

Beyond Risk: Communitas, Flow and Embodiment in the Practices of Paragliding

Marketing Master's thesis Diana Leskelä 2012

Department of Marketing Aalto University School of Business



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Abstract

This consumer behavior study investigates paragliding, a little studied form of engineless free flight in which a pilot uses naturally occurring air currents to ascend, stay aloft, and fly across distances while seated under a frameless nylon canopy.

Purpose of the Study

This study seeks to understand the practices of paragliding, through an examination of its web of practice-arrangements, and how paraglider pilots experience them. By extension, I ask what role embodied cognition may play in these practices; and whether practice theory or embodiment help expand our understanding of a risky-sport experience

Methodology

Ontologically this study is grounded in practice theory. The research method utilizes videography, participant observation and interviews. The findings are presented via a rhetorical collage alternating ethnographic thick description with theoretical analysis utilizing theories of flow, embodied cognition and practices.

Findings

The practices of paragliding offer an ever changing experience in which pilots navigate the invisible in a dance of total attention that engenders flow, communitas with other pilots, and a spiritual sense of union with a higher natural order that leads them to endure regular sacrifices to realize and maintain their dreams to fly like a bird. Paragliding shows some parallels to the Celsi et al (1993) model of high-risk consumption, however a completely different web of practices and interlinked embodied experiences result in a distinct framing of the experience outside of considerations of risk, adrenaline or social rebellion. Embodied cognition is tacitly incorporated into training regimes as a critical component of learning and doing the practices that help paragliders not only to achieve transformative states but to conceive of, and understand them. Theories of embodiment and practice theory have a strong affinity. Practice theory is an effective ontological tool for studying activities with elements of risk that allows researchers to drop restrictive framing biases in favor of seeing a phenomenon in all its multi-layered, intersecting dimensions.

Keywords practice theory, practices, embodiment, risk, paragliding, videography, ethnography, high-risk consumption

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INTRODUCTION

"That thing is I felt a real bird. And then I felt this is my life." -HK, paraglider pilot

Paragliding is an aerial sport of free flight in which a pilot steers an engineless, frameless fabric canopy through naturally occurring dynamic or thermal air currents to ascend, stay aloft, and fly across distances. This activity is distinct from two related aerial sports: hang-gliding and skydiving. The paragliding canopy, or wing¹, resembles a parachute, but is longer, thinner and with different control lines. Like a hang glider, but unlike a skydiver's focus on free fall, the paraglider pilot's goal is to launch from one place and ascend using only the natural forces of the sun and air so that they may fly for hours and over many miles.

Frequently characterized as peaceful or relaxing by pilots, paragliding is an aesthetic and captivating experience in which pilot, wing and air engage in a delicate dance together in order to "use what nature gives" to fly free, "like a bird" in often spectacularly beautiful natural environments². To the uninitiated, if they've heard of it at all, this is not what paragliding is. "They don't know," and think of paragliding as an obscure high-risk sport practiced by adrenaline junkies with a death wish, just another one of the "adrenaline", "extreme" or "action" sports whose increasing presence Celsi et al (1993) characterize as a feature of a contemporary life in which individuals frustrated by restrictive work lives seek out opportunities for denouement and catharsis.

Mirroring these perceptions, researchers have examined paragliding as an example of a risky activity attracting risk-seeking participants. The few studies on

¹ Also known as a paraglider, though the word can be used as a noun both for the wing flown and the pilot, as well as an adjective.

² Quotes from interviews with paragliders.

paragliding in the literature follow in a research tradition that sets up *a priori* dichotomies of normal/deviant, good/bad, life/death which narrow and predefine from the outset the possibilities for understanding of this phenomena (Willig, 2008). Stranger (1999: 265) instead proposes that risk-taking leisure activities are embodied, playful experiences rewarding to participants in and of themselves for their "profoundly aesthetic" qualities. Inspired by this view, this research explores the nexus of communitas, flow and embodiment in the practices of paragliding, using practice theory as a grounding ontology.

Through videography, participant observation, and interviews the practices of paragliding are revealed to transport pilots into a space apart from everyday life that offers a "different game every time," engaging their total attention. Meeting these challenges produces profound feelings of satisfaction via flow, and a sense of both communitas with other pilots as well as union with a higher order that leads them to endure regular sacrifices in order to realize and maintain their dreams to fly like a bird. Embodied cognition is found to be a critical component of learning and doing the practices-arrangement bundles that help pilots arrive at this transformative state, helping pilots become one not just with their equipment and the routinized activities of the practice, but also with each other and the natural environment.

In addition to these observations on paragliding, this study concludes that practice theory proves to be an effective ontological and analytical tool for researchers wishing to study activities with elements of risk. It allows us to drop potentially restrictive framing biases and judgments and to instead seek out the nature of the phenomenon in all its multi-layered, intersecting dimensions. It helps us piece out and reveal the complicated web of a practices constituent parts, thereby helping us remain open to a phenomena's own framing of risk and its possible place in the understandings, rules and teleoaffective structures of a set of practices.

Research Phenomenon

This research seeks to understand the practices of paragliding.

Research Problem and Objectives

This research examines what the practices of paragliding are and how paraglider pilots experience them. By extension it asks:

- 1) What role, if any, does embodied cognition play in these practices?
- 2) Can practice theory or embodiment help expand our understanding of a risky-sport experience?

This topic is looked at as a consumer behavior study within marketing.

Orientation and Approach

Schatzki's (2005) theory of practices forms the ontological grounding for this study. In practice theory the unit of analysis is the unique practice-arrangement mesh of routinized doings, sayings, understandings, rules, material arrangements and stages of emotion that composes any social phenomenon. "Practice theories comprehend non-instrumentalist notions of conduct, both observing the role of routine on the one hand, and emotion, embodiment and desire on the other (Warde 2005: 136)." Because of this they are perfectly suited to a study of this phenomenon.

The research design was fieldwork based, combining participant- and nonparticipant observation, along with semi-structured and open-ended interviews. Videography was the guiding method for data collection and analysis. Because videography allows documentation of action and repeated review, it is an excellent complement to a practice theory approach and is especially useful for capturing tacit elements. The main fieldwork occurred in the summer of 2009 in the Annecy region of France with supplementary fieldwork at sites in four other countries. Multicountry sites were justified by the need to follow a weather dependent practice as it travelled according to the flying calendar.

Prior, personal lived experience as an intermediate paraglider pilot aided in the design, planning and execution of the fieldwork. Rather than bias the study, drawing on this personal experience proved an asset for untangling:

"A practice that is so intensely corporeal, a culture that is thoroughly kinetic, a universe in which the most essential is transmitted, acquired, and deployed beneath language and consciousness." Wacquant (2004: vii-viii)

Much effort was made to insure that any tapping of this personal experience was done thoughtfully, with continual effort to question and re-question assumptions and observations with theoretical rigor in order to both "keep it strange" and triangulate. An ad hoc, bricolage data analysis enhanced with theoretical reading techniques was used to analyze the over 14 hours of video of pilots in action, 34 pilot interviews, 200 photographs, and combined 40 pages of field writing collected over the 270 hours of fieldwork.

Limitations

The limitations of this study are the difficulty of application to other practicearrangement bundles, and possible survival bias of perspectives due to a focus on observing and interviewing current, active pilots. Another issue is the limitations presented by a single researcher, especially when it comes to videographic data collection and data analysis. It would have been fruitful to have a mixed team of participant observers and non-participants in order to increase range of observations and more fully triangulate the analysis.

Structure

This study proceeds as follows: **First**, there is a general discussion of paragliding to introduce the reader to the general phenomenon: what it is, how it has developed, what it is not, how it is possible and some of the variations in its practices. The presentation is general, but does draw in places on basic practice theory concepts. Second, there is a review of the theory relative to this study. This review begins with modes of researching risk, and then proceeds to practice theory, followed by Finally theories of transformative experiences are examined, embodiment. particularly flow and communitas. Third, the study's research design and methodology are explained. Fourth, the findings are presented. The findings are organized in a layered exposition with a thick description of the practices of paragliding, presented as a simulated field journal, interspersed with an analysis of key findings. The text of the thick description/simulated field journal is italicized to distinguish it from the more traditionally written discussion of the findings. For the reader's convenience the field journal chapters are listed in a grey font in the table of contents. The Appendix has a glossary for readers interested in the paragliding vocabulary used. Fifth, the findings are followed by a discussion and conclusions.

PARAGLIDING

Overview

Paragliding is an aerial sport of engine-less free flight in which a pilot manipulates a fabric canopy with no rigid primary structure to use naturally occurring dynamic or thermal air currents to launch, ascend, stay aloft, and fly across distances. Through skillful interaction with the equipment and these forces a pilot can fly for many hours and over hundreds of kilometers. The flight vessel, known as a paraglider, glider, canopy or "wing", is a multi-cell fabric canopy that takes a concave shape when air flows into its cells.

In order to be considered a paraglider the wing needs to be capable of soaring flight and be foot-launchable from a hillside (Whittall 1995: 195). This means that the pilot can generate enough airflow over the wing by walking or running to generate sufficient lift to fly away from the hillside. The wing is inflated before launching, unlike in skydiving, and is already flying before the pilot leaves the ground (Whittall 1995:11). Contrary to common misperception the pilot does not jump off the cliff.



Figure 1 A pair of paraglider canopies lying on the ground and looking up at a tandem wing during flight.

During flight the paraglider pilot sits suspended upright, as if in a chair, buckled into in a fabric seat or "harness", formed around an actual webbing harness. Heavy-duty, metal locking carabineers attach the harness to the wing via attachment points at the end of a series of nylon lines tied onto the underside of the wing. The harness may or may not have side and back cushioning or protection, but overall the pilot is exposed to the elements and is not encapsulated by any structure. A reserve parachute attaches to the harness, either via an external pouch or hidden in an envelop enclosure sewn into the harness. Combined, this basic equipment packs into an oversized backpack making it easily portable – overall, the smallest flight vehicle available.



Figure 2 The same pilot shown in the air from afar and close up, and then walking with his complete flying rig.

Paragliders usually fly one person per wing "solo", but it is also possible to fly "tandem" in which pilot and passenger sit one in front of the other in separate harnesses. Despite what is implied by the term "solo", pilots usually fly in the air at the same time as other pilots, much in the same way that friends run together. Portable radios are often used to remain in communication with each other.



Figure 3 A tandem pilot launches with a seven year-old passenger while a gaggle of pilots share a thermal.

Paragliding can be practiced anywhere that the meteorology and geography are favorable. The pilot simply needs a launch site, the "launch", space to ascend in and airspace to fly, and a spot in which to land, the landing zone or "LZ". Pilots have flown around, across and through numerous mountain ranges from the Alps, Rockies and peaks of the Karakorum; made distance records across Finland, the Texas desert, and the Brazilian flatlands; and soared sea cliffs in Denmark, Hawaii and Peru (Bonte, 2004; Ewing, 2009 & 2011; Martel, 2011; Silvester, 2006). A few pilots have even flown from the summit of Everest (Ewing, 2011). Despite the definition of the wing, to paraglide does not require a hillside, cliff or mountain setting. Instead of a footlaunch, tow launching using a winch or pulley and vehicle is possible, and is the primary means for flatland flying, for example in Finland and the Texas desert. However, foot launching is the technique most commonly employed by pilots, and most flying occurs in areas where foot launching is possible.

Brief History

Paragliding is a relatively young sport. Paragliders became generally available in the mid-1980s after a development that paralleled, yet slightly lagged, that of modern hang gliding, paragliding's "first cousin" (Whittall, 1995: 12). While the antecedents for hang glider development stretch back centuries, with marked progress in the early 20th Century, the modern forms of both sports are indebted to modifications to parachute and kite designs by aerospace engineers in the 1940s-1960s. Dr. Francis and Gertrude Rogallo's development in the 1940s and 50's of the Rogallo wing, a self-inflating flexible wing kite, to slow rocket reentry for NASA is particularly crucial for both sports. In fact, Dr. Rogallo had originally sought research funds for the design in the 40's as an inexpensive solution for recreational flight (NASA, n.d.), and by 1963 flexible, controllable foot-launched hang gliders based on the Rogallo wing had been flown. By the early 1970s, hang gliding had entered the popular imagination with interest in the sport found across the world, recreational associations springing up, and commercial hang glider production established.

Paragliding development required further innovation milestones. In 1961 French engineer Pierre Lemoigne patented the Para Commander, a towable parachute with improved forward speed, control and "the beginnings of recognizable glide" (Whittall, 1995: 10). In 1962 American Domina Jalbert patented the 'ram-air' Parafoil, a double-surface, rectangular-planform canopy with an open leading edge, multiple airfoil-section cells, and a sewn trailing edge. The Parafoil formed a wing shape when the internal cells inflated by their passage through the air – contemporary paragliders use this same concept (*Ibid*). In 1965 NASA engineer David Barish took the first flights from Hunter Mountain in New York State using his single surface Sail Wing. In the 1960s NASA coined the term 'paraglider', and it first started to be used to describe foot launching of gliding parachutes in the early 1970s. In the early 1970s the British Association of Parascending was formed by British parachutists towing ram air canopies and Para commanders with vehicles to release them in order to soar back to the ground. (Christ, n.d.; Whittall, 1995: 9-16).

France has been central to the development of paragliding as a modern sport, *parapente* in French. In 1978 three French parachutists, Jean-Claude Betemps, Andre Bohn & Gerard Bosson, perfected foot launching down a slope at Mieussy, Haute-Savoie, making Mieussy paragliding's first Mecca (Christ, n.d.). The Haute-Savoie region remains one of paragliding's iconic hubs and pilgrimage regions. In 1979 Gerard Bosson introduced paragliding at the hang gliding world championships, and by 1981 the Swiss were holding a championship competition in Wengen. The first Paragliding World Championships were held ten years later in Kossen, Austria (*Ibid*).

