gliding community I share and adopt, judging other and myself as a glider pilot and member of the community. I too relished the endless discussions about gliding, sharing with fellow members the appropriate jargon of the subculture" (Carocci 2009:53).

As my fieldwork went on, it was as mentioned not difficult to find skydivers that wanted to discuss different topics with me. However, they discussed with *the skydiver*, not *the researcher*, although I spent quite some time trying to remind them about my true intentions. As most of them were oblivious, I stopped advertising my project after a while unless someone new asked me specifically how I could stay on a dropzone for so long without working. Wheaton (1997) explains how partially concealing your true intension from the community brings about clear ethical considerations. However, as Carocci (2009) also suggest, it has often been remarked that fieldworkers are selective in their descriptions of themselves and their interests to those they study (Georges and Jones 1980:57). In the studies where the researcher belongs to the social reality in which he or she observes and analyzes, this holds especially true (Carocci 2009:52).

I felt that if I spent too much time reminding everyone about my status as a researcher, it would just seem strange as skydivers rarely talk about what they do for a living and so on. The

more emphasis I put on my role as a researcher, the less they would think of me. I also felt it would be quite arrogant to continuously remind them that I was so lucky to be able to, according to several informants, "take six months off" to follow my desires, when they could not – especially with the serious economic climate the American informants found themselves in at the time of my fieldwork. Being able to conduct long studies in that way, and receive financial support for it, is not common in the USA, and several of the informants expressed awe and curiosity in how 'in the world' the system worked. Those with an academic or at least higher educational background, also questioned what I was really doing there, as they had a hard time seeing my "hanging around and skydiving" as research.

### Research roles

Although it was not as deliberate at all times, in retrospect, I am pleased with the way I managed different research roles. The broken foot, the affiliation with professional skydivers, me being a young female skydiver and the different activities I participated in, all in all seemed to have given me a fairly broad range of data to work with. Laurendeau argues that is was necessary to jump out of the same airplanes, land the same parachutes, and "bullshit around the same campfires as people I was purporting to study" (2000:61). He goes further and compares his roles with those of Bryman (1988:48) who "[...] was cast in three different research roles: "total researcher", "research participant" and "total participant"". The different roles were apparent from minute to minute, not day to day. This has to do with the very nature of a dropzone; at some times there is a buzz of activity and one does not have time to stop and analyze one's surroundings. At other times, there is a long wait prior to a jump, and during these down times one finds him- or herself as simply an observer, trying to make sense of the behaviors you are witnessing in terms of research questions (Laurendeau 2000:61).

Many researchers warn against 'going native', to become too involved in the lives of subjects (Bryman 1988:96-97). Laurendeau (2000:62) admits that while it is important to be able to step away from one's role as a participant in order to examine issues in the field, he agrees with Lyng (1998:225) who argues that:

"...there can be no doubt that the depth of understanding is related to the degree of "co-presence" between subjects and researchers... A high degree of co-presence means not only occupying the same spaces and experiencing the same events as one's subjects but also sharing the circumstances of their lives with a constitutional stance that matches theirs as closely as possible".

Participant observation is explained by Mason (1996:60-64) as the process of entering a social setting, participating (to a greater or lesser extent) in the activities there, and making systematic observations about the interactions, activities and relationships in that setting. The goal is, as we very well know, to understand how the world is viewed from the perspective of those being studied (Bryman 1988:61). However, there is more to it than just showing up at a place and "looking" at other people. One needs to get in, learn the ropes, maintain relations and leave and keep in touch (Shaffir & Stebbins 1991). Furthermore, one usually combines this method with others to address some of the concerns often raised about the validity of research in which the investigator is a full participant (Mason 1996).

The insider-position as such was kind of difficult for me to tackle when analyzing its impact on my fieldwork and findings. Usually, when we discuss insiders, I think of researchers who have studied their own kind, in a familiar setting, "at home". Obviously, these are my feelings more than it is the correct use of the concept. Nevertheless, being an insider in my research was being a skydiver. What does that really imply? I was not only a skydiver, but also a Norwegian one, mid-experienced and a 'free-flyer'. This meant that I was a specific *type* of skydiver, and when I conducted my fieldwork, I was a *foreign visitor* to some of the informants, but a 'local' to others as I had been there for so long. In other words, I was a "local" in an anthropological sense, but also a "local/visitor" to the skydivers. I had to remind myself continuously that I was a visitor to keep some form of separation current in my mind.

Young (1991:9) makes some remarks on this type of research as well. He argues that it can be painful to be an insider as he or she is studying his or hers own social navel, and the potential of recognizing the possibility that the analysis is only one of many arbitrary possibilities, is always present. It is not unlikely that the researcher discovers that many aspects of his or her life is flawed. For example, I soon enough realized that all the arguments I use to defend skydiving as a truly safe activity are built on quite biased ideas of safety that is really a discourse created among the skydivers. That is not to say that I today regard skydiving as unsafe (or that I regarded it as completely safe before) – but I do see in a new light the processes that give me that very belief, and I have to agree with Young; it is quite painful to have the idyllic state of ignorance removed (however deliberate). I long back to the time where I argued that "you are more likely to be killed driving to the dropzone", and actually not reflect on that very statement.

I was, as Carocci (2009) also notes, faced with the task of reconciling the knowledge I had due to my insider-position, with everything I dreaded to know anything about because of that very

<sup>&</sup>lt;sup>4</sup> Information on the different disciplines of skydiving can be found in the appendix.

position. How could I write down those things that I wanted to keep to myself? How could I explain the paradoxes in the community's safety work, without being affected by them myself? I did not want to gain knowledge about the uncertainties and the ambivalences towards how safe the sport really is, and at the very least, I wanted to avoid increasing my own level of uncertainty to such a degree that it would affect my own participation. But how could I not? As my research went on, I experienced more and more scary incidents, learned about dreadful reports of fatalities across the world, read more and more discussion on 'close calls' in the online forums, not to mention the countless numbers of discussions with fellow skydivers. It got so bad that I recall sitting on a bench on the dropzone, *expecting* someone to get injured at *any* point. Every time skydivers came in for landing after a jump, I was afraid to look, knowing *all the possibilities* of what could go wrong. How could I not? The only thing I occupied myself with during the fieldwork was the negative outcomes and possibilities of the activity! I had never been so conflicted towards it, as I was during the fieldwork, not even when I started out skydiving several years ago.

### **Subjectivity**

I have tried to take a reflexive approach to this study, an approach that Lyng also discusses:

"[The approach]...embodies an obligation by researchers to describe their social, normative, and, in some cases, emotional relations to the [participants], problems, and data they study. In other words, researchers must explicitly identify themselves as part of the research process" (Lyng 1998:246).

Laurendeau (2000) discuss how he, as an active skydiver studying skydivers, had to recognize that he is not simply a researcher who went out to study a pre-existing and concrete reality, but that he is and has been a party to the *creation* of that reality. Also McLaren (1991:50) posits "field workers engage not just in the analysis of field sites but *in their active production*" (emphasis in original). The type of ethnography that Sands (1999) describes as 'intensive participation' is perhaps what I should call the ethnography I adopted, an approach that corresponds with Carocci's (2009); I belonged to the population I studied, as I was an active skydiver. Unlike Carocci however, I was not known to any of the participants I studied, and the routines and operation of the activity was fairly new to me due to the size of the dropzones. It differed from the traditional methodic challenge in participant observation in that I already was a skydiver, and that

I took part of all aspects of their interaction, including actual skydiving, training camps, events for learning, competitions and what not.

To me, and as Carocci (2009) notes, the problem was not that of negotiating entry to the activity and forming relationships. The challenge was to obtain the degree of separation needed for conducting critical analysis of situations one has thorough knowledge of (Dyck and Archetti 2003). The researcher's voice coincides with the native's voice; "[...] in a way, I have crossed the final bridge that spans the chasm of researcher and those studied" (Sands 1999:15). Sands further argues that a researcher that belongs to the same cognitive world and shares an identical worldview becomes in essence an informant who can use experience to validate or 'check out' the experiences of others. Thus, the researcher adds a dimension of validation not available to traditional participant observations (Sands 1999:31).

Carrocci (2009) elaborates on the arguments of Bourdieu as she examines her own insider-position in the community of gliders. She explains how the knowledge acquired in a field to which a researcher already belongs, must abide by an epistemological awareness. She quotes Bourdieu:

"In choosing to study the social world in which we are involved, we are obliged to confront, in dramatized form as it were, a certain number of fundamental epistemological problems, all related to the question of the difference between practical knowledge and scholarly knowledge, and particularly to the special difficulties involved first in breaking with inside experience and then in reconstituting the knowledge which has been obtained by means of this break" (Bourdieu 1990:1).

I met countless of challenges as the study went on. I was terrified of missing details that a non-skydiver would have picked up on instantly, and compare whatever I observed with own experiences and thus tainting it. And, as mentioned, it felt truly wrong to obsess on the parts of the activity that I initially thought was irrelevant for the experience of it. Carocci (2009) who studied a subculture of Italian gliders, being a glider herself, explains my feelings better than I possibly can: "writing this thesis I had to write about what I would have rather not written about, revealing fears and social difficulties I would have rather kept hidden". Tenni, Smyth and Boucher (2003) argue that when the researcher is dealing with data that has been produced about his or her own experience, touching sensitive areas, data generation could become problematic. However, several theorists claim that the self is a resource for making sense of others. Fieldwork can thus be situated between autobiography and anthropology, and can connect personal experiences with a general field of knowledge (Hastrup, cited in Okely and Callaway 1992:117).

George and Jones (1980:33) suggest that anthropologists should not try to escape or negate themselves. Rather, they should use themselves in the purpose of studying others but also go beyond the mere study of her or his self. However, one should be careful not to construct others in one's own image and avoid using general categories, which exclude the self. Cohen clarifies this when he argues that the "[...] self-driven way may be less exciting theoretically, but may be closer to our experience" (Cohen 1992:235).

Carocci (2009:51) explains how her status as an insider in the gliding community in Italy (where she had been a practitioner for four years prior to her fieldwork), presented her with the risk of taking things for granted. She further discusses that when a researcher decides to study through fieldwork individuals with whom they regularly interact, they operate as what has been termed by George and Jones (1980:48) as an 'unknown observer'. This process can be described as "becoming a critical insider" (Carocci 2009:51) and requires adopting a technique of "continually taking mental steps back as to observe, compare, contrast and question as well as to experience" (Hodkinson 2002:5-6).

Just as excessive remoteness can represent an obstacle to scientific knowledge, excessive proximity does too (Carocci 2009:50). Carocci elaborates that those who stress this even further are the anthropologists of emotion, and they claim that the researcher's emotional response to fieldwork could actually be guidance for developing an interpretive approach to culture (Lutz and White 1986:430). She argues that by imposing unwanted categories upon her data, hopefully these were imposed as a glider pilot, a full-fledged member of the community she studied. One can therefore assume to some extent, that these categories are a reflection of that same community (McDonald-Walker 2000).

I think it is impossible not to impose unwanted categories upon the data. Insider or not, fieldwork was an all-consuming activity and I often lost track of what I was doing and why. The skydiver sometimes occupied me, the researcher at others. I found it terribly confusing to manage the role of both at the same time, if I tried to do that deliberately. After struggling for a while I decided to go with the flow, so to speak, and use the periods with less activity and when I was off the dropzone, to recuperate and reflect. I tried to be aware of the times where the skydiver took over, and in the aftermath reflect on the implications of those situations. Interestingly enough, I often felt that it was at those times when I was a 'total participant' (Bryman 1988:48) that I generated the most fascinating insights. Their perceptions on risk and reactions to incidents and such was at times completely different from my own and I would forget all about being a researcher and try to understand where their arguments and opinions came from – and it was from

these discussions I later was able to extract the very essence of what I am writing about. Just as any fieldworker, insider or not, the path was not clear and had to be adjusted as time passed by.

### The final text

Clandinin and Connelly note that how one writes and creates the final text depends on the selective interests of the ethnographer, as "what is taken to be experience is a function of the observer's interest" and furthermore, that any translation includes a personal interpretation (1998:156). Carocci (2009:62) argues that it seems to be of grave importance to recognize that ethnographers construct their own accounts of the social world, and especially that the written word does not simply mirror social reality. Bourdieu also elaborates on this:

"There is no object that does not imply a viewpoint, even if it is an object produced with the intention of abolishing one's viewpoint (that is, one's bias), the intention of overcoming the partial perspective that is associated with holding a position within the space being studied. But our very operations of research, by obliging us to articulate and formalize the implicit criteria of ordinary experience, have the effect of rendering possible the logical verification of their own premises" (Bourdieu 1990:6).

In Carocci's (and my) case, presenting the findings of a fieldwork in written form is aimed at the academic purposes of the research. Often, the written form may sound unfair and biased to the native eye's, and this is further complicated when one writes about people from the same background as the researcher herself. It is hard to avoid the fact that long lasting links of shared interests, not to mention friendships, make this task even more difficult. Carocci (2009:62) argues with the help of Devereux (1967) how the scholar directs his or her attention towards privileged themes that are selected according to a certain taste and personal inclination, but also, and I have tried to demonstrate this as well, to his or her fears and psychological defenses. Carocci further argues that the risk of data becoming selectively sifted by memory is in her case attenuated by her personal involvement in the subject of her research not being broken off. Being an active participant in the social reality studied can prevent findings from becoming selectively edited by memory by constant relation to the field, also during the final stages of writing up the text. This can help the researcher to remain aware of possible mistakes and a lack of subtlety in the presentation of the material (2009:63).

As the last year passed, this has become apparent to me. I never felt that the fieldwork really ended, as I continued to spend time together with skydivers, although in my own country. I

found that this contact made it gradually easier to define concepts of interests, mostly because I was finally able to get a separation from the fieldwork itself. Spending much time over books and articles, and discussions with fellow students and supervisors, made it easier to spot controversies and concepts, and I was able to take those very concepts with me and discuss them further with fellow skydivers. These dialogues helped tremendously in giving me the confidence I much needed, confirming what I thought to be valid observations and interpretations. Strathern (1986:27) claims that the anthropologist as author can cast people's experiences into a different light in an illuminating way. People can know more about themselves, and I found it very enjoyable to be able to discuss skydiving in an entire new fashion with my friends. I felt like I was able to arouse their interest, as I tried to negotiate in new way issues of interest shared with them. Most enjoyable of all was confirming my thoughts on the matter we were discussing, and being given new and further developed concepts to analyze, as many were able to question me quite critically given their thorough knowledge to what I am studying.

Generating enough empirical material was therefore not as difficult as I had feared. I found that I had a myriad of ideas about what I should do, what was interesting and not and so on. After all, I had been a student of anthropology exactly as long as I had been a skydiver, and I had spent endless hours already, "analyzing" the community and its processes. The discussions with the skydivers on the dropzones also continuously gave me input on what they occupied themselves with, and I often changed focus as I realized my concepts of interest were exactly just that, my concepts.

The difficulties started when I came back home and realized what an enormous challenge I had made for myself, trying to write about literally everything I found exciting! There were endless opportunities in my mind, and the term 'kill your darlings' soon proved to be a recurring thing I had to remind myself about. Many focuses were left behind as the text evolved, some of them with a heavy heart. If I in retrospect should decide on one thing that was the most difficult, I would have to choose the process of writing down the empirical findings in an understandable way. I found it excruciating to try to describe how skydiving is performed without writing about *every single detail* I felt was necessary for the reader to know. When I was describing a high-performance landing, how could I not explain what kind of canopy they use, and so on? I was often left behind with a feeling of doing my material injustice, as I had to simplify close to everything. The help of non-skydiver friends and as mentioned, fellow skydivers, as well as classmates and supervisors turned out to be invaluable in the process of transforming skydiving into an understandable object of anthropological interest.

Chapter three will bring us abruptly into the challenges skydivers face and examine how we can understand the processes of dealing with incidents, and further how this process affects the participants' view of the risks they face.

# **Chapter 3: Identifying Risk**

# **Excerpt from field notes**

"I just saw a guy crash into the ground. Still feel sick to my stomach. In addition to this, two guys who were doing 'crew' (Canopy-relative work) got tangled up into each other's canopies; they had to cut themselves loose with the hook knife<sup>5</sup>! WHAT IS THAT ABOUT!!! One of the guys didn't even have an open canopy before he was as low as one thousand feet... That is just sick. To top it all off, two tandems had to cut away, and a student had a fire<sup>6</sup> because he pulled too low, so he had two canopies out!! That is so beyond anything!! What kind of place is this?! I just have this sinking feeling—it's one of those days. It's like the dropzone has bad karma. Every time a new load goes up, I anticipate that something new will happen... I just feel it. The other guys here said it as I was about to, they were like: this is one of those... someone's gonna die today.

It really was one of those days (...) It's been only a few hours since last I wrote. I just heard that a girl went in at the neighbor dropzone It is weird. I cannot really explain my feelings right now. The worst thing was that she was a conservative skydiver, not one of those idiots... She's dead. Probably just did a stupid mistake and now she's gone. She must have done something weird. I heard someone say she cut away her main below one thousand feet. If that is correct, what in the world happened? She had like two thousand jumps. So unbelievably unnecessary...As the days go by now, I just get more and more anxious and stressed out about getting back into the air. I've been sitting on the ground for the last two months almost due to my stupid broken foot, just watching one after the other pound into the ground. Why can't people learn how to fly their damn canopies! I can't help think whether I'll hurt myself when I go back up, after all, I've only seen idiots doing stupid stuff ... Will I be stupid...? AAh!!! I am so frustrated I hate feeling like this! I need to get my shit together and do some serious mental training in the coming days, to get ready. I know better than this. I do better than this... I know I do... I would never cut away my main at a thousand feet. That's just crazy! ... I wonder what happened to her... I really do...".

<sup>&</sup>lt;sup>5</sup> A small knife attached to the rig in case one needs to cut the lines manually.

<sup>&</sup>lt;sup>6</sup> 'A fire' is when the AAD – automatic activation device, opens the reserve. Activates when the skydiver has a fall-rate that indicates that he is still in freefall below the altitude of approximately seven hundred and fifty feet, which equates to approximately four-five seconds from impact with the ground.

<sup>&</sup>lt;sup>7</sup> 'Went in' refers to a death. Skydivers also use 'a statistic', 'bounced' 'pounded' and other similar terms. They do not necessarily refer to a fatality; the terms are used for serious incidents as well.

### Introduction

How are incidents affecting the participants? How do they deal with them? This chapter will examine some different scenarios that occurred during my fieldwork. I will elaborate on how the different practices around these incidents can be understood as a ritual where the skydivers do what they can to find the error that was made, and how this ritual gives them greater satisfaction in their own safety. The rituals functions as informal training; through narratives they make sense of what the hazards are and what they imply for their own participation. Further, I argue that when so called 'freak accidents' occur, the skydivers experience more stress and put even greater effort into making sense of the incident. Anomalies like these accidents sometimes lead to new risk categories, which enhance the community's feeling of being in control. When minor incidents happen that could have had a worse outcome, I will examine how the skydivers reestablish order from chaos through several coping mechanisms that involve placing blame and thoroughly investigate the accident collectively. First of all, I will present a case where the process of negotiating an incident was fairly easy to the skydivers.

### "Close call"

I was sitting on a bench when I heard the sound of a diving canopy<sup>8</sup> coming from the wrong side of the landing field. I turned around just to see him smash into the ground. His body made a "thump" as it impacted, and it looked more like a sack of potatoes that had been thrown from a distance, rather than a human body. Time stood still. All sounds, people, and surroundings disappeared and it was like I had tunnel vision. As I managed to zoom out and return to reality, only a few milliseconds had gone by, and I realized we had an emergency situation - I cried out to alert everyone at the dropzone to run over to him, but they were already on their way. They all heard the sound when he crashed. The entire dropzone seemed to stand still, as if it held its breath. Nobody talked. Nobody moved. My body was trembling and I closed my eyes, shocked and convinced I had just seen someone die.

He had hit the ground so hard that his body bounced back up and disappeared from my field of vision. He was gone, for sure. My mind kept repeating the scene over and over again, trying to make sense of what it just had seen. I had never seen an impact that bad, not even after four years in the sport. The next thing I heard was people shouting "He's okay! He's walking!" It made absolutely no sense to me; how could that even be feasible? Someone sat down next to me and asked me what had happened. I looked over at them and said that he should have been dead

<sup>&</sup>lt;sup>8</sup> For an example on a diving canopy, see appendix.

and that the people yelling "okay" probably had made a mistake. I turned around toward the area where the skydiver had impacted, and to my disbelief I saw him walking toward the packing area. He was visibly shaken, but he was walking. I could not fathom it.

It turned out that it was a mid experienced skydiver named George that was practicing his hook turns<sup>9</sup>. A few moments after the incident, George came over to me and asked if he could talk to me. He had heard that I had seen what had happened (I was the only one who had a clear field of sight). He was acting weird and stressed out. George told me about how he had misjudged the altitude when he initiated the hook turn and how he too late realized he was heading for some parked trailers. He tried to "stab himself out"; meaning that you very quickly use your toggles to stop the descent of the canopy, but it was too little, too late. He pointed to where he had first impacted. As I saw where he was pointing, I asked him to follow me over to where it had happened. I showed him a point about twenty meters away from his pointing finger and said: where is where you first hit the ground. Right between the timber-wood here, those stones and that metal fence». He shook his head in disbelief: «are you sure? How could that be?» He then asked me to follow him forty meters down the other direction, and said «this is where I stopped bouncing over the ground». It turned out he had hit the ground at one point, flown through the air for another twenty meters before finally coming to a stop maybe forty meters further down the road. The impact had been severe. I got the feeling that getting the circumstances of the incident clarified, helped him just as much as it helped me. We were both affected, in our own ways, and talking about it felt comforting for a reason.

While we were having this discussion several other people came over, interested to hear what I had to say since I were the only one who saw the actual impact. After I had retold the story countless times (skydivers kept joining the group as they recognized something of interest was going on), they shook his hand; congratulating him with being alive due to simple, 'dumb luck'. Had he landed half a meter to either side from where we found the print of his body on the ground, he would probably have lost his legs, if not worse. What saved him was a big pile of moist dirt after a week of rain.

A couple of days later, George posted the video from the jump on his Facebook-profile, where you could see from his angle everything that had happened. It was scary and disturbing to relive what I had seen just a few days prior; the sounds, the impact and his body flying through the air. What for me had seemed like minutes, had really been seconds. The headlines of the video

<sup>&</sup>lt;sup>9</sup> Landings where you put your canopy into a steep dive near the ground to build up speed and energy in order to swoop inches above the ground as far as possible. Pictures of swooping can be found in the appendix.

The handles attached to the steering lines on the canopy. See appendix for information on equipment.

said: «Mom, don't watch this». In the video itself he had written: «what not to do. Diagnosis: Got cocky. Inexperience. Scary move. Extremely lucky... Be safe up there». After the impact you hear him mumble to the crowd running to his aid «I'm fine. I'm an idiot». When he posted the video online, it got over twenty comments from his skydiving friends, discussing the incident and how lucky he had been. People asked questions, compared it to their own similar experiences and so on. Some of the comments would go like this: «don't become statistics, please!» «You lucky...!» and «Hmmm, wake up call for me. Thanks for posting this».

Skydivers react strongly to these events. When people "go in", "becomes statistics", or experience a close call in the sport, it gives them a tough reminder that they are performing a dangerous sport and that death *is* a possible outcome. This creates an environment of awareness, so to speak. The skydivers made sense of this episode by categorizing it and furthermore figuring out the very smallest detail of the course of events.

In this incident it was evident, both to George and the spectators, that the reason for the accident was a grave *error of judgment*. A series of minor mistakes ultimately made him crash into the ground, and the fact that he walked away from it was nothing but a miracle. The accident had nothing to do with weather, equipment or other skydivers (the main factors one usually investigate) – George was the one to initiate a 'hook-turn' at the wrong altitude and the wrong place with a wrong set-up<sup>11</sup>. His experience should have told him that he was doing a mistake, before he did it. The skydivers discussed this event with George in public, and asked him to elaborate on every decision he had made, trying to figure out exactly what he had been thinking, since according to them, he could not have been thinking at all.

In addition to discussing it with George, the other skydivers discussed it with each other and observed how he behaved after the incident. When he posted the video from the jump on his profile, and expressed how he had made a dangerous mistake that ultimately could have cost him his life, they all agreed that George had done a good thing. He did make a mistake, but he shared it, and thus contributed to a discussion of safety that would benefit the entire skydiving community. He had learned.

What about the incidents where it is not clear what caused it? The next story from the field will show how greatly disturbing it is to skydivers when there is an anomaly to deal with.

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<sup>&</sup>lt;sup>11</sup> The 'set-up' is adjusted depending on how big of a turn the skydiver intends to do. When they start to practice hook-turns, they always start out higher and gradually work themselves down to the right altitude through systematically adjusting the set-up. The goal is to perform the *exact same turn* every time, at the right altitude to avoid any mistakes.

# "Freak accident"

We were having a beautiful day for skydiving at the dropzone. The weather was perfect with blue skies and no wind. I was standing right next to the landing field, talking to some coaches and the staff when it happened. We heard the characteristic sound of a "swooper"; a skydiver coming in with high speed with a high performance canopy aiming to swoop inches above the ground as far they can<sup>12</sup>. The canopy has such high speeds that it sounds as if it cuts through the air, and it looks spectacular when done right. To get the canopy to go fast enough, they do a hook-turn. The skydiver, Paul, came in perfect, the dive was at the exact right altitude, and he came out of the turn at the right spot and leveled out his canopy perfectly. It was a textbook swoop. As he swooped above the ground (they can swoop a distance of over one hundred meters easily) he leaned over in his harness, doing a maneuver called «superman». When done correctly, your head is aligned with your body all the way down to your feet, flying over the ground, horizontally. The spectators clapped, shouting excitedly and were indeed very impressed. Out of nowhere Paul got thrown up in the air, almost fell out of his harness (swoopers loosens the chest strap almost completely to get a better wing profile on the canopy, resulting in better properties), hung in midair for a split second before crashing into the ground with a «thud» just a few meters from where I stood. Then things happened really fast. Other skydivers that had been on the same load and were out on the landing field threw their gear off and ran over to him. Spectators and staff ran to his aid as well. The staff's reaction was impressive. The dropzone was not shut down; they kept the planes going, but told the skydivers to land on the alternate field. They coordinated, called for help and within fifteen minutes an ambulance had picked him up and it was as if it had never happened.