Paragliding is Not the Same As ...

Non-practitioners commonly mistake paragliding for three better-known activities: hang gliding, skydiving and parasailing. This section briefly describes these sports to contextualize the different material, spatial, procedural and performance aspects that distinguish these practices from paragliding. This is done with two goals in mind: 1) to clarify any possible misconceptions or images that might be in the reader's head; and 2) to confirm that paragliding needs to be considered distinctly, even if sports with apparently similar dimensions have been investigated. Since these somewhat related practices differ in their material, spatial, procedural, understanding and performance aspects, it is natural to propose that they might also vary in their "'teleoaffective' structures embracing ends, projects, tasks, purposes, beliefs, emotions and moods," what Warde calls engagements (Schatzki, 1996;89, cited by Warde, 2005; 134).

HANG GLIDING

Of the similar aerial sports, paragliding is nearest to hang gliding, however the hang glider in flight has a clearly distinct physical profile, even to the uninitiated. In hang gliding the pilot flies suspended in a prone position under a semi-rigid, 'delta' wing made of fabric stretched taut over removable aluminum spreader bars.



Figure 4 Comparative illustration of the shape of a paraglider (left) and hang glider (right).

The different aerodynamic properties of the equipment and the fact that it does not collapse in flight, allow hang gliders to fly faster and to stay in the air in stronger conditions than paragliders, both in terms of airspeed and turbulence. Hang gliders must generate more speed to launch, and come in to land at faster speeds. The equipment design results in a wing that is bulkier and heavier, needs more muscle strength to steer in the air, and requires more time to set up and take down. These differences result in different routines for launching, piloting and landing.

Despite these differences, paragliding and hang gliding are more similar than different when compared to other recreational air sports. Both focus on soaring flight rather than descending. Both were developed to meet the desire for an inexpensive, portable, engineless means to fly. Both omit a protective, crash-resistant, structure that would fully encase the pilot. Both use foot launching, *i.e.* the pilot's own energy powers the acceleration that generates lift, and -landing, *i.e.* the pilot's own feet serve as the landing gear when touching down. Both require skilled use of sources of natural lift to ascend, for example rising thermal air or air deflected off of landforms. In fact, the Fédération Aéronautique Internationale (FAI), the world governing body of air sports, categorizes paragliders as Class 3 Hang Gliders (Whittall, 1995:14).

Hang gliders and paragliders fly many of the same sites, and many pilots, particularly older ones, are "biwingual", that is they are able and licensed to fly both types of wings. Many schools offer instruction and tandems in both, though most often by different specialist pilots. Paragliders and hang gliders often share national organizations or clubs, particularly where the overall free flight community is small. For example in the U.S., the U.S. Hang Gliding and Paragliding Association (USHPA), originally the U.S. Hang Gliding Association, licenses pilots in both sports³. Like national bodies in many countries, its brief expanded to paragliding as that sport developed.

SKYDIVING

Skydiving, also known as parachuting, is a sport based on free-fall, rather than soaring or flight. Jumpers ascend in a plane and jump out of it to free-fall with only a parachute to slow their descent. The chute remains packed and deflated during the jump. It only inflates when the pilot decides to deploy it, or if an auto-deployment device is used. In recreational skydiving the chute is somewhat steerable and rectangular rather than the historical round chute.

There is a fundamental difference in attitude between the two sports. Parachuting is all about the fall; paragliding is all about the flight. As Whittall (1995: 11) puts it, "parachutes are about getting you down: paragliders are designed to keep you up!" In most countries skydiving and paragliding are practiced at different locations, and in many they have different governing- and recreational- associations,

³ www.ushpa.aero

for example in the United States. Internationally the FAI governs skydiving as a sport via its International Parachuting Commission (IPC), in a similar manner to how it governs paragliding as a sport. In Finland, where paragliders and hang gliders primarily tow from recreational airfields, all three sports share launch sites and airspace, along with national licensing by the same organization that licenses recreational pilots of single engine planes, gliders, and hang gliders⁴.

PARASAILING

Parasailing is not a sport but a commercial entertainment offering that utilizes chutes derived from Lemoigne's Para Commander designed for parascending (Whittall, 1995: 10). The customer is towed by a boat while suspended in a simple strap harness under a small, circular canopy, along the shore or in open water. The objective is simply a thrill. There is no release from the tow, no independent flying or piloting, no soaring, nor any free fall. As such it is not usually classified as an aerial sport, and its inclusion here would offend most aviation hobbyists, particularly paragliders. However, it is included in this section because of how often non-pilots confuse paragliding with parasailing, which they might have seen on holiday at a beach resort, on a cruise or in the media. The activity requires no aviation knowledge, nor skill development, and is a purely commercial enterprise rather than a recreational sport.

BASE, KITING, SPEED RIDING

Three lesser known sports that may also be confused with paragliding are BASE (Buildings, Aerials, Spans, Earth) jumping, kite skiing, and speed riding. In BASE-jumping, a derivative of skydiving, the goal is to jump from a high spot, then deploy the chute before hitting the ground (Forsey, 2009). It is unregulated and

⁴ In Finnish: Suomen Ilmailuliitto, http://www.ilmailuliitto.fi/

unrecognized as a sport in most places, but often familiar to the public from its inclusion as a stunt in movies and spectacles.

Kiting, or kite skiing when used over snow, derives from the windsurfing tradition but uses a simplified, smaller ram-air canopy similar to a paraglider but with fewer lines. The goal is to catch air for jumps and tricks, or to travel overland fast. Using skis, a snowboard, ice skates, or long board with wheels, the kiter kites the wing and uses the wind to generate speed over the ground or uses the force of the air lifting the wing execute airborne jumps and tricks. Kiting is not recognized as a civil aviation sport.

Speed riding is a hybrid of kite skiing, downhill skiing and paragliding that utilizes a simplified paraglider-like wing with better control features and glide than a snow kite. The speed rider skis down a slope with their wing fully inflated and flying, as if launching a paraglider. Using the controls the rider can lift off the ground for short or long stretches, for example to fly past obstacles, cliff drops or crevasses. The speed rider can also touch down again to resume skiing. The wing helps the skier generate faster travel speeds.

The Invisible Context for Performance

Paragliding owes its existence to skillful human adaptation to the opportunities for flight offered by the natural world through application of aerodynamics and meteorology. This adaptation is centered in the historical and ongoing development of practices, via equipment and understandings of both how to use it and the context in which it will perform. These practices take advantage of aerodynamics, that is the laws of physics, to mediate the human inability to fly unaided. Because paragliding relies on engineless flight, these practices also rely intimately on atmospheric conditions – wind, temperature, air, and pressure – to

provide the energy needed to power the glider. These conditions are often invisible, at least to the naked human eye, and unthought-of in non-pilots' daily life, though a wide body of materials exists to explain them scientifically. Thus aerodynamics and meteorology provide both the physical and intellectual context for the performance of the practices of paragliding.

AERODYNAMICS

Paragliders are airfoils designed to fly using what nature gives via the properties of physics. An airfoil is "a curved surface designed to deflect the air smoothly to produce as much lift with as little drag as possible (Pagen, 2001: 29)." As an airfoil paragliders fly when pressurized, that is when air fills the canopy to pressurize it. This, along with its arched shape, helps the paraglider maintain its form. When oncoming air meets a canopy it passes simultaneously over, into and under it. In addition to pressurizing the wing, this force generates lift because the deflection of the air by the wing slows the airflow under it while speeding the air above it, generating force upwards. This force is not so much dramatic upward lift that an engine would create as a suspension from falling. Conversely, drag, the sum of the forces parallel to a wing's flight path, slows it down (Pagen, 2001: 30). The pilot can control speed somewhat by increasing or decreasing the angle of attack, the angle at which their wing faces the air. This is done by minimizing or increasing pull on the brake toggles to minimize or increase downward pull on the trailing edge of the wing, or by pushing on a speed bar with the feet to activate lines that tuck down the front of the wing. The pilot's goal is for lift to exceed drag.

In order for lift to occur properly, so that the glider flies in a safe, balanced fashion, the center of pressure, the sum of the combined lift and drag forces on the wing, and the downward pull of the center of mass of the glider and pilot must be aligned (*Ibid*). A way to visualize this is as the centered weighting of pendulum.

Much of the flying learning process involves learning how to move with the glider to maintain this correct weighting and so as to be able to sense how the wing is weighted and make corrects if needed. The pilot can initiate, or even complete, turns in the air by shifting their weight to one side, though turning is usually done by combining weight shifting with input on one brake to slightly deflect the wing in the desired direction. An example of this is shown in Figure 5 below. Advanced pilots master the manipulation of weighting and brake inputs to perform different maneuvers for safety or fun. The recent development of acro flying represents the skillful manipulation of these forces of physics to transform them into an art of movement.



Figure 5 A pilot "runs it out" to repressurize the wing in response to a collapse during launch.

Paragliding is often jokingly referred to as controlled falling by pilots or instructors. How much a wing lifts depends partially on the speed of the oncoming air. However, since excessive speeds deform the wing, lifting air in addition to oncoming air is required to ascend. This lifting air can come from air rising as it deflects off of a landform or from thermals (Pagen, 2001).

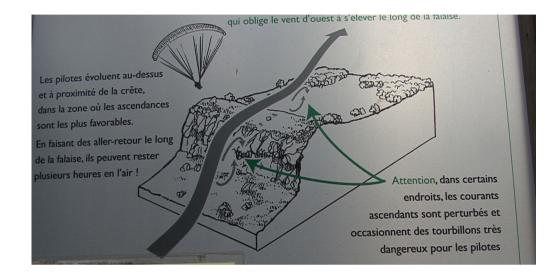


Figure 6 Diagram from a signboard at Col de Sapenay, France warning of common local turbulence patterns.

Thermals are columns of rising air generated from uneven heating of the ground or buildings (Pagen, 2001: 118-119). In certain conditions thermals create clouds, leading to the term "cloud suck" to refer to the pronounced lift generated under building clouds. Air does not lift uniformly, and air encountering obstacles generates dangerous turbulence that can deflate a wing. Pilots must learn to both know intellectually how, why, and where lift moves, rises, sinks, and creates turbulence as it moves across terrain, as well as to understand how to recognize these changes when they encounter them in the air.

METEOROLOGY

"The hardest part of paragliding is learning to understand the conditions. You can learn to fly from point A to point B in a few days, but learning the conditions takes a lifetime." (Lars Linde as cited in Pagen, 2001: 107)

Paragliders are completely dependent on the weather and terrain in a way that pilots of rigid, engine-powered aircraft are not. They can only fly when the combination of weather, time of day, and air conditions are right for a given site (Pagen, 2001). They need sunlight for both visibility and lift, as it is the heating of the ground across the day that influences where thermals occur and how wind flows. They are at the mercy of local and regional bands of high and low pressure. They cannot fly in rain, as a wet wing does not maintain its dynamic capabilities. They need winds within an acceptable range of speeds. The prevailing or localized winds need to be in the correct direction so that pilots can launch and land into an unobstructed, oncoming breeze; and so that they are able to fly downwind or upwind without being in leeside turbulence such as can be caused by a strong föhn moving through and across an alpine valley (Martens, 2007). If there are clouds they cannot be huge cumulonimbus, which represent clouds ready to release the stored energy from collecting all that rising air as downdrafts, thunder or lightening.

A pilot needs to understand when flying in an area how a given terrain and winds will interact, and how this interaction will change according to the passage of the day and changes in temperature, along with the impact of current or forecasted variances in air pressure (Pagen, 2001; Martens, 2007). They need to be able to identify different cloud types and understand what their presence indicates about the current and impending weather conditions. As a result basic flying meteorology is a part of training curriculums and life long field apprenticeship for all types of pilots.



Figure 7 Photo of a metrological lesson posted at the Col de Sapaney landing zone by the French Federation of Ultra-Light Motorized Gliders.

Practice-Bundle Variations

Paragliding has some recognized variations around which different bundles of practices cluster: powered paragliding, acro, cross country and competition, and tandem. Some represent diverging practices and identities apart from 'regular' paragliding, while others represent higher skilled forms of the standard practice. Many pilots might give a try to all these variants with great or mixed success, while others chose to focus their time on a single variant.

Aside from these, there are other ways to categorize paragliding. For example, the sport can be broken down by type of launch used such as foot or towlaunch; by aerodynamic features such as ridge soaring versus thermal flying; or by topographic differences such as flatland flying, beach cliff flying, inland ridge soaring or mountain flying. However, these categories and their specialized practices can also be viewed as enmeshed in the overall web of paragliding practices. Accordingly this section focuses on the more distinct practice bundles around which different equipment, associations, ratings, or pilots cluster.

POWERED PARAGLIDING

The most clearly distinct set of practices comes with powered paragliding, or "paramotoring", in which modified equipment allows the pilot to fly with a caged propeller and engine that can be used to generate thrust for lift to launch (USPPA n.d.). The flight can be flown entirely with the engine, or the engine can be turned off to utilize available lift, and turned back on to surpass sink or lift less areas. Powered paragliders don't usually share the same launch sites as standard paragliders, but they may use the same airspace or use the same landing zones as their launch points. There are competitions such as the World Paramotor Championship, web sites, and other media specifically focused on paramotoring. FAI governs paramotoring as a sport apart from paragliding, via its Microlight & Paramotor Commission (CIMA) (FAI, n.d.). In some countries, such as the U.S., paramotoring has its own voluntary association / quasi-governing body apart from non-powered paragliding, the U.S. Powered Paragliding Association (USPPA), whereas in the U.K. it does not (USPPA, 2007).