My heart was beating and I was feeling sick. This was the second time I had witnessed someone crashing into the ground, but the first time it was not nearly as close as this. I literally stood ten meters away from him. In addition to hearing the "thud" when his body hit the ground, I also heard the air being squeezed out of his lungs, as if someone had hit him in the stomach. But worst of all was hearing his bones shattering when he impacted. It was terrible, and chills went up and down my spine in horror.

Some were crying, convinced Paul was in serious trouble. I was almost in shock. What had happened? The landing had been perfect, and suddenly he got tossed in the air like a puppet. Immediately we started to talk, asking each other what we had seen, trying to figure out the anomaly. People ran out of the hangar where they were packing, also keen to know what was

<sup>&</sup>lt;sup>12</sup> Pictures of swooping can be found in the appendix.

going on. For the next thirty minutes we stood there asking and answering questions. Some of the most experienced skydivers that had witnessed the incident had seen his feet touching the ground as he swooped, and a foot got caught in one of the sprinklers on the ground. Due to the high speed, this minor snag made his body bounce up in the air before tumbling back to the ground, like a pendulum.

Nobody knew how Paul was doing at first. I talked to some of the guys that had helped him after he had been driven away in the ambulance, asking how he was doing. They said he was going to live. His arm was severely injured, and he had passed out for several minutes, but he was lucky, and they claimed it was a "freak accident". Later that day I found out that the injured skydiver was a member of the staff and asked the dropzone leader how he was doing. She said: «he is one of the most talented coaches we have, he is a very good canopy flight instructor, and maybe one of the best there is. He simply experienced bad luck». I got the sensation that she wanted to explain what an anomaly it was, that one of their staff members could get injured like that. It was clear to me that they were all quite distressed over it, as was I.

So how did they deal with this incident? The next section will aim to discover this very process and examine how incidents can be used to create new risk factors to some skydivers, and function as a learning experience to the entire community.

# Implementing new risks

Even when everything is done correctly, you face a risk of serious injury. Examples of incidents like these are turbulence issues, where the canopy collapses near the ground, resulting in serious injuries, someone else flying into you (canopy collisions almost always ends in death for at least one of the involved), and landings where a skydiver trips on something and e.g. fractures a leg. Interestingly, even cases like this when it is "uncontrollable" factors like weather that resulted in an injury; skydivers still regard it as a human error – if the turbulence was so bad that the canopy collapsed due to it, one should not have jumped in the first place – it was an *error of judgment*. This can be understood as a method of mentally defending the risky aspects of the sport. By always explaining incidents with "someone made a mistake", regardless of the incident, *risk is encapsulated* and placed on the human factor alone. It provides the skydivers with a sense of relief, because they argue that they would not have done the same mistakes. Paul Slovic (2000) highlights how the anxiety reducing desire for certainty breeds overconfidence in the face of hazards. People who face e.g. natural hazards often consider their environment absolutely safe. They explain previous accidents as attributed to freak combinations of circumstances, unlikely to

occur again. About risk perception there is a fallibility of judgment – and skydivers explain as many instances as possible with this very notion. How could they not if they were to jump again?

However, sometimes skydivers experience incidents that it is hard to make sense of, and these are by far, the most disturbing ones. These cases are explained as 'freak accidents', and in the instance with Paul, the skydivers did not know what to say except "shit just happens". It was a serious anomaly that one of the staff, the very best one, got seriously hurt doing nothing perceivably wrong. Some commented that he could have avoided putting his legs to the ground, but this is a normal procedure for swoopers, done almost every time. Furthermore, they remarked that he probably knew there were sprinklers on the ground given the fact that he was a local jumper. However, as several of the spectators expressed - who could have imagined a sprinkler being a problem?

As mentioned, Paul's incident was an anomaly that distressed the skydivers to the extent that they explained it as a freak accident. In all instances of skydivers being hurt, the process of categorization starts. The reason for the incident is one thing, another and just as interesting is the process where the skydivers figure out what this might imply for them personally, and for the community in general: "Is this something that can happen to me? Is this something I should be worried about?". Follo (2005) discusses how risk is mentally constructed with a model of the risk phenomenon's ontological status, and this can provide a better understanding of the process. She argues that the question "what is risk?" really speaks to the question of what risk as a phenomenon is like and more specifically risk as people talk about, understand and experience (2005:22). Follo provides an example of a young boy dying after falling from a tree in kindergarten. She explains how the children then learned that slippery branches could be dangerous and that muscle was needed to be safer. In this discussion, Follo shows that a person learns how to construct risk mentally through the processes of enculturation and socialization (2005:25). In the incident where Paul got hurt because his foot got caught in the sprinkler, we can understand this as an example of what Follo explains as mental constructions of risk. In other words: Paul's accident made sprinklers a problem. Not only a problem in the sense that "he got hurt because of a sprinkler", but also "obstacles are dangerous, and we should avoid them".

In situations like these, the process of categorizing the incident will first of all provide the skydivers with facts about the cause of the incident in question, and most likely information about how it should be avoided in the future. Usually one will learn about possible reasons it happened in the first place, *beyond* the effects of the incident. E.g.: "he or she got hurt because he or she hit the ground too hard" versus "he or she got hurt because he or she tried to do a hook-turn and initiated it too low due to his or her lack of competence". In this there lies the information that had

they known better, they would not have initiated the turn at that altitude which in turn implies that if *you* do the same, the result will probably be the same.

The stories of an incident are at first very particular and regards only the incident in question and reasons for it happening. However, in retrospect, this story is reflected upon by skydivers and shared with others through discussions and videos, just as the story of the boy dying in Follo's (2005) example was shared and discussed with the children in the kindergarten. The boy died of a fall, but ultimately, he died because he did not have the body strength to support himself on slippery branches. In the instance of Paul and the sprinkler, the sprinkler went from being the cause of Paul's incident, to being a new problem to teach – a new risk factor. It was not the sprinkler anymore, but obstacles in general that was the problem. The details of the story fades away as it is being re-told, becomes less immanent and transforms into stories that counts for bigger issues regarding safety: from "sprinklers are dangerous" to "obstacles are dangerous". This way, all skydivers are subject to the lesson regardless of their level of competence. An inexperienced skydiver will learn that he or she should be aware of obstacles, and a high performance swooper will learn that even the smallest obstacle as a sprinkler, combined with high speeds, are dangerous, and that even a perfect landing might end disastrously if attention is not paid.

Not all incidents end badly. Next I will show how skydivers react in order to figure out whose fault the mishap was, and how to proceed in order to reestablish order from chaos.

# A free fall collision

We were four skydivers, myself included, doing 'track dives' 13. In this discipline of skydiving the group fly either on the belly or on the back, in an angle. It creates a sense of flying due to the high speeds forward and downward, compared to other disciplines where one usually fall straight down, doing other maneuvers. A fifth skydiver, John, asked if he could join us. The rest of the group were kind of skeptical of letting him join as we did not particularly care for "garbage loads" like that, where jumpers join in the last minute. After giving him a thorough brief on the plan we had just made, we got in the plane. The four of us had already done many jumps together, and the routine was getting better every jump. We talked over the plan one more time in the plane before we exited, making sure everyone had understood important safety-issues. The group exited and followed Stuart, who was "the rabbit" – the designated leader of the jump. It is

<sup>&</sup>lt;sup>13</sup> Picture of a tracking dive can be found in the appendix.

important to have a leader as the speeds are very high, and the danger of collision is immanent if everyone flies around with no obvious flight pattern.

A few seconds after the exit the group had set up the pattern according to the plan, and three of us were at our designated places in relation to Stuart, the rabbit. In the corner of my eye I saw that John was coming in from another side than I had expected him to, and he was coming in fast. Before I managed to adjust my body to avoid him, he was in front of me, our paths crossing, and suddenly he was flying too slow compared to my full speed. I did not manage to readjust my speed and angle and I crashed into him in such a force that I blacked out for a second. As I realized what was about to happen one single thought flew through my head as I comprehended that the impact could make me unconscious: "I am so relieved I have an automatic activation device right now" (for more information on equipment, see appendix).

One could compare it with the principle of walking in a crowded street. As long as everyone walks the same direction and with the same speed, it is easy to adjust minor corrections. If someone however stops abruptly, greater adjustment is needed faster, and it makes it harder to adapt to the new circumstances. On a street the results of this would be nothing but a minor annoyance. When I was flying in two hundred and sixty kilometers per hour on the other hand, and John reducing his speed to maybe three quarters of that, it was like hitting a concrete wall. I slammed my head (skydivers wear helmets for this reason, among others) and my upper body into the rig on his back – it felt like being 'hit by a truck'. Luckily, I managed to pull myself together and aborted the jump – I let the rest of the group continue forward, and stayed where I was, waited till I had enough space and opened my canopy. I was terrified and my entire body ached. When the canopy deployed I checked my limbs and face, afraid something was broken, as I tried to catch my breath. In almost three hundred jumps I had never been so close to serious trouble, and to put it bluntly, I was furious. What had happened?

When we landed, Stuart ran over to me, also terrified. He had been on his back during the jump and saw the force of the impact, and told me he was relieved when he realized that I was still conscious after the collision. I was at that time not sure what had happened, and whether I had done something wrong. We dumped our gear on the packing mat and immediately called the group together to check the video-material (all of us had cameras on our helmets). After scrutinizing the film from all the angles we had, we could see that John had failed to maintain a steady path in relation to Stuart, the rabbit, and that he had turned and slowed down at the same time just in front of me, resulting in the accident. John was devastated, and surprised, thinking at first that I had crashed into him, not the other way around. I, on the other hand, was relieved but also scared. Relieved that I was not the one to blame, scared because I had not been able to

control the situation. If I had been more skilled, I would have been able to adjust my own path fast enough to avoid John. Had I participated in a jump above my level of competence? Was I pushing the edge of my limits?

One of the most effective ways of reestablishing order from chaos and identifying what caused a risky situation is by debriefing the jumps, usually with the aid of video-material. Most mid-experienced to experienced jumpers use cameras when they skydive. There are several reasons they wish to do so, among them the possibility to review the jumps in order to improve their skills but also in order to have material to make entertaining videos of events and alike.

In the previous example the video-material make it possible to scrutinize the course of events. What had happened? Could it have been avoided? Did anyone do a serious mistake? All of us were shaken up by the incident, and relieved that nothing worse happened. When we saw what had caused the incident, we were able to make sense of the episode and explain it; John made a mistake but also learned to be more aware and never to cross the line of flight. The group as a whole realized they should have planned the jump better given that three out of five was mid-experienced and not as skilled with that type of jump. I learned the importance of staying focused, not only on the rabbit and my own flight pattern, but also the pattern of the jumpers around me. And last but not least, John and I earned a new and humble respect for the forces of speed and angle combined.

What is interesting in cases like this is that first of all, blame is placed. After a scary incident the skydivers feel a need to know whose fault it was. That way chaos is turned back into control – the incident makes sense again. In this instance, it was Stuart who was the most experienced that was able to explain to John and I how the situation could have been avoided. Thus, videos provide skydivers with an *instant feedback*. It is considered to be undisputable facts but also negotiable. When the jump was over *I* was the one to blame until we saw the video. Then it turned out that *John* was the one that caused the collision. Be that as it may, it was partly my fault as I should have been able to move when I realized that he was slowing down. After discussing it within the group, we agreed that *both of us* had made mistakes, in addition to *the group as a whole*. The 'truth' can be turned upside down, and change in an instant. The video itself can affect the experience of the jump. It corrects the preliminary facts, and holds a paradoxical monopoly on the truth, at the same time as it enables a new truth to emerge after an interpretation of it. As Breakwell (2007) points out: risk judgment only makes sense because they exist within a social frame of meaning construction. In this context, the meaning construction can be completely altered through the use technological aids.

## Discussion

Anderson and Taylor (2010) posit that skydiving fatality and injury reports feature prominently in the sport's publications and web sites, frequently followed by extensive discussions about how to reduce the risk of similar accidents. Most importantly, and I agree with their argument, risk is acknowledged as an obdurate fact of skydiving among the participants. In order to understand the processes when dealing with incidents better; it is perhaps useful to attempt a categorization of them. There seems to be two main categories in this context; the incidents where it is easy to spot the error, and where the error is normally ascribed to a human factor. The other is what we could compare with the abovementioned "freak accident" – incidents where it is hard, if not impossible, to make sense of the cause of the event. The discussion will try to emphasize the different practices that occur depending on what kind of incident the skydivers are dealing with.

When a skydiver makes a mistake, or experience an accident caused by external factors, it seems to affect the participants in various and quite extensive ways. In the first incident where George simply made a grave error, the others learned about the possible outcomes of pushing one's limits too much. This corresponds with Lyng's (1990) notion of risk management practices, where some participants crowd the edge more than others. As the other skydivers discussed the accident, they learned about the edge and negotiated its limits collectively. George did not believe he lacked skills as such - he just made an error - it was a poor decision. Laurendeau (2006) argues that when these instances occur, the incident becomes a part of his or her knowledge base for future landings, but they do not shake his confidence in his ability to do edgework. He simply chose the wrong maneuver at the wrong time. This way the participant can isolate the event from his or her skydiving identity. I argue that this also has to do with the fact that admitting the mistake as being caused by lack of skills would be too disturbing to the skydiver. Wolfe (1979) claims that in an interesting tautological twist, edgeworkers view the instances where people get hurt or dies as evidence that they lacked the core survival skills of a genuine edgeworker. According to him, this way of accounting for negative consequences provides them with a sense of confidence about the likely outcomes of their own high-risk pursuits. Although I agree that skydivers feel more certain about their skills when they discuss others incidents, I do not agree that this is because they claim that the skydiver lacks 'survival skills'. Rather, they explain it as making a mistake due to lack of concentration and skills - and one should not be too arrogant about it on others expense. Although they rarely admit it, they know that mistakes can be made by anvone.

The anomaly of lack of skills is thus avoided or explained as momentary lapse of concentration or simply ignored altogether. Furthermore, they construct success at negotiating the edge by combining a mature approach to managing the risks and an ability to remain "cool" in the face of danger (Laurendeau 2006). The skydivers who witness incidents like these makes it very clear that the skydiver in question has made grave errors, and I often experienced that their reaction affected the reaction of the skydiver it had happened to. They asserted that it was important to thoroughly discuss the matter, both among themselves and the unfortunate skydiver. "We need to learn from other's mistakes", they would argue, further expressing the importance of really understanding why it happened. In the instance with George, it was easy to identify the mistake; it was a human error. As soon as they realized that he had done "everything" wrong, they could relax and further discuss the matter as something that did not really regard them personally. Instances like these seemed to enhance their feeling of self-efficacy; after all, he made a stupid mistake, one they would not do. In general, the skydivers seemed to be comforted when they could establish the reason. When they discussed it, it brought them a great satisfaction in safety, which was further reinforced when George responded to the group, meeting their standards and posted his videos online, for all to see.

More disturbing, as mentioned, are the accidents where it is harder to find the reason for it. The skydivers experience more stress, and do the very best they can to identify the anomaly. Lois (2005) explores control in her research on a volunteer search-and-rescue organization, and the emotional strategies members of the organization employ to maintain the illusion of control so that they can continue to perform on the edge (see also Lyng 1990). According to her, rescuers enter what she calls the "redefining feelings" stage when, in the wake of "unsuccessful" missions, they find it difficult to maintain the illusion of control (Lois 2005:138). The strategies they employ include denying responsibility for the victim's fate, blaming the victims, and emphasizing the positive side of negative events (2005:144-145). This corresponds with my own findings; in the instances when blame cannot be placed, the skydivers instead seemed to draw on the idea of fate and "bad luck", or they transformed the event into one of a learning possibility. They asserted that not everything is within their control – but argued further; after all, what is? This corresponds with a fatalistic attitude, and as Binkley (1995) witnessed among fishermen working in dangerous environments, the skydivers simply have to accept the things they cannot change. This acceptance functions as an important psychological protective mechanism. Further, when the incident cannot be isolated from their identities as easily, they transform it into a general learning experience which in turn reestablishes their feeling of control. They performed something I compare to Perin's (2005) concept of 'real-time logics', where incidents are interpreted, conferred

upon and collectively negotiated. This way they produce new knowledge and lessons are learned. Binkley (1991) further asserts that when formal authority is de-emphasized and consulting is done across status levels, it strengthens social bonds and provides a strong sense of identity. The fishermen in her study experienced group solidarity when they shared common experiences, goals and values, which gave them a sense of personal control and a newfound trust in fellow workers.

We can witness the same thing in the free fall collision I presented, the one where I was involved in. I felt an immediate loss of control as it happened and in the aftermath of the incident. The uncertainty of what had really happened made me re-think my skills, my actions, and what had caused it. The doubt was so prevalent that I started questioning literally every part of the jump. Who was it really that collided with whom? If we look to Lyng (1990) this is a good example of experiencing the need to regain control. The group got together, and in an interactive process with the use of video material and detailed discussion, control was regained. It was necessary to process the incident together, and as the group did, it became clear what the problem was and how it could be solved. After experiencing the incident, that luckily did not end badly, John and I, particularly, experienced a more conscious attitude towards safety, something Binkley (1991) also notes in her work. In other words, the group as a whole affected the outcome in regard to the sense of personal control. After control was reestablished, we could move on, still with the 'fright' in our bodies, but also confident that we had learned important lessons we could bring with us.

It seems that the main task in dealing with incidents is thus to remove any uncertainty. The skydivers need to protect their skydiving identities in order to remain confident they can handle any challenges they may encounter. It might be interesting to compare incidents with Douglas' (1966) notion on polluting elements. She argues that pollution is a type of danger, which is unlikely to occur unless there are lines of structure, cosmic or social, that is clearly defined (1966:113). According to her, a polluting person is always in the wrong and he or she has crossed some line that should not have been crossed. His or her displacement therefore unleashes danger for someone. When this happens, the structure is expected to protect itself by a power inherent in it. Incidents, or rather the skydiver who caused the incident, have always made a mistake – regardless. When the mistake cannot be found, they dismiss it altogether and turn to other coping mechanisms instead. 'They' can be compared to Douglas' structure, and the pollution to the skydiver in question or the anomaly, depending on the circumstances.

When pollution happens, the skydivers instantly start the process of reestablishing order from chaos, and this process can perhaps be compared to a ritual. However, there are both deep and sacral rituals, e.g. rites of passage, and less deep and secular rituals, like eating breakfast together every Sunday. The rituals of removing uncertainty in the case of incidents and unwanted behavior can be seen to be somewhere in the middle of the two categories; it has aspects of both. In the case of a fatality, the sacred aspect might be adjusted to an extent with an intensifying, strengthening and extension of the operators of more secular ritual practices, rather than a complete substitution between them. It seems to me that the sacred elements are adjusted with an extraordinary treatment, rather than a mobilizing of mythical operators, which is an interesting paradox. Perhaps in a different culture, a death where the cause was somewhat unclear, and perhaps even connected to fate and "bad vibes" (as skydivers often use when uncertainty is at its highest), would be explained somewhat different. In other words, their treatment of the vagaries of fate is quite an interesting anthropological issue. The rituals attempt to create and maintain a particular culture, and a particular set of assumptions by which experience is controlled. Douglas asserts that any culture is a series of related structures which is compromised of social forms, values, the whole of knowledge and through which all experience is mediated (1966:128). The rituals thus enact the social relations form, give them visible expressions and through that enable people to know their society. In other words, these rituals I have identified in this chapter, can be argued to maintain the skydivers culture in the form it is, and function as a "cleaning up" of any abnormalities they do not wish to have in it. Especially prominent is the almost "scientific" approach to the cleansing process. In the instance of Paul for example, the anomalies was so extensive that the hope to remove them altogether was vanishing. It seemed that it was challenging for the skydivers, and they instead left the incident itself behind and started making new categories instead. This process was a subtle one and occurred after the preliminary 'shock' and paradigmatic aversion had passed. The skydivers cannot avoid or remove all anomalies, some they have to live with. This, to me, becomes apparent in their dealing of "freak accidents". If we are to interpret it in a ritual light so to speak, they approached it with the effort to minimize the mystery – not cultivate it for the vagaries of fate or the transcendental.

There is a sense of outer structural control that we can find also as inner self-driven personal control, and the dialectics between these are fundamental. I argue that a skydiver would not be able to make sense out of his or her experiences without the influence from the community and vice versa. Being a skydiver is somehow quite a lonely task – they emphasize that 'you' are the only one up there, the only one to blame, but at the same time, there is this entire system around each and every one that affects how the participant experiences this 'loneliness'. Tulloch and Lupton (2003) explain how the ways in which risk is dealt with and experienced, are inevitably developed via memberships of cultures as well as through personal experience. They further explain, that to Douglas, notions of risk are shared within cultures or communities rather

than being the products of individual knowledge and perception. Most important of all, and Carocci (2009) elaborates; the victim's stupidity is considered the cause of his or her death (or in this context; incident). The others consider themselves smarter and are certain they will be able to avoid such fates. We can thus see that human error and failure to manage situations are the causes of incidents according to skydivers, *not exposure to uncontrollable amounts of risk*. There is thus a highly sensitive balance between losing control and staying in control. The sensitive balance can be seen as a system where the control cannot be searched for in a rigorous and static manner, the system needs to be dynamic and in movement for the participants to be able to use it properly in instances of uncertainty.

"From the perspective of a high risk performer, virtually all feel that they are capable of managing the context in which they perform, with most leaving what to them is a comfortable margin between their risk taking behavior and the edge. Even those who operate on the extreme edge emphasize that they rarely go beyond the limits of their control. [...] Still these individuals freely state that the slightest mistake in their performance could be catastrophic" (Celsi, Rose and Leigh 1993:17).

On the same note, Douglas (1985:29) states that the best established results in risk research show that individuals have a strong but unjustified sense of subjective immunity. In familiar activities they tend to minimize the probability of bad outcomes. Risks that are supposed to be under control are underestimated as they reckon they can cope with familiar situations. The same goes for the risks they view as very unlikely to happen. She also explains how the sense of subjective immunity is adaptive if it allows humans to keep cool in the midst of dangers, where they dare to experiment and not be thrown off balance by evidence of failures (1985:30).

Carocci (2009) who studied glider pilots refers to Douglas' (1985) work when explaining that in the instances where there had been a fatal incident, the blaming of victims is effective for silencing indictments on the whole social system. When they blame the victim, "it is a handwashing ploy for all good sorts of occasions" (1985:56). When they have decided that the deceased pilot is to blame for the crash, there is no longer a need to inquire further into the adequacy of the safety procedures adopted. The issue of fatal accidents is dealt with through an attitude composed of collective removal and 'victim blaming ploy' (1985). My findings thus are in agreement with Douglas' notion of the process of cleansing as a significant ritual aspect.

This is especially visible in the instances where there has been a 'double fatality'. This type of incident usually derives from two skydivers colliding in mid-air in canopy flight. These

incidents have sadly occurred more and more often during the last years, and have become a big safety concern in the community. When I attended a canopy course during the fieldwork, the instructor told me "You have to fly that thing as if everyone around you wants to kill you", meaning that no matter what, I had to do my very best to fly in a manner that would not "let" anyone else collide with me, even though they were to blame. Later that month, I recall the same instructor coming over to me as we had just received the news that there had been a double fatality at a neighbor dropzone, stating,

"You get my point? They both are dead, but they should both be alive. The guy that was hit was at a place he was not supposed to be, the other guy did not see him. Who's to blame then, really? You cannot give away your responsibility for your own life; never put yourself in a situation that can enable someone to kill you by mistake!"

Besides denial reactions and rationalizations like the "victim blaming ploy", Carroci (2009) elaborates that there are certain accidents, which provoke particularly strong feelings. The canopy collisions in the skydiving community go under this type of accident. She further explains how they give rise to an unusual capacity for reflexivity on what has happened – the skydivers have more and more often argued whether the real culprit is not the skydiver who died, but the way *the skydiver in general* participates in the activity these days. They wonder, as did Carocci's pilots, that the problem besetting the milieu is one of a wrong mindset, what we in the anthropological discipline would define as a cultural problem (2009:189).

This chapter has shown us that skydivers risk management practices are essentially about negotiating the edge collectively. This way they can isolate the events from their own identities as skydivers and this enhance their feeling of self-efficacy. In the more troubling cases, they draw on ideas of fate and simple, bad luck – another process that further reduces uncertainty. Instead of dealing too much with the instance in itself, they transform the event into learning experiences and thus attempt to remove any polluting elements they fear. I argue there is a strong and visible dialectics between individual and group, and chapter four will take us further into the universe of social control. Perhaps then, can we better understand how important the community as such is for the skydiver's sense of control and safety.

# **Chapter 4: Social Control**

### **Excerpt from field notes**

"I spent some time online today on the incidents forum on dz.com. Wanted to see if there was any more information about the girl that died on [...] They haven't confirmed anything yet, but the story goes that she was jumping a big-way (something she usually does according to them), got some kind of a malfunction that didn't look dramatic from the ground, and suddenly cut it away at way too low altitude. Someone commented that it felt terrible when a careful, safety-minded skydiver as her dies. It's easier to deal with an idiot killing himself with stupid things, rather than a careful and quite conservative jumper. He wrote that somehow, that means we're all vulnerable. People on the dropzone too have been talking about the fatality all day... Actually, there was this guy on the forum that asked if it could be a suicide! The others immediately slaughtered the idea and specifically exclaimed that they would not tolerate such forms of insinuations without any kind of proofs".

#### Introduction

Skydivers actively police each other. The methods vary from situation to situation. By staging dangers, they create a moral universe where the skydivers continuously discuss common beliefs on what the dangers are and how they can be controlled. In doing this, an interactive learning process takes place, and it seems like the participants have a desire to adjust their understanding, so that it is modified and defined more precisely. They categorize both the events and the involved, and in this process they make every skydiver accountable for his or her actions. The incidents function as a common reference point for a normative and pragmatic play. I argue that if we see skydiving as a sport that involves two different spheres, the normative play can be better understood. On the one hand we have the risky activities - the actual skydives. It is in this sphere skydiving as a sport happens. However, we also have a sphere where uncertainty reigns, and in this sphere we find all those elements that skydivers fear and attempt to control - the skydivers themselves. We have seen, and shall continue to explore in this chapter, the importance and value skydivers hold on the notion of human error. In every single case of an incident skydivers attempt to identify how the mistake happened, and most importantly, who made it. In cases of doubt, judgment is questioned, and in cases where blame is impossible, general concepts are used or they are put in categories of freak accidents and disposed of altogether. I believe the skydivers in subtle and sometimes mysterious ways remove the risk from the activity altogether, and identify it as a question of human capacity. However, there is a paradox here: all skydivers

recognize the dangers they take upon themselves when they jump out of aircrafts, but they do not talk of it as a general risk – it is not gravity itself that is considered to be dangerous. Instead, it is treated as a case-by-case evaluation. The risk is not jumping out of planes – it is in doing this or that wrong *during the jump*.

"Danger is defined to protect the public good and the incidence of blame is a by-product of arrangements for persuading fellow members to contribute to it [...] a common danger gives them a handle to manipulate [...] a weapon for mutual coercion. Who can resist using it who cares for the survival of the community?" (Douglas 1992:6).

Within Douglas' (1992) framework, different types of blaming directly influence the system of justice within a community. She argues that the influence goes both ways: the blaming and the system of justice together are symptoms of the way the society is organized (Douglas 1992:6). I believe Douglas' framework is interesting when analyzing skydivers sense of the common threat, and how to deal with it. The threat takes many forms, and is continuously managed and negotiated. Blame seems to be of crucial importance. It is through blame the skydivers find the common threat: *the fallible man*. This is perhaps the reason the skydivers are able to make sense of the dangers they face and maintain a sense of control: looking to others errors and doing what they can to prevent those errors from being repeated, both by themselves and others.

First of all, I will examine how skydivers deal with the incidents where the person in question refuses to follow others advice, and how they use these incidents to demonstrate in subtle ways to other participants that deviance will not be tolerated.

# "He's a 100-jump wonder"

During the fieldwork, I experienced an incident where the skydivers tried to warn someone before the accident happened, because they felt he was pushing it too far. It was a visiting skydiver named Bruce, and he was fairly inexperienced with only one hundred jumps or so. I got in contact with him and found out that he flew a very demanding canopy and in addition to this, he loaded<sup>14</sup> it too heavy for his experience level (both according to skydivers idea of "common sense" *and* to the manufacturers guidelines. To compare, one could say that it was the same as if an eighteen-year-old driver got his license yesterday and went and bought himself a Ferrari). During a conversation on the dropzone one day, Bruce told me he had recently bought

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<sup>&</sup>lt;sup>14</sup> One "loads" the canopy with their own body weight and the weight of the rig. The more you load it, the more responsive and demanding the canopy becomes.

his canopy and was now experimenting with hook turns. Several skydivers overheard our conversation and came over to chat. A few of them were highly experienced and were shocked that he had that canopy, and that he was trying to do those landing. Several of the skydivers said to him that he was pushing it way too much, and that he should undertake canopy coaching, and have more jumps before he decided to do that type of landings. Bruce told us he was doing fine, and that he knew what he was doing.

The other skydivers started to refer to him as a "100-jump wonder", a derogatory terms used for inexperienced jumpers who think they are "skygods" as soon as they have over one hundred jumps (some skydivers argue that this effect is typical at that stage, that the three-digit number of jumps gives a psychological effect in itself – one thinks they are more skilled than what is the case). Arnold (1976) claimed the central issues of the subculture of skydiving are among others statisticalizing; the preoccupation with jump numbers and hours of freefall time. I agree, that in some cases this becomes evident, especially with less experienced skydivers.

A few days went and the 'inevitable' happened. Bruce misjudged the angle of the dive in his landing and crashed into the ground. He was lucky, only a knee got badly injured. When Bruce had gone to the hospital, a crowd quickly gathered, among them the same skydivers that a few days prior had warned him. The entire story was retold, from the day we first talked to him, to what canopy he flew, how heavy he loaded it, the number of jumps and so on. Everyone agreed the incident was bound to happen with such a bad attitude. *He had it coming*.

Bruce was categorized as a skydiver with a bad attitude, and when he injured himself, the skydivers talked of him in a judging way. Not only was he pushing it too far, which happens from time to time with less experienced skydivers, but also he refused to listen to the advice of more experienced and skilled jumpers. Bruce eventually became a reference point for neglect at the dropzone. Whenever someone was pushing it, some would refer to Bruce with comments like "remember what happened to that visitor, he thought he could handle it. A few days later he was in the hospital. Just saying".

When Bruce returned from the hospital, everyone was even more attentive towards him than before, hoping to see an improvement in him. A few days after the incident I was told that Bruce had said to someone else that he knew he would get hurt at some point. He actually *expected* it to happen, and he also felt it was inevitable if one wanted to become very skilled, claiming that expertise was impossible without 'sacrifice'. When this spread among the skydivers on the dropzone, Bruce, if possible, became even more unpopular. The rest of the skydivers had a

<sup>&</sup>lt;sup>15</sup> "Skygod" is a term skydivers use in a humoristic fashion when talking about expert skydivers, but it is also used as a derogatory term for skydivers who think they are more skilled then they are.

hard time respecting him. When I asked them why it was such a problem that Bruce acted like an idiot – after all the only one that he hurt was himself – they explained how stupidity like that reflected badly upon everyone. Nobody wished to be seen as irresponsible daredevils, and Bruce's behavior did not contribute to anything but "bad vibes". Worst of all, according to the others, was that he *could* hurt someone else. With such a bad attitude, they argued he did not respect others safety either, and could end up making a fatal mistake that cost someone else their life.

Nevertheless, even though Bruce himself was oblivious to the dissatisfaction the others felt towards him, *other skydivers were not*. And as mentioned, whenever an inexperienced skydiver asked a more experienced one what had happened to Bruce (who was walking around on crutches), they would explain "what you see there is idiocy on sticks. He's lucky if he'll make it to thirty". Bruce became the common foe, *the danger*, if you will. He represented all that is wrong with irresponsible skydivers. We can argue that in order to protect the public good, one wishes to seek out and inflict communal punishment on the foe, and expect compliance (Douglas 1992). Bruce was seen as a traitor for not adopting the community's sense of what was dangerous, and he was therefore seen as *the danger*. Ironically, his neglect provided the community with a common foe that in turn was a weapon that they could use to persuade fellow members to contribute to the protection of public good (Douglas 1992).

Some skydivers react quite differently to their own errors, and try their best to win back the trust of their friends. The next section will examine how this can be understood as a purification ritual, according to Douglas' (1992) theories.

## "I fucked up"

There had been a gigantic party on the dropzone and everybody that had attended it, including the staff, was hung over. The Staff, however, had to work as normal. When I got up around noon the first thing that happened was that Johnny came up to me: "You're not gonna believe what happened this morning!" I asked him what the big news were, expecting something major due to his excitement. He continued, very loudly and not caring we had spectators, about what had happened:

"Stevie [a tandem videographer] was so hung over that he didn't realize that he had forgot to put his gear on when he went to the plane! On the way up on the ladder, Michael, of course, stopped him, asking him if he intended to get on the plane without his rig! It's crazy!"

I gasped unintentionally as I heard Johnny telling me the story. "That's just sick" I replied, meaning it, shocked that Stevie had tried to get on the plane when he obviously was not in a shape to do so. We continued this discussion for a while before Johnny had to get back to work. I wandered down to the loading area and found Stevie and the rest of the working staff waiting for the plane to fuel. Before I had the chance to say anything, one of the staff members asked me: "have you heard that Stevie here have decided to take skydiving to the next level?" I smiled and turned towards Stevie. "You sure it's a good idea to jump out without a canopy, buddy?" My tone was friendly but I realized that I as well, was struggling to keep the judgment out of it. He looked back at me, ashamed. "I fucked up. I was so busy filming the tandem student, and I was distracted from my normal routine. Hung over as I was, I didn't realize that I didn't have my rig on before I walked up the ladder". The others around us snickered and rolled their eyes with obvious judgment. "Guys!" Stevie said irritated, "I would've realized it myself before I got on the god damn plane. Give me a break! I'm not, and have never been, drunk at work". At this point the plane had been fueled and the skydivers got on it. A few people sat behind. I overheard some of them quietly whispering in a condescending tone "I think he was still drunk as shit. I think Leonard [the chief instructor] gave him a really hard time, as he should if you ask me".

A few days after this episode the dropzone had their annual "Safety Day" and during this meeting Leonard, the chief instructor brought up the incident with Stevie and an incident with a visiting skydiver that had walked onto the plane with his rig incorrectly strapped on. He had just hung it over his shoulders, but not put his legs in the leg straps. This would be fatal if not noticed. Even though Leonard did not name the people in question, everyone knew whom he was referring to. Once again, the skydivers talked about this in public, very clearly showing their disapproval. In spite of this, the skydivers got over the incident fairly quick – Stevie had spent every day he was on the dropzone after the incident, telling everyone voluntarily how he had made a fool of himself, and it seemed that because of Stevie's defiance to be categorized as a bad skydiver, the others finally gave him some slack. The fact that Stevie was a popular member of the staff with no prior history of neglect to safety probably helped a lot. Nevertheless, it was his own focus on accepting the incident as a very serious error on his behalf that made the rest of the group forgive him.

This can be seen as a moralistic explanation on a misfortune following Douglas' (1992) assertions. However, it should be noted that the word misfortune is incorrect to use in this context. It was not bad luck as such, that caused him to make the error as much as it was his reduced state.

<sup>&</sup>lt;sup>16</sup> In the U.S., all dropzones regulated by the USPA is required to hold an annual "Safety Day". It is held on the same date every year, and is meant to be a forum for safety-regarded discussions and training for the members.

In fact, Stevie broke a taboo by being so hung-over that he was incapable of maintaining control over his own state and the equipment. The community in general is very critical of performing under the influence of any kind of substance, and Stevie failed to maintain this value by being so clearly hung-over. It is not uncommon to jump when hung-over, most skydivers probably do, but a line is drawn between being hung-over as such, versus still being under the influence. The problem with Stevie seemed to be the *obviousness* of his state. According to Douglas (1992), purification ritual is called for in instances like these. By being open about his mistake, and humble about it, Stevie managed to earn back the trust of his friends. Had he reacted the same way as Bruce, however, he would probably receive the very same treatment he did. It is likely to claim that he would have been seen as a threat to the public good as well, and the social effects of his failure would be graver.

To me it seems like the notion of blame is immanent in categorizing incidents. The problem of walking onto a plane with the intention to skydive, without a rig on, is unnecessary to interpret. Yet, this incident clearly shows how judgment is so clearly delivered to someone who makes a mistake. Not only will this judgment affect the recipient of it, but also everyone that witnesses it. In this case, we could also see that some form of humor was used when the judgment was given. When one of them said: "have you heard that Stevie here have decided to take skydiving to the next level?" it does not mean that he took Stevie's behavior lightly, on the contrary, the seriousness of the comment was highlighted by saying it in a humorous way. Humor was often used in instances where blame was passed on to others and to me it seems that using humor rendered the message a little less harmless – it seems to be easier to pass judgment to friends when subtler methods are used. Also, by being subtle, you give your fellow skydiving friend a chance to make up for his fault – to pay his dues. A part of it may also be that skydivers make mistakes all the time, and if one should be serious and judging every single time, skydiving would loose its appeal as an activity of pleasure and fun. Perhaps we can call it "dead serious fun". After all, the outcome of skydiving may be exactly that.

There are some excuses skydivers do not tolerate. When someone neglects to admit the fault was theirs, and allows that error to be at the expense of the community, strong reactions follow.

## "Don't be a Lutz"

"Don't be a Lutz" is universal in skydiving with being an irresponsible idiot. Lutz was a student skydiver in 1996 on a dropzone in the U.S. He did his first skydive with two instructors,

and everything that could go wrong, did. Instead of pulling his main canopy as he was taught, he cut it away, and failed to open his reserve. When the instructors finally got him to pull the reserve handle, the reserve canopy opened. Lutz then failed to steer his canopy at all, landed in power lines and mysteriously survived with minor injuries (power lines are the very last place you want to land a canopy. If the current does not kill you, the fall down from the cables will).

What happened further is the reason skydivers *still* use the phrase "don't be a Lutz" every time someone does something stupid and fails to take the blame for it; Lutz refused to admit that he had done a series of potentially deadly mistakes and instead went to the media with the video of his skydive, telling everyone how the dropzone had failed to teach him what he needed to know. To my knowledge, he also attempted to file a lawsuit, claiming that his instructors failed to do their job. The lawsuit did not go through, since all students have to sign a waiver before they skydive, stating that the dropzone is unaccountable, no matter what happens. Today, years after the incident, Lutz' video can still be seen on television programs about extreme sports, with Lutz himself usually explaining how skydiving almost killed him.

The skydivers I met that told me this story explained how Lutz had "dumb luck", some of them even went as far as stating that "natural selection was robbed that day" – insinuating that Darwin's law failed. They explained how Lutz made all the mistakes it is possible to make on a student jump, and further how he failed to follow the instructions from the jumpmasters that was jumping with him. So why do the skydivers still care so much, and why has this incident resulted in a universal phrase, often used in the community? If Lutz, when injured, had quit skydiving and left it with that, the jumpers would most likely just state that "skydiving isn't for everyone". But by leaving the sport after one single jump and only one day at a dropzone, and then go out to the media and explain how it was the sport and instructors that almost killed him, Lutz stepped over a symbolic line, so sanctuary, that it was never forgotten. The reason they reacted so strongly, and still do, to this person and alike, is the strong value they uphold on the reasons for incidents. As Laurendeau (2000) also notes; it is never the sport that kills people, it is the people who kill people. Therefore, when Lutz explicitly argued that the problem was the sport, he had according to the other skydivers completely ignored his responsibility towards his own fate. On the "dropzone" forum online, a skydiver posted this, years after:

"I really got ticked off for a moment after realizing he [Lutz] blamed the whole thing on his JM's [instructors] and gave skydiving a bad rap [reputation] so I decided to email him. This is what I said:

Why in the world did you pull your cutaway handle instead of your pilot chute while skydiving and then steer your reserve into power lines instead of away, when you had plenty of time to do so? Do you not pay attention? Stop blaming other people for your ignorant mistakes and giving skydiving such a bad name, it's no ones fault but your own!"

This post got amounts of replies, where the importance of facing your own mistakes was discussed thoroughly. The core of the problem was summed up by the skydiver who posted this – take responsibility for your own mistakes and do not give skydiving a bad reputation. In other words: skydivers do not want to be associated with irresponsibility, daredevils, stupidity and lack of competence. Whenever using the phrase "Don't be a Lutz", they sum up every skydivers responsibility to the community as a whole – your actions will reflect upon us, so be responsible. Unfortunately for Lutz he became the common symbol of what skydivers argue they are not, and everything they aim not to be. Using rhetoric of sin and blame, Lutz was the biggest sinner of all – he used his failed attempt at skydiving to become famous at the expense of the sport, and presented his incident as if he was a victim and not the one to blame.

One thing skydivers do a lot, is to tell each other about truly terrifying incidents where lives almost were lost. These stories typically occurs when skydivers attend courses of different kinds, and I will argue these stories function as moralistic warnings and reminders of the outcomes one can experience when skydiving. The skydiver who experienced it usually tells these types of stories, and they rarely, if never, leave any details out. In this section I will elaborate on two stories that were told during canopy courses I attended during my fieldwork.

### **Moralistic warnings**

During Safety Day, a skydiver named Jimi held a lecture. Leonard, the chief instructor, had asked him to lecture the other skydivers about a brutal incident he barely survived. Jimi told the attendants about how he was "too cool for school". The story went like this:

"I had around two hundred jumps on my canopy, had attended three canopy courses and had done countless two hundred and seventy-degrees hook-turns when it happened. I did a bad set-up, misjudged the altitude and the amount of input on the canopy and I dove too steep, too fast. Before I even had the time to react, I realized I was millisecond away from pounding into the ground [Pause]. My body was literally crushed into pieces. I needed eleven surgeries, followed by sitting in a wheelchair for two months and crutches for an additional six months [Pause]. My body will

never completely heal. In total this process cost me somewhere in between five and six hundred thousand dollars. [Pause]. It only takes that one time, guys. Please be careful out there".

The crowd was dead silent as Jimi talked. You could feel the tension in the room. Several of the attending skydivers clapped, and thanked Jimi for sharing. Others were twisting when he told the story, making faces, as if they felt the pain he had suffered. After the course was over, and we were sitting in a crowd around the bonfire, drinking beers, the discussion went on. Some of the skydivers told similar stories they had either heard or had happening to themselves, and all that had attended expressed how humbling it was to hear the story. Everybody agreed that hearing these stories were necessary, not only did one learn from them, but they also made them reflect upon the dangers, and their own responsibility to each other. Nobody wished to see their friends getting hurt, and those types of incidents are so easily avoidable. The skydivers argued it was crucial that these stories were told, and all were clear on the fact that they were not told in order to scare anyone, but to explain that it can happen to everyone, no matter how good you are.

The next story is quite similar, but this skydiver had a substantial amount of more experience than what Jimi had, and surprised the listeners to the story even more.

Lenny told the story about his own incident during a canopy course he held on a skills camp I attended. He is regarded as an experienced and especially skilled canopy pilot, with more than six thousand skydives and several years of experience. When the course started he told the attendants about how even the most skilled ones make crucial mistakes, and the mistake he did almost cost him his life. The jump that ended so badly happened during a demo-jump. His friends and himself had been asked to do this jump just a few days prior, and they decided it was so easy that they did not need to really plan it that well. The day of the jump the group decided to impress the crowd so when Lenny came in for landing, he intended to "carve" around a tree (doing a controlled, low turn and fly around the tree near the ground) in the middle of the crowded space. At this point in the story, the attendants on the canopy course were listening very carefully. Most of them knew that Lenny had injured himself really bad, and heard stories about how it happened, but never from Lenny himself. He continued to explain how he came in for landing, initiated the carve-turn and too late realized that his canopy was too close to the tree. It got caught up in the branches; Lenny was swung up in the air like a pendulum and literally smacked down in the ground with enormous force. He was close to dying and was simply experiencing "dumb luck" when he survived the impact. Lenny further told the group about the endless surgeries and the long recovery, and about the injuries his body sustained that he would never completely heal from. One of the participants asked him how it could happen, considering his experience. He replied explaining how he thought of the jump as an easy one, and that even he, with years of experience, could make mistakes, implicitly stating that so could you.

The previous sections of this chapter showed us how skydivers continuously police each other in different variants, and how they discuss incidents thoroughly. Who is it that can exercise control over others activity within the informal arena? Those who are skillful? The experienced? Everyone? I will argue that this universe is built on a form of "fair hierarchy": it is a combination of your competence and experience that will give you a status of legitimacy to control others. The following section will illustrate that policing others is anything but a straightforward process. Many aspects matter, and it is a complex system that is based on a case-by-case evaluation. The event thus exemplifies the *constitution of boundaries*, and variations in how these boundaries are conceived and related to.

## "Stay behind the line!"

One day I was walking around the dropzone, doing nothing in particular when Bella cried out to me:

"Linn! There you got some good material for your thesis!"

I went over to her, startled about the outcry and curious to hear what she had to say. She continued:

"Do you see those two ladies standing in the loading area? That's super dangerous and it's Michael's job [ground personnel] to stop situations like this from occurring. And he's not doing his job! He doesn't care about anyone, especially not the business!"

As we were talking, Johnny, who worked for the school went out on the landing field to "catch the tandem". On windy days tandems need help to make the big canopy stay on the ground after landing and avoid it dragging the instructor and student along the ground. Bella cried out to the ladies who were following Johnny to meet their friend who was doing the tandem jump:

"Johnny! Ladies! You're not allowed to be here! Stay behind the line!"

Johnny ignored her and told the ladies it was fine, they could come as long as they stood where he pointed them. When the tandem student had landed and was barely out of hearing reach, Johnny walked over to Bella, furious:

"What were you thinking? Those are customers, *you do not* shout at them. I was making sure they were not in the way of the tandem, it was not a problem at all".

Bella replied, angrily:

"That's not the point! Rules are rules and you are breaking them".

Michael, whose job this really was, kept out of the argument, just shaking his head over Bella. After the argument, Johnny and I walked away to sit down in the shadows. He told me how incidents like this happened all the time with Bella around.

"Nobody takes her seriously, she's always trying to nail people for their mistakes, when she's the one making them all. She has no authority here but acts like she's the owner. It pisses me off. She should make more effort on minding her own damn business".

We continued discussing the importance of keeping tandem students families and friends away from the area of landing, packing and loading the airplane – on busy days. However, the day in question was very slow, and the only people on the dropzone were the staff and the tandems Bella had yelled at. Johnny sighed:

"It should be more important to make the customers happy, when possible. Instead she [Bella] continues to make a fool of herself".

During a car ride with Bella, I decided to ask her about her outbursts around the dropzone, which was happening regularly. She fired up immediately.

"If someone is doing something dangerous it's my right, no, *my duty*, to tell them. No matter whom they think they are! And I always keep track of everyone at the dropzone to make sure nobody violates the rules! I don't even jump during boogies thanks to all the visiting idiots! This is a self-policing sport. When others don't police themselves, it is my duty to do it for them!"

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I argue that Bella gets little or no respect because she fails to understand when policing is legit, and necessary. Bella felt the rules were absolute, where the others meant it was of much more importance to use judgment at all times; rules are guidelines. Some rules, like the one where tandems and visitors should stay behind 'the line', are redundant on slow days. Bella annoyed the others mostly because she was not regarded as a person with legit reasons to police others. She was experienced in years but still failed to earn respect, partly because she was not especially skilled. Her regular outbursts also contributed to her unpopularity and other skydivers often commented how it was embarrassing. In contrast, it sometimes occurred that the chief instructor, Leonard, came down on the loading area to intervene if he saw tandems being inside the line (on busy days). When *he* ordered people away and at the same time criticized the tandem instructors and Michael (ground personnel) for not paying attention, no one would question it. As the chief instructor he has legit reasons to interfere. Skydivers would almost never discuss any decisions made by Leonard, at least not with him.

### **Discussion**

Rules are not necessarily seen as a contribution to a controlled performance of the activity. In fact, rules may function as the exact opposite, according to some. I argue that much of my material contributes to that notion, to some extent; the social and pragmatic universe that is created among skydivers, affect the community in a much more far-reaching manner than the rules itself. When discussing incidents, skydivers rarely talk about what rules as such that were broken. What they discuss is how it happened, why, and how it could have been avoided. Locating and really acknowledging the fact that the humans cause the incidents, affects the skydivers in such a profound way that it alters the way they engage in the activity. That being said, I find it hard to believe that the rules as such do not affect the starting point of the skydivers value system. After all, people who have a thorough understanding of the sport make the rules, and they continuously develop them as the sport advances. Even though skydivers did not refer to rules as such when judging incidents, it seems to be safe to assume that the normative rules and pragmatic wisdom correspond with each other to some extent.

Politics has it public face (the normative rules) and its private wisdom (the pragmatic rules). Whether or not it will be effective they are normatively neutral. Bailey (1969) claims that each culture has its own sets of rules for political manipulation, its own language of political wisdom and political action. The normative rules can perhaps be generalized into 'a skydiver can and should always make comments on others behavior if rules are broken, or if the skydiver in

question puts others in danger'. The private wisdom however, is slightly more complicated. A mid-experienced skydiver would for example instantly correct any skydiver with the same or less experience if he or she felt it was necessary. If he or she were more skilled, the person would most likely feel inferior to that skydiver, and not interfere with him or her, unless the skydiver was posing a direct threat. If he or she felt a skydiver with more experience and/or skill was ignorant and potentially dangerous, he or she would talk of him or her, but not necessarily to him or her. Experience in this context usually matters more than skill itself. Yet, in the example with Bella, who is an experienced skydiver, this did not give her legit reasons to interfere with others behavior. They did not regard her as reflected, experienced or logical in any way. Most of all, she was not a particularly skilled skydiver, even after years in the sport. Bella on the other hand, maintained that rules were absolute, and she felt that it was her duty to uphold them. She embraced the role as the "dropzone police", and failed to see the system as a living organism so to speak, where the general group felt it was more important to exercise judgment on a case-by-case evaluation. Had she on the other hand been a 'Ninja<sup>17</sup>', that the others looked up to, she would probably have been able to exercise the rules in a more successful manner. In other words, sanctioning others seems to be more of a collective task rather than an individual per se. When individuals attempt to police others, this is often experienced as an intrusion, and the reaction to being policed depends on the "policer's" status in the community.

Several of the skydivers regularly expressed the concern of having too many rules being made. According to them, an overload of rules would function as the opposite of creating order – it was more likely that it would restrain the skydivers sense of adaption and hinder them in learning to think for themselves. Many also argued that if you e.g. have rules that say you cannot do 'this' before you have 'that' number of jumps, and so on, it would only create a community where the obsession with "levels" to reach, would eventually lead them to stop calculating risks of their own. To exemplify this, in the Norwegian skydiving community, there has been a big debate on wing-loading rules lately. The Parachute Association of Norway<sup>18</sup> requires a minimum of two hundred jumps before a skydiver can downsize to a more demanding canopy<sup>19</sup>. Many skydivers argued this leads to more dangerous situations, because skydivers instantly downsize as soon as they reach two hundred jumps, instead of acquiring the skills necessary, and then evaluate if they are ready or not.

<sup>&</sup>lt;sup>17</sup> "Ninja" is a term skydivers use in a humoristic fashion when talking about expert skydivers.

<sup>&</sup>lt;sup>18</sup> Norges Luftsportsforbund, fallskjermseksjonen.

<sup>&</sup>lt;sup>19</sup> A new set of rules was recently introduced by NLF (March 2012) with even stricter limits on choice of canopy, in an effort to reduce the increasing numbers of serious incidents in the Norwegian community lately.

Oliver-Smith and Hoffman (2002:11) assert that much can be learned about basic features of a group's worldview by investigating how concepts of uncertainty, peril, safety, fortune and fate are constructed and perceived. They argue that people formulate meanings for what has occurred, and in that process we can learn about the social process. Often, various interpretations of events are produced that brings up control of definition and "story", along with *tales of praise* and condemnation. Often, there is a "true account" of events, origin, the consequences and especially responsibilities, and this account can erupt a contested form of discourse. Oliver-Smith and Hoffman argue that such definitions even extend to risk, and the question of whether it is recognized and who gets to outline the amounts and limits of it. They emphasize that in the negotiation of these, there is much to learn about the tensions and ideologies within the community, and, the outside entities.