ACROBATIC FLYING

Acrobatic, "acro", flying is a relatively new phenomenon. Acro pilots execute different maneuvers while in the air by using the wing controls and weight shifting to

induce variations on spirals, spins, loops, and different wing deflations and recoveries. Originally practiced as part of safety training (S.I.V.) clinics, in the last ten years it has developed into a pursuit in its own right, with specialized wing, harness and reserve designs, acrobatic competitions, dedicated websites, its own flying hubs, and specific heroes. The development and diffusion of acro can be credited partially to the pioneering Rodriguez brothers, who have developed many of the current maneuvers and popularized them via the SAT (Safety Acro Team) video series (Adrenaline & Turbulence, 2009).



Figure 8 French acro pilot Jeremy Bailly practices the wingover maneuver in front of the main Annecy launch.

Visually dramatic, Acro is appealing and captivating to watch even for non-pilots. It requires highly advanced skills and hours of dedication to master the maneuvers, and exposes pilots to higher risks than standard paragliding. It is practiced from many of the same launches as normally used for standard paragliding.

CROSS COUNTRY

Unlike paramotoring and acro, cross country is not strictly a separate discipline, but a core part of paragliding, an advanced development of skills and practices for novices to aim at and progress into. As Noel Whittall writes:

"Soaring on a ridge or repeating circuits of a tow-launch airfield is great sport, but after a while many pilots feel that they want to take the freedom of the air to greater limits. After learning to fly in the first place, the next great adventure lies in trying to cover the miles to a distant landing place." (Whittall: 1995, 163)

Distance may be measured as making flights out away from launch and back to the standard LZ, linking three spots in a triangle, or going for open distance from one point to another. Cross country requires thermalling and landing skills, knowledge of airspace restrictions and confidence. Good knowledge of weather and terrain is important, particularly in complicated mountain regions. Pilots need to be able to identify potential landing zones, rapidly lose altitude if needed, and land in an LZ, possibly improvised or unfamiliar, anywhere along the way in lieu of always landing at a familiar field close to launch. This type of flying often involves traveling downwind or cross-wind (Whittall: 163).

Certain flying sites are more conducive to cross country flying than others. Cross country flying can be done in standard paragliding gear, but pilots who focus on it often adopt some or all of the gear developed for competition flying. For English speaking pilots Cross Country magazine is a standard bearer of the sport, though tips for cross country flying skills, photos from flights, trip reports, and reporting of local records are usually included in most standard flying magazines and occupy many flying forum threads.

COMPETITION FLYING

Standard paragliding competition, or what is referred to when "comp flying" or "comp pilots" are mentioned, is based on cross country flying. In the most

common "Race to Goal" format pilots compete to fly designated tasks. The tasks usually involve flying to a goal while crossing through designated turn points along the way. Achievement is monitored via vario-GPS track logs, possibly backed up by on the ground spotters. The fastest to goal wins the task. Tasks are often conducted over multiple days. Pilots receive points for each task. The winner of the day's tasks gets 1000 points, and everyone else a proportion of that according to distance achieved and time taken. The pilot with the most points at the end of the "comp" wins (Whittall 1995: 169-180).

Another, less structured competition style is "Open Distance" (OD) in which scoring is based on a measurement of total distance rather than reaching a fixed goal. The idea is to increase "simplicity, inclusiveness, and freedom from encumbering restrictions". Routes may be fixed or devised individually by each pilots. OD comps can be almost as structured as a standard race to goal format, with turn points, defined launch cylinders, etc., as long as a final endpoint has not been defined. They can also be virtually unstructured with the only objective to fly the most miles "before the sun goes down" (1st US Open Distance Nationals, 2012).

There are many levels of competition ranging from small comps organized by local clubs to national, international and world cup circuits. Many pilots fly competitions occasionally for recreation, but there are also pilots who focus their lives on competing, preparing for competitions, and travelling the comp circuit. In Japan, Korea and the Alpine countries top pilots regularly have professional sponsors, but this generally does not provide their full income, and most hold some kind of employment. This can mean paid employment as test pilots, tandem pilots and instructors, or in other paragliding-related jobs, though at comps a diversity of nonflying professions are also represented.



Figure 9 (Top) Pilots at the 2009 Nordic Open in Slovenia listening to a task briefing, their electronics at the ready, and setting up their wings in preparation for the opening of the start window. (Bottom) French pilots discussing the day's task at a regional comp in Annecy and rapidly launching when the start window opens.

The impetus to fly faster to win has driven much wing development, and comps have served as a proving ground for new wing designs. In addition to a faster wing with a better glide ratio, comp pilots usually use specialized harnesses with a sleeker profile to reduce drag and often choose competition oriented equipment for the rest of their kit, such as specialized helmets, electronics and other accessories. Competitions are held at areas known for their good thermal development utilizing sites' normal launch and landing zones. Competition results are covered in paragliding magazines and websites, particularly Cross Country.

TANDEM FLYING

Tandem flying is a clear set of practices, but without a distinct sub-culture formed around it. In tandem flying a single pilot flies a passenger, often for money. One interviewee likened it to "driving a bus" compared to solo flying. Tandem flying requires specific equipment, instruction, and skills development, and has separate rating exams. Some conflict can exist between tandem pilots and solo pilots. For example, at sites where a lot of commercial tandems are flown paid tandem pilots can dominate the launch with special set up zones and priority launching. By convention they get airspace priority⁵. Commercial tandem pilots at a site usually know each other and can appear cliquish or 'apart', especially in busy tourist areas. However not all tandem pilots do so for money, and tandem pilots generally also actively fly solo, with tandem flying either a way to make a living flying, a way to fly friends, or a method for enhancing student instruction. Tandem license ratings are handled by the same agencies that govern solo flying, and there are no tandem specific magazines, clubs or websites.

THEORY REVIEW

Paragliding has been little researched in any discipline, and when it has the focus has been on using it as a specimen for the investigation of propensities towards risk. Paraglider pilots are included in two quantitative marketing studies by Shoham, Rose and Kahle (1998, 2000) modeling risky sports participation, personality traits and the need for efficacy. In psychology Filaire et al (2007) examine the motivation, stress and anxiety levels of paraglider competition pilots. Watson and Pulford (2004)

⁵ The origin of this is practical rather than solely status based. Airspace rules or etiquette are set up to prescribe safe flying behaviors. A tandem wing is larger and displaces more air, creating more turbulence. For example, in ridge flying the tandem receives priority for flying alongside the ridge where there is more lift, because if a solo pilot were to attempt to fly inside a tandem (closer to the ridge), the solo pilot would put themselves at risk of dangerous wake from the air flowing across the tandem towards the ridge.

compare personality differences between high-risk sports amateurs and instructors from six different sports including paragliding. More common are studies of other aerial sports such as hang gliding (Brannigan & McDougall, 1983), skydiving (Celsi et al, 1993; Laurendeau 2006; Laurendeau and Van Brunschot, 2006; Lyng, 1990, 2005; Price and Bundesen, 2005; Willig, 2008), and BASE-jumping (Forsey, 2009). Risky-sports participation is also the salient aspect being investigated in these later studies, though the approaches are more diverse and include phenomenological and ethnographic research designs.

The usual questions being asked – explicitly or implicitly – by these studies are, "Why would an individual purposefully seek physical and psychic risk?" and "Why do individuals risk their lives for play? (Celsi et al, 1993: 1-2)" As both Stranger (1999) and Willig (2008) critique, such a line of inquiry presupposes certain truths or narratives about the phenomenon such as a struggle between life/death or deviancy/normalcy. While paragliding is a sport with risks, and the way paragliders approach and deal with these are of interest to me, my research seeks to go beyond this narrow focus. Stranger (1999) proposes an alternate characterization of risktaking leisure as an aesthetic, flow experience linked to rewarding embodied play. Taking this as my jumping off point, my study uses theories of embodied cognition and transformative experiences, in particular flow and communitas, combined with practice theory to uncovering a broader perspective on the nature and experience of paragliding.

This literature review proceeds in the following manner: First, there is a discussion of common research approaches to and understanding of risk. Second, practice theory is presented, followed by embodiment. Finally theories of transformative experiences are examined, particularly flow and communitas.

Researching Risk

Any study of a practice where voluntary engagement with risk is a component needs to consider the variety of ways in which risk has been approached. Accordingly this section looks briefly at approaches to risk research in economics and psychology, and then how these have been applied in studies of paragliding and adventure sports.

Economics

Generally in economics, behavior finance and consumer behavior, risk is approached as an intriguing departure from rational, efficient decision-making. The fundamental assumption is the consumer as homo-economicas: a rational actor who applies some kind of cost-benefit analysis to their choices so that risk processing occurs in a manner consistent with overall decision-making (Conchar et al, 2004). Conchar et al (2004) model risk processing as a three-phase, normative process that incorporates various dimensions of risk framing, perceived risk assessment and perceived risk evaluation. "Risk framing produces a general attention set of importance weights, information about the choices, and an edited consideration set, which will simplify further risk processing (2004: 424)." Risk assessment and evaluation form nuanced combinations to determine a situational risk-taking propensity, rather than a behavior itself (ibid). In practice research has found that consumers apply heuristic strategies to reduce information overload or time spent on decision-making (Conchar et al, 2004). Interestingly, research utilizing qualitative approaches has found risk contexts where normalizing environments reframe, or normalize, perception of risk for participants (Celsi et al 1993).

From a practice theory approach any such "rationalized" decisions should evidence influence of an individual's degree of competence and proficiency in a practice's "contrasting understandings, levels of practical competence, and degrees of involvement", as well as the influence of Schatzki's horizon of possible intelligibility that each practices teleoaffective structure creates (Warde, 2005: 147). In addition rules or explicit formulations may serve as heuristics for participants, while tacit knowledge could reduce or internalize on-the-spot processing requirements. However, it is hard for the empirical studies of risk in consumer behavior and economics to address such nuances because by necessity they use artificial contexts and surveys in their experimental design.

Psychology

Framing of risk isn't merely a consideration within a risk decision context, but also affects research into risk related phenomena. Researchers studying participation in activities that the researcher categorizes as risky, deem such participation as risky before they even begin. This implicitly characterizes participation as unhealthy and, as such, *a priori* associates involvement in the activity with individual pathologies or deviance. As noted by psychologist Carla Willig (2008) in her phenomenological study of 'extreme sport' participation:

"Health psychologists tend to start from the assumption that health risks should be avoided and that those who engage in risky behaviors represent a problem to be solved...We tend to assume that no-one in their right mind would choose to act in ways which may jeopardize physical safety and mental equilibrium (Willig, 2008: 691)."

Accordingly researchers "look for a pathology or cognitive bias that generates" behavioral choices framed as unhealthy" (*ibid*).

This attitude is reflected in many psychological studies of outdoor, adventure and action sports, particularly those labeled 'extreme' or 'high-risk'. For example, Tator (2011) approaches increasing participation in risky sports and recreation activities as a problem that needs to be described so that researchers can identify risks and help mitigate them by offering risk reduction strategies: "Thrill seekers are stimulated to attempt stunts and actions for which they are often untrained and unskilled. In some high-risk activities, alcohol, drugs and superficial media portrayal overcome or cloud the *normal* instinct towards risk aversion and self-protection" (Tator, 2011: 1291, *emphasis added*).

Approaching a sport activity with this attitude frames the experience a certain way, assuming that its understandings, rules and teleoaffective structures center themselves around the dichotomies of safe/danger, normal/deviant, good/bad. This narrows the possibility for deep engagement with the phenomenon and corrals the researcher into a narrowed set of possible understandings and conclusions.

Paragliding and Adventure Sports

The few studies of paragliding in the literature naturally subject it to this approach. For example, in psychology Filaire et al (2007) examine the motivation, stress and anxiety levels of paraglider comp pilots before and after competitions via surveys of psychological scales such as the Telic Dominance Scale, commonly also employed in studies of drug addicts and gamblers, along with blood samples to measure cortisol responses. Watson and Pulford (2004) compare personality differences between high-risk sports amateurs and instructors from paragliding, skydiving, hang-gliding, scuba diving, microlight flying, and rock climbing. Using questionnaires, participants were evaluated for personality factors such as extroversion, psychoticism, self-efficacy, neuroticism and A/B personality type, with the conclusion that people attracted to high risk sports tend to be extroverted and emotionally stable with a tendency towards Type A personality characteristics.

In marketing Shoham et al (1998) use similar techniques to develop a predictive model for risky sports participation based on economic expectancy-value theory, using a sample of paragliders. Their model attempts to incorporate the findings of Celsi et al (1993) and Brannigan and McDougall (1983) with existing empirical psychological and economic research. They find correlations between participation in risky sports with thrill and adventure seeking, arousal avoidance, role

relaxation and age, along with arousal of curiosity. A follow on mixed methods study adds themes of drama, danger neutralization and peer identification into their model (Shoham et al, 2000). That later study samples participants active in at least one of these sports: skydiving, rock/mountain climbing, deep-sea diving or gliding. Shoham et al are surprised to find an insignificant relation between the need for efficacy, *i.e.* continued involvement and progressive mastery, and frequency of engagement. Their interview subjects show subjective variation across cultures and sub-cultures in their perception of a given sport as risky. They also find a positive relationship between perceived fulfillment of needs for camaraderie with frequency of engagement and future probability of engagement in other risk sports. Experience is seen as both required for developing efficacy and producing options for identity construction via mastery. Except for their finding on efficacy these results are consistent with participant observation studies of risky or adventure sports practitioners (Celsi et all, 1993; Arnould and Price, 1993; and Brannigan and McDougall, 1983).

The biggest issue with these studies is that Shoham et al (1998, 2000), Filaire et al (2007), and Watson and Pulford (2004) mirror the approach in health psychology critiqued by Willig (2008): reliance on questionnaires and surveys; sampling that mixes diverse activities based on biased assumptions of the researcher; and an excessive focus on predictive models.