As we could see in the last chapter, as well as in this, the skydivers emphasized that "they would never make the same mistakes" as the skydiver in question did when discussing an incident. The community expects them to tell others about their mistakes, especially when the outcome was serious. In the instances of less serious outcomes, they still use moral judgment upon each other, but more often these messages are disguised as friendly 'bullying' and humorous comments, and the stories seem to be understood as a shared opportunity for learning rather than attempts of policing. The use of 'friendly bullying' is especially prevalent in the instances where less experienced jumpers perform bad landings and claim that "it was the wind who pushed my canopy over" and similar excuses. More experienced skydivers will laugh of these attempts to avoid admitting they made a mistake, and just tell them "yeah, sure it was the winds" and so on. Also, as I argue in the example of the skydiver who forgot to put his rig on before attempting to get on the plane, humoristic comments were used in order to attempt to render the message a little more harmless. Larsen (2009) posits that laughter marks not only an offense, but is also an origin - a duality. He refers to Bergson who claims that we laugh when we see something organic appear mechanical - in other words; when someone plays in the boundaries between man and machine, a source of fear and comic (Bergson 1971, cited in Larsen 2009). Larsen thus argues that laughter and fear can be seen to be functional equivalents and he claims this is similar to the juxtaposition Radcliffe-Brown made between avoidance and joking relationships.

What I find the most difficult in analyzing the normative evaluations they use for each other, are the fact that they seem to work on a case-by-case basis. An incident where one person is judged will for another person be used only as a reminder to the others to stay safe. One incident is judged as a simple mishap, others and similar incidents are used as examples for deviant behavior for the entire community. The hierarchical system involves degrees of experience and

skills, years in sport and number of jumps, but at the same time all these factors can be completely meaningless in some cases.

What seems to be common for all incidents and unwanted events is the notion of 'mistake'. Everybody can make them, but how they are treated depends on who made a mistake, and how she or he reacts to it. Next, there is the question of risk; how grave was the mistake? Was it a simple mishap, or a potentially hazardous mistake? Last, and perhaps most important, who observed the mistake? Not all will react the same, obviously, and some mistakes will be overlooked by one, but greatly emphasized by another. Be that as it may, what is interesting is the way they are treated, when the group decides to treat it. One could argue that when they express feelings like "shit happens" and "it was just an accident", it is really excuses to avoid taking responsibility for the mistake. It is to me quite interesting that in as good as all incidents, it always boils down to human error – but at some point it gets too far down to make any sense. If you e.g. lose a toggle as you are about to land, it can have profound consequences. But losing the grip of your toggle is sometimes just an accident - just as if you lose the grip on your cup of coffee. There is thus a difference between human error and more significant errors in things like planning, judgment, poor equipment choice or maintenance. Those things seem to require premeditated thought (or lack thereof) and a different course of action before the incident could have prevented it. A simple error on the other hand, could be just an honest mistake. As some of the skydivers expressed; you can have the right training, experience, gear, conditions, mindset, preparation; and you can still have a mental lapse, a physical lapse, or a combination of the two that causes a major incident.

Therefore, if we are to categorize the events presented in this chapter, it becomes evident that there are both similarities and differences that may affect the way they are treated. Events where the person in question either refuses to admit he or she made a mistake or neglects to take the blame for it, seem to be used as derogatory examples to the rest of the community. By clearly showing disapproval over someone's behavior, they simultaneously make it evident that such behavior in general is not tolerated. In the incidents where the skydiver admits and takes full responsibility for the mistake, the event seems to be judged as less serious by the others; everyone can make mistakes, and that is just the way it is – as long as he or she realizes what happened, and shares it with others to learn from their mistakes. In the last category presented, skydivers share their story of a worst-case scenario, in order to remind skydivers about their fallibility, and perhaps to humble them. As shown, some skydivers tend to be somewhat arrogant towards their own failures, and these stories probably help realign the balance, so to speak. Anderson and Taylor (2010:43) refer to a skydiver posting on an online forum "Always remember, 'you are not

now, nor will you ever be, good enough to not die in this sport". Common for all, I argue, is the need to regain control for both parties; the skydiver who made a mistake can be seen to regain some control if he or she deals with their mistake, regardless of how. For the remaining skydivers that witness the failure, they can be seen to regain control by either "forgiving" the other for his or her mishap, or by using the mishap as an example of unwanted behavior. Laurendeau and Van Brunschot (2006) exemplify this well when they explain how skydivers often use words like "femur" as verbs, saying e.g. "that guy's gonna femur if he doesn't fix his hook turns". I often heard similar expressions from skydivers when they witnessed someone who was pushing their limits, and I believe expressions like these were quite effective towards whoever happened to overhear the derogatory comment.

Åhdal (2008) argues that control is facilitated by the workings of Bourdieu's (1977) concept of 'habitus' in individuals. According to her, it is not discourse and control enacted through observation and deterministic force of dispositions, but rather social performance and the desire to act honorable that guides the motivation of, in our case, the skydivers. As discipline is linked to practice, we can see a social technology aimed at changing the behavior of people in order to achieve an outcome. This outcome further reflects locally anchored morality and preferred local values (Ådahl 2008:34). When the skydivers reacts so clearly to behavior that does not meet the standards of the group, they make sure to remind the skydiver in question that deviants do not go unnoticed. As mentioned, this strategy is in most cases directed toward the individual in question – however, when they see the person as a "lost case", they rather focus their efforts on the rest of the group so that at least the others will understand the implication of 'acting out'. This can also be compared to Foucault's and Sheridan's (1977) notion on disciplinary power. They argue that disciplinary power is dependant on the elements of hierarchical observation, normalizing judgment, and their combination in a procedure that is specific to it, the examination. According to them, the art of punishing, in the regime of disciplinary power, is not primarily aimed at atonement or repression. What is does is to refer individual actions to a whole that is a field of comparison, a space of differentiation and with a principle of a rule to be followed (1977). It actually differentiates individuals from one another in terms of an overall rule. Through value-giving measure it compares, differentiates, hierarchizes, homogenizes, excludes. In other words, the disciplinary power normalizes. The examination combines different techniques in order to judge someone, a normalizing gaze, a surveillance that makes it possible to qualify, classify and to punish. In other words, it establishes a visibility over individuals through which one differentiates and punishes them (1977).

In the cases presented above, it is clear how skydivers, using quite elaborate methods, control each other through observation. In doing so, they correct unwanted behavior with the aim of realigning the individual with the "norm" of behavior they approve of. Thus, it seems legit to argue that the skydivers learn how they should respond to incidents emotionally through observing reactions to deviant behavior. Furthermore, I assert that their reactions contribute to upholding the norm-value system through the use of morals and narratives on deviance.

In this chapter I discussed that the normative and pragmatic universe that skydivers create, recognize and negotiate the limits of the activity. In the discourses around unwanted behavior there is much to be learned about the tensions and ideologies in the community. This becomes especially evident in regard to who has the legitimacy to control others, not to mention the inconsistencies in this process. Skydivers try to acquire an outcome that reflects locally anchored morality and preferred local values. The next step in understanding skydivers relationship to risk is therefore to examine how they aim to neutralize these risks with their own actions.

# **Chapter 5: Embodying Risk**

## **Excerpt from field notes**

"Today was 'safety day' at the DZ. There were all kinds of coaches and employees of the dropzone here, giving lectures on how stuff should be done. I don't know, there was a lot of it that was insanely basic. It seems like, I don't know, that they don't want to take anything for granted. They were talking a lot about how to perfect your skills, to train efficient. It's a good thing I guess, I got a lot of good input from it. You kinda forget after a while, the basic stuff. Well, forget is not the right word, but you get so occupied with the struggle to always improve, that sometimes you even forget to have fun. I think I'm gonna do a solo-jump some day - it's been a long time. Just jump out of that plane and fall, just enjoy it, without thinking about all the maneuvers I should do and who to fly next to and all that stuff. It was kinda funny when they were discussing different scenarios where people do weird stuff in the sky. You know, weird decisions. Everybody that attended the lectures laughed and made jokes, because, all of us make mistakes, all the time. When it's just silly stuff, like busting<sup>20</sup> the exit, it's fun to make jokes about it, because it's not really that serious. One of the Ninja's here was holding one of the lectures on freeflying-skills. He was real firm that one should not attempt any advanced jumps until you actually know what you're doing. I couldn't agree more. That is what creates the dangerous situations - people getting in over their head. He said, "when you don't have the skills to get out of the way...you have no business being there at all". I love that he says it like that. The other guy, was talking about canopy-skills. He was saying, "You rather be on the ground wishing you were in the air, instead of being in the air wishing you were on the ground". I know the feeling. Participating in jumps you're not skilled enough for. It's a good thing that he says it. A lot of people respect him; he's a reflected guy, not to mention that he has insane skills. One more thing he said that really made me listen was "have confidence in your skills! Figure out what your limits are, and work on them, that's how to get good". Next week there's a canopy course. I can't wait! Love to learn new stuff!"

### Introduction

Until now, I have asserted that skydiving is a highly normatively controlled activity, and that skydivers always try to make sense of every incident by searching for the mistake that must have been made. I have also shown that the skydivers create a normative and pragmatic universe where they recognize and negotiate the limits of the activity. It seems that they try to achieve an outcome of all unwanted events that reflects locally and anchored morality and preferred local

<sup>&</sup>lt;sup>20</sup> "Busting" the exit is when you e.g. leave the plane with a wrong body position, so that you do not manage to keep up with the group, or you bump into someone and disturbs their exit as well. This is rarely a safety issue as such, but a time-issue. Loosing several seconds of the jump is not desirable for the overall performance.

values. Risk is unquestionably captured within the human domain, and we therefore need to go further in the analysis to really fathom the social processes in the sport.

This chapter will therefore search for the methods skydivers use to neutralize the risks they identify. By exploring the ways they relate to their skills and thus their exercise-methods, we can argue that the main activity for skydivers involves eliminating as much risk as possible by training the weakest link – themselves. The next section will discuss the actual methods the skydivers use in an effort to neutralize as much risk as possible. First of all I will examine to what extent the wind tunnels may have affected skydivers view on training and how this relates to their idea of a safe sport.

## The wind tunnel: false sense of security or a tool to increase safety?

Skydivers focus a lot on perfecting body-flight skills, and the best way to do this is by training in the wind tunnels<sup>21</sup>, also known as 'indoor skydiving'. These constructions consist of a vertical tunnel in a chamber inside a building, where powerful engines create a wind flow strong enough to fly on it. In other words it is a simulated skydive which creates the opportunity to fly as you would in the sky, without the issue of time and altitude. Skydivers use of wind tunnels is increasing dramatically, both for beginners and highly experienced. The first tunnel was military, and built in 1964 (Poynter and Turoff 2004), however, not until early 2000 did indoor skydiving become popular for commercial and exercising use. Today, indoor skydiving is recognized as a sport, and there are many competitions and championships every year. More and more skydivers prioritize doing tunnel time, and it has become a somewhat "natural" way to enhance your skills effectively.

With the entry of tunnels, freefall-disciplines have been totally transformed. Body flight is simply not what it used to be before tunnel flying became an ordinary way to exercise. During my fieldwork I met many tunnel coaches that asked me to imagine skydiving, as it was a few years back. They argued that now, when so many learn to fly correct and efficient with the help of the wind tunnel, the sport in general has become safer. They explained that the possibility to work hard and detailed in the tunnels, and then take the maneuvers to the sky, making the moves bigger, faster, steeper and with more people is driving the art of body flight to new levels. They were amazed over the development the last few years, and truly happy more and more people decided to use the tunnels as a tool. That way there would be more talented flyers, so the jumps could be even more artistic and extraordinary.

<sup>&</sup>lt;sup>21</sup> Pictures of training-sessions in a tunnel can be found in the appendix.

Some of them could ponder over where it would stop, if it ever would. "The sky is certainly not the limit anymore" according to an informant. This is suggestive of a general idea that the tunnel is mainly a tool - equipment that enhances performance in new and unseen ways. The tunnels functions as a *simulation of the reality* in this case. By training in them, the skydiver can focus on the details, and forget all other aspects that are usually present during a jump. The tunnels therefore provide a method of condensed, high-velocity learning. It is a tool that gives the skydiver a chance to focus on skill only, instead of all the other limiting factors as time, altitude, other groups in the sky, equipment malfunction and so on.

Do the tunnels enable skydivers to acquire skills at the expense of experience? The tunnels have introduced the sport to new and unfamiliar challenges that have created new worries among many skydivers. With tunnel-time, anyone can become a 'Ninja' in a blink of an eye, so to speak, and several of the veteran skydivers worried this might alter the sport in negative ways. They argued that the entry of tunnels would result in a lack of understanding of the other aspects of skydiving; earlier, a skydiver became good by jumping. He or she would have to stick with it, through hundreds of jumps, trying to acquire the skills necessary to be able to join the more advanced and rewarding groups. This would usually take years - days in and out spent at the dropzone. This would enable them to acquire the attitudes of a more mature skydiver as he or she progressed through time.

They claimed that they saw more and more people choosing the tunnel as a training method instead of the 'traditional' way of earning skills, as the tunnels provides the same, if not even better, level of skill within hours. Furthermore they expressed concerns that these jumpers, no matter how skilled they had become in free fall, were more likely to lack knowledge and skills necessary in the other aspects of the jump, "Will these 'air mines' know when not to go on a load?" they asked. The veterans especially emphasized that the tunnels did not teach skydivers how to be safe in relation to other groups in the sky, and most importantly, they could not teach you canopy skills within the walls of a chamber. The biggest problem of all, in their opinion, was that as these "tunnel-rats" got better and better in short amounts of time, they would be good enough to participate in the more advanced jumps with the biggest groups, even if they had very little 'real-time experience' in the sky. 'Big-ways'24 are especially challenging due to the amount of jumpers in the sky at the same time. Normally, one does smaller groups where it is easier to keep track of everyone, both in freefall but particularly during the separation from the other

 $<sup>^{22}</sup>$  A term used for skydivers who are about to make a disaster happen.

A term used for skydivers who are frequent flyers in the tunnels.

<sup>&</sup>lt;sup>24</sup> Picture of a big-way can be found in the appendix.

jumpers, given the number of canopies opening at the same time in a relatively small airspace. You need to have total control of your own body, everybody else around you, and the group as a total should have the same angle and speed at all times to reduce the chance for collisions and a poorly performed jump in general.

The veterans therefore worried that tunnels presented a short cut to success to the jumpers who did not want to sacrifice the time and energy needed to acquire a total set of skills. They argued there were no guarantees that their attitudes toward their own limits were as developed as their skills, and that it was ridiculous how much money was being spent *in a machine* rather than in the sky.

There are two sides to the coin. Many skydivers (especially the younger, experienced participants in the community) argued that the expansion of tunnel flying had improved the overall safety. Through intensive and focused training, better techniques had been acquired and a general knowledge of how one should fly their bodies had been earned. They would lead the opposite argument of the veterans: why should you spend years tumbling in the sky, presenting a danger to yourself and those around you, when you can learn how to move safely with the help of the tunnel in a percentage of the time it used to take? Furthermore, they did not believe that the tunnels "replaced" actual skydiving; they argued that people still did as many jumps, in addition to the tunnel time. More and more instructors actually advised students to do some tunnel time during their training, in order to learn how to be stable on the belly during free fall. The rhetoric these skydivers used, suggested that tunnels were better for the sport in total, perhaps even implying that more should use them.

It should also be mentioned that since so many skydivers use the tunnels to improve their skills, and *all teams* do it rigorously, one is almost dependant on tunnel-time to improve to a level of 'expert'. Previously, a skydiver could be recognized as an expert with about one thousand jumps. Today, a skydiver without tunnel-time is hardly considered anything but experienced. You can still be an excellent e.g. freeflyer, however; without tunnel-time you have little chance to reach the same level as those with considerable tunnel experience. This is a fact acknowledged by all skydivers – wind tunnels are simply, by far, the best way to practice freefall skills, even by those who are skeptical of them.

As we can see, there are some inconsistencies when it comes to the use of tunnels. How do they really affect the skydivers? The next section will examine this, and argue that the use of tunnels can affect how skydivers view their own skills.

## Actual or perceived self-efficacy?

It thus seems that the tunnels have changed the way one can participate as a skydiver. With tunnel time you can excel to a higher level of body flight, if you only have the time and money required to do it. Within months you could, in theory, participate in jumps one could only dream of ten years back when the tunnels were not normal to use. The use of tunnels has created a discussion within the community. 'When "all accidents" (around eighty percent of fatalities) happen during canopy-flight, should we not focus more on enhancing canopy-flight skills? Are we creating a culture where free fall skills are preferred at the expense of experience? How can we regulate this development?'

This discussion is, as mentioned, more prevalent with the veterans in the sport that are worried about the rapid changes they witness. Nevertheless, many of them also argued that the community would change with it, not necessarily for the worse. They believed that since so many have evolved to such a high level of expertise, and also make a living of it, these individuals would affect the rest of the community in a positive way. Expertise is never bad, they asserted, and they reasoned that this expertise would influence the way the activity is performed all over. Many also expressed that they had never seen such a high level of knowledge within the community in general, and meant that the focus on enhancing skills with tools like the tunnels, have altered the way the general community relates to the activity. They believed this very development was the best they had ever witnessed, in spite of their worries – as most skydivers trained harder than ever before to become as good as the best, which in turn hopefully would mean to be as safe as they could be. However, it should be mentioned, tunnel flying is still somewhat reserved for those that are really 'going for it'. Recreational skydivers still find it more important to spend their limited funds on actual skydiving. It is tempting to argue that these also tend to be the more skeptical ones to the use of tunnels as a training tool, as it is somewhat out of reach for them.

Be that as it may, how can we explain the effect tunnels have on skydivers? During the fieldwork I often encountered skydivers that had approximately the same amount of jumps as I did, but with a lot of tunnel time. These skydivers were not only more skilled than me, due to the amount of training, but also 'braver' – they would participate on jumps with twenty-two other skydivers with a shrug, whereas I would refuse to jump with groups of that size. First of all, I did not believe I had the actual physical skills necessary to be on the jump, but I would also feel that it was out of my league because it was simply too many jumpers in the air at the same time. In other words, I was uncertain whether I could handle it or not. The skydivers with better skills due to the tunnel would not feel the same way and go on the load without any more doubts. Skill-wise, they

were probably good enough for the free fall part of the jump – but were they good enough to handle the break-off from the group before deploying?

I also encountered a skydiver, Rob, which had been skydiving for approximately two and a half years. In that time he had done perhaps four hundred jumps and thirty-five hours of tunnel time. Even though it is not entirely correct to automatically transfer minutes in tunnel to amount of jumps, one could say that thirty-five hours is equivalent to around twenty one hundred jumps of free fall time. In other words, Rob had, in two and a half years, spent the 'same' amount of time in free fall as a skydiver with more than two and a half thousand jumps (which would be a lot in that amount of time). When I met him, a group was having try-outs for a record jump due later that month. In try-outs, skydivers with sufficient skills participate to prove themselves good enough to join the record. The organizer picks out the best ones, the rest are "benched". Rob did the try-outs and got picked out to participate. Some of the skydivers that observed the try-outs commented, both to him personally, but also the organizer, that they were worried he was being too confident about his skills. When the organizer learned that the skydiver in question only had four hundred jumps, he immediately benched him - explaining that he was "way too inexperienced to be on a big way of that size". Rob got annoyed and wanted an explanation, arguing that he had, after all, proved himself. The organizer explained that the try-outs were much smaller (they divide the jumpers in several groups at first, then start working them together into one, big group), and that even if Rob had shown he could fly well with ten people, that did not mean he would fly well with fifty, not to mention in a pressured situation due to the recordelement of the jump. In other words, Rob was told to gain more experience before he could join the "big guys". Laurendeau's (2006) findings correspond with my own. He stated that in the instances where skydivers are unsure about someone's abilities, they are unlikely to invite that individual on the important skydives for fear that they will not perform well.

The tunnels can thus be argued to provide a heightened sense of *perceived* self-efficacy with less experienced jumpers. When they have acquired sufficient skills, they automatically believe they are skilled enough for jumps they would not have been comfortable doing previously, if it were not for the tunnel time. Laurendeau (2006) argues that experienced jumpers often step in to "correct" less experienced or more reckless jumpers if they feel fit. He further elaborates that "skill" as such, is not only physical; skydivers feel that it is rather an ability to handle the mental and emotional aspects of the sport (2006:95), and in this case, Rob probably confused the two. He was 'skilled' enough, but only physically. What worries skydivers the most, are jumpers who are not aware of their limitations. Celsi, Rose and Leigh (1993) argue that participants go through a habituation period where high-risk activity is gradually perceived as the

norm. The theme of the illusion of control is more likely to occur with mid-experienced skydivers (like Rob). They tend to adopt an attitude of *complacency* towards their own behavior and activity as they have "made it so far" without problems, and thus find it unnecessary to be worried about future difficulties. In other words they feel in control without realizing that in some circumstances, this feeling may be an illusion.

"From the perspective of a high risk performer, virtually all feel that they are capable of managing the context in which they perform, with most leaving what to them is comfortable margin between their risk taking behavior and edge. Even those who operate on the extreme edge emphasize that they rarely go beyond the limits of their control" (Celsi, Rose and Leigh 1993:17).

Douglas (1985) further clarifies this stating that individuals have a strong but unjustified sense of subjective immunity. People underestimate risks they perceive to be under their control, as well as those risks that are rarely expected to happen (1985:29). In this case, as we know, it was explained to Rob why he was not seen as skilled enough to participate, an idea Rob had a hard time reconciling with. Breakwell (2007) argues that people are often very resistant to changing their prior risk estimates when new information is provided for them. Rob was given information he experienced as unjust, and according to Nisbett and Ross (1980), contrary evidence to beliefs tends to be dismissed as unreliable, erroneous or unrepresentative.

Even though Rob felt that he could handle the jump, the rest of the skydivers around him disagreed. One could therefore argue that on Rob's behalf, the others consulted to find the best solution in managing the situation and this can according to Binkley (1991) lead to a stronger sense of group identity – the others experienced enhanced trust in each other – they had collectively "fixed the problem".

As we have already discussed, new technologies as the wind tunnels have created possibilities of condensed, high-velocity learning. The focus on body-flight literally exploded as skydivers started to integrate tunnel-time with skydiving. But how does the actual learning proceed? The next section will aim to discover how skydivers relate to their body as a tool, just as important as e.g. the canopy. They treat their bodies as mechanical instruments, and we will see that this approach leads to a notion of techniques – both of the body and the mind. We will also elaborate on how this approach ultimately may lead to greater sense of *perceived self-efficiency*; the body is controllable, and with a controlled body, one can minimize the risk of making fatal mistakes in the sky.

### De-learning embodied techniques

Learning to fly your body is meticulous work. As Marcel Mauss has put it, there is a technique of diving, and a technique of education in diving (Mauss 1973:71). What we really are discussing here is the presence of a technical education in every society, which has its own special habits. These techniques are acquired, not natural. It is a common mistake, according to Mauss, to think that there is a technique only when there is an instrument (1973:75) He claims that man's first and most natural technical object, and at the same time technical means, is his body. I am tempted to follow his argument when discussing skydivers. Flying, to put it bluntly, is not natural for human beings. Still, skydivers spend years perfecting techniques of the body, acquiring skills unimaginable only some decades back (not to mention only a few years back due to the tunnels). Skydivers spend serious amounts of time trying to learn how to fly their body, and I promise you, it is harder than it looks.

During my fieldwork I tried to fly in a wind tunnel for the first time, and was coached by Ringo, one of several leading coaches in the world. During the session in question (we had thirty minutes of time, divided in two minutes sessions and four minutes of pause in between), I was to learn 'back flying'. When you 'back fly' your back should be horizontal with the ground, knees and hip bent ninety degrees and arms positioned at shoulder height, hands turning up towards your head. Legs are used as rudders, arms for stability. Sounds easy enough. The problems started when I was trying to maneuver in this position. Imagine yourself lying on your back on the floor, moving to an upright position. What you do is tightening your abs, bending the upper body, and using your head and neck as help to get up. The arms can also be used, putting them in front of you, like if you were dragging yourself up. In free fall, however, everything is opposite. The head needs to be pushed back towards the ground together with the upper part of the back, the arms put high up, behind your head, the abs stretched as far as possible and the hip pushed towards the ground. That is the *only* way to get up because it is the airflow that enables you to. If you do it wrong, laws of aerodynamics will push you in a different direction.

During a session in the tunnel, it is impossible to communicate verbally, due to the noise and winds. The coaches therefore, communicate by showing what to do with their own body, emphasizing certain movements with hand-signals and sometimes even steering the student's body by holding and guiding it<sup>25</sup>. It is very meticulous work, because you simply have to do it over and over again, most likely making the same mistakes many times. Frustration comes easy, and the communication with the coach becomes essential. Ringo, my coach was laughing as we

<sup>&</sup>lt;sup>25</sup> Picture of a skydiver being coached in a tunnel can be found in the appendix.

debriefed my session. He pointed out how most skydivers need considerable amounts of time, "de-learning", as he put it. He told me how we spend all of our life, moving without thinking about what we do with our muscles. In the air, one needs to be aware of what every muscle does, and stop it from doing what it wants to, naturally. He explained how this is very easy to spot when you see inexperienced skydivers flying. All movements are childish, without flow, and very exaggerated and stiff. When you see an experienced skydiver on the other hand, it is almost impossible to see the movements that initiate a change in body position. Like great dancers, or gymnasts, the moves are fluent. Techniques become embodied and one does not think about what one does – it is part of a flow.