Beyond these critiques, there is a bigger issue at hand: can we take all risks as analogous? Can we apply conclusions on attitudes towards financial risk taking to skydiving and then to scuba diving or rock climbing or vice versa? Is it acceptable to group very different sport practices under a single "risk" label, simply because the researcher sees them as exotic or dangerous? There is no commonly accepted definition for what constitutes 'adventure-', 'extreme-', 'action-' or even 'risky-' sport. Sports variously labeled this way in the literature include snowboarding (Tator, 2011), skiing, hang gliding, skydiving (Celsi et al, 1993, Laurendeau, 2006), BASE- jumping (Forsey, 2009; Willig, 2008), surfing (Stranger, 1999) and mountain biking (Tator, 2011). If all risks are analogous, can participation in any risky sport satisfy the same needs as participation in another?

Celsi et al (1993) speak of extreme sports as emblematic of the late 20th century social order and rising consumption for high-risk activities. Following the example of Lyng (1990) they define high-risk activities as those in which "participants knowingly risk death or physical injury as well as the possibility of psychic injury should they fail to perform adequately in the risk context (Celsi et al, 1993: 2)." In contrast, Brymer (n.d.) believes that extreme sports should be clearly distinguished from high-risk sports. He characterizes both as self-initiated, usually occurring in a natural-environment and as having limited outcome certainty, but distinguishes extreme sports as being activities where "an ineffectively managed accident or mistake has the almost unavoidable potential for death, where as for the high-risk activity the result is usually restricted to injury" (Brymer, n.d.: 1). In a German examination of the land use impacts of 'extreme nature sport' the geographers Egner et al (1998) focus on activities clearly defined by their common orientation towards experience and adventure in nature: "mountain-biking, rock climbing, paragliding and hang gliding, wind surfing, snowboarding, scuba diving, river rafting, white water canoeing, canyoning and others (Egner et al, 1998: 121)." All these sports are characterized by participants who invest significant financial, time, physical and technical expenditures to practice their chosen activity, a pursuit that "often dominates the entire structure of their everyday life" (Ibid).

Celsi et al (1993: 2) see high-risk behavior as linked to an "inherent dramatic enculturation" that glamourizes risky-sports. However, as Brymer points out, if "normal risk has been defined as risk that is culturally accepted as related to skill and experience," and if involvement in a 'culture' of extreme sports causes perceived normalization of the risk relationship, there may be something more to participation in risky sports than a desire for risk (Brymer, 2002).

Stranger's (1999) alternative is to view risk-taking leisure activities as embodied experiences rewarding to participants in and of themselves, and as such to link them to play which, as Huizinga points out, is a "profoundly aesthetic" activity (Stranger, 1999: 265) pursued for no other goal than itself. He further connects the impulse to pursue such activities to a postmodern impetus to aestheticize contemporary experience. Similar to Celsi et al's (1993) view that mass culture and conditions of society drive people to seek out denouement and catharsis, Stranger's argument is that postmodernism facilitates a risk orientation through it's emphasis on an aesthetic of sensation over modernism's demand for rational interpretation. In a cultural of aestheticization, the chase for the "thrill of self-transcendence", whicht occurs in the search for flow via high-risk leisure activities, becomes a natural, rather than irrational, impulse (Stranger, 1999:270). It is not risk per se that the surfers he studies seek, but raising their exposure to risk is a by-product of their ongoing search for flow, which requires them to increase their challenges as their skills increase. Stranger reaches this conclusion inspired by Huizinga's groundbreaking work on play. As he quotes Huizinga on sacred play:

"In the form and function of play, itself an independent entity which is senseless and irrational, man's consciousness that he is embedded in a sacred order of things finds its first, highest, and holiest expression" (Huizinga, 1949: 17 as quoted in Stranger, 1999: 268).

This evokes common themes in theories of transformative experience that are discussed in the final sections of this review.

The standard empiricist and deviance oriented approaches to risk may tell us how much cortisol a person produces, how their playfulness in life correlates to how they react to a telic state, or give us confusing conclusions about what personality traits practitioners may or may not have, but these factors don't help us understand the genuine experience of paragliders, nor reveal the various strands in the mesh of its practice-arrangement bundles. What are the alternatives to empiricist and deviance oriented approaches to studies of risk? Psychology, sociology and consumer culture theory all contain studies that attempt to examine such experiences through deeper investigations of individual and group experience – including both phenomenological oriented studies and culturally oriented ethnographies. For my purposes the most interesting of these are the theories of flow and communitas, and Celsi et al's (1993) dramatic model of risky sports participation because it incorporates flow and communitas into an aerial sports concept. These three theories are covered after the sections on practice theory and embodiment that directly follow.

Practice Theory

OVERVIEW

Practice theory is an ontology that views the social as occurring via the activities and material routines that both encompass individuals and are shaped by them. Most strongly associated with Schatzki (2001, 2005), it is philosophically rooted in Heidegger, Wittgenstein, and theoretically related to, but distinct from the structuralist approaches of Bourdieu, Giddens, Foucault and Butler (Halkier et al, 2011). Schatzki's conceptualization, derived within organizational theory, is founded on two principles: "(1) that social order is established within the sway of social practices, and (2) that mind is a central dimension of this 'process'"(Schatzki, 2001: 50). In Schatzki's theory of practices social life is inherently a part of a specific context – "the site of the social" (Schatzki, 2005). This "site" or field is constituted by activity arrays occurring within a specific context that encompass individuals and are shaped by their practices. This nexus of human practices and material arrangements both affects individual action and is shaped by it (Schatzki, 2005).

Each "practice-arrangement mesh" is part of a "larger net of practice-arrangement bundles" that are linked to similar bundles or nets, for example at other locations (Schatzki, 2005: 473). Accordingly, any social phenomenon is "a feature or side of the overall human practice-order web" (*ibid*), a concept similar to Bourdieu's (1977) social field, but less deterministic. These nets, meshes or bundles - social formations - should be examined for how they originated and how they are perpetuated as "together, answers to these questions constitute an explanation of the formation (Schatzki, 2005: 475)."

With practice theory Schatzki breaks away both from theorists that focus on individual motives, actions and felt experiences at the exclusion of a bigger cultural picture; as well as from cultural-structuralist approaches that deny individual actors agency in favor of greater social factors, such as discourses, social or class background, inherent political struggle, or other cultural or structural elements. While I describe these two ontological directions as oppositions, it is important to note that Schatzki doesn't treat them as untouchable, opposing monoliths. His approach advocates a move away from oppositions that narrow our view of social life, to instead blend elements of each dichotomy into a useful approach to examining human activity. Thus "what is acceptable or prescribed in any practice - its teleoaffective structure - is always subject to discursive determination (Schatzki, 2005: 475)," yet individuals are not just incorporated into a practice, but are key agents who perpetuate it and possibly alter it. Practices can be altered intentionally or unintentionally; "known or unbeknownst to participants"; or with wholesale, "conscious intervention from the inside or outside" (Ibid: 475-476). As Warde (2005: 140) describes it "The concept of practice inherently combines a capacity to account for both reproduction and innovation."

For Schatzki, practices, as the "site of the social", link humans via their material arrangements, physical connection or the layout of the settings in which they

occur (Schatzki, 2005: 471). Practices are human activities, "organized, open-ended spatial-temporal" manifolds of actions organized by three practice specific phenomena: "understanding how to do things"; rules, that is "explicit formulations that prescribe, require, or instruct that such and such be done, said, or the case"; and "teleoaffective structure" which is an "array of ends, projects, uses (of things), and even emotions that are acceptable or prescribed for participants in the practice" (Schatzki, 2005: 471-472).

These three phenomena are the linkages that combine together to form practices, that is, what is apparent to us and viewable for examination. We are able to discern these phenomena as they are expressed through "a routinized type of behavior" consisting of several, interconnected elements: "forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge" (Reckwitz, 2002: 249). The combination of these components, which I summarize in Figure 10 below, form a useful grounding from which to identify, examine and conceptualize a given set of practices.

Practices

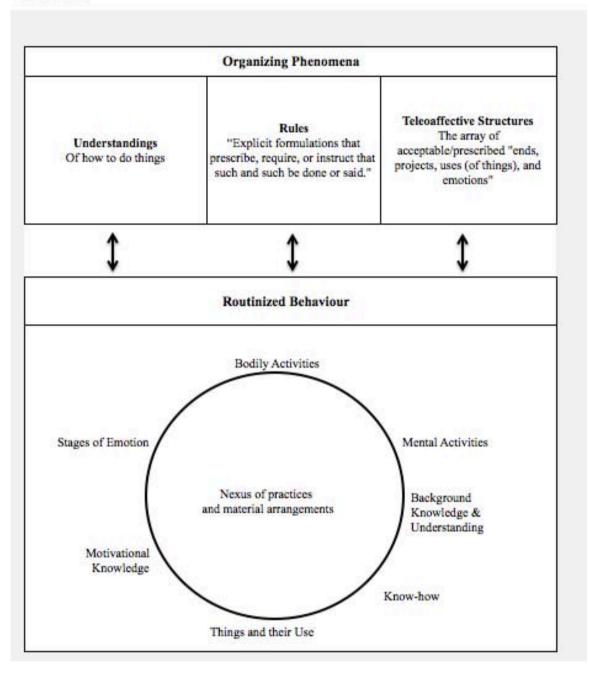


Figure 10 Key components of a practice-arrangement mesh, based on Schatzki (2005) and Reckwitz (2002).

One of the wide appeals of practice theory for researchers from different disciplines is its openness for interpretation, yet this is also its weakness. After declaring the intention to step across ontological divides, Schatzki's writing focuses

more on articulating components of practices than working up rigid theoretical strictures. This has left it to others to address methodological or theoretical considerations for applying practice theory within various fields (for example Cherry and Higgs, 2011; Halkier and Jensen, 2011; Warde, 2005). This wide-open approach gives a researcher latitude and freedom, but keeps the theory stream fragmentary, heterogeneous and sometimes contradictory (Warde, 2005). Schatzki's essays can be difficult to read, while other writers can pull the concept in their own directions.

ROLE OF THE INDIVIDUAL

For consumer culture, Warde (2005) offers a useful review of practice theory specific to consumption studies. His attempt to synthesize Schatzki, Bourdieu, Giddens and others into a practical, minimal conceptual structure for studies in consumer behavior produces useful observations on the implications of practice theory for considerations of the individual, the multiplicity of consumption and the social signification of consumption. In practice theory individuals participate in multiple, different practices and so are carriers of multiple practices. As Reckwitz asserts, "the individual is the unique crossing point of practices, of bodily-mental routines" (2002: 256). Warde interprets this as "minimizing the analytic importance individuality" without excluding investigations of specific individuals' of consumption behaviors (2005: 144). However this could instead be interpreted as allowing for more analysis of individuality, in investigating the unique intersections of practices found among individual consumers. While Warde sometimes seems to focus more towards the collective than individual choices, and thus more towards Bourdieu than Schatzki, in contrast to Bourdieu he makes it clear that it is not only socio-demographic stratification that leads to behavioral variation, but rather "contrasting understandings, levels of practical competence, and degrees of involvement" (Warde, 2005: 147). Practice theory allows us to view consumption not as "a form of psychological adaptation to the postmodern world, nor a problem of identity per se, but rather a consequence of the nature of the social organization of practices" (Warde, 2005: 144). Shortly put: how many different practices people participate in, and with what level of commitment, influence the total variety and volume of their consumption.

Swidler (2001) takes the view that in this emphasis on the routine, practice theory places less emphasis on what is happening "in the heads of actors, either individuals or collectives" and rather focuses on actions "notable for their unconscious, automatic, un-thought character" (2001: 83). Swidler asserts that it is the physical and the unconscious, automatic and taken-for-granted actions and routines that are of interest rather than "conscious ideas and values" (Ibid). Reckwitz's interpretation places less strident emphasis on only physical routines, instead clarifying that routine refers also to "routinized ways of understanding, knowing how and desiring" (Reckwitz, 2002: 250). This means a practice encompasses a "routinized way in which bodies are moved, objects are handled, subjects are treated, things are described and the world is understood", thus crossing "the distinction between the allegedly inside and outside of the mind and body (2002: 250-252)." Rather than throw out the individual mind entirely as Swidler does, Reckwitz's characterization includes it as part of a nuanced whole: both engulfed by and representing, both shaped by and shaping a practice. This leaves room for the conscious, deliberate or thought out aspects to the development, learning, or acquisition of automatic practice routines and ideas.

COMPETENCE AND PROFICIENCY

Collins believes that tacit skills and knowledge are what move practitioners "from a state of incompetence to a state of competence within a practice" (2001: 116). Collins asserts that "mastery of a practice cannot be gained from books or other inanimate sources, but can sometimes, though not always, be gained by prolonged social interaction with members of the culture that embeds the practice" (*Ibid*). Using the example of bike riding he says: "We learn to ride a bike then without knowing how we do it, where 'knowing' is used in the sense of 'being able to formulate the rules'" – e.g. either formulating them in a way to satisfy a physicist or in a way that would "enable another person who read them to be able to ride a bike immediately" (Collins, 2001: 116-117). One indicator of success in achieving a practice is to cease committing "*faux pas*" when interacting with other practitioners. However tacit skills require "continual repair and maintenance provided by the embedding community" (Collins, 2001: 117). This would almost seem too far in asserting the importance of the social for learning a practice at the expense of the individual effort to actually master the tacit skills.

Competence and proficiency in practices are also key for Warde (2005). They play an important role for both internal and external rewards, which in turn may influence which practices people choose to engage in. Practices are able to deliver fulfillment of different types with "wants fulfilled only in practice, their satisfaction attributable to effective practical performances (Warde, 2005: 142)." Warde notes that psychic rewards such as achievement of Cziksentmihalyi's concept of flow can be achieved through proficiency, with level of proficiency determining the degree of reward. "Some practices can be seen as more complex than others because they offer more levels at which opportunities to experience flow can be found," and thus greater opportunities for psychic rewards (Warde, 2005: 143). Remembering that adoption, use and control of material goods is driven by their use in related practices, this implies that "most (consumption) action is not directed towards communicating with others but towards the fulfillment of self-regarding purposive projects" (2005: 147) and is thus more concerned with efficiency and effectiveness than cultural signification. However while "judgments of performance are made internally with respect to the goals and aspirations of the practice itself, and proficiency and commitment deliver satisfaction and self-esteem", proficiency can also produce external rewards such as a more advantageous position or status both within the practice and within larger society due to association with a specific, highly valued practice (Warde, 2005: 148). On the surface this calls to mind Bourdieu's (1977) habitus. Yet, whatever the generally accepted ranking of a practice within any broader social hierarchies "there are internal goods to be derived from it for individual practitioners (Warde, 2005: 148)."⁶ This is an important point when considering consumption patterns tied to non-mainstream, fringe or marginalized practices.

Taking a different interpretation, Watson and Shove (2008) assert that practice theory omits a competence element, particularly for consumer research. However, being competent is implied in obtainment of tacit knowledge. By competence, or the "capacity to do," Watson and Shove mean, "the skills implied in the use, integration and desiring of items required for the effective accomplishment and performance of daily life" (2008: 71-72). In their view consumers are knowledgeable actors whose acquisitions are in some sense an expression of their "capabilities and project-oriented ambitions" (*ibid*). Drawing on Latour's concept of human and non-human hybridity, they go on to point out: "materials and consumer goods are themselves active agents in the configuration and distribution of competence and so of practice" (Watson and Shove, 2008: 71-72). This is not said to strictly re-deny consumers the agency that practice theory allows them, but rather to call for a closer look at the role that the actual consumer goods play in different consumption "dynamics of doing, desire and demand" (Watson and Shove, 2008: 85).

⁶ It is important to note that by making these points Warde is not seeking to characterizing practice theory as a strictly individualist based approach. He takes pains to point out that practice theory allows consideration of individual pursuit of "use-values" in tandem with appreciation of

[&]quot;the role of meaning and understanding, know-how and judgment. The practice approach does not give 'culture' *more* than its due – the embodied, socially structured institutions which provide the parameters of the domains of action, and the location of social groups in space, keep the social and the cultural in the frame together (Warde, 2005: 147)."

Just as Watson and Shove (2008) propose that the materials and consumer goods of a practice play an active role, along with individuals, in shaping the activity arrays occurring within a specific practice, so should other non-human and nonmaterial aspects of the arrays, for example how, where and when the practices occur through space and time. For the practices of paragliding this means we must look not just at the equipment used (the material goods) and the pilots, but also the space through which it occurs and the temporal dimensions in which it unfolds. Since the activity occurs outdoors, the weather and the air, along with the physics of flight need to be also considered. Rantala et al (2011: 285) conclude in an ethnography on wilderness guiding in Finnish Lapland that weather "exerts a significant power in directing and redirecting human nature-based activities." As such, they point out that it is effectively a material entity in itself "involved in the enactment of various sociomaterial practices" (Rantala et al. 2011: 285). Thus weather has agency within a web of practices- constraining or extending possibilities. Combining this with the insights of Watson and Shove (2008) we can posit that such non-material "things" as the weather, air and physics join the list of the material "things and their use" that are involved in the practices of paragliding and which influence their configuration and distribution, and so by extension competency and proficiency.

Embodiment

EMBODIED COGNITION

Merleau-Ponty (1962) proposes a philosophy of embodied cognition in which the body is not merely a thing but the site of knowledge, via perception. It is the body that holds this role through the senses rather than the mind through consciousness. It is, a "permanent condition of experience, a constituent of the perceptual openness to the world" (Merleau-Ponty, 1962: 440). Rather than a supporting role in our understanding of the world, subsumed to the power of the conscious, rational mind, perception has the primary place in understanding. By extension, physical experience, through our bodies, has a primary place in this understanding:

"To be an embodied subject, then, is to be an active being, with needs which motivate actions and in relation to which elements in the surrounding environment are meaningful...to be embodied means that living in the world comes before conscious thought about the world: experience is 'pre-reflective' at base, and reflection concerns what is pre-reflectively given" (Merleau-Ponty as quoted in Matthews, 2006: 55-56).

Merleau-Ponty's philosophy is a critique Cartesian thinking that views the human body only as an object of physics (Matthews, 2006: 49-50). This is a way of thinking that doesn't ask why but instead concerns itself with underlying descriptive mechanics, such as what is found in empiricist, physics based explanations of phenomena. Merleau-Ponty (1962) uses the example of those that explain raising an arm in physiological terms as a series of interactions between the nerves and flesh, rather than via a description of the reasons and motivations for, or sensations involved in raising the arm. An analogous example from this study would be an attempt to explain involvement in risky-sports via measures of cortisol production. Merleau-Ponty believes we are held captive by our "neglect of what our ordinary, pre-reflective experience of reality tells us" (Matthews, 2006: 51). Consequently he advocates for a phenomenological approach to research that focuses on discovering and describing actual experiences rather than explaining them mechanically.

The implication of embodied cognition is that all of the senses – vision, hearing, taste, smell and touch mediate our experience of the world, even if the mediation occurs on a level apart from language or rational consciousness. For paragliding this is a particularly important concept, as it allows us to consider aspects of the practices of paragliding that are unimaginable within other theoretical orientations. Aspects of paragliding that exist in the domain of the practices' visual, tactile and aural routines or experiences include, for example, the feeling of being in

the air, of feeling the air on the skin, and the response of the glider to inputs. These aspects encompass many dimensions of experience that are either not normally utilized in daily, ground-based life, or the utilization of which we are not normally conscious. For example, the nauseating sensation of the body being jostled up and down in turbulence is conveyed to our consciousness via the workings of the inner ear, just as it does when you feel turbulence as a passenger in a jet plain. Training this inner ear to withstand and accept such stimuli is an unconscious part of a pilot's apprenticeship, achieved over one's time in the air.

THE BODY IN PRACTICE THEORY

Practice theory views routinized ways that bodies are moved as a component of practices and blurs the distinction between the "inside and outside of the mind and body," rejecting, as Merleau-Ponty (1962) does, their strict Cartesian separation because "a social practice consists of certain bodily *and* certain mental activities" (Reckwitz, 2005: 250-252). That is, "if somebody 'carries' (and 'carries out') a practice, he or she must take over both the bodily and the mental patterns that constitute the practice" (*Ibid*). Bodily-routinized performances are sites of the social, because practices are sites of the social.

Instead of being mere tools or instruments, bodies and their movements are an integral part of both learning and enacting the "interconnected complexes of behavioral acts" that make up practices (Reckwitz, 2005: 250-252). As Reckwitz points out:

"A social practice is the product of training the body in a certain way: when we learn a practice, we learn to be bodies in a certain way (and this means more than to 'use our bodies'). A practice can be understood as the regular, skillful 'performance' of (human) bodies" (Reckwitz, 2005: 251).

This is analogous to Merleau-Ponty's (1962) characterization of the role cognition through embodiment plays in our understanding of the world.

The body is thus critical to competence. The sociologist Wacquant (2004), an adherent of Bordieu's (1977) later conceptualization of habitus, focuses on the bodily aspect of competence in his study of Chicago inner city boxers, seeing competence as a critical element of their "body capital". He proposes that competence comes from painful apprenticeship, from bodily immersion in the routines and dynamics of the practice that end up not only shaping and transforming the physical, but also one's sensations, mental attitudes and desires (Wacquant, 2004, 2009). Without such embodied transformation a kinetic practice cannot be experienced. As Merleau-Ponty asserts: "I must have experience of the world before I can begin to develop knowledge of it and so develop a conception of an objective world" (Merleau-Ponty as quoted in Matthews, 2006: 51).

PLAY

Huizinga's (1938, 1971) influential theories on play offer a striking parallel to Merleau-Ponty. In his book *Homo Ludens*, Huizinga seeks to go beyond the rationalenlightenment idea of *Homo Sapiens* ("man the thinker") and the modernist ideal of *Homo Faber* ("man the maker") by drawing our attention to *Homo Ludens*, "man the player," to capture play, part of human life left out by those conceptualizations (Huizinga, 1938: 1). Huizinga describes play as:

"...a free activity standing quite consciously outside "ordinary" life as being "not serious," but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means" (1938: 107).

He goes on to outline five essential characteristics of play that strongly resemble Csikszentmihalyi's (1990, 2002) theory of flow: (1) freedom; (2) non-ordinary, superfluous and distinct from "real" life; (3) physically and temporally distinct from "ordinary" life; (4) order of its own; (5) apart from material interest and without profit (Huizinga, 1938). While in Schatzki's view "both social order and individuality ... result from practices," to Huizinga play prefigures both social order and culture (Schatzki, 1996 as cited in Warde, 2002; Huizinga, 1938).

Huizinga characterizes adult play, what he terms the "higher forms" of play, as functioning from two basic aspects: "as a contest for something or a representation of something" (1938:108). He combines these so that a game "represents a contest, or else becomes a contest for the best representation of something" (*Ibid*). Structuralist thinkers could easily interpret this to cast play as a dialective struggle over contested spaces of representation and narrative. However, Huizinga clarifies that by representation he means display or exhibition of "something naturally given, before an audience... the parading of something out of the ordinary and calculated to arouse admiration." If display is combined with activity "we have a performance, a stepping out of common reality into a higher order" (Huizinga, 1938). For example, tribal sacred performances are more than simple actualization, they are symbolic actualizations, but beyond that, mystical ones. Thus, play can be a conduit to mystical or spiritual experiences, as well as a time when one joins, via bodily enacted practices, in union with higher forces outside, of oneself.

Transformative Experiences

Research into transformative consumption experiences offers several alternates from which to consider risky sports. Within consumer culture theory (CCT) researchers have identified a broad range of models to characterize different transformative experiences that, like peak experiences, provide consumers with "turning points which lead to a change in self-concept and identity" (Dodson, 1996: 317). These have most often been identified as occurring through escape from the ordinary or application of developed skills to intense challenges. Arnould and Price

(1993: 25) characterize peak experience, peak performance, flow and extraordinary experience as all mapping "a special class of hedonic consumption activities" characterized as "intense, positive, intrinsically enjoyable experiences." The intense feelings of personal transformation in these experiences often leads to feelings of interpersonal connection to others, through communitas, or the incorporation into the extended self of the objects employed in the enactment of the experiences (Dodson, 1996).

Example transformative experience models include applications and iterations of Maslow's peak experience (Dodson, 1996), Privette's peak performance (Arnould and Price, 1993) and Abrahams' extraordinary experience (Arnould and Price, 1993; Coulter, 2006), as well as examinations of sacred consumption (Belk et al, 1989), spiritual leisure (Schmidt and Little, 2007). CCT researchers have drawn on related models from psychology and sociology, such as flow (Csikszentmihalyi, 1990, 2002) and edgework (Lyng, 1990, 2005). Interestingly, many models of transformative experience derive from research into risky, adventure or outdoor sports such as rock climbing (Csikszentmihalyi, 1990), skydiving (Celsi et al 1993; Lyng, 1990, 2005), river rafting (Arnould and Price, 1993), and mountain biking (Dodson, 1996), to name but a few. Practices have generally not been the intentional level of investigation in these studies, but are sometimes touched on within work with socio-cultural or phenomenological orientations.

Because the range of models is so broad, this review is limited to those deemed most relevant to a study of paragliding: flow and communitas. The model of high-risk leisure consumption as a dramatic struggle developed by Celsi, Rose and Leigh (1993) incorporates both of these concepts and is helpful in explaining both more deeply within a risk-sport setting. Accordingly this chapter starts with a review of Csikszentmihalyi's (1990, 2002) concept of flow, and then explores its application in the model of Celsi et al (1993). Then, the relation of flow to other extraordinary

experiences and the spiritual and sacred are discussed. The chapter closes with a closer look at communitas.

FLOW

Flow is the theory of optimal experience pioneered by the psychologist Mikhail Csikszentmihalyi (1990, 2002) in which ordered consciousness is produced through active engagement with the demands of a task, lifting "the course of life to a different level" (Csikszentmihalyi, 2002: 69). Working with a variety of athletes, from aficionados of high-risk sports such as rock climbing, to yoga enthusiasts and practitioners of other "riskless" activities such as art painting, Csikszentmihalyi found that successfully being able to deploy skills that one has achieved leads to relaxation, calm and a freedom from fear of failure. This generates a confidence in one's ability to minimize or contain risk, a paradoxical sense of the 'possibility' of control rather than the 'actuality of control' (Ibid: 60). According to Csikszentmihalyi everything we experience - joy, pain, interest, boredom etc. - is represented in our minds as information, and this information can be transformed through optimal experiences into a "sense of mastery - or perhaps better, a sense of *participation* in determining the content of life" (2002: 4-6). Csikszentmihalyi's flow theory informs studies across many disciplines, from interpretations of practice theory (Warde, 2005) to investigations of risk sports (Celsi et al, 1993).

An optimal experience is required for flow, and has nine distinguishing features (Csikszentmihalyi, 2002: 46-63):

- (1) We feel in control of our actions, "masters of our own fate".
- (2) There is achievement of the unexpected or unimagined.
- (3) It is induced by a challenging activity that requires skills.
- (4) The merging of action and awareness.

(5) Clear goals and immediate feedback. These can be invented or negotiated on the spot.