Learning to skydive, however, is a completely different story. Skydivers talk about angles, rotation, drag, force, aerodynamics and so on. The body is the skydivers plane, and it need to be steered, and the mind must be disconnected in order to achieve that. Also, the body should not struggle against the air (like the inexperienced do at first). On the other hand, it should work with the air to help the body move. The force of the air can be manipulated, by creating more lift on one part of the body, thus resulting in a movement. When being coached, the language is very technical. Only when the skydiver has reached a certain level, the language transforms more into a language of mutual understanding: 'can you feel the air pushing on your legs? Use it!' compared to my lessons as an inexperienced: 'maintain a strong upper body, push the air with your feet, and do not let it force your legs away. Forget everything you know about moving your body'. And even further, when a level of expertise is reached, the coaching get even more metaphorical: 'feel the air as you transcend from this position to that, use the energy enough to complete the turn' and so on. It seems that the language used in coaching becomes more and more metaphorical and oriented towards emotional aspects as the level of complexity increase. One needs to master the basic and technical elements of flying before one can submit to the air, so to speak, and just fly your body intuitively. When that level of skill is reached, the technical language simply does not suffice anymore, and cannot be imparted in technical terms.

Most frustrating of all when flying in the tunnel, was that I had to learn everything all over again. When I tried the tunnel for the first time, I had more than two hundred and fifty jumps, and knew very well how to lie flat on the belly in free fall. In the tunnel on the other hand, that proved to be extremely challenging – the air as such feels the same, but it is the *visuals* that change dramatically. Whereas you are used to having empty space around you as far as you can see, suddenly you are in a tight chamber with walls, and *every single movement* you do becomes apparent to you, because you *see* that you move in relation to the walls. Instead of just relaxing

the body and fly it, you try to correct every movement as you *see it happening*, and thus struggle more than what you should – resulting in poorly executed flying.

The technical body is as you can see, a very substantial part of the learning process. It is through mastering body techniques one excels, and it takes time to learn how to change ones embodied movements. A skydiver has to go through the phases of this process, just like a child goes through phases of learning to ride a bike. When the skill of riding the bike is acquired, the child would not be able to tell you exactly what it does, he or she just do it. This is also true for the skydiver who has learned to go from a 'back fly' position to a 'sit fly' position. The movement happens without thought.

It is for this reason coaching is so necessary in the sport, and the reason coaches can make a livelihood on coaching alone. Those who have learned to educate techniques of the body holds a certain position in the community. One thing is to be able to fly your own body; the challenge comes when you are to explain those movements that you cannot explain with words. Embodied and tacit knowledge, as previously mentioned, needs to come through detailed work with angles and so on, however, this process takes so much time that when expertise is reached, most skydivers will not be able to educate others in it easily.

Therefore, the next section will go further into the process of acquiring new skills, and especially how to train in such a way that the movements happen without thought. I will also discuss further how Mauss (1973) can help us understand the skydivers relationship with their body as a tool.

## Disconnecting the mind

During a skills-camp, an informant asked one of the experts that also participated on the camp: "how should I learn to sit fly?" and the expert that was not a coach, replied: "I have no idea, you just do it. Feel the air, you know". This made absolutely no sense to her, because she had not yet required this skill (neither had I). One of the coaches, Tina, overheard this and pointed out to her:

"Try to picture yourself sitting up, not on a chair, but like in the gym, towards a wall. The amount of strength you use to hold your body up is the same amount you need to use in free fall. Your entire body must be tensed and strong, and the hips just as locked as when you're against a wall".

At a later point, I asked Tina what I could do to improve my own sit flying, explaining: "I struggle with my feet being pushed back underneath my body, and I can't seem to fix it". She asked to see some films of my jumps. After I had showed this to her, she pointed out how my hips were incorrect:

"Try to fixate your hip, lock it by pushing your tailbone down, elongating it together with your spine. At the same time, hold your belly in and drag your shoulder blades into your back and push your chin in toward your chest. You want to create at least two double chins! You are not doing it right if it is not extremely uncomfortable! If you do this, your legs won't be able to move that easily, because your hip is strong and fixated. As of now, your legs are all over the place because you don't have the strength to push against the resistance that the air creates".

I did a few jumps, and nothing happened. I went over to her again, frustrated how I still was doing no progress. She asked me if I had practiced it on the ground. "On the ground?" I asked her back, slightly confused, as I had tried to "sit" as you should in the position in the air, on the ground, several times before without luck. She explained further:

"It is the most unnatural way to have your body, who in the world would sit like that? That is why you need to sit on the ground, pushing your ass and boobs out, and holding your stomach in, like a goose or something. It looks stupid but it will work, if you listen to me. Don't just do it once or twice, but do it wrong, and then correct it by exaggerating *every* transition. Wrong, right, wrong right, as many times as you can bear. When you enter the sky, you will do it wrong, and then you will remember that you need to transition the body, and then the body will know how to, intuitively".

I did it a hundred times, like Tina had asked me, and I have never felt so silly. Sitting on the edge of a chair in the hangar, pushing my bum and chest in and out of position. It made quite a sight, and in between, she would come over to demonstrate and correct me, by pushing my chin back, my shoulder blades into the back, adding pressure to my feet to make me counteract it and so on. Later, when I entered the sky, I took myself thinking "I am doing it wrong", and without thinking about what I did, my body moved into the correct position and it solved the problems I have had for such a long time. When I came into the hangar again, after the jump, I went over to Tina, excited, and asked her how she could manage to make me so much better in such a short amount of time, when I had been working on it for two years on my own. She replied:

"It is all about teaching your body how to do the "wrong-right" thing. The only way to do it is by doing it a thousand times, until you don't have to *think* the movement anymore. It just needs to happen, the body needs to move on its own. That is why freeflying is so hard. You are trying to teach your body to move in completely new ways. That's why I made you repeat it on the ground, when you have the capacity to think the movement. In the sky, you don't, so your body must do it automatically".

I also encountered a similar scenario when I was coached in exits. Exits are very hard to learn, because you go from having no wind on the body (inside the plane) to jumping out in a lot of it, and you need to "present your body to the wind" in the correct way instantly, or else you will be pushed over and ruin the exit. Good exits are partly due to safety-issues, but mostly to *time*. You do not have much of it and spending the first ten seconds correcting a bad exit gives you ten seconds less time to do what you were supposed to do – fly. This was with Ringo, after the 'back fly coaching' in the tunnel, I previously mentioned. The aim of this coaching lesson was to learn how to exit in a 'sit fly' position. He started explaining:

"Not only do you need to think about the body position itself, but the body position *in relation to* the relative wind, since you are jumping out of an aircraft that is moving forward. Therefore *you* will move forward, and downward, all at the same time. As you jump out, you need the relative wind to hit your body on the right places, so you are going to think that you are a sumo-wrestler".

I laughed, thinking he was making a joke. When I realized he was dead serious, I shut my mouth, confused, and he continued:

"A big, fat sumo-wrestler will jump forward, with every pound of his body, with a low centre of gravity, and *a lot of* attitude. So when you jump out of the plane, I want you to picture me as your opponent, because I will be underneath and in front of you, and you are to visualize yourself jumping towards me, with as much force as you possible can".

Not only did he talk me through how I should mentally construct the image of my body as heavy and powerful, he also made me 'dirt-dive'26 the jump pretending I was sumo-wrestling over and over again. In addition to a very physical approach in my being, I also was expected to roar loud, as a wrestler, as to put myself in a mental state of aggressiveness. Needless to say, it worked. When jumping out of the plane, I transformed into a very heavy Japanese wrestler, punching

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 $<sup>^{26}</sup>$  A ground rehearsal of the jump.

through the air as if it did not exist, trying to attack my coach. It was pure beauty, as Ringo so kindly put it.

How can we understand this? In order to learn how to move in a new element, skydivers actually need to re-embody preexisting knowledge on movements. With the help of coaches, they are participating in an apprenticeship in education of flying. This corresponds with Mauss' (1973) notion on man's first and most technical object, and at the same time technical means, the body. Mauss (1973) argues that the child's education is full of so-called details, which are really essential. Training, like the assembly of a machine, is the search for the acquisition of efficiency. He further claims that these techniques are thus human norms of human training. The notion of skill, presence of mind and habit combined imply competence at something, and Mauss grapples with the idea that this clearly put us in the technical domain (1973:78). Are we dealing with "biologico-sociological phenomena", as Mauss suggests? If so, the basic education in all techniques consists of an adaptation of the body to their use (1973:86). Furthermore, the methods skydivers use when learning is quite interesting – it is one of imitation. They jump or fly in the tunnel, together with the coach, who with his or her own instrument - the body - shows the student how to do it. Explaining the movement is often impossible on its own; one has to see it in order to replicate it. Mauss argues that the notion of education could be superimposed on that of imitation. Indeed, one imitates actions that have succeeded and which one has seen successfully performed by people that instil confidence and command authority. The skills of flying are acquired, not natural. In other words, and Mauss elaborates on this as well, we are dealing with the social nature of the habitus. The adaption to a physical, mechanical or chemical aim is pursued in a series of assembled actions, and it is assembled not only by the individual, but also by all his or her education – the whole society to which he or she belongs (Mauss 1973:76).

It is not just the physical body that is being trained to perform. The mind is too. The term "muscle memory" is commonly used, despite the scientific basis for such claims being somewhat uncertain. Nevertheless, I choose to adopt this term owing to the fact that this is the term the skydivers use. The next section will elaborate on the techniques skydivers use in the preparations for the jump, and how they practice the jump as much as possible, both by visualizations but also through simulating the exits and the jump itself on the ground.

## **Dirt-dives and preparations**

The concept of creating muscle memory is explained among skydivers as learning to adopt new techniques and use them without conscious thought. One wants to do a specific maneuver so many times, both on the ground and in the air (and perhaps in the tunnel) that eventually, the skill is embodied. One way to create capacity for this to happen is by *training the mind*. Visualizing the moves before a jump or a tunnel-session does this.

Most skydivers appeared to use visualizations to some extent, some more thorough than others. Especially before complex routines it would be more necessary to pre-visualize it, not to mention, prepare for the jump as well as possible. When I witnessed skydivers being coached, the coach would always tell how the jump should be done several times, and ask the skydiver to visualize it. Another important part of preparing for the jump is by doing so-called "dirt-dives". Most dropzones have a construction of the airplane's door situated on the loading area where the skydivers meet before they go on the plane. This construction is really just a replicate of the door, with the handles, the door itself and, if the plane has it, the steps below the door on the outside of the plane the skydivers can use to stand on before exiting. The construction is referred to as "the mock-up". When the group has decided what routine (type of jump) to do, they go inside the 'mock-up', enter the door, find their places, imitate the exit and "jump out" of the door. When they are "in free fall", they move around on the loading area, finding their slots next to the leader of the jump, pretending to do the actual jump. Even the break-off is rehearsed so that everyone knows where to go before opening their canopies. Preparing this way is important to most skydivers, not only do they feel more in control of what is supposed to happen during the jump, it also removes any uncertainties they have about the actual plan.

Especially important is the part of getting ready in the door. Most airplane doors on planes used for skydiving, are around one and a half meters tall, and less than two meters wide. When you are a big group, you want to have as many as possible on the outside of the plane before exiting. One skydiver usually hangs on the very back of the door, where there is a 'camera-step' (the spot is designated to whoever is filming the jump), the rest stand with one foot on the edge of the door, and the other hanging out, holding tight with one or two arms on a long handle on the inside or outside of the door. On the bigger airplanes one can fit as many as six skydivers "in the door". However, if the group is bigger, the rest of the group has to crouch inside the plane, as close to the door as possible, throwing themselves out as the skydivers on the outside let go of the plane. It should be noted that hanging on the plane in that fashion is quite hard; not only is it extremely crowded, but the speed of the airplane makes you feel like you are hanging on for your life, trying not to fall off the plane before you are intending to jump – quite ironic, I know.

In the plane you would see some of the skydivers contemplate by themselves, often with their eyes closed, making subtle body movements, as they visualize how the moves should be done. Every part of the jump, from the exit till the landing is visualized to ensure the best possible outcome of the jump. The skydivers would say that an appreciated outcome of using this technique is also a calmer mind that directly will influence the quality of the jump, the safety and the overall experience.

As in the examples I elaborated on in the previous section, one can see how the coaches told me to *think what it should look like*. In general, many coaches I met told me that by training the mind, you are also training the body. A way to ensure the best possible result is by activating the correct muscles as you *think the movement*. They meant that this would help the body remember what muscles you intended to use, and the learning process would go faster. Skydivers being coached by these informants would spend quite some time on the ground, with their eyes closed, moving carefully the different parts of their body over and over again, and rehearsing the exit by jumping out of the 'mock-up' multiple times.

#### Discussion

Why the intense focus on acquiring skills? Skydiving is potentially very risky – that is a fact. The question that remains is whether that risk is within control or not to those who face those risks. Laurendeau (2000) who studied skydivers argues that the informants claimed they managed the risks such that the sport is not risky *for them*. He quotes an experienced skydiver reflecting on this:

"Well, potentially, it's probably the most...dangerous sport in the world. I mean, every time you leave an airplane, you're potentially going to die, unless you open your parachute. You have to know how to use the equipment, you have to be taught properly how to do it, and jump within your limitations, and continue to expand them. If you argue for your limitations, then they're going to be yours. If you realize your limitations, and improve them and extend them or expand them, then you're going to be safe" (Laurendeau 2000:79).

He further elaborates that the very irony of this management is that it does not mean to take as little risk as possible – instead, it means that every skydiver to him or herself should decide how much risk they are willing to accept in a trade-off for the benefits they receive. Laurendeau and Van Brunschot (2006:185) refer to an informant who argued that "if I thought I was gonna die, I wouldn't go and do it". They explain how the informant felt she understood the edge well enough to have an accurate understanding of the risks in the sport, and that she therefore was well within the limits and thus safe. Some risks are almost equivalent with having more fun, not because it is riskier per se, but because it gives them greater satisfaction due to its challenge. Several

informants argued that they needed the challenges in order to be safe; and that one should always try to push one's limits. If you do not, they argued, you become lazy and bored. An informant expressed that "when the day comes that I sit in the plane, waiting to exit, without any sort of anxiousness towards the jump, that's the day I'll quit skydiving". He argued that always trying new things and challenging himself was necessary to stay sharp and focused. That is not the same as being scared, or experiencing stress every time they jump, but that a certain level of motivation and pressure is a good thing in order to perform well. It seems like the skydivers feel more alive when they are in contact with the forces of chaos so to speak, by challenging them. This requires that one accept a certain level of risk in order for it to be any kind of challenge at all that one can master. That is not the same as to say that they are *on the edge* of the 'cliff', or on the edge of *chaos*, but that one finds him or herself in a fairly narrow area between *chaos and order*. In other words, a *shift of the edge* takes place, but one also wants to be within reach of it. If the safety is *total*, the system that is alive will solidify to ice and come to a halt.

I found that as the skydivers practiced hard towards specific goals, the risks involved in that maneuver became somewhat 'neutralized'. They practice it so many times, over and over again; that they do not view it as being risky the same way they did when they started out. This is suggestive of a general idea that practice leads to the feeling of perceived self-efficacy. Gleitman (1995) for example, notes that familiar situations change the individual's perception of risk because of habituation. When a behavior is repeated enough times it does not appear to be as dangerous as in the beginning, simply because one gets used to doing it. Furthermore, when a person performs an activity he or she sees as dangerous, and nothing occurs, people can become more prone to the confirmation bias, which means that they are more prone to seek or interpret evidence in ways that are partial to existing beliefs (Nickerson 1998). This can account for more than the jumps alone; as shown, skydivers spend more and more time in the tunnels, perfecting skills and body flight-techniques. It seems safe to assume that while doing that, they also experience less anxiety than they would if they were to try new maneuvers "in the real world". In the tunnel, there are only walls to collide with (which can be dangerous enough) and informants expressed that it was good for them to be able to do most of the mistakes in there, rather than in the sky. It also took some pressure off the learning situation. When skydivers participate in jumps, they dislike it strongly if they are the one's who do not get it right and mess up the dive. In a tunnel on the other hand, one is meant to make mistakes – that is what the tunnels are made for. They also argued they have more "available mental space" and are more relaxed. Most important of all, while simulating movements in the tunnel, they seem to become normalized to the

skydiver, and most likely reduces his stress-levels, which again enhance his or hers perceived skills.

In other words, by becoming more confident, one also becomes more confident in what risks one can handle. What was earlier considered to be too risky becomes acceptable to the practitioner. Several authors who have studied risk-taking assert that the feeling of being in control reduces any stress one experiences (Douglas 1985), and those participants who are able to trust the present, in this context their present skills, automatically construct trust in things to come. By repeating the activity that could result in stress, they gain a feeling of familiarity and safety and it is the familiar that motivates them to keep the performance going and is the source of their motivation and innovation (Mattingly and Garro 2000). Most importantly, and the essence of acquiring skills I argue, can be compared to Binkley's (1991) findings; the factors which the workers attribute to their personal control is of the greatest importance. I argue skydivers can be understood the same way. Skydiving is, after all, about having fun in the sky together with friends. They use all of their energy towards becoming better, more precise, more elegant, and more efficient. This goes for both freefall-skills and canopy-techniques. Training and becoming good, is within their immediate control; the more effort one puts in, the better results. And as several studies mentioned above, feeling in control reduce stress and uncertainty and enhances the overall experience.

However, there is more to it. Several studies have established that people, who have a high degree of perceived control, were prone to take more risk than people who feel they have less control (Hammond and Horswill 2001). It thus seems fair to argue that the idea of control is connected to risk behavior. Laurendeau and Van Brunschot (2006) explain how other skydivers often worry about their friends when they think they are performing beyond their capabilities, and as I discussed in chapter four, skydivers often step in to correct other skydivers if they see it as necessary. This is especially prevalent when it comes to the question of canopy-skills. As mentioned earlier, there are also concerns in the community that among others, the tunnels have lead to a general idea that skydives can be replaced with tunnel training, which further leads to potentially risky situations when skydivers fail to perform within their limits. Although this belief is debated within the community, it is interesting to discuss. Do the tunnels actually lead to riskier behavior, given that skydivers arguably receive a heightened sense of control and increased skills as a result? On the other hand, by being able to train so specifically, they acquire the capability to improvise, as Groeger and Chapman (1990) note:

"Skilled performance involves not simply the matching of highly-practiced motor outputs to well-specified stimuli, but the ability to produce new sequences of activities in reaction to situations not previously encountered" (Groeger and Chapman 1990:1349).

Can this perceived control also be good in relation to the safety? When they train, it seems that they are able to reduce anxiety and receive confidence, which again leads to a more relaxed body and mind – essential if they are to perform well. Being scared and experiencing stress, could actually be dangerous in itself, as it would lead to a reduced mental capacity and in a worst case scenario, the skydiver might make fatal mistakes due to his or her state.

"While illusions of vulnerability may be generally adaptive and protect people from the minor negative experiences of daily life, illusion may become especially important and exaggerated in people facing severe threats as a method of dealing with the threat" (Rodriguez et. al. 1992:469).

This corresponds with what Moen (2003) argues in her research on risk-takers, among them skydivers; the different practices skydivers do, indicates that when having a dangerous occupation or hobby, it may be advantageous to have realistic training with potential hazards to increase self-protective behavior (2003:92). One should not, she further notes, reduce the illusion too much as it would cause the individuals too much anxiety about possible negative outcomes. It can thus seem that optimism in regard to own skills and possible outcomes, is essential to the skydivers in order to *reduce the stress enough* to be able to participate at all. This corresponds with what we have seen above; skydivers may lack of a certain realistic self-perception, but that very perception may also be what *enables them to perform safely*, to a degree.

As we know, we are dealing with risk-takers, and it may help to examine the skydivers in relation to a 'risk culture', as Giddens (1991) describes in order to understand the skydivers emphasis on attaining control. As we have seen in this thesis, the *risks are linked to human responsibility*, a notion we can link to late modernity as well. According to Giddens, reflexivity has taken on a different character and social practices are constantly examined and reformed in the light of incoming information about those very practices, thus constitutively altering their *character* (1990:38). Especially interesting compared to the context of skydiving, is that people in the modern age have ambivalent emotional response to their established routines and habits and people deliberately seek out risk as a means of *undermining ontological security*. Thus, risk-taking may be regarded as the flipside to modernity, as response to the ever-intensifying focus on control and predictability of modernity (Lupton 1999:156). On the same note, the skydivers

strongly emphasize the importance of routines and repetition, at the same time as they choose riskier behavior, as they get more skilled. This to me corresponds well with the notion Giddens (1990) asserts on undermining ontological security. As presented in the present chapter, familiar situations change the individual's perception of risk because of habituation, and the activity seems less dangerous. Therefore, if we look at Giddens' and Lupton's ideas on people of 'the modern age', it may be a valid statement that the skydivers continue to seek out *new risks* to avoid too established routines, or in plain terms, avoid boredom.

Lupton (1999:76) further argues that there is more emphasis on the malleability of the self and the responsibility that one takes for one's life trajectory; a notion I argue is vital among skydivers. According to Giddens, the preparedness to take risks converges with some of the most basic orientations of modernity: "The capability to disturb the fixity of things, open up new pathways, and thereby colonize a segment of a novel future, is integral to modernity's unsettling character" (1991:133). It is therefore interesting that the skydivers in my study value to a great extent the routines and habits of the activity, at the same time as they can be said to cultivate the risks to break out of the routine of everyday life.

In other words, the skydivers endless attempts at facing the risks through exercise-methods and calculations, combined with the emphasis they put on *control* and *knowledge*, make them 'candidates' for examples on the modern project, so to speak. They argue that survival is their own responsibility, and that one should attempt to control every risk factor they are aware of. They view most of the risks they face as calculable risks, and thus within control. If we also add what Lupton says on the malleability of the self, one could compare this to the skydivers attempts to educate their bodies and minds to cope with the uncertain elements they dread. If we assume that being unable to control the body and mind is dangerous, a claim I am certain is true, we can perhaps argue that what skydivers really are doing when they train, is *embodying the risks*. It is through their body and mind they feel in control and exercise control, and it is also their body and mind that tells them *when they are out of control*.

This chapter has shown us how skydivers neutralize to themselves the risks they face through various techniques. By acquiring certain skills they accept risks accordingly to perceived self-efficacy, in a trade-off for the benefits they receive. Through practicing different elements involved in having control over one's body and equipment, they acquire the belief that the risks are less pervasive and 'real'. I thus argue that perfecting skills leads to a form of neutralization of the risks. As they get better they achieve a form of subjective immunity and this is closely related to the general idea of how training should be performed in the community. In other words, we are dealing with a normative system of how techniques and skills should be acquired. The community

in which they belong assembles the techniques they use. Most important, by acquiring skills, they experience less uncertainty in their performance. This is closely linked to what I will examine in the last chapter of this thesis; the technologies they use. Many skydivers have unshakable confidence in their own skills and this affects their relationship to the technology in profound ways.

# Chapter 6: Technology – a Savior or a Hazard?

## **Excerpt from field notes**

"I did my first jump in two and a half months today. The first one since I broke my leg. People on the DZ were really sweet, cheering me on. I was so nervous. Oh my god, thought I was gonna throw up. I thought about all the accidents I've seen, on all those people with fractured feet and what not. And I thought about my own leg. It didn't make it any easier that everybody was watching. I have a feeling that not all believed me when I said I broke my leg walking... haha! I don't blame them! I don't believe myself even! To calm myself a bit, I borrowed a friend's canopy. His was bigger and nicer than my own. I didn't want to worry about the landing too much. And in case I screwed up, I really wanted to have one that didn't fly too fast. Before the jump I sat on the landing field for an hour, watching other people land. It was hardly any winds at all and that was annoying. I wanted up-winds to reduce the speed! I couldn't help think that my leg is still weak after the fracture, and I was really worried that I was gonna twist it and break it up again. I would seriously kill myself if I did that! Anyways, when I sat in the plane on the way up, together with Rodney and Benny, who I was jumping with, I was really anxious. It wasn't the freefall-part that worried me as much as the landing. It's always like that when it's been a while since last jump. Well... we jumped out and the jump as such went well enough. A bit rusty after the long period of not jumping, but pretty okay after all. When I opened my canopy, my heart was beating like crazy! When I finished the control-check of the canopy, I actually had to let go of everything, take a few deep breaths to calm myself down. I decided that I refused to act so stupid, released the toggles and started to fly that canopy as aggressively as I could, as to get it out of my system. It worked! I had so much fun. When I came in for landing, I noticed that a lot of people were looking, and I told myself that I was gonna do the best landing ever, and I did. It was really smooth. Oh, the feeling of utter and insane ego! Haha, it was great! Without the ego, I think we would be worse off... I really do. I think we need to tell ourselves that we rock the world in order to do this. I really do".

#### Introduction

The next section will bring us further into the issue of controlling uncertainty and risks. We shall examine how the skydivers understand the technologies they rely on in the sport, and how we can understand their concerns towards it as a question of dealing with uncertainty and perceived self-efficacy. I will argue that they, through technology, neutralize concerns about the activity, both the risks they undertake and the skills they claim are the only way to eliminate those risks. However, there are several paradoxes in their relationship to the technology. First of all, I

shall examine the uncertainty most skydivers experience when they have to rely on the technology to function as it is supposed to.

#### Malfunctions & gear-fright

Gear-fright as a phenomenon can be explained as experiencing difficulties with trusting the equipment one uses in skydiving. Many of the informants told me they had experienced having gear-fright at certain points, some more than others. Many found it hard to discuss, which can be understandable when we think about it; skydivers argue that it is (as good as) *never* the equipment's fault when something bad happens – it is the skydiver's fault. Having gear-fright can thus be seen as paradox; how can you be afraid of something that you never were supposed to rely on in the first place? To me it seems that gear-fright challenges the idea that the equipment is "infallible" when it comes to managing risks.

As a skydiver, I am not unfamiliar with having gear-fright, and as with many of the informants, it was at its worst when I was new to the sport. Several of the informants expressed how the worst part of it was the ambivalence they experienced toward the fear itself. When asked to explain why, they would ask back: "how can you jump out of a plane when you are unsure the equipment will function properly?" They felt the fear was stupid; that they knew it was irrational to not trust equipment, which "never fails", and that they also knew that if it did not work, they would have the skills to deal with it. We could say that the equipment is a prolonging of your own body and in turn, your skills. If the equipment does not work – you will not work. If the attention of the skydiver during a jump is focused on anxiety about the chances of a malfunction, it is not joy one experiences, but fear. It is however, quite a paradox that you can use technology as you please, you are the master of it, while at the same time you are also in total subordination to it. You need to *rely* on it, to some extent, but you cannot *trust* the equipment alone. I had several conversations with jumpers that had experienced these feelings, and asked them to explain how they managed to get past the gear-fright.