(6) Concentration of the task at hand such that one is conscious of only a very select range of awareness.

(7) A paradox of control in which one doesn't even worry about losing control.

(8) Loss of self-consciousness because there is no attention left over to consider anything beyond the present.

(9) Transformation of time through compression or expansion.

When combined these elements are experienced as flow, a state with deeply compelling and potentially addictive power in which one has a sense of "being in a world where entropy is suspended" (Csikszentmihalyi, 2002:61). When flow is produced:

"Alienation gives way to involvement, enjoyment replaces boredom, helplessness turns into a feeling of control, and psychic energy works to reinforce the sense of self, instead of being lost in the service of external goals. When experience is intrinsically rewarding life is justified in the present, instead of being held hostage to a hypothetical future gain" (Csikszentmihalyi, 2002: 69).

For these autotelic experiences the "doing itself is the reward" (Csikszentmihalyi, 2002: 67).

In order to achieve flow the skills of the person must be up to the task at hand – too difficult or too great of a challenge can produce frustration or fear. Instead, flow comes from an "endlessly complex symphony of mental and physical challenges" that completely absorbs one in deep, yet effortless involvement (Csikszentmihalyi, 2002: 50-53). This idea evokes a requirement for the embodied consciousness of Merleau-Ponty (1962) as well as a mastery of Schatzki's (2005) routinized bodily and mental activities of practices. In fact, Warde (2005) sees a

crucial link between achievement of flow and competency and proficiency in the tacit knowledge, explicit formulations and teleoaffective structures of a practice.

In the flow state one can gain a sense of union with "some Other", be it the physical environment, team members, an event, equipment, etc. (Csikszentmihalyi, 2002: 64). Stranger points out that flow is a common element in descriptions of the thrill felt during risk-taking leisure activities that "emphasize ecstatic feelings of oneness with the environment, the loss of self in the activity and an intense awareness of the moment" (1999: 268). This experience of transcendence has been credited with the formation of communitas among skydivers (Celsi et al, 1993) and bikers (Schouten and McAlexander, 1995). A sense of perceived bonds with equipment used when obtaining this flow has also been identified among mountain bikers, one so strong that the equipment is felt to be almost part of oneself, a sort of communitas with material objects (Dodson, 2006) and Harley bikers (Schouten and McAlexander, 1995).

Dramatic Struggle

Celsi, Rose and Leigh (1993) use skydiving to explore high-risk consumption, examining the dynamics of motivation, risk and benefits attained through participation. Their extended model of high-risk leisure consumption characterizes skydiving as living out a cultural drama of *agon* (scripted struggle), denouement (resolution of a complex situation) and catharsis (a sense of release of tension and anxiety) that releases oneself from the tensions of everyday life. At the macro environmental level, high-risk consumption is facilitated by mass media, social specialization and technology. Mass media cultivates and reinforces our culture's deeply seated, dramatic worldview. In these post-modern times this includes diffusion of images and tales of high-risk or extreme sports, making them known to wider audiences and positioning them within the realm of the possible. Social specialization of postindustrial society creates tension in peoples' lives between their desire for self-determination and autonomy and the reality of their daily working lives. Dramatic enculturation "primes individuals" to seek release from this tension through the "denouement" of play at the same time that this same alienating social specialization gives them the free time and income to pursue this release (Celsi et al, 1993: 4). At the same time technological improvements in equipment make the sport more affordable and safer, helping extend skydiving participation to a broader range of new jumpers.

In the final part of the Celsi et al (1993) model of high-risk consumption, skydivers' motives for participation evolve based on experience and degree of risk acculturation. While they initially try the sport to fulfill hedonic motives, e.g. thrill seeking, or due to normative influence, as they earn membership in skydiving's highrisk subculture and increase their skill, self-efficacy increasingly drives their ongoing participation. Celsi et al (1993) characterize efficacy as "a desire to develop technical skill for both personal satisfaction and social status within the sky-diving community" (Shoham et al, 2000: 12). The skydiving experience itself is marked by progressive, skill-based rites of passage such as initiations, surpassing student status, achieving 1000 jumps, etc. Throughout these experiences jumpers gain further acculturation and confidence. In this environment "perceived competence is a critical factor in social status" within the subculture's hierarchy of competence (Celsi et al, 1993: 7). Selfconstruction is possible for skydivers through their achievement and displays of skill. As involvement and competency increase, the urge to participate is marked by more transcendent motives: flow, communitas and phatic communication. In this model the desire to achieve flow is a type of higher-level hedonism.

Communitas is a feeling of camaraderie that happens when people share a "common bond of experience...that all participants consider special or 'sacred'" (Celsi et al, 1993: 12). For skydivers the common experience of skydiving, as well as

flow, provide the transcendence from the "mundane of everyday life" that unites jumpers who otherwise have little in common in terms of demographics or social class (*Ibid*). Communitas is discussed further in the final section of this literature review.

Phatic communion is special communication shared by members of the highrisk community that is not fully intelligible to outsiders. More than just specialized vocabulary, phatic communion is a combination of "shared experience and technical language that transcends translated meaning" (Celsi et al, 1993: 13). Identified by the anthropologist Malinowski this communication "transcends common understanding and gives fluidity and cohesion" to a subculture, particularly "members of liminal groups and subcultures who ... share ritualistic experiences" (*Ibid*).

Celsi et al (1993) provide a structuralist inspired interpretation of the high-risk experience that resembles Lyng's (1990, 2005) concept of edgework, a sociological model of voluntary engagement with risk. Edgework consists of a "dialectic of 'spontaneity and constraint' (Lyng, 2005: 21) in which engagement with activities at the 'edge' is a reaction to disenchantment with modern society. Lyng sees edgework as altering both self and time through negotiation of boundaries. As with Csikszentmihalyi's (1990, 2002) flow, edgework is characterized by altered perceptions of self and time, strong emotions such as fear, sensations of hyper reality and an "addictive high". Lyng proposes that the "intensely seductive character of the experience itself" is the answer to the "question of why anyone would risk their wellbeing to participate in activities that seem to offer no material rewards" (Laurendeau, 2006a: 386), a different answer to the same question that motivates Celsi et al (1993).

Celsi et al believe their model should generalize to other high-risk activities. Some avenues they suggest for researchers to extend or examine are, first, to look for "key transition variables" to reveal the "process dynamics of motive evolution, risk acculturation, and identity construction" (Celsi et al, 1993: 20). Shoham et al (2000) partially attempt this in their study on predictive variables for risk-sports participation described in the first chapter of the literature review, but they do not do much to dig into the dynamic processes between these and the components of the Celsi et al model. An alternate approach this would be to use practice theory to examine how the practices of skydiving are constituted, iterated, and perpetuated through the linkages between these aspects of the model.

Second, Celsi et al call for a comparison of high-risk consumption differences between people and contexts, asking:

"For instance, do the extremely varied physical and temporal contexts of scuba diving, high-altitude climbing, formula 1 racing, white-water kayaking, and skydiving produce identical, subtle, or perhaps highly varied experiences of flow, community, and identity construction?" (Celsi et al, 1993: 20)

From a practice theory perspective this is the natural question. Since each of these activities is constituted through its own practice-arrangement bundles or meshes, one first needs to ask if flow, communitas and identity construction are part of the practices of each; and then move from there into comparisons. Adding an embodied cognition perspective, it is reasonable to question if the different physical and temporal contexts of each activity engender different understandings, rules, teleoaffective structures and routinized behaviors.

Extraordinary experiences

Extraordinary experiences are a subset of hedonic consumption marked by "intense, positive, intrinsically enjoyable experiences" (Arnould & Price, 1993). Related to peak experience, peak performance and flow, Arnould and Price (1993) distinguish them by proposing that experiencing them does not require high levels of effort, specialized knowledge or training. Instead they can occur in a range of completely different settings that are experienced as unique and apart from a person's everyday world such as whitewater rafting (Arnould and Price, 1993) or attending

Broadway plays (Coulter, 2006). Extraordinary experiences provide an escape from the everyday by providing "temporary respite in liminoid spaces offering magic, communion, spiritual enrichment, and the sublime aura of the authentic" characteristic of the aesthetic (Thompson, cited by Coulter, 2006: 129).

Arnould and Price (1993) found that similar to skydiving, whitewater trips can offer "engineered" extraordinary experiences for clients that serve as a rite of passage, a rite of intensification and a rite or integration embodying deeply embedded cultural rituals. Whitewater rafters experience this escape through a carefully cultivated service encounter that immerses them in a narrative of "triumph over natural forces achieved through trust and mutual reliance" that leaves them with feelings of personal growth, self-renewal, communitas and harmony with nature (Arnould and Price, 1993). The guides produce magic for the client to whom the extraordinary experience feels spontaneous and unrehearsed. Although it is the guides' skills that produce the achievement, that of placing their clients in "challenging" situations and steering them through them so that the clients feel they have worked together to boldly "overcome" something, the participants experience this achievement in similar ways to the flow that the skydivers of Celsi et al (1993) achieve through successful application of hard earned competence. Arnould and Price characterize this as communitas through "mythohistorically oriented" performance, an interpretation that parallels Celsi et al's (1993) dramatic denouement and catharsis (Arnould and Price, 1993: 27). Interestingly, both studies were published in the same year.

Spiritual and Sacred

Belk et al assert that when it comes to the sacred, it can be found in a range of consumption experiences, not strictly those focused around risk, adventure or the outdoors:

"We take the sacred in the realm of consumption to refer to that which is regarded as more significant, powerful, and extraordinary than the self. Sacred occurrences may be ecstatic; they are self-transcending. Such selftranscending experiences may, but need not, be aided by a social context involving fellow believers who also revere the object or experience. The profane, by contrast, is ordinary and lacks the ability to induce ecstatic, selftranscending, extraordinary experiences" (1989: 13, emphasis added).

This description seems to mirror the transformative experiences of skydiving, flow, edgework and extraordinary experiences discussed above. Beyond the obvious link between personal transformation and transcendence, this points to a broad diffusion of sacred sensations in society. In fact Belk et al (1989) observe that the simultaneous "secularization of religion" and "sacralization of the ordinary" in contemporary life has led to a situation where, "anything can potentially become sacred" (Belk et al, 1989: 9). Rather than randomly assign sacredness to situations or things, distinctions of the sacred vs. the profane are played out "within common domains of experience" (*ibid*).

A sense of the sacred is highly personal. Sacred consumption can occur within or around "places, times, tangible things, intangibles, persons and experiences" (Belk et al (1989:9). In their findings they discuss it in such varied consumption settings as sightseeing and collecting. The objects of sacralization are bestowed with this sense through ritual, pilgrimage, quintessence, gift-giving, collecting, inheritance, or external sanction (Belk et al 1989:14).

Spiritual or transformative experiences are more commonly identified in the research as triggered by liminal moments. Belk and Costa (1988) find that liminal experiences unite people from diverse backgrounds around a common pursuit, allowing them to feel a sense of community. Schmidt and Little (2007) uncover four common triggers for spiritual leisure experiences: nature, newness and difference, challenge and ritual and tradition in habitual practices. The triggered responses range from emotion and sensation; struggle for control of the self and circumstance, or a loss or surrender of control; overcoming of personal limits, fears or negative self-image; and reflection and contemplation both during the activity and afterwards.

Looking at the sacred aspects of consumption Belk et al (1989) observe that society deems certain hobbies acceptable because they "focus one's life and seemingly make one happy" and link this to sacredness and the "apparent benefits to the individual from participating in the sacred as a means of giving one's life purpose" (Belk et al, 1989:31). Consider this in the context of the potential experience of the sacred by practitioners of risk-sports, on whose acceptability "society" is generally divided. Some researchers frame such activities as deviant, while others express more ambivalence at the same time that they still frame the activities studied as outside the norm or on the edge. Yet if a risky-sport activity were to be experienced as sacred so that it gave the participant's life focus, meaning, purpose and happiness, why shouldn't they be considered favorably by society?

COMMUNITAS

In the CCT literature communitas usually refers to the sense of community formed through shared rites of passage that transcend the mundane. Belk et al (1989) describe it as "a social anti-structure that frees participants from their normal social roles and statuses and instead engages them in a transcending camaraderie of status equality" (1989: 7, after Turner 1969). In their interpretation communitas is fostered when people are in "liminal," or between states, such as during a pilgrimage or initiation. Sharing ritual experiences generates a spirit of communitas that transcends everyday identities or social motives. Communitas has been found to be experienced between participants in a broad range of consumption contexts, including among skydivers (Celsi et al, 1993), whitewater rafters (Arnould and Price, 1993), Harley bikers (Schouten and McAlexander, 1995) and golfers (McGinnis and Gentry, 2004).

In the context of generating communitas, the definition of rites of passage gets stretched to refer to almost any transformative moment, even if not conceived as a rite of passage per se within the context of a given set of practices. According to Celsi et al (1989: 12), Turner describes communitas as "shared flow". This implies it can come from a feeling of union through mutual, shared moments of transcendence, or through recognition of shared direct knowledge of the same types of transcendence experiences. In fact, Celsi et al (1989) characterize communitas as transcendence at the level of group experience. As mentioned in the section on transformative experiences Celsi et al (1989) attribute the communitas they found among skydivers to the bond between jumpers created by "common knowledge of the flow experience". They further link communitas to phatic communication, "the special language that joins together" members of the skydiving community, and consider it an aspect of communitas (1989: 13).

While Turner's characterization, as cited by Celsi et al (1989: 12) emphasizes "shared flow", flow is not a requirement for communitas. Any experience experienced as liminal, ritual or transcendent should be able to generate feelings of communitas among participants. The whitewater rafters of Arnould and Price (1993), discussed in the section on transformative experience, are a good example.

RESEARCH DESIGN AND METHODOLOGY Analytical Framework

Schatzki's (2005) theory of practices forms the primary grounding for this study. Practice theory, discussed previously in the literature review, is an ontological approach between constructivism and structuralism on the one hand and phenomenology on the other. In practice theory social life is seen as tied to the context of practices in which it is inherently a part, and the "site of the social" is the "nexus of doing and sayings", routines of behavior consisting of interconnected elements including, "bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of

emotion and motivational knowledge" (Reckwitz, 2002: 249). As Warde summarizes: "Practice theories comprehend non-instrumentalist notions of conduct, both observing the role of routine on the one hand, and emotion, embodiment and desire on the other" (2005: 136). Thus, using practices as the unit of measure, rather than the individual or cultural unit, allows one to remain open to looking at both the inside and outside of the mind and body. Actions and decisions of individuals are contextualized within the "interconnected practice-arrangement bundles" that compose the particular social phenomena under study (Schatzki, 2005: 478). This allows for an examination of both individual pilot experiences, through their "bodily and mental patterns", in tandem with an examination of physical sites, shared actions and external group realities (Reckwitz, 2002: 250).

Practice theory was selected to overcome the limitations found in other theoretical approaches when it comes to exploring a phenomenon that can be viewed on so many levels: individual, social, cultural and kinetic. A phenomenological approach would give deep insights into the subjective "lived experience" of the pilots, but blocked off analysis of the external environment and actions influencing this lived Constructivist approaches such as discourse analysis or cultural experience. ethnography, while potentially helpful for illuminating dynamics of paragliding as a consumer subculture, felt artificial. When seeking to understand this high-risk phenomenon deeply it seemed counter productive to deny pilots their agency; and to ask that their internal experiences be ignored or subjugated to cultural forces. Further, a constructivist emphasis on identifying the influences of a dominant culture posed challenges for a small study of an international practice in which pilots from many dispersed cultures mix and came together to fly. In contrast, practice theory provides an outlook for fruitful openness to both the kinetic forms of the practice as it's observed, from single individuals across groups; to its lived experience, e.g. in pilots'

recollections of this kinetic experience; and its discourses, embedded in and evolving with the practice instead of leading or dominating it.

This greater liberty to examine a phenomenon from so many angles comes with its own downsides. One is the risk of inundation from the many facets of the practice-web. It is possible to get bogged down in the details and mechanics of the practices to minute levels, obscuring depth. When combined with the infinite replayability of videoed field observations that allow every gesture, movement through space, comment and interaction can be considered, reviewed, mapped and remapped by the researcher, it is possible to comb the material past the point of usefulness. Practice theory allows the researcher to embrace so many aspects of a phenomenon that it is easy to tempting to lose sight of the forest for the trees.

Research Design

According to Schatzki (2005) watching activities, interacting with and asking questions of participants, and learning their practices are the only way to access practices. Accordingly my research was designed as a fieldwork based videography, combining participant- and non-participant observation, along with semi-structured and open-ended interviews. Prior, personal lived experience of the practice as an intermediate paraglider pilot aided in the planning of the fieldwork, and was crucial during its execution. Wacquant asserts that that when studying corporeal and kinetic practices:

"... There is nothing better than initiatory immersion and even *moral and sensual conversion* to the cosmos under investigation, construed as a technique of observation and analysis that, on the express condition that it be theoretically armed, makes it possible for the sociologist to appropriate in and through practice the cognitive, aesthetic, ethical, and cognitive schemata that those who inhabit that cosmos engage in their everyday deeds (2004: vii-viii)."

Accordingly, rather than biasing my study, my prior, lived experience with the practice enhanced my research. It allowed for a faster "ramp up" time for the study, providing many years of initial, exploratory introduction to the topic, especially when it came to the selection of sites and research subjects. Prior experience proved essential for deeper interaction and shared understandings with study participants, yet was balanced by conscious efforts to re-immerse myself in the experience in the mode of a theoretically informed ethnographer trying to view all as strange and new.

Because a practice is a type of behaving and understanding that appears at different locales, at different points of time, by different body/minds (Reckwitz 2002) my fieldwork took a multi-site approach and occurred in stages: preliminary fieldwork in Southern California to narrow down the research objective; an intensive stage shadowing and observing a group of American pilots flying in France; then additional observation and interviews of pilots at sites in Finland, Slovenia, Austria, and the U.S. This multi-site approach suits a weather dependent sport whose participants travel from location to location according to where seasonal conditions are best. To observe and participate in the practice I had to move as it moved.

The fieldwork was documented via video, photographs, field notes and personal journals. Secondary sources are used as supplementary materials. The results are delivered via this paper.

VIDEOGRAPHY

Because videography allows the researcher to visually document and share practices in action, instead of just post-hoc recollections of action, it is an excellent complement to a practice theory approach. It is especially useful for capturing tacit elements of a complex web of practices that may go unobserved or otherwise get lost from conscious attention in the "heat of the moment". They may then later be repeatedly viewed and reviewed with more leisure, allowing the opportunity to focus on only one aspect of the practice per viewing, or to step back and "relive" moments of the fieldwork with the advantage of distance. This helps produce a broader view, allowing the observation of connections, contradictions and inter-linkages. Use of video in this manner supports an open coding, inductive approach, such as those associated with grounded theory or ad hoc analysis methods (Kvale & Brinkmann, 2009).

Belk and Kozinets (2005) discuss several possible risks inherent to videographic data. Beyond the usual disruptive effects the presence of any researcher may cause, a video camera can be more intrusive and disruptive than a tape recorder or note taking, causing subjects to be more self-conscious or inhibited. This can happen both in interviews as well as when capturing subjects engaging in practices of interest. The camera may also stimulate "conspicuous self-presentation" in front of researchers who come from the subject's own social sphere (Belk and Kozinets 2005, p. 131). One example is the possibility of strutting and self-styling for the camera, especially in this day of YouTube and reality TV. Belk and Kozinets (2005) identify "Broadcast yourself" as a contemporary cultural zeitgeist and refer to Kozinets et al's (2004) theorizing of an "obverse panopticon" in their study of consumers at ESPN Zone.

Another potential issue with videography in practice theory driven research is the quantity of material that it allows one to produce. Combining fieldwork videos, i.e. videos of people in action, with taped, video interviews, i.e. videos of people recalling or talking about action, more than triples the normal transcription burden of audio-taped interviews and goes beyond the already substantial processing time for video-taped interviews alone. When one is interested more in the words that subjects say, *e.g.* in an analysis of their narratives, this extra material would be too burdensome (Kvale & Brinkmann, 2009: 179). On the other hand, when one is studying practices, the burden of working with the extra material collected can be offset by the advantages it offers for post-hoc analysis of interactions between people as well as those between people and things or people and places.

Description of the Research Activity

FIELDWORK

As mentioned above the fieldwork occurred at multiple sites. It was also characterized by interaction with a variety of pilots with different skill levels, years of experience and preferred sub-practices, nationalities and native languages. I observed and interviewed beginners to experts; recreational pilots, instructors and pros; tandem-, acro-, comp- and cross country- pilots. I had flown and formed friendships with some of these pilots in my prior active flying days, while I met or was introduced to others through flying friends. Yet others I met during the course of the fieldwork.

The Main Sites

Torrey Pines Gliderport

The preliminary fieldwork at Torrey Pines Gliderport in La Jolla, California in June 2009 narrowed down the research objective and allowed for practice in the field with the video equipment. I selected Torrey Pines for familiarity, convenience and site status. Torrey is probably the best-known coastal ridge site in the U.S. and is also where I learned to fly. I was already headed to the region to see family, so the location was convenient. Torrey is known for extremely easy access, consistently good weather and regular flying conditions, making me confident that there would be pilots flying during the two days when I was briefly able to visit. Having spent several years flying the site I was familiar with the layout, conditions, owners, and some of the local instructors and pilots. In addition to interviewing an instructor pilot there that I already knew, I gained access to other pilots I did not know through introductions from a pilot with whom I had been a student. This established my credibility as a fellow paraglider even though I didn't have my gear with me, and these pilots never saw me fly. Torrey is a site that attracts a lot of non-flying spectators, with clearly demarcated access areas for each, and tourists commonly pestering pilots with questions, so this endorsement was important for access to the pilot area and pilots to trust me enough to talk openly.

Annecy, France

The main fieldwork occurred in July 2009 as an intensive stage travelling for a week with a group of American pilots flying in an organized tour of the Haute-Savoie region of France, centered mainly around the town of Annecy. The name Annecy is often used by visiting pilot to refer to a broader region that stretches all the way up to Chamonix. Across this range multiple flying sites attract paragliding pilgrims from around the world drawn to legendary thermal development and excellent, friendly terrain for cross-country flying. The region's place in paragliding history, stories, images, videos and magazines has also contributed to a legendary status. Access to most sites is fairly easy, and there are satisfying flying opportunities for all levels of pilots. There is a well-developed paragliding related commercial infrastructure consisting of flying schools, guiding services, equipment shops, gear repair and specialized accommodation such as flying hostels adjacent to key sites.

Eagle Paragliding, a Santa Barbara, California, based school, organized the tour. I had never previously met or flown with any of the pilots or guides on the tour. I was introduced to the lead instructor and guide through an old friend who had previously guided with him. I was able to join the group and film it in exchange for paying my accommodation and meals and for making a short promotional video. During the research I lived with the pilots at their lodge, ate all meals with them, travelled with them in the group van, and joined them at their launches and landings. I also joined them as a tandem passenger for a glacier flight. The glacier trip turned

out to be an extra-ordinary experience for these American pilots and a highlight of the trip.

The Eagle trip was marketed as a guided cross country flying trip in the French Alps, so my intent was to focus on the experience of advanced-intermediate cross country practices. In the end the pilots' skill levels were mixed: one was a complete beginner, two were novices, one was a rusty intermediate and two were advanced intermediate pilots. This mix converted the trip into three parts: an introduction to thermalling for the novices, a skills refresher for the intermediate pilot, and a guided cross country flying experience for the more advanced pilots. The first two resulted in active coaching, instruction and sometimes intervention from the trip leader, while the later benefited from the inside knowledge of the local flying environment provided by the local guide. In addition, two American friends of the trip organizer, intermediate pilots and former students, stayed at the same lodge on a self-supported trip, periodically flying and socializing with the group.

Other sites

Additional data was collected at flying sites in Slovenia, Austria, Germany and the U.S. This included observation of a traditional format paragliding competition, as well as of a unique, multi-day, 850 km. paragliding 'adventure' race, including preparation by athletes and organizers and the first day of the actual event. During these events brief, short interviews were conducted with pilots and supporters when possible. This brought more, highly experienced pilots into the sample. These informants provided some of the most insightful comments, perhaps because many of them were sponsored and more relaxed speaking on camera or doing interviews, or possibly because after fifteen to twenty plus years in the sport they are more able to articulate their experiences. Participant observation also occurred in Finland on an ongoing basis during 2008 and 2009. This involved mainly flying at the sites used by the club with which I have been affiliated (Lahti Ultra Team), but also included investigating possible new flying sites in Southern Finland with a small group of friends. To clarify however, I was not myself an active pilot from the time of the primary research through to the writing of the results, and was not "current", having stopped practicing the sport regularly.

MATERIAL COLLECTED

Data collection occurred in intermittent stages over three years. During 270 hours of fieldwork observation I recorded over 14 hours of video of pilots in action, interviewed 34 pilots, took over 200 photographs, wrote a combined 40 pages, typed, in field notes and journaling of personal reflections. About a third of the interviews were longer and semi-structured. The rest were short mini-interviews. To supplement my primary material, I reviewed numerous artifacts and secondary materials such as articles, books and blogs written by pilots, regional site guides, competition announcements, video and print advertisements, and commercial and hobbyist videos.

In parallel to my own videotaping during the Annecy fieldwork, two of the pilots in the American group also videotaped their experiences for fun. Analysis extended to some of their videos, along with some of the online slideshows and photo albums created by other participants. This additional material captures the subjects' own point of view, allowing the opportunity to combine reflections on "perspectives of action" (pilots talking about flying practices), "perspectives in action" (footage of people engaged in the practices), and points of view of the action (pilots' own documentation of the practices) into the analysis process (Belk and Kozinets 2005 after Snow and Anderson 1987).

SAMPLING

The choice of the sites is discussed above, in the fieldwork description. At each site selection of pilots to interview was primarily access based and depended on who was available and willing to be interviewed. As mentioned, access was facilitated by existing personal relationships with instructors, pilots and guides. In some cases these people were also interviewed, or they just gave me referrals to others. When showing up at different sites, access was maximized as much as possible with those that I didn't already know by working with a pilot who could 'endorse' my presence, for example the local pilot at Torrey Pines and the lead Eagle guide. This helped secure casual interactions with possible subjects, for example conversations at launches, while traveling or during meals, that established trust and helped gain access to interviews. Since I videotaped all the interviews, trust was an especially important factor for camera shy pilots. Still, I was unable to obtain formal interviews with several pilots who refused on-camera interviews, although they were willing to answer my questions during casual conversations, and were o.k. being filmed in action both when engaged in flying practices, as well as during the often bawdy socializing when away from the flying sites.

Beyond access, interview subjects were chosen in order to hear about the experiences of pilots at a variety of skill levels and nationalities. During the shorter, impromptu interviews, sampling was also opportunistic. While at launches or during the competitions I approached pilots who looked un-occupied, for example while they were waiting for conditions to improve. I also looked for signs of experience or skill, such as type of wing or harness or type of helmet, along with signs of involvement, for example brands worn or clothes worn for flying, to decide whom to approach. Similarly, I listened for the languages that pilots spoke together and looked for markings denoting nationality, such as flag patches sewn to equipment, to identify

pilots from different countries, and then spoke with those with whom communication was possible in some common language.