"I think that my trust in the equipment has increased gradually as I've gotten more experienced myself. Well, until I had a bag-lock [the canopy is stuck in the container, and will not come out when supposed to]. I had gotten so comfortable that I pulled lower and lower. The more free-fall time I got, the better it was. This particular jump was no different. The canopy got stuck, and I was still falling very fast toward the ground. I had actually decided to open my reserve, when the main finally opened. When I checked my altimeter after the jump, my canopy had not opened until fourteen hundred feet [you should have a canopy out at three thousand feet]. I think the reason this

happened was that I had gotten *too* trustworthy. After that it took a while before I got somewhat comfortable again. However, in retrospect I see that this incident made me more aware. I've learned to trust the equipment again, but my heart still skips a few beats every time I pull [the canopy's ripcord]" (Male skydiver, mid-experienced).

You can see how this experience reminded the skydiver how trust is necessary to keep calm and have good experiences, while it is even more important to not become too trustworthy. After this incident he used a fair amount of time to become calm again, and still now, a long time after it happened, the feeling of uncertainty is not completely gone. However, he was happy this had happened to him because he understood now, that he had been pushing the limits too far. The incident made him aware how the equipment can only do so much if you do not give it the room for error it needs – like more altitude when you deploy. According to him, the close call gave him a newfound respect that probably prevented him from pushing it too far in the future.

The previous story is typical for mid-experienced jumpers. Learning by doing is a good description of how experience challenges blind trust, which is often common among skydivers who have not had an incident yet. As in the next example, a more experienced skydiver told me about how he felt trust is something of a choice: you decide to trust based on knowledge and thorough routines.

"I'm usually pretty good at trusting my equipment, especially because I have a background in mountain climbing and such. Besides the fact that I'm pretty meticulous about having every detail of my gear in the most outstanding order, I rarely think about stuff like: "wow, hope this is going to work". However it happens from time to time, especially when I open my canopy really high, and look at the view around me, and then starts to look at my leg straps, lines and so on and think to myself: "what AM I doing?" The mind can easily wander about and start creating worst-case scenarios. The heart rate accelerates pretty much when that happens, and I am very attentive when it does. Luckily, it just lasts a few seconds, I'm good at pushing thoughts like that away, because I know that the gear will work" (Male skydiver, experienced).

This conversation was with an informant who also happens to be a rigger, especially trained with thorough knowledge about equipment and one who holds a certificate for packing reserve canopies. I asked him further if he could explain why he thought his background in other sports had something to do with his trust, and especially if the fact that the other sports are technical had anything to do with it. He replied:

"I think one learns to trust the equipment over time. Activities that demand a significant degree of trust in equipment, like climbing, scuba diving, some forms of skiing, rafting and so on, forces the performer to trust the equipment and to be comfortable. I believe this is a knowledge that people bring abreast of activities. You know, rationally, we know that the equipment will hold, it is the instinctive part of the mind that needs to be trained in suppressing the doubt, I think".

As we can see, this skydiver reflected more upon the division between rationality and instinct that is harder to control. However, he did tell me that he had never had a close call either, and it is possible that experiencing the equipment fail would have changed his opinion. Nevertheless, it is interesting that he differentiates between rationality and instinct, and thus argues that if instinct is what fails you, it is actually your body. This view presented itself to me as the one that is most common; most of the skydivers I talked to expressed how fear is illogical, and that emotional reactions as such are just the body's reaction to adrenalin and uncertainty. Over time, the mind calms down enough to "take over", and learns to suppress these emotions.

Interestingly enough, as the skydivers become more skilled and learn more about the possible malfunctions of the equipment, they do not necessarily choose safer equipment, as you would expect. As the level of experience and skills increase, they tend to choose canopies that are smaller, more advanced and also more demanding. An informant explained how he had chosen to reduce the probability of good and reliable openings, in order to get a more exciting canopy:

"When I first started skydiving, I was generally more afraid, like everyone else, that the gear wouldn't work. I think this has to do with poor understanding of the different malfunctions and what one can do to reduce the probability of those. I didn't really feel comfortable under canopy yet, either. Now, that I know so much more about how the equipment works, I jump a much smaller canopy, which is known to open roughly. So I never actually trust that my canopy will fly, and I'm prepared to cut it away every jump. That being said, I've yet to experience a 'cut away'" (Male skydiver, experienced).

This skydiver actually trusts his skills in handling whatever malfunction that may occur so much, that he accepts the increased risk of having one. High-performance canopies are known to be irregular in openings, and often have to be cut away. As skydivers become more skilled and experienced, they usually choose these canopies. But why? They argue that they have been in the game for so long, and have earned a sound respect for what could happen. They also believe they are capable enough to handle it. Many of them referred to statistics when discussing these matters, and argued that a cut away is, after all, "just a cut away". It should be noted that 'cut-aways' as

such are quite common, and rarely result in injuries or fatalities in themselves. The dangers of having a high-performance canopy is connected to the speed and angle when landing, not the irregular openings. Be that as it may, it seems to be quite a paradox that skydivers trust in equipment is very dynamic; at first many experience blind trust, and at the other end of the scale, most choose not to trust it at all. In other words, they have completely isolated themselves from the equipment, and they trust themselves instead. According to them, one should never rely on the equipment. However, this is only true for the main canopies; most skydivers do maintain a strong sense of trust in the parts of the equipment that is designed to save their lives when the main canopy fails to. Why this separation? In fact, skydivers argue that they choose to trust their equipment, but only to a certain extent. These sentiments illustrate that 'trust' is a complex issue with regard to equipment. As the skydivers become more experienced, gear-fright changes in nature or disappears completely. The most experienced ones even say they do not trust the equipment at all, only themselves. This must be clarified, because the notion of trust seems to me to be prevalent in all scales of experience level, and I argue that trust in equipment versus trust in self has more to do with what part of the equipment we are discussing, rather than the existence of trust or not. To highlight this further, I will debate the notion of 'saves' - when technological aids prevent an accident from occurring.

A skydiver can be too trustworthy, usually when he or she is inexperienced, but the gearfright can also be so prevalent that it renders a skydiver dysfunctional. An informant with less than one hundred jumps explained how he had so much trouble trusting the equipment that he considered quitting skydiving altogether. One of his biggest concerns was that he was afraid the equipment would fail when he needed it the most. An episode where the equipment made a 'save' with another student changed this for him.

"I was kind of worried that the equipment would not work. Last summer I experienced two students having their AAD fire on them<sup>27</sup>... After that I worried less, because I got to see that the gear works as it is supposed to when the student fucked up" (Male skydiver, novice).

As we can see here, experiencing how the equipment made a 'save' made the inexperienced skydiver capable of relaxing. He now felt that it was 'okay' to relax more. It seems to me that the skydiver's concern was not really the equipment as such, rather his skills. When he experienced

<sup>&</sup>lt;sup>27</sup> An "AAD fire" is very serious, and only happens if the skydiver has not opened the canopy manually at the right altitude. The AAD then opens the reserve canopy at an altitude of only seven hundred and fifty feet, or about two hundred and fifty meters. This equates to approximately four-five seconds from impact with the

another student making a potentially fatal mistake, and still survived due to the AAD, it made him trust that the equipment would save him if/when he could not.

What is interesting with this story versus an incident where a skydiver is too trustworthy is that they are placed on the two extremes of a scale. Most skydivers will likely be somewhere in the middle, having periods of gear fright, that usually ends with more experience and practice. An incident where a malfunction is involved can change this, especially when the malfunction is a direct result of a human error.

I argue that the notion of trust in equipment is actually not that at all, rather, it is *trust in own skills that is camouflaged as "equipment-issues"*. It thus seems like the gear itself is expected to serve two functions: one – work as it is supposed to, and two – work even when the skydiver does something wrong. However, for the first function to be fulfilled, the equipment is dependant on being used correctly. The other function should work because skydivers *do* make mistakes, and this is essential; even though they rarely admit it, I argue that they do need to trust that it will work. So as a consequence of this, the equipment is also 'a savior'. It is important to note that most skydivers don't think of the equipment like one, conscious at least. Be that as it may, when 'saves' occurred, it comforted them to the extent that they regained trust in it, where it had not been before.

Can trust in skills kill you? To what degree do skydivers trust the equipment to save them when they make too many errors? I argue that technology can be both something that fails you and something you can fail, all at the same time. How can I make such a claim? This is what the next section will aim to explain.

### "Technology could've saved her!"

A fatal accident that occurred early in my fieldwork may help us understand the paradox of trust in equipment. A skydiver was killed doing a 'routine jump', and it started a big discussion in an online incidents forum for skydivers. Those who knew this skydiver had no idea how the incident could have happened. After the free fall routine with a big formation, she had separated from the group before deploying her main, as normal, and the next thing that happened was that she had a so-called "slow spinning malfunction". The main canopy was out, but not fully, resulting in a slow spiral toward the ground. The correct action to do at this point is to cut away the malfunctioning main canopy, and open the reserve, if you cannot fix the problem. The skydiver had not done this as soon as she had realized that the main was not functioning, and the skydivers argued she had probably tried to fix it for too long. At very low altitude, she had cut it

away, but never had enough time to pull the handle that releases the reserve canopy. She fell to the ground at full speed, and died<sup>28</sup>.

On the forum the incident was discussed rigorously, and everyone wanted to know how a safety-minded and experienced jumper with more than two thousand skydives had failed. After all, it was a 'typical' malfunction, nothing extraordinary, and a cut-away would have been the 'textbook thing' to do. Many theories were formed in the aftermath of the fatality, and I will present some of the most interesting ones.

First, and many agreed on this, "technology could have saved her". If she had an AAD on her rig, it would most likely have recognized that she had too fast of a fall rate too close to the ground, and it would have opened the reserve automatically. On the other hand, this could have resulted in her reserve entangling into her main that was still attached to her rig. Second, they discussed whether she had audible altimeters in her helmet or not. If that was the case, they would have sounded an alarm several times to remind her that she was loosing altitude too fast. If she worked on fixing the problem with the main for too long, without realizing she was getting low, those alarms could have made her aware that she was out of time. But also here, the technology could have failed. Her main canopy was out and partially open, meaning that the fall-rate could be so slow that the audible altimeters would miss it. Third, as many thought the reason for the malfunction was a brake fire (one of the two toggles<sup>29</sup> not attached properly, which makes the canopy turn until you release the other one as well) it was discussed whether the real issue was the fact that it was a "common" malfunction. As skydivers become more experienced, they do not recognize "commonalities" as a problem, resulting in trying to fix malfunctions that you some hundred jumps ago would have cut away instantly. In other words, the skydivers debated that the deceased skydiver may have seen one of her toggles released, tried to release the other one, and forgetting all about altitude as she did not recognize the situation as dramatic.

In this case, it seems like several things were critical. First, additional equipment *could have* increased the chances of survival. Secondly, experience can make one "blind" to the seriousness of the situation; one should not forget that the equipment *is fallible*, and that you always need to take corrective actions if it is to save you. It may appear as the trust can only go so far with the skydivers. What is important here is the fact that they all looked to the technology first; could she have survived if...? At the same time they recognized that it might not have made a difference at all. The AAD is supposed to open the reserve, but it failed to because she did not

<sup>&</sup>lt;sup>28</sup> A couple of months after this incident, the court of inquiry released the information that the deceased was found on the ground with her hand on the reserve handle, giving a clue that she had in fact intended to open it. <sup>29</sup> The handles attached to the steering lines on the canopy. For more information on equipment, see appendix.

fall fast enough. The audible altimeters (if she had them, something they did not know for sure) did also fail, due to the slow fall-rate. But she failed the technology as well. Why did she not cut the main away instantly when it failed to fly properly? Why did she wait for so long before she did? Would she have acted more appropriately if she had less experience (as in less skills)? Was it actually her trust in her skills that ultimately killed her? Or did she trust that the equipment somehow would fix the malfunction on its own? These questions will never be answered. Her fatality, however, did raise many questions in the community, especially among the experienced skydivers; they reflected upon the fact that *technology can fail* (a main canopy not opening correctly), but *if we fail it*, technology will not save us — not even the "saving parts" of it. Technology is thus cleansed with the notion of human error, at the same time as technology is also expected to cleanse the human error, to a certain extent, that is.

I find the way skydivers relate to the technology fascinating and full of paradoxes. The final discussion will examine just how we can understand this relationship, and how it affects the participants' view of the hazards and how they perceive to be in control of them.

#### Discussion

The relationship between the skydiver's trust in his or her equipment is, at best, complex. It seems that the trust changes form depending on the experience level of the participant, and in variable ways. I argue that it is really a question of trust in own skills and not the equipment as such. When problems occur in this relationship, they argued that it was "silly" as they asserted that it was just their instinct to feel fear, but that their rational intellect knew very well that it was all under control. They also expected the equipment to function properly when they used it correctly, and even when they made mistakes they anticipated that the equipment was so sophisticated that it would save them. That being said, I never experienced the skydivers claiming that it was the equipment that caused an accident, ever. Perhaps that is not difficult to understand when one takes into mind the fact that skydiving cannot be performed without it. If they were to see technology as the reason for incidents – how could they continue participating in the sport? As they are dependant on it in such profound ways, it would remove their entire feeling of safety if the equipment itself were a danger to them.

As we could see in the last sections, participants admit they sometimes have difficulties trusting the equipment's reliability. It is not uncommon to use the argument; "it is just instinct, our intellect knows this is safe". They further claim that it is ultimately their skills that they need to focus on; the technology is, after all, just "stuff". You are the user of it, so the responsibility is

yours. That way we can argue that the equipment is a form of a prolonging of the participant's body, as they argue it is the body that should receive the focused attention, not the equipment as such.

In the incidents where the informants expressed their feelings toward the reliability of the equipment and how they related to it, I found that when they experienced a close call, either to themselves or others, this actually made them rethink their basic assumptions. If I follow Lyng's (1990) argument, this can be explained as negotiating the edge. However, I do not believe 'negotiating' is the best term in this context. To me it seems that is more of a "tuning in" towards it – the participants play around the edge in sort of a way, relate to it and interact with it. At the same time they do not want to come too close to it either.

One participant felt that his experience had forced him to take action, and change the way he performed, while another figured that since he had received 'proof' that the AAD worked, he could relax more and go on with his activity. The third participant actually maintained that he was so skilled that he did not bother worrying at all anymore. After all, he felt confident he could tackle whatever happened. However, in the incident of the fatality, the skydivers immediately turned to the equipment, trying to figure out what difference it could have made, depending on the circumstances. After thorough discussions, they believed the reason for the fatality was due to the skydiver's confidence. Obviously, and they remarked this as well during the debate among themselves – they will never know for sure what happened. Be that as it may, it did not stop them from interpreting the possible reasons for the disastrous event.

Technology, and the technological aids especially, should be given more focus in the task of understanding this. Laurendeau's (2000) findings will contribute to this. He argues that there are several contradictions apparent when considering the notion of managed risks, and choice of equipment especially. When he conducted his research, approximately twelve years ago, the skydivers in his study differed quite a lot from the ones in my study. Laurendeau explains how skydivers can reduce the potential for injury and death by their equipment choices. He highlights the AAD and type of main canopy. The author explains that whether or not to own an AAD, is an issue of safety every skydiver must make by himself (2000:80). Today, that is no longer the case in every nation. In the USA, it is still legal to jump without one. However, many organizers and dropzones would strongly advice all skydivers to purchase one. In Norway, having an AAD is mandatory, and in the rest of Europe, more and more federations and/or dropzones make local rules that one is not allowed to jump without one. In other words, the AAD is no longer what Laurendeau argued a decade ago; a technological aid one *might* decide to purchase. Most skydivers I met strongly emphasized that it was illogical to not have one, as they have proven to

save so many lives. However, there were some inconsistencies that I will examine shortly. The most common reason I ever encountered for not having it, which Laurendeau also commented, is the price. An AAD cost around fifteen hundred USD (almost nine thousand NOK), and is quite an investment not all can afford.

According to Pfaffenberger (1988), any new technology will bring with it new sets of possibilities to a situation. Pinch and Bijker (1984) claim that the fact that technology is socially constructed implies that it has social content – it is far from neutral. The surviving form of a technology is the one selected by a social group that succeeds in imposing its choice over competing forms. They further stress that their fundamental characteristic is that "all members of [the social group] share the same set of meanings...attached to a specific artifact" (1984:30). The AAD is thus interesting as it presents a set of contradictions for skydivers (Laurendeau 2000). He further asserts, and my findings correspond with his, that the choice of not getting one is based in part on a belief in their own ability to handle any situations they might encounter (2000:81). After all, many of the informants expressed to me, "you only need an AAD if you do not pull your main at the right altitude. Why in the world would I not do that?" they asked me. When I replied, wondering what they felt about the possibility of losing consciousness for some reason in free fall, they would argue that the chances of that were so slim that they felt it was irrelevant to them. One of Laurendeau's informants expressed this: "I don't feel I need it...[part of my] risk management is to keep me out of the situations that may require one" (2000:81). Another informant admitted that the reason he felt he did not need it, was perhaps because he had never come close enough to a situation where it was needed. In chapter three, I examined the incident where I collided with another jumper during free fall, and I actually encountered my first situation where an AAD could have been necessary. I found it, as a skydiver, extremely comforting to know that I had a piece of equipment that would open my reserve if I actually passed out after the collision. Laurendeau asserts that part of a skydiver's rationalization of risk is to hold the position that they are fully capable of handling any situation they may encounter in the types of skydives in which they participate. They firmly believe they will be conscious, aware and physically able to deploy their parachute every single jump, a belief we have seen is not always valid. Be that as it may, even though they argued that they were not in need for an AAD, a substantial amount of the skydivers did have them. When I asked them why they bothered investing in such a pricy item if they thought it was useless, they would avoid the question or mumble something like "well, it's a good thing to have if something freaky should occur".

The AAD is not the only 'extra' item one can choose. Most skydivers I met, especially mid-experienced and up, had at least two audible altimeters in addition to the normal altimeter

you are obliged to have. An audible altimeter will sound alarms at pre-set altitudes during free fall, and some even while you are flying the canopy. Its function: remind the skydiver about his or her altitude. The problem with these types of technological aids is that you start to rely on them. When students learn to skydive, they are told over and over again the importance of always be aware of their altitude, and they are told, "check altimeter!" repeatedly. When they earn more experience and participate in more advanced jumps, having audible altimeters are seen as a good thing; you should still check the 'normal' altimeter, however, "if you forget", you will have an additional device to help you remain aware. Many of the informants (and myself, I must admit), therefore chose to have two of them, so that if one failed, you would still have the other one to rely on. The result is obviously that you do not check your regular altimeter as much as you should – you start to depend on the technological aids.

Laurendeau explains how jumpers that were asked about the issue of AADs, expressed that anyone who relies on them should seriously consider whether or not they belong in the sport (2000:92). Thus, it seems that the skydivers do have problems with the idea of relying on equipment to save their lives. However, this contradicts to some level with the actual practice I observed. The skydivers claim they do not and should not, under any circumstances, rely on the equipment – why then do they continue to purchase more and more of them? Some would worry about the fact that they saw that more jumpers got used to having these items and even felt that skydivers with "these attitudes" jeopardized their safety, something Laurendeau (2000) also noted in his study. He further asserted that most skydivers feel that the technological advances in general is good for the sport, after all, it has become safer throughout the years – it is the accompanying attitude that scares them.

Any technology should thus be seen as a system not just of tools, but also of related social behaviors and techniques, according to Pfaffenberger (1988:241). Ferguson (1977) further argues that technology consists of practical knowledge, which is often resistant to codification, and Layton (1974) claims it must somehow be shared and transmitted just as any aspect of culture.

"Technology, then, is *essentially* social, not 'technical'. When one examines the 'impact' of a technology on society, therefore, one is obliged to examine the impact of the technology's embedded social behaviors and meanings" (Pfaffenberger 1988:241).

Pfaffenberger's point here is to understand that the outcome of any given innovation is still subject to substantial modification by social, political and cultural forces, and that it is fundamentally wrong to assume that it carries with it a consequent pattern of social and cultural

evolution (1988:240). Thus, any new technology will bring with it new sets of possibilities to a situation.

There has also been a major innovation in canopy design, which has changed the course of skydiving as a sport and that has grown to become an increased source of worry among many of the skydivers. With the entry of modern ram-air canopies, it became accessible for anyone who earlier could not have handled the beating of the older canopies, where one literally bounced into the ground at sixteen kilometers per hour in the landing (Laurendeau 2000). As the innovation continued, more and more advanced canopies were introduced which again put much more restrains on the pilot. What started out to be safer canopies have developed into (among others) high-performance canopies that can potentially be deadly if not maneuvered correctly. The new technology actually reduces the margin of error in some areas and this corresponds with a dimension of Lyng's (1990) edgework model, that is the notion of pushing the limits of the technology associated with the activity. When Laurendeau (2000) interviewed some of the participants that used these canopies, they would argue that the real problem is not the technology, but the way some people fail to jump within their limitations. One of his informants drew the analogy (which I heard myself numerous times), "people kill people. Guns don't kill people" (2000:102). In other words, it is not the capabilities of the equipment that is the problem according to the jumpers, but the *capabilities of the pilot*. Those who I talked to about this matter, told me the same thing Laurendeau was told: "I fly this canopy because I am good enough. I can fly them". We can see here that the jumpers have unshakable confidence in their skills, and maybe it is a confidence necessary in order to rationalize the risks in skydiving, while at the same time, the very same confidence enables them to go too far.

It is tempting to argue that the problem stems from having *too many choices*. There is always a *new 'item'* one could have that will reduce the likelihood of some events, and a new item that *will 'save' you* if you make a mistake. The skydivers seem to acknowledge that there are inconsistencies in their explanations, but in order to remain certain about their safety, they argue that they would never rely on them. In other words, *the technological aids are explained as items you do not need, but still items you want to have – just in case*. At the same time, some of the technologies have put more responsibility on the skills of the skydiver, and thus there is more responsibility on his or her capability of doing the right thing and making the right choice, not to mention in regard to what activities he or she decides to partake in. When these aids actually save someone, it is not difficult to understand that it decreases the uncertainty they feel. They can then point to the technology and say: "Look! We even have stuff that opens the reserve *for us*, how

dangerous can it be? Of course, we can handle ourselves, but if, god forbid, something happens, we will still be safe".

The skydivers thus seems to normalize and even deemphasize the hazards by pointing to the equipment, at the same time as they firmly express that they would be just as safe without most of it. The issue of control is central to their understanding of risk (Laurendeau 2000:135) and whereas a jumper in Arnold's (1976) study would have asserted "I don't find it particularly risky", jumpers in Laurendeau's (2000) and my study, assert "I don't find it particularly risky for myself". The risk we are talking about is thus not risk per se, but acceptable risk. The skydivers continue to push themselves to handle more demanding activities, with more demanding gear, at the same time as they acquire equipment that enhances safety and put more restraint on the participants skills.

The technology has therefore made the sport more complex, with more choices than ever before, and with choices comes responsibility. At the time of Lyng's (1990) study, the perils jumpers faced had more to do with malfunctioning equipment rather than their performance as pilots. Laurendeau (2006) argues that as the new way of 'crowding the edge', which is also evident today, the notion of a survival capacity becomes less persuasive as a method of making sense of risk. The practitioners today crowd an edge that demands new kinds of technical expertise and especially judgment. When it comes to the case of hook-turns for example, the notion of an innate survival capacity is only useful if the skydiver understands what choices are appropriate in the different conditions depending on his or her experience level and skills. It seems fair to argue that more risk leads to more uncertainty, which again leads to greater effort from the participant's side to gain more skills, more certainty, not to mention, more self-efficacy in order to perform. I also maintain that the introduction of new technologies re-actualize how the skydiver should approach the challenges and tensions in his or her situation of opportunity. New skydivers are placed with somewhat other types of specific choices than the more experienced skydivers are, as the overall property of opportunities are changed with the introduction of new technological elements. Actually, even the decision to relinquish from reacting to the new technologies can be a choice. At the same time, it seems to be a point that despite the arrival of the new equipment, the skydivers approach to it will remain somewhat the same. There is still the question of skills, control, and abilities, not to mention, other skydivers choices. The social group still imposes certain values on what is good, and what is bad, to put it bluntly - and this is a feature of the community I find unlikely to change, despite whatever technology "throws" at them.

In this chapter I elaborated on the idea that skydivers strongly express that it is never the equipment that will lead to an incident, but I also showed that there are many contradictions to this belief. The skydivers argue that they do not need the technological aids to enhance their safety, as their personal risk management practices revolves around avoiding the situations in which they would need the aids. However, most skydivers today do use these items – the same items they argue they are not in a need of, but also the items they claim make the sport safer. As we have seen, they have unshakeable confidence in their skills and argue that in the case of choice of equipment, it is exactly the choice that is the problem. The technology has in other words altered the way the sport is performed to some extent, and provided paradoxical challenges: it has made it safer and it has made it riskier. More responsibility than ever is handed to the skydiver and his or her choices. 'Does he or she handle it well?' seems to be the 'billion dollar question'.

# **Chapter 7: Final Remarks**

This thesis has sought to understand how skydivers manage risk, and I have argued that the notion of control is crucial if we are to understand how they are able to participate in an activity that is dangerous. I have employed theoretical perspectives on among others, voluntary high-risk behavior, individual and collective risk management practices, embodiment and technology. These perspectives have offered valuable insight to how skydivers risk management processes can be examined. Lyng's (1990) perspective on voluntary risk-taking especially, proved to be valuable as it worked to construct a general framework in which skydivers could be analyzed.

The thesis explored how skydivers relate to each other while trying to make sense out of the dangers and attempt to avoid mistakes being repeated. Learning about the reasons for negative events is what make them feel safe and what enables them to participate, even though they realize that they can do mistakes also. It is the *social practices* of managing risks that maintain the values in the community. That is why participants spend substantial amounts of time training hard, and I examined how this training in fact affects their feeling of being in control – a feeling of utter necessity if one is to participate in the sport. It is their body that is their tool, the equipment is only a prolonging of it, and it is through the body one can control the risks. Furthermore, I discussed that when they have to rely on 'things', it adds another dimension to the picture of control and some find it more challenging than others. Again, it is the community that enables them to feel certain about their activity as they continuously discuss what equipment is and should be, and most important, what it is not. It is the community in which the skydiver belongs that sets the guidelines for what kind of responsibility every person has – for him or herself and for others.

While conducting the fieldwork and writing this thesis I struggled with the fear of missing fundamental aspects, as I was a skydiver myself and I examined these uncertainties as thoroughly as possible. Was I imposing unwanted categories upon my data? If so, could those categories reflect the very phenomena I was studying, as I was a full-fledged member of the skydiving community? I felt that I could only try to be as reflexive as possible about how I affected the data, just by being there – not to mention that I was participating in the discussions, in the jumps, and in the general process of managing risks. After all, *my own safety was just as much at stake as theirs were*. The conflicted emotions I experienced while transforming skydiving into an object of anthropological relevance was also elaborated upon. Having to decide what would be most interesting in this light was difficult as many generalizations were necessary in order to

accomplish this. The question I have asked myself the most without a doubt, is "how can skydivers represent a larger anthropological issue?" If we look at the society in which they belong, this might clarify things.

Our world becomes more and more stressful and as we know, many struggle with the feeling of losing control over their lives. As Giddens (1990, 1991) notes, and as I discussed, our society may be called a "risk culture". He states that more than ever, risks are linked to human responsibility. The reflexivity of humans has taken on a different character and we constantly examine and reform our social practices, thus constitutively altering their character. We have ambivalent emotional responses to our established routines and habits and more than ever before do we seek risks as a means of undermining ontological security. According to Lupton (1999), risk-taking can be seen as a flipside to modernity, as response to the ever-intensifying focus on control and predictability. If I understand Lupton correctly, skydivers could be examples on this behavior. But are they really? Is it fair to assume that if people seek risks because they are tired of the overly controlled world, the way they would go about it would be anything but controlled? As I have discussed throughout this thesis, what the skydivers value the most, is control. And they acquire that through habituation, routines, training, calculation, policing and rationality - they want to be in control. In fact, it makes more sense to me that because the world has gotten so fragmented and confusing, people feel the need to take control back into their lives. However, we should not forget that skydiving is something one *chooses* to participate in, and further something one through various methods attempts to control. In other words, the skydiver is the one who decides how to be a skydiver and what risks he or she accepts for him or herself.

If we look at the skydiving community presented in this thesis, it resembles a risk culture more than anything else. Skydivers treat their self as malleable and value being in control over their destinies – perhaps more than ever, as the outcomes of the activity can be so profound. Also interesting is that they seek the community's comforting membership. Is it because the personal responsibility for their life is so heavy to bear alone? Their world is filled with uncertainties and doubts and the skydiving community seem to provide a method of making sense out of all those uncertainties. I assert that the different aspects of living in a modern world becomes clarified to a great extent when we consider the skydiving community, exactly because it is so 'condensed' and all uncertainties are thus easier to spot. The outcome of making an error could cost their life, losing control would inhibit them in living and the more they rely on technology, the more uncertainty it manifests. Are they really that different from non-skydivers? They too struggle with making sense out of their life while maintaining control and maneuver themselves in the morass of possibilities.

In chapter three, I explored how the skydivers deal with incidents and learned that the emphasis they put on the human error is profound. However, it also became evident that minor incidents would often be explained as momentary lapse in concentration – they claim that all incidents happen due to human error; at the same time they acknowledge that accidents can happen. The importance seems to be whether it was an honest mistake, or neglect in regard to safety procedures that caused the mistake. More disturbing are the incidents where the human error is harder to identify. In these instances the skydivers seems to draw on ideas of fate, and further transform the incident into one of a learning possibility. What is crucial in this process is the need to be able to compartmentalize the accident so that it does not affect the skydiver's sense of control – the sense of subjective immunity is thus adaptive if it allows humans to keep cool in the midst of dangers, where they dare to experiment and not be thrown off balance by evidence of failures, as noted by Douglas (1985). It therefore seems that protecting their skydiving identities is more important than anything else. Thus, when uncertainty is at its highest and rational explanations do not suffice, they turn to other explanations to comfort themselves and remain confident about their ability to handle the risks in the sport.

It became evident to me that the notion of rationality is a significant element in how they managed the risks. As soon as something occurred, whether it was a simple mistake or a more serious one made by themselves or others, they instantly started the process of reestablishing order. They "attacked" the facts of the event, so to speak, with an accompanying attitude of calmness and logic – the goal was to establish, as soon as possible, what mistake had been made. Perin (2005) offered invaluable insight into how this process could be understood with the perspective on 'real-time logics'. This was also true in the instances where the skydivers asserted it was a 'freak accident', however, the process changed as they realized there was no 'natural' (as in human error) cause of the event. When the preliminary shock and paradigmatic aversion had passed, they approached it with the intention of minimizing the mystery – not cultivating it for the vagaries of fate. After all, the skydivers cannot remove all anomalies and some they have to live with, however uncomforting they may find it.

Follo (2005) provided insight into how people can be seen to mentally construct risks with the risk phenomenon's ontological status. This process provides people with a certainty that they know of the things that poses a threat to their lives. Further, Slovic (2000) asserted that, as people desire to be in control, that very desire breeds overconfidence in the face of hazards. 'Ignorance is bliss', one could say. This was demonstrated to be very much the case with skydivers. However, is that not a human capacity we all need if we are to avoid being paralyzed by fear of all the possibilities that could go wrong? Lois (2005) also noted that people enter a 'redefining feelings'

stage when they find it difficult to maintain the illusion of control. We deny responsibility, blame the victims and emphasize the positive side of negative events. Skydivers claimed that negative events provided *learning possibilities* that ultimately affected the total safety. When disaster strikes, one must manage to redefine the experience of it and move ahead. Some things we simply must accept, as Binkley (1991, 1995) also notes when examining fatalistic attitudes among fishermen.

Additionally, I discussed whether skydivers process of making sense out of unexplainable incidents could be compared to Douglas' (1966) notion on pollution. According to her, these practices enact the social relations form, give them visible expressions and, most importantly, enable people to know their society. The need for categories to make sense out of experiences is, in my opinion, fundamental if skydivers are to manage the uncertainties they encounter. They need to understand what has happened, and they need to feel that what happened is not something that will happen to them. Who can live if they do not understand their world and if they do not know how to avoid hazard?

In chapter four I investigated the dialectics between individual and group and it seemed that there are a lot of tension between the normative and pragmatic universe in the community. The skydivers worried about having too many rules being made as they claimed this would reduce skydivers capacity to learn how to manage the risks. It thus appears that the skydivers value the responsibility towards their own behavior, as well as others behavior, more than a formal regulation of the activity.

The notion of mistake stood out as an important issue in this chapter as well. In the cases of minor events, they would use humor as a method of expressing their view on mistakes, whereas they would clearly and quite directly show their disapproval to the skydiver in question and thus the entire community if the mistake was caused by negligence. The community use quite elaborate methods of controlling each other through observation to correct deviants in order to realign him or her with the 'norm' of behavior. I argued that skydivers *learn how to respond emotionally* to incidents through observing such correctional actions.

Douglas (1992) argues that 'blaming' influences the justice within a community, and as I examined different events that occurred in the field, it became obvious how this was necessary as a means for the skydiver to distance himself or herself from 'stupidity'. By looking at others deviant behavior, the skydiver could feel better about his or her participation. As Douglas argues, people protect their worlds by inflicting communal punishment on those who do not contribute to the public good, and most importantly, one expects compliance. I thus argued that it is the community that sets the guidelines for what kind of responsibility every skydiver has. And as

shown, when someone failed to uphold his or her responsibility it was considered as unacceptable. Furthermore, the skydivers used moralistic warnings to remind the others of their vulnerability. Oliver-Smith and Hoffman (2002) note that tales of praise and condemnation is important if we are to understand a group's worldview and this corresponds with my findings where skydivers used this extensively to achieve control over the activity. The events discussed also highlighted what Ådahl (2008) comments on the desire people have to act honorable, and that it is this desire that guides their motivation. Foucault and Sheridan (1977) also complemented the findings as they note that the disciplinary power aims to normalize and establish a visibility over individuals. Especially when the community 'examines' the skydiver who they suspect of negligence, they use different techniques that in turn can be said to establish a visibility over individuals. Through these processes I argued that skydivers attain an outcome that reflects the locally anchored morality and preferred values.

Chapter five explored the skydivers attempts at facing the risks through exercise-methods and how these methods influenced their perceived control. The emphasis they put on being in control and earning knowledge is substantial and they claim that the only one who are responsible for their own survival are themselves. One should, according to them, attempt to control every risk factor they know of. They attempt to educate both their body and mind, and I argued that the process of embodying new skills is really embodying risk as such. Mauss (1973) was valuable in understanding how the body can be understood as man's first and foremost instrument. The value skydivers give the management of the risk through a focus on the mind and body can further be argued to make skydivers good examples of the modern project, both because they believe the risks are controllable with a calculated approach to them, but also because they view themselves as a tool that can be cultivated so to speak, to contribute to the management of risk. The better they get, the more they consider themselves in control of the risks. Gleitman (1995) for example, argues that familiar situations change an individual's perception of risk, and Douglas (1985) asserts that control reduces any stress one experiences. In other words, not feeling in control over one's body means not being in control over the risks.

The perspectives on personal control given by, among others, Binkley (1991, 1995), Hammond and Horswill (2001), and Moen (2003) offered an understanding of the skydivers risk management processes. In fact, it seems that perceived efficacy is necessary to the skydiver in order to reduce the stress enough to be able to participate at all. Skydivers may lack a certain realistic self-perception in some regards, but that very illusion is what enables them to be safe, something Nickerson (1998) contributes to as he states that people are prone to the confirmation bias when they participate in dangerous activities. In other words, skydivers attempt to *neutralize* 

the risks through acquiring more skills. The more skills they achieve, the more self-efficacy they gain, which again makes them more prone to seek out new challenges and perhaps riskier activities. They attain a subjective immunity that is closely related to the ideas on how training should be performed in the community. We are thus dealing with a normative system of how techniques should be acquired – as it is the community that assembles the techniques they use.

In chapter six we dealt with technology and how the skydivers relationship to it is paradoxical in several ways. The skydivers seems to normalize and even deemphasize the hazards by pointing to the equipment, but at the same time they firmly express that they would be just as safe without the available technological aids. Laurendeau (2000) was able to provide invaluable insight into this matter, arguing that skydivers do not feel they need technological aids due to their respective risk management. They claim that due to their particular skills and the way they go about as participants, the sport is not risky for them, just risky in general, something Laurendeau also found in his studies. This seems to contribute to the idea that what we really are dealing with is acceptable risk, as they claim that their personal risk management practices revolve around avoiding the very situations in which they would be in need of technological aids.

The skydivers put substantial emphasis on the notion that equipment failure is as good as never the cause of an incident – as they claim that if it in fact was a malfunction, it occurred due to lack of proper maintenance and use of the equipment. In other words, they compartmentalize the incidents and remove technology as a source of concern altogether, which again can be understood as a method of dealing with the uncertainty they sometimes feel in letting their life into the hands of "things", so to speak. Be that as it may, even as they claim they do not need the available items on the market that are made to enhance safety, they continue to acquire them. When they explained why technology was a challenge in the sport, they argued the problem was not the technology, but that the participants failed to choose correct types of equipment for his or her level of skill.

Pfaffenberger (1988) who argues that any technology will bring about new possibilities, as well as Pinch and Bijker (1984) who claim that technology is socially constructed, offers an understanding of how technology can be seen to have changed the sport of skydiving. The problem seems to stem from having too many choices – there is always an item that will reduce the likelihood of certain events, or items that will 'save' you when you make certain mistakes. Where a skydiver some decades ago had, for arguments sake, one simple task in regard to the equipment during the jump – open the canopy – the skydiver today has unlimited possibilities when he or she chooses what kind of equipment they want and what kind of discipline and training-methods they want to perform within.

To sum it up, technology has made the sport safer, but the skydiver is also faced with more difficult choices and more responsibility is put on him or her. Being a skydiver today requires more technical expertise than it did some decades ago. Technology thus seems to *reactualize* how the skydiver should approach the activity, as he or she continuously has to evaluate his or her choices, as new choices are made available to them. Nevertheless, despite the arrival of new equipment, the skydivers approach could be argued to remain the same in the future – they still have to evaluate their skills, train efficiently, work hard, remain in control and consider other skydivers choices as well as their own. The social group imposes certain values on how the technology should be managed and this is a feature of the community I find unlikely to change.

These issues aside, there are some paradoxes in skydivers risk management practices that is fascinating. Further research is needed in these areas to better understand the conflict of ideas, and indeed whether it is in fact a paradox or whether there are more complex issues at work that will shed further light on the findings of this study.

First of all, skydivers view their sport as fundamentally different from other types of risk-taking. According to them, it is not the activity itself that is dangerous, but doing this or that wrong while skydiving. When someone hurts themselves, skydivers claim that the person made a mistake, regardless of the incident. Therefore, on one side of the argument they argue that skydiving is dangerous, but only to others, as they would not make the same mistakes. On the other side, they admit that sometimes things just happen, and they reflect on the fact that "those things" could happen to themselves as well. Further, gear-fright is interesting as they are afraid of something that they at the same time claim they do not rely on. Technology is viewed as tools they can use to both increase their chances of survival, but also as tools they use to challenge themselves. It is never the technology that is the problem – it is the jumper who does not use it correctly. In some regards they are in total subordination to it, in others they are the masters of it. When dealing with uncertainties, they isolate the equipment and trust only themselves, whereas when they are inexperienced they want to trust the equipment, *because* they do not trust themselves. When it comes to the technological aids, these are *things they do not need, but things they want to have* – just in case.

To sum it up, uncertainty among skydivers seems to be fixed with technical systems and thorough routines. They put all their efforts in managing the factors they view as controllable, and avoid the ones they regard as uncertain. Perhaps they use so much of their time dealing with enhancing skills and turning to technology because it is easy and logical. The human factor on the other hand, is irrational – why do people make mistakes when they know so well how it should be done? They spend all their time teaching each other about risky behavior and risk factors to

remind themselves they are participating in a sport that is dangerous. However, even after all that focus on the hazardous elements of the sport, skydivers rarely identify themselves with these risks, as 'they do not make the same mistakes'. Still, they 'stage' dangers to each other and thus maintain a moral universe in which every jumper has to relate to.

Skydivers claim that skydiving is not dangerous to them personally, while at the same time, they spend all their time on managing as much risk as possible. Yet, if we look beyond the rhetoric it is evident that the risk is there – it is just camouflaged as skills, equipment, jumps, stupidity and so on. Everyone else makes mistakes, until you make it. Perhaps it is legit, then, to say that skydivers are in fact 'Skygods' – until proven otherwise, that is.

# **Bibliography**

- Abolafia, M.Y. (1996) 'Hyper-rational gaming'. *Journal of Contemporary Ethnography*, 25(2), pp. 226-250.
- Albert, E. (1999) 'Dealing with Danger: The Normalization of Risk in Cycling'. *International Review for the Sociology of Sport*, 34(2), pp. 151-171.
- Anderson, L. and Taylor, J.D. (2010) 'Standing Out while Fitting In: Serious Leisure Identities and Aligning Actions among Skydivers and Gun Collectors'. *Journal of Contemporary Ethnography*, 39(1), pp. 34-59.
- Appadurai, A. (1996) *Modernity at Large. Cultural Dimensions of Globalization.* Minnesota: University of Minnesota Press, volume 1.
- Arnold, D. (1976) 'A sociologist looks at parachuting', in Yiannaki, A., McIntyre, T.D., Melnick M.J., and Hart D.P. (eds.) *Sport Sociology: Contemporary Themes.* Dubuque: Kendall/Hunt, pp. 302-305.
- Bailey, F.G. (1969) *Stratagems and spoils: a social anthropology of politics*. Oxford: Basil Blackwell.
- Beal, B. (1995) 'Disqualifying the official: An exploration of social resistance through the subculture of skateboarding', *Sociology of Sport Journal*, 12(3), pp. 252-267.
- Beal, B. (1996) 'Alternative masculinity and its effect on gender relations in the subculture of skateboarding', *Journal of Sport Behavior*, 19(3), pp. 204-220.
- Beck, U. (1992) Risk society: towards a new modernity. London: Sage.
- Bernard, J. (1968) 'The Eudaemonist', in Klausner S.Z. (ed.) Why Men Take Chances, Garden City, New York: Anchor, pp. 6-47.

- Binkley, M. (1991) 'Nova Scotian offshore fishermen's awareness of safety', *Marine Policy*, 15(3), pp. 170-182.
- Binkley, M. (1995) *Risks, Dangers and Rewards in the Nova Scotia Offshore Fishery*. Montreal: McGill-Queen's University Press.
- Booth, D. (1994) 'Surfing 60's: A case study in the history of pleasure and discipline', *Australian Historical Studies*, 103, pp. 262-279.
- Bourdieu, P. (1977) Outline of a theory of practice. Cambridge: Cambridge University Press.
- Bourdieu, P. 1990 (1984). Homo Academicus. Cambridge: Polity Press.
- Bourdieu, P. et. al. (1999) *The Weight of the World: Social Suffering in Contemporary Society.* Cambridge: Polity Press.
- Breakwell, G.M. (2007) The psychology of risk. Cambridge, UK: Cambridge University Press.
- Bryman, A. (1988) Quantity and Quality in Social Research. London: Routledge.
- Burgers, J. (1975) 'Causality and Anticipation', Science, 189, pp. 194-198.
- Carocci, A. (2009) *The Real Issue is Flying, not Death. Dealing with Risk in the Subculture of Italian Gliding*. Doctoral thesis. London: University College London.
- Cassidy, R. (2002) *The sport of kings: kinship, class and thoroughbred breeding in Newmarket*. Cambridge: Cambridge University Press.
- Celsi, R.L. (1992) 'Transcendent Benefits of High-Risk Sports', *Advances in Consumer Research*, 19, pp. 636-641.

- Celsi, R.L, Rose, R.L, and Leigh, T.W. (1993) 'An Exploration of High-Risk Leisure Consumption Through Skydiving', *The Journal of Consumer Research*, 20(1), pp. 1-23.
- Cetina, K.K. and Bruegger, U. (2000) 'The market as an object of attachment: exploring postsocial relations in financial markets', *Canadian Journal of Sociology*, 25(2), pp. 141-168.
- Clandinin D.J. and Connelly F.M. (1998) 'Personal Experience Methods', in Denzin, N. and Lincoln, Y. (eds.) *Collecting and Interpreting Qualitative Materials*, Thousand Oaks London-New Delhi: Sage.
- Cohen, A.P. (1992) 'Self-conscious Anthropology', in Okely, J and Callaway, H. (eds.) *Anthropology and Autobiography*, ASA Monographs 29, London: Routledge, pp. 221-241.
- Cornelius, R.R. (1996) *The Science of Emotion: Research and Tradition in the Psychology of Emotion.* Upper Sadle River, NJ: Prentice-Hall, Inc.
- Curry, T.J. and Strauss, R.H. (1994) 'A Little Pain Never Hurt Anybody: a Photo-essay on the Normalization of Sport Injuries', *Sociology of Sport Journal*, 11(2), pp. 195-208.
- Dake, K. 1992. Myths of Nature: Culture and the social construction of risk. *Journal of Social Issues*, 48(4), pp. 21-37.
- D'Andrade, R. (1995) *The Development of Cognitive Anthropology*. New York: Cambridge University Press.
- Delk J. (1980) 'High-risk sports as indirect self-destructive behavior', in Farberow, N. (ed.) *The Many Faces of Suicide*. New York: McGraw Hill, Inc, pp. 393-409.
- Devereux, G. (1967) *From Anxiety to Method in the Behavioural Sciences*, Paris, the Hague: Mouton & Co (It. Tr. 1984, Rome: Ist. Enc. Italiana).

- Donnelly, P. (2004) 'Sport and Risk Culture', in Young, K. (ed.) *Sporting Bodies, Damaged Selves: Sociological Studies of Sports-Related Injuries*. Volume 2. Oxford: Elsevier, pp. 29-57
- Donnelly, P. and Young, K. (1988) 'The construction and confirmation of identity in sport sub cultures', *Sociology of Sport Journal*, 5(3), pp. 223-240.
- Douglas, M. (1966) *Purity and Danger: An analysis of the concepts of pollution and taboo.*London: Routledge.
- Douglas, M. (1985) *Risk Acceptability According to the Social Sciences*. New York: Russell Sage Foundation.
- Douglas, M. (1992) Risk and blame: essays in cultural theory. London: Routledge.
- Douglas, M. (2003) 'The Gender of the Trout'. *RES: Anthropology and Aesthetics*, 44, pp. 171-180.
- Dyck, N, and Archetti, E.P. (eds.) (2003) Sport, Dance and Embodied Identities. Oxford: Berg.
- Dyck, N. (2008) *Exploring regimes of discipline: the dynamics of restraint*. New York: Berghahn Books.
- Ewert, A. and Hollenhorst, S. (1994) 'Individual and setting attributes if the adventure recreation experience', *Leisure Sciences*, 16(3), pp. 177-191.
- Farberow, N.L. (1980) 'Indirect Self-Destructive Behavior: Classification and Characteristics' in Farberow, N.L. (ed.) *The Many Faces of Suicide*. New York: McGraw-Hill, pp. 15-27.
- Ferguson, E. (1977) 'The mind's eye: nonverbal thought in technology', *Science*, 197, pp. 827-836.

- Follo, Gro (2005) 'The Risk Phenomenon's Ontological Status', in Johansen, S.E. (red.)
   Anthropology and Ontology. Trondheim Occasional Papers in Social Anthropology, 11.
   Department of Social Anthropology, NTNU: Trondheim.
- Foucault, M. and Sheridan, A. (1977) *Discipline and punish: the birth of the prison*. London: Penguin Books.
- Frey, J. (1991) 'Social risk and the meaning of sport', *Sociology of Sport Journal*, 8(2), pp. 136-145.
- Garro, L.C. and Mattingly, C. (2000) *Narrative and the cultural construction of illness and healing*. Berkeley, California: University of California Press.
- Georges, R.A. and Jones, M.O. (1980) *People Studying People: the Human Element in Field Work.* Berkeley: University of California Press.
- Giddens, A. (1990) The Consequences of Modernity. Cambridge: Polity Press.
- Giddens, A. (1991) Modernity and Self-Identity. Cambridge: Polity Press.
- Giddens, A. (1999) 'Risk and Responsibility', The Modern Law Review, 62(1), pp. 1-10.
- Gleitman, H. (1995) Psychology. W.W. Norton & Company.
- Groeger, J.A. and Chapman, P.R. (1990) 'Errors and Bias in assessments of danger and frequency of traffic situations', *Ergonomics*, 28, pp. 1349-1363.
- Hammersley, M. and Atkinson, P. (1995) *Ethnography. Principles in Practice*. London: Routledge.
- Hammond, T.B. and Horswill, M.S. (2001) 'The influence of desire for control on drivers' risk taking behavior, *Transportation-Research-Part-F:-Traffic-Psychology-and-Behaviour*, 4(4), pp. 271-277.

- Hodkinson, P. (2002) Goth. Identity, Style and Subculture. Berg: Oxford.
- Holyfield, L. (1997) 'Generating excitement: experienced emotion in commercial leisure', in Erikson, R. J. and Cuthbertson-Johnson, B. (eds.) *Social perspectives on emotion*. Volume 4. Greenwich, CT: JAI Press, pp. 257-282.
- Holyfield, L. (1999) 'Manufacturing adventure: the buying and selling of emotions', *Journal of Contemporary Ethnography*, 28(1), pp. 3-32.
- Horton, R. (1960) 'A Definition of Religion and its Uses', *Journal of the Royal Anthropological Institute*, 90, pp. 201-225.
- Hughes, R. and Coakley, J. (1991) 'Positive Deviance Among Athletes: The Implications of Over Conformity to the Sport Ethic', *Sociology of Sport Journal*, 8(4), pp. 307-325.
- Hunt, J.C. (1995) 'Diver's Accounts of Normal Risk', Symbolic Interaction, 18(4), pp. 439-462.
- Klausner, S.Z. (1968) 'The Intermingling of Pain and Pleasure: The Stress Seeking Personality in Its Social Context', in Klausner, S.Z. (ed.) *Why Men Take Chances*. NY: Garden City, pp. 137-168.
- Kusz, K. (2004) 'Extreme America: The Cultural Politics of Extreme Sports in 1990s America', in Wheaton, B. (ed.) *Understanding Lifestyle Sports: Consumption, Identity and Difference*. London: Routledge, pp. 197-209.
- Larsen, T. (2009) *Den globale samtalen. Om dialogens muligheter*. Oslo: Scandinavian Academic Press.
- Lash, S., Szerszynski, B. and Wynne, B. (1996) *Risk, environment and modernity: towards a new ecology*. London: Sage.
- Laurendeau, J. (2000) Blue skies, Black Death: Risk, subculture issues, and Gender in the contemporary skydiving community. Doctoral thesis. Department of sociology, Calgary, Alberta.

- Laurendeau, J. (2006) "He didn't Go in Doing A Skydive": Sustaining the Illusion of Control in an Edgework Activity', *Sociological Perspectives*, 49(4), pp. 583-605.
- Laurendeau, J. and Brunschot, E.G. (2006) 'Policing the Edge: Risk and Social Control in Skydiving', *Deviant Behavior*, 27(2), pp. 173-201.
- Layton, E. (1974) 'Technology as knowledge', Technology Culture, 15, 31(4).
- LeBreton, D. (2000) 'Playing Symbolically with Death in Extreme Sports', *Body & Society*, 6(1), pp. 1-11.
- LeBreton, D. (2004) 'The Anthropology of Adolescent Risk-Taking Behaviours', *Body & Society*, 10(1), pp. 1-15.
- Lois, J. (2005) 'Gender and emotion management in stages of edgework', in Lyng, S. (ed.) *Edgework: The Sociology of Risk-Taking*. New York: Rotledge, pp. 117-152.
- Loseke, D.R. (2007) 'The study of identity as cultural, institutional, organizational, and personal narrative', *Sociological Quarterly*, 48, pp. 661-688.
- Lupton, D. (1999) Risk. London: Routledge.
- Lupton, D. and Tulloch, J. (2002) "Life would be pretty dull without risk": voluntary risk taking and its pleasures, *Health, Risk and Society*, 4(2), pp. 113-124.
- Lutz, C. and White, G. (1986) 'The Anthropology of Emotions', *Annual Review of Anthropology*, vol. 15, pp. 405-436.
- Lyng, S. (1990) 'Edgework: A Social Psychological Analysis of Voluntary Risk Taking', *American Journal of Sociology*, 95(4), pp. 851-886.

- Lyng, S. (1998) 'Dangerous methods: Risk taking and the research process', in Ferrell, J. and Hamm, M. (eds.) *Ethnography at the Edge: Crime, Deviance, and Field Research*. Boston: Northeast University Press, pp. 221-251.
- Lyng, S. (2005) Edgework: The Sociology of Risk-Taking. New York and London: Routledge.
- Lyng, S. (2008) 'Edgework, Risk, and Uncertainty', in: Zinn, J. (ed.) Social Theories of Risk and Uncertainty: An Introduction. Oxford: Blackwell Publishing, pp. 106-137.
- Lyng, S. and Snow, D. (1986) 'Vocabularies of motive and high-risk behavior: The Case of Skydiving', in Lawler, E. (ed.) *Advances in Group Processes*. Volume 3. Greenwich, Conn: JAI Press Inc, pp. 157-179.
- Mason, J. 1996. *Qualitative Researching*. Thousand Oaks, CA: Sage Publications.
- Mattingly, C., and Garro, L.C. (2000) *Narrative and the cultural construction of illness and healing*. Berkeley: University of California Press.
- Mauss, M. (1973) 'Techniques of the body', Economy and Society, 2(1), pp. 70-88.
- McDonald-Walker, S. (2000) Bikers. Culture, Politics and Power. Oxford: Berg.
- McLaren, P. (1991) 'Field Relations and the discourse of the other: Collaboration in our own ruin', in Shaffir, W. and Stebbins, R. (eds.) *Experiencing Fieldwork: An Inside View of Qualitative Research*. Newbury Park: Sage, pp. 149-163.
- Messner, M.A. (1990) 'When Bodies are Weapons: Masculinity and Violence in Sport', International Review for the Sociology of Sport, 25(3), pp. 203-219.
- Messner, M.A. (1992) *Power at Play: Sports and the Problem of Masculinity.* Boston: Beacon Press.
- Mitchell, R.G., Jr. (1983) *Mountain Experience: The Psychology and Sociology of Adventure*. Chicago: University Press.

- Moen, B.E. (2003) Risk perception and optimistic bias amongst skydivers, fire fighters and employees in the army. Master's thesis, Department of Psychology, Trondheim: NTNU.
- Natalier, K. (2001) 'Motorcyclists' interpretations of risk and hazard', *Journal of Sociology*, 37(1), pp. 65-80.
- Nickerson, R.S. (1998) 'Confirmation bias: A ubiquitous phenomenon in many guises, *Review of general psychology*, 2(2), pp. 175-220.
- Nisbett, R. and Ross, L. (1980) *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs, NJ: Prentice-Hall.
- Nixon, H.L. (1992) 'A Social Network Analysis of Influences on Athletes to Play with Pain and Injuries', *Journal of Sport and Social Issues*, 16(2), pp. 127-135.
- Nixon, H.L. (1994) 'Coaches' Views of Risk, Pain, and Injury in Sport, with Special Reference to Gender Differences', *Sociology of Sport Journal*, 11(1), pp. 79-87.
- Okely, J. and Callaway, H. (eds.) (1992) *Anthropology and Autobiography. ASA Monographs* 29, London: Routledge.
- Oliver-Smith, A. and Hoffman, S. (2002) *Catastrophe and Culture: The Anthropology of Disaster*. Oxford: School of American Research Press.
- Perin, C. (2005) *Shouldering risks: the culture of control in the nuclear power industry*. Princeton, N.J.: Princeton University Press.
- Perlmuter, L. and Monty, R. (1973) 'Effect of Choice of Stimulus on Paired-Associate Learning', *Journal of Experimental Psychology*, 99, pp. 120-123.
- Pfaffenberger, B. (1988) 'Fetishised Objects and Humanised Nature: Towards an Anthropology of Technology', *MAN*, New Series, 23(2), pp. 236-52.

- Pinch, T. J., and Bijker, W. (1984) 'The social construction of facts and artefacts', *Social Studies of Science*, 14, pp. 399-441.
- Poggie, J. and Gersuny, C. (1972) 'Risk and Ritual: An Interpretation of Fishermen's Folklore in a New England Community', *Journal of American Folklore*, 85, pp. 66-72.
- Poggie, J., Pollnac, C. and Gersuny, C. (1976) 'Risk as a basis for taboos among fishermen in southern New England', *Journal for the Scientific Study of Religion*, 15, pp. 257-62.
- Pollnac, B., Poggie, J. and Cabral, S. (1998.) 'Thresholds of Danger: Perceived Risk in a New England Fishery', *Human Organization*, 57(1), pp. 53-59.
- Poynter, D. and Turoff, M. (2004) *Parachuting: the skydiver's handbook*. Santa Barbara, California: Para Publishing.
- Rinehart, R. and Sydnor, S. (2003) *To the Extreme: Alternative Sports, Inside and Out.*Albany: State University of New York Press.
- Rodriguez, R. et. al. (1992) 'Optimism, coping, psychological distress, and high-risk sexual behavior among men at risk for acquired immunodeficiency syndrome (AIDS)', *Journal of Personality and Social Psychology*, 63(3), pp. 460-473.
- Rohrmann, B. and Renn, O. (2000) 'Risk perception research: An introduction', in: Renn, O. and Rohrmann, B. (eds.) *Cross-cultural risk perception: A survey of empirical studies*. Kluwer, Derdrecht, London and Boston, pp. 11-53.
- Sands, R. (1991) Sport Ethnography. Champaign, IL: Human Kinetics.
- Sands, R. (1999) *Gutcheck! An Anthropologist's Wild Ride into the Heart of College Football.*Carpinteria (CA): Rincon Hill Books.
- Shaffir, W. and Stebbins, R. (1991) *Experiencing Fieldwork: An Inside View of Qualitative Research*. Newbury Park: Sage.

- Simon, J. (2005) 'Edgework and insurance in risk societies: some notes on Victorian lawyers and mountaineers', in Lyng, S. (ed.) *Edgework: The Sociology of Risk-Taking*. New York: Routledge, pp. 203-226.
- Slovic, P. (2000) The Perception of Risk. London: Earthscan.
- Smith, C.W. (2005) 'Financial edgework: trading in market currents', in: Lyng, S. (ed.) *Edgework: The Sociology of Risk-Taking*. New York: Routledge, pp. 187-200.
- Strathern, M. (1986) 'The Limits of Auto-Anthropology', in Jackson, A. (ed.) *Anthropology at Home,* ASA Monographs 25, London: Tavistock, pp. 16-37.
- Sørhaug, H.C. (1996) *Om ledelse: makt og tillit i moderne organisering*. Oslo: Universitetsforlaget.
- Tenni, C., Smyth, A. and Boucher, C. (2003) 'The Researcher as Autobiographer. Analysing Data Written about Oneself', *The Qualitative Report*, 8(1), retrieved 20-04-12.
- Thornton, S. (1997) 'The social logic of subcultural capital', in Gelder, K. and Thornton, S. (eds.) *The Subcultures Reader*, New York: Routledge, pp. 200-209.
- Tomlinson, A. (1993) 'Culture of commitment in leisure', *World Leisure and Recreation*, 35, pp. 6-9.
- Tulloch, J. and Lupton, D. (2003) Risk and Everyday Life. London: Sage.
- Wheaton, B. (1997) 'Covert Ethnography and the Ethics of Research. Studying Sport Subcultures', in Tomlinson, A. and Fleming, S. (eds.) *Ethics, Sport and Leisure. Crises and Critiques*, Aachen: Meyer and Meyer Verlag, pp. 163-172.
- Williams, T. and Donnelly, P. (1985) 'Subcultural Production, Reproduction and Transformation in Climbing', *International Review for the Sociology of Sport*, 20(2), pp. 3-17.

- Wolfe, T. (1979) The Right Stuff. New York: Farrar, Straus, and Giroux.
- Zinn, J. O. (2008) Social Theories of Risk and Uncertainty: An Introduction. Oxford: Blackwell Publishing.
- Zinn, J.O. and Taylor-Gooby, P. (2006) 'Risk as an interdisciplinary research area', in Taylor Gooby, P. and Zinn, J.O. (eds.) *Risk in Social Science*. Oxford: Oxford University Press, pp. 20-53.
- Zuckerman, M., Kolin, E. A., Price, L. and Zoob, I. (1964) 'Development of a Sensation seeking Scale', *Journal of Consulting and Clinical Psychology*, 28, pp. 477-482.
- Young, M. (1991) An Inside Job: Policing and Culture in Britain, Oxford: Clarendon Press.
- Young, K. (1993) 'Violence, Risk, and Liability in Male Sports Culture', *Sociology of Sport Journal*, 10(4), pp. 373-396
- Young, K. and White, P. (1995) 'Sport, Physical Danger, and Injury: The Experiences of Elite Women Athletes', *Journal of Sport and Social Issues* 19(1), pp. 45-61.
- Ådahl, S. (2008) 'The Legacy of Vieskeri', in Dyck, N. (ed.) *Exploring regimes of discipline:* the dynamics of restraint. New York: Berghahn Books.

## Other sources:

http://www.dropzone.com/: Website on information on skydiving and discussion forums.

http://www.uspa.org/AboutSkydiving/SkydivingSafety/tabid/526/Default.aspx: Safety numbers from USPA. Accessed 15.03.2012.

# **APPENDIX**

### **Terminology**

Air mines – skydiver who is about to make a disaster happen.

**Big-ways** – big formation skydives that can range from a relatively small group to groups in the hundreds. 'Big-ways' can be done in all freefall-disciplines.

**Bunkhouse** – cheap accommodation at the dropzone.

**Dirt dive** – ground rehearsal of a jump.

**DZ** – dropzone. A place where a business or a club organizes skydiving.

**Exits** – the actual jump out of the plane.

**Garbage loads** – badly planned loads and skydives without worked out plans.

**Hook-turns** – high performance landings where the intention is to initiate a steep turn close to the ground to build up enough speed to swoop above the ground.

Loading area – where the skydivers gather and plan the load before boarding the plane.

**Load** – One load is one airplane of skydivers.

Manifest – office that organizes the loads.

**Mock-up** – a construction that simulates the airplane door to practice exits.

Ninja – humoristic term for a expert skydiver.

**Rig** – the complete system of the container/harness, the canopies and an AAD if present.

**Skygod** – can be used as derogatory term for a skydiver who think his or her abilities are better than they really are, or a humoristic term for a expert skydiver.

**Swoop/-ing/-er** – Skydiver that practice canopy piloting.

The Mat – the packing area where skydivers pack their rigs.

**The School** – The area on the dropzone where students and tandems are trained.

**Tunnel rats** – frequent flyers in the wind tunnels.

USPA - Unites States Parachute Association.

Whuffo – Non-skydiver. From the expression: "Whuffo you jump out of 'em planes?"

**Wind tunnel** – construction of a vertical tunnel or chamber with powerful turbines to create winds strong enough to fly on. Also called 'indoor skydiving'.

#### History

Mankind has used parachutes for hundreds of years, even back to China in the 1100s. Leonardo DaVinci designed a pyramid-shaped wooden framed parachute around 1495 that was tested for the first time in the late 20<sup>th</sup> century. In the late 18<sup>th</sup> century display jumps were performed from balloons in Europe, and in the late 19<sup>th</sup> century women appeared on the scene. The first woman to jump from an airplane in the U.S. did so in 1913.

It was during the First World War that parachutes were used as rescue devices, but only from observations balloons. The first emergency bailout from an airplane did not occur until 1922. Between the world wars people started to perform parachute jumps at air shows. After the Second World War, former soldiers continued to skydive and resulted in a growth of parachuting as a hobby. As the popularity increased, competitions emerged and quickly gained acceptance among international air sports. As the first commercial skydiving schools appeared, so did the term "skydiver" in the 1950s.

Skydiving as a sport has changed dramatically since its establishment, and the technological inventions have altered the way participants skydive. There have been enormous technological advances and the sport has become increasingly commercialized. The industries serving these activities have grown; thirty-forty years ago, participants were mostly military that relied on army equipment. In the 1970s skydivers started to construct equipment themselves, and increasingly, civilians started skydiving.

#### **Demographics**

Skydiving as a whole has become a sport available to everyone, and the amount of skydivers in the world today continues to grow. At its earliest stage, skydivers were mostly male, due to its origin in the military system. Today, women account for about ten to fifteen percent of the community, and are getting more and more visible in competitions etc. In Norway, the number of active female skydivers is actually as much as thirty percent. There are skydiving in practically all corners of the western world; e.g. in the United States Parachute Association alone, there are over thirty-three thousand members which performs about three million jumps each year.

#### The Equipment

Today, skydiving gear and accoutrements are produced worldwide in a multi million-dollar industry. Improvements in material and construction have increased safety and lowered costs. Early equipment weighed around twenty-five kilos and was extremely large and difficult to handle. Today, equipment is approximately ten kilos, not larger then a small backpack, and is extremely reliable. The gear has also become stylish, as manufacturers recognize the elevated status that participants bestow on it.

Technology has made the sport safer with products like AADs - automatic activation devices, which open the canopy for the skydiver if he fails to, ram-air canopies that have replaced the round ones which are easier to maneuver, digital altimeters with audio alerts and so on. However, it has also increased risk with the invention of smaller and faster, so-called high performance canopies. These canopies can reach extreme horizontal speeds and are very demanding to maneuver safely. Increased speeds and higher maneuverability also put more demands on the pilots' abilities.

When skydivers refer to their equipment, they usually refer to "the rig". Every rig has a main canopy that opens when the skydiver throws a pilot chute – a small parachute – out in the wind so that it catches air. The pilot pulls the main out of the container that further inflates. The container is similar to a backpack that holds the main and reserve canopy and also includes thick chest- and leg straps that keep the container firmly attached to the skydiver. The main canopy might not open correctly; it can be stuck in the container, it might not inflate properly, and it can get entangled in its own lines and so on. If this happens the skydiver will cut away his main canopy and open the reserve with the help of a cut-away handle and a reserve handle. Finally, there is the AAD that will automatically deploy the reserve canopy if the skydiver is in trouble. By measuring air pressure (and therefore the skydivers fall rate), it registers if the skydiver is falling too fast too close to the ground. This could be the case if the skydiver is knocked out in the exit, collides in free fall or has lost consciousness of other reasons.

All canopies (both mains and reserves) are basically the same in construction, but have different properties. The canopy's lines are connected to the risers, which in turn are connected to the harness. In addition you have two steering lines attached to two toggles, one on the right side and one on the left side of the canopy. Pulling the toggles will reduce the canopy's forward speed and flatten out the downward speed. Essentially, the steering lines are the brakes of the canopy. Modern canopies continue to advance – different shapes make the canopies behave differently and different sizes contribute to speed. The smaller, the faster. The lines are also shorter on smaller canopies, and thinner, and the relative distance from the skydiver to the canopy is

decreased, making it more responsive. Maneuvering a canopy is like driving a racecar. You can drive it in a docile fashion, or fast and aggressive, depending on what type of canopy you have. The skydivers weight also contributes to the canopy's responsiveness and speed.

To sum it up, a canopy is more than a rectangular piece of nylon fabric designed to stop your freefall (which was what it started out to be in its earliest form). Main canopies today are both a toy and a tool for skydivers. The canopies allow the canopy pilot to maneuver them as controlled and precisely as possible. The main canopy are no longer a "brake" that prevents the skydivers from hitting the ground – they have transformed into fast and agile tools for them to use.

#### The Practice

Most dropzones are relatively similar around the world when it comes to their operations. There are differences in local regulations, size, demographics and volume. However, as a skydiver you will be able to orientate easily wherever you are. Every dropzone (DZ) will have one or more airplane(s) and a manifest that organizes and regulates the planes. One plane ride is called a load. At smaller dropzones the manifest also functions as an office, registering new jumpers and briefing them on local regulations. At bigger dropzones, there will be an office that regulates all administrative work. All DZs will have some form of packing area (usually referred to as "the mat"), a clean, even surface where the skydivers can pack their gear, and a loading area where the skydivers gather before they enter the airplane. Last, but not least, any DZ needs a landing field. There are different regulations depending on what country it is in, however, most landing areas are about the size of a soccer-field or bigger. Many dropzones has several landing fields, to separate different kinds of landings (high-performance landings, normal landings and student landings), which will be explained more later on. Furthermore, most of the dropzones of a relative size will have a bonfire, bunkhouse and a bar where one can buy food during the day, and have some beers during the evenings.

When you arrive at the dropzone, there are certain procedures that need to take place. If it is your first time at the dropzone in question, you need to register. The registration consists of filling out forms, a brief on the dropzone rules and other important information on certificates, experience and equipment. The skydiver has to show that his or her licenses are current, that the gear is airworthy and finally, money need to be paid in advance to be able to jump.

All skydivers are required to log their jumps in a personal logbook, and show this to the dropzone during the registration process. In order for the jumps to be valid, an instructor must

have signed for each jump. The reason for this is numerous; certain certificates require a specific number of jumps, (e.g. instructor license) but amount of jumps also give you greater liberties such as the right to fly a high performance-canopy, jump from hot air balloons, do demo-jumps in stadiums/parks, do record-jumps and so on. In other words; the logbook and hence the number of jumps is the equivalence to a persons CV – a chronological order of what licenses one has earned, courses and general experience. However, as skydivers have gained the licenses they desire, most of them stop to log as rigorously as more inexperienced skydivers. Instead they rely on different technological aids that log number of jumps, to keep a certain track of the number. An experienced skydiver will tell you he has "fifteen-hundred-ish jumps", where a novice will most likely know exactly how many he or she has.

Next step for the skydiver is to check the gear. There are certain elements on the gear that are crucial; if you have an AAD, it has to be switched on. All of the webbing on the container needs to be thoroughly checked for weak points and rifts. The skydiver also checks handles, the reserve ripcord (which allows the reserve to deploy if needed), the three-ring system that releases the main canopy from the rig and the RSL (reserve static line) if the skydiver has it, that at the same time pulls out the ripcord of the reserve, allowing the reserve to deploy. Some jumps with cameras and audible altimeters, if that is the case, these are checked and turned on as well.

All routines revolve around getting ready – physically and mentally. For many skydivers, this routine is the very first thing they do, even before they go to the office to register or make a deposit. Some does this routine at the very last second before they go in the plane. Nevertheless, as good as all skydivers have a routine, and follow it slavishly. Lack of routines increases the risk of missing something during the control of the gear and will thus put you in greater risk of a malfunction.

When the skydiver is done checking his or her equipment and has registered at the office, the jumping can begin. He or she will usually hang out down at "the mat", to get an overview on who's jumping that day. Some also likes to observe a couple of loads landing before they decide whether to jump or not. If the weather conditions are fine, they will start planning who to jump with and what to do. Most of the time the skydivers want to jump together with other people in a group, instead of solos. The latter is usually reserved for training on specific moves in the air, where it is more constructive (and safe) to jump solo due to the skydivers lack of motion control in the process of learning. When the group has decided what kind of jump to do, they plan the exit out of the plane, at what altitude to separate before opening their canopies, and also make sure everyone in the group has understood what direction to land (it is crucial that all skydivers from the same load land in the same direction to avoid collisions). After making the plan, they will "get

manifested" for a load. If it is a busy day the group might have to wait for a while. A substantial amount of the day is spent waiting for your load, and this time is spent hanging around on the mat, talking to other skydivers about gadgets, jumps, malfunctions, other dropzones, planned trips, incidents and so on.

Ten minutes before the load takes off, they get a "call" from the manifest, saying on a microphone "ten-minute call for load x". The skydivers get their gear on quickly; making sure everything is still as it should be. They gather at the loading area to discuss with the rest of the skydivers that are going on the same load what groups are exiting in what order. The plane is then loaded the opposite of the exit-order: the group that are to exit last go into the plane first, so that everyone sit according to the exit plan. The exit orders are decided using the same system most of the time, depending on what kind of jump the group is doing and how big it is. Bigger groups usually go first as they drift the longest way, free flyers go after belly flyers because their fall rate is faster and drift less and so on. By using this method one creates natural separation, using gravity and rules of aerodynamics to separate the groups from each other in free fall. Conflict between groups can be fatal during separation if e.g. two skydivers track away from their own group and into another. When this has happened it has almost always resulted in death for both skydivers involved, due to the high speeds and the force of the impact.

In the plane, the skydivers sit extremely tight, and it is important to make sure your cutaway- and reserve handle are still in its place before exit. If one is loose, it can result in the reserve coming out or the main being cut away without your knowledge. At altitude, a "two-minute call" is given, where the skydivers again check their equipment, put the helmets and goggles on and turns on the cameras. The groups exit the plane with a certain amount of time in time in between (depending on winds), and key their exit with "ready-set-go!"

The point of free fall is to master the art of 'flying your body' in a controlled manner. Body flight is accomplished via increasing/decreasing the drag of your body, using arms and legs as rudders for body flight motion control, as well as other techniques similar to that of an airplane.

After the group has finished the free fall part of the jump, they separate at about five thousand feet and *open their canopies* at three thousand feet. After orienting themselves in the air under canopy and controlling that it behaves as it is supposed to, they start "the pattern". This consists of a box-shaped flight pattern, where the skydiver maneuvers the canopy in an imaginary route towards the landing field. After entering the pattern (at about one thousand feet) one should always fly very comprehensible so that other canopy pilots are able to understand where you are going. Depending on the winds and the demographics of the dropzone, one either flies a right-handed pattern or a left-handed one. In the pattern the skydiver should not initiate any more than

ninety-degree turns (exceptions are made for specific landing areas designated to high-performance landings). Non-compliance to these rules is dangerous, and can result in canopy collisions. When the skydiver has landed, he or she will quickly return to "the mat", pack up his or her rig and do it all over again. While waiting for the next load the group will often get together and look at the films from the jump, discussing their own and others achievements. When the day is over, the skydivers get together in front of the bonfire, talk about the jumps they did and brag and fib about each other's accomplishments.

#### The Disciplines

Skydiving is performed in various ways, and practitioners have several different disciplines to choose from when deciding what kind of jump to perform. The styles are ordered as freefall-disciplines first, followed by canopy-related styles. Finally, I have listed "skysurfing" and "Freefall Style & Accuracy Landing". These are however not as wide spread anymore, and used to be more popular some years back. Today, most skydivers focus on formation skydiving or freeflying, canopy piloting or a combination of all three. However, all skydivers start out learning basic "belly-flying" before they advance into formation skydiving or freeflying. Lying on the belly with the arms and legs bent, in a "box" or an "x" position, pressing the hip towards the ground, is the basic position all skydivers use when deploying their canopy, and this position is necessary in order to give the canopy the best possible conditions to open correctly. They are also taught how to fly fast away from other groups on the belly, in a "track" before they are allowed to jump with bigger groups regardless of discipline. This is necessary to create space between the jumpers prior to deploying the canopy.

Formation Skydiving is also referred to as "belly-flying" or "relative work". It involves jumpers falling in a belly-to-earth orientation and building formations by holding onto each other's arms or legs. Formation skydives can range from two-ways to groups in the hundreds.

Freeflying is most akin to aerial acrobatics. Jumpers fly in all orientations—most commonly upright or upside-down—and can fly over, under and around each other. Vertical formation skydiving is a branch of freeflying that involves jumpers building a series of formations in a mix of upright and head-down orientations. A third branch is tracking, where skydivers fly either on the belly or the back, in an angle, creating high vertical and horizontal speeds at the same time.

Wingsuit flying is one of skydiving's newest disciplines. A wingsuit is a specialized jumpsuit that uses fabric to create arm- and leg wings on the jumper. The wings allow the jumper

to cover large horizontal distances across the sky while maintaining a very slow descent rate. 'Wingsuiting' is often known due to its use in base-jumping. Most people have seen the "batmen" flying close to the mountains in astonishing proximity and speed.

In *canopy piloting*, often called "swooping," skydivers fly high-performance canopies that can generate high vertical and horizontal speeds. By performing speed-inducing maneuvers, like *hook-turns*, these experienced skydivers can glide inches above the ground for hundreds of yards at speeds approaching 120 km/h.

In *canopy formation*, sometimes called "canopy relative work," jumpers open their parachutes immediately after exiting the airplane. They then fly their parachutes together and build formations by holding onto each other's canopies in various ways.

In *skysurfing*, a jumper attaches a board, similar to a snowboard or wakeboard but made specifically for skydiving, to his feet and performs aerial acrobatics in freefall, including flips and spins. *Freestyle* is most akin to aerial ballet, with a jumper performing a graceful dance in freefall.

Freefall Style & Accuracy Landing is often referred to as "the classics" and is skydiving's oldest disciplines. In style, an individual jumper performs a pre-determined series of loops and spins in freefall as quickly as possible. For accuracy, a jumper under his parachute tries to land on a quarter-sized dot on a landing "tuffet".

#### Safety

On an international average, about 1 in 100 000 jumps ends in a fatality. Around 80% of the fatalities happen under "good" canopy, which means that the skydiver has a canopy that function as it is supposed to<sup>30</sup>. These fatalities are related to landings, mostly due to low turns, either planned hook-turns (high performance landings) that went wrong or poorly performed low turns too close to the ground, often to avoid obstacles. About 4 of every 10 000 jumps ends in an injury. A substantial amount of these are minor injuries as broken bones, bruising, sprained ankles and so on.

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 $<sup>^{30}</sup>$  These statistics are presented on the online forum  $\underline{\text{www.dropzone.com}}$ 

## **Pictures**



A big-way formation of freeflyers, Donagene Jones. The group is flying a head-down position.



A training session in a tunnel, Donagene Jones.



A group doing a tracking dive, Mike Carpenter.



A hybrid formation with both bellyflyers and freeflyers, Matthew Vincent.



A skydiver being coached in a tunnel, Matthew Vincent.



This is an example of the angle towards the ground one would have while performing a hook-turn, Stacey Carl.



A swoop over a pond, performed by Stacey Carl.