ANALYSIS

The analysis process employed an ad hoc, bricolage method enhanced with theoretical reading techniques. According to Kvale and Brinkmann a bricolage technique is an alterative to more systematic methods such as categorization and conversation analysis that allows the researcher to move "freely between different analytic techniques and concepts" in order to generate meaning (2009: 233). I believe such an eclectic style of analysis is suited to my practice theory approach, because it allows one to remain apart from the underlying structuralist or individualist biases that would be introduced by strictly following a more conventional method of data analysis. For example, adhering to a strict phenomenological method of meaning condensation would preclude analysis of the footage of the practices of paragliders in action, as well as a probing for any signs of the teleoaffective structures that describe what is acceptable or prescribed in any practice. Similarly a strict discourse analysis would preclude considering the phenomenological, felt experience of the pilots.

The ad hoc analysis was iterative and employed coding, grouping, contrasts and comparisons, along with noting inter-relations and dependencies between themes in order to see "what's there" (Kvale and Brinkmann, 2009: 234). First, the video footage collected was downloaded into a video editing program and logged by site, setting, date and type (interview or action). Second, having sorted out the interviews from the footage of people in action, I transcribed all the interviews. Each interview transcript was reviewed and summarized into main themes and topics mentioned by the subjects, which were compared to my impressions noted in the field diaries. The interview summaries were further coded to mark off themes from existing literature. From these reviews a common set of themes or contrasts between the respondents was developed.

Third, using this set of themes as a guideline I then went back to review each video in detail, transcribing the dialogue and action shown and coding each clip according to the types of practices shown, themes evidenced and any contradictions revealed. The transcripts of the action videos were organized by day and time and served as a different kind of field diary. These were read and re-read, comparing them to my original field diaries and interview reviews.

Fourth, the themes from the clips were compared to the interview reviews to see where the images in actions reinforced or contrasted the participant comments and where they brought out new themes. In several instances reviewing footage for a series of incidents described in an interview, and then re-watching the interview, brought to light notable points I had missed while conducting the interview or in my initial review of its transcript. This allowed further comparison and triangulation. All this occurred along with re-reviews and new readings in the literature until a saturation point was reached.

During the above process an attempt was made to repeatedly re-read each interview and select footage transcripts through different theoretical lenses, to conduct theoretical readings in the manner of Lather as described in Kvale and Brinkmann (2009: 235-237). The initial coding followed a realist reading that was observational and descriptive in which the goal was to "search for the 'native's' point of view" in which the themes touched on by each respondent were indexed (*Ibid*: 236). Then followed a critical reading in which the transcripts were re-read in order to probe beneath what was strictly said. Lather describes critical reading as a demystifying via a "hermeneutics of suspicion" in which one seeks to identify and probe beneath hegemonic discourses in order to call "attention to larger social, political, and economic issues" (*Ibid*). Since this ontological orientation is biased towards

structuralism and is not totally inline with a practice theory approach, a search for evidence of hegemonic discourses was substituted with a search for underlying themes resonant with the literature of practices, risk, flow and consumer culture. Finally, a deconstructive reading was done on select interviews and action transcripts to look for "unconscious silences and unspoken assumptions" (Kvale and Brinkmann, 2009: 236). This is where videography was particularly valuable. While these are easy to denote and review in an interview transcript, when they occur in the "real life" of the field, in the moments of the practices, they are particularly hard to catch and note in a field diary.

REFLECTIONS ON THE INTERVIEW PROCESS

Acceptance and Legitimacy to the Fieldwork Informants

Being known as a fellow pilot was critical in order to gain access to the pilots. Those who didn't previously know me never saw me actually solo fly, taking my pilot status on faith either from the endorsement of another pilot; or by my ability to understand their gear and what they were doing and ability to converse with them. I did not solo fly during the fieldwork, but did take many tandem flights, in order to film the practice in the air and refresh myself, in a bystander fashion, to some of its sensations.

Overall, endorsement was an advantage: pilots felt comfortable talking to me as a fellow pilot and able to talk about flying as they normally would, with all their specialized vocabulary, slang and hand gestures, without the need to simplify or explain as to an outsider. For some pilots, after overcoming their initial hesitation over being filmed, this meant they were comfortable preparing their gear, launching, flying and landing under my gaze without fear that I would get in the way, nor feeling they had to explain everything as if on stage performing to a tourist. Pilots commonly watch and are watched by other pilots.

On the other hand, insider status made it harder to discuss the subject in fresh ways that would always "make it strange." My status led conversations in certain directions, potentially missing enlightening avenues that a researcher completely new to the topic might broach. Another issue was degree of perceived skill. As with most sports, in paragliding higher skill engenders more respect and possibly higher authority. Since the pilots never saw me fly on my own, they were left to judge my skill level via other cues, such as years spent flying, who I was friends with/knew in flying, or how I well I could follow and participate in conversations on flying. In some cases I felt that this led to moments of "cultural asymmetry" (Bordieu, 1977) in which the more novice pilots attributed a higher skill or status to me than I truly deserved, leading them to possibly self-censor, screen their comments, or express themselves in expected phrases or scripts (Kvale and Brinkmann, 2009: 103). It also made it difficult later when evaluating certain nuances in taped conversations. Was a novice pilot defensive when recounting an aspect of a launch, landing or flight because they felt I was a better pilot judging them? Was it instead evidence of frustration? Or was it simply their personality? Or did such attitudes point to an area needing more investigation? Another risk of my perceived status was that some questions could come off with loaded meanings. For example, asking someone's pilot rating and wing type can be a loaded question because these potentially signify competence and thus status, and so might be perceived as an attempt to establish relative position.

Issues of communication and language

Language affected the research in several ways. First, language issues affected sampling. Most interviews were conducted in English, but in a few cases they were conducted in the pilots' own languages, *e.g.* Spanish, French and Romanian, in the later two cases with a translator. Initial conversation was used to screen pilots for

ease of communication in the common language. Overall, interpreted interviews were avoided, because of availability and potential research complications. However, I did interview two pilots with an interpreter because they were high-level pilots with distinct skills whom I wanted to hear from, and a third pilot was available to translate.

Second, language affected the quality of the interviews. With the recreational pilots it was easier to feel the discussion was going deeper when we shared the same language. Since, many aspects of the sport are non-verbal, it appears that the newer one is to the sport, the harder it is to verbalize these aspects. The more expert pilots, in contrast, showed more experience discussing various aspects of the sport, perhaps because many work as professional instructors or test pilots. However, they also at times showed a polish that hinted at experience with interviews and the possible repeating of well-practiced sayings and anecdotes.

Third, language and culture, in addition to weather, the reason the research was not based in Finland, although some Finnish pilots were interviewed during competitions in Central Europe. Although it is easy to hold basic discussions in English with the pilots in my Finnish club, in past interactions many club pilots appeared uncomfortable and self-conscious when conversations would turn to English. Because I don't speak Finnish well enough to conduct interviews in Finnish, I felt I could not discuss the flying experience deeply enough with these Finnish pilots. I also suspected the pilots would be more self-conscious than normal if interviewed in English, which would be a barrier to a free discussion. This is always a potential issue for interviews conducted in an informant's second language, but this was felt to be a greater obstacle with the Finnish pilots. The self-effacement and shyness common in Finnish culture combined with the video camera exasperated this issue. It is interesting to note that there were never other people videoing the flying at the Lahti site in Finland during my fieldwork, unlike at the American and Central

European sites where video cameras were very common among both pilots and spectators.

FINDINGS

Format

This section describes a selection of the key findings generated in this research. There is not enough space to cover all of the findings uncovered, so I attempt to focus on the most relevant ones.

The findings are organized in an experimental collage fashion that may be unfamiliar to the reader. By collage I mean a layered technique interspersing varied styles of descriptive representations of the practices (Kvale and Brinkmann, 2009: 288). The methodological emphasis of this research is to return to a deep absorption into paragliding in order to capture its web of practices so as to generate insights with fresh eyes. To complement this approach, the findings are presented in a way chosen to better situate the reader within a first hand context of the web of paragliding practices, the settings, sights, sounds and tactile sensations, while still maintaining the distance of an analytical discussion. Accordingly, this section layers a simulated, narrative field journal of the practices of paragliding, consisting of a thick-description, images, quotes from the pilots, and excerpts from the filmed material and other primary sources, between a more conventional, academic expository analysis. The text of the thick description is italicized to distinguish it from the more explicitly analytical presentation of the findings.

This collage approach is inspired by narrative interspersion, an expository method described by Ball (1992) in which implicitly linked, rather than topically ordered, segments are interwoven through a theme. The narrative of the simulated field journal follows a temporal order, while the interwoven academic analysis proceeds in topical one, sometimes picking up on themes implicitly presented in the proceeding thick description. Rather than confuse, it is hoped that this format will hope over come the limits for succinctly conveying the spatial, temporal, and bodily actions of a practice, that words impose - especially our ability to "view", extract and present its tacit dimensions.

Journal of Practices, Part I - Morning

Annecy, France: Saturday

ARRIVAL

Finally the weather forecast is good: post-frontal and unstable, but thermic, soarable - good for cross country. A break from the over-developed conditions, difficult wind, dramatic thunder, and rain showers of the past few days. Montmin (aka Forclaz), Annecy's best known launch, is buzzing with activity as pilots swarm in after three frustrating days of poor to unflyable weather. Every fifteen minutes or so another wave of pilots comes slowly marching single file up the path from the parking lot as another van driver drops off his group. Unlucky solo travellers without the expensive access card to the parking lot gate have walked all the way up from Col de la Forclaz, sweating in the heat and under the weight of their packs, silently cursing, "10 minutes- like hell!"



Figure 11 A wave of pilots arrive at Montmin.

The pilots walk slowly, deliberately, lined up single file or in twos, trudging up the steep, rocky dirt path under the weight of variously sized backpacks – from barely larger than a trekking rucksack to humongous, fat sacks kept in motion by a dwarfed and bowed pilot. Some are deep in concentration, others, lighter on their feet, chat or look around. Interspersed among the pilots are fleet-footed hikers, tourists, tandem passengers, instructors and onlookers. Sometimes the march of pilots splits into two lines like a forked stream converging on the same destination: Forclaz, this mecca - one of France's most well-known launches, one of Europe's most popular paragliding sites, a launch of legend.

Visiting pilots worry if the forecast will really hold. Many are in Annecy only for a few days, a week, ten days, perhaps their sole vacation this year, or a quick stop on a rapid-fire tour of the legendary European sites. With each additional day of unflyable weather, these pilgrims feel increasing frustration at lost airtime and pressure to salvage their trip. Pilots from Japan, the U.S., South America, Denmark, Switzerland, Germany, Netherlands and Hungary, and French weekend warriors in by train from Paris crowd in on the locals, all sharing this same preoccupation.

Only the most privileged of locals, the professional and semi-professional pilots and unemployed, flying "dirtbags" with no fixed demands on their time, stroll

up to launch with an unconcern air. These pilots know that if the "meteo" doesn't favor they can come back another day, their year is full of ample flying days. Many fly so much anyway they wouldn't have bothered to turn up if they weren't confident that it's going to be good. As the guide says, "If it wasn't crowded, we wouldn't be here."

As the pilots arrive a growing row of set up hang gliders on the grassy, slanting ground, greets them along the trees to their right. Arriving pilots scan the scene in heady excitement, daunted awe or efficient intent. First timers can't help commenting on the huge launch area, perhaps many times the size of their home hill.

THE SITE

- Col de la Forclaz Montmin
- **Practices**: Delta, Parapente
- Orientation: West

- **GPS**: 45°48'50"N 06°14'48"E
 - Altitude: 1240m



Figure 12 Col de Forclaz (Montmin) launch (D) & Doussard landing (A) (Google Maps)

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- Access: From Annecy head towards Talloire to le Col de la Forclaz, or from Doussard towards Vesonne to le Col de la Forclaz. Locked gate. 10 minute walk by foot.
- **Observation**: Best panorama around the lake. Very regular conditions. Easy departure for most classic flights (Cross & SIV). This takeoff should be avoided in case of strong south winds.
- **Regulation**: Please consult information panel at takeoff. Presence of a responsible in charge of regulation during Spring and Autumn WE, all days during July and August. Prepare your wing outside of the carpet, using the space available above. Hang-gliders are taking-off using the left area (towards lake), and as they need to reach this place without problems, paragliders have to leave free all the left ridge. Re-landing is prohibited at takeoff. Please leave the airspace free in front of takeoff.

(Les Clubs du Pays du Mont-Blanc, 2009)

The launch area is a very large hillside clearing of grass, dirt and carpeting ringed by pine trees along the back and dense bushes on two sides. A dirt path bisects the clearing, marking off front from back: set up area from the downward sloping launch "apron". Beyond this more grass, already dotted with pilots, then trees, paths and the gulley. The zones on the lakeside of the path are all reserved for launching. This includes the apron, a huge, softly sloping area luxuriously covered in fake grass. It's been recently 'improved': cleared of rocks and pebbles and graded to a perfect, evenly sloping launch angle and smooth, ankle protecting perfection. At peak capacity and straight-in conditions it holds three rows of set up gliders set up and ready to launch in two to three columns. To the left the fake grass gives way to a gravel-covered slope, from which pilots can also pull up their gliders. A prominent windsock stands like a sentinel at the edge of the gravel. A second wind indicator, a streamer, is planted on the far side of the fake grass. The wind direction is perfect when both of these blow straight in, perpendicular to the cliff line, minimizing turbulence from the trees around the take off.

Scanning the launch as they arrive, pilots break off from the pack, claiming a piece of ground on which to unfurl their wing and set up their gear. The locals and more advanced pilots quickly grab the best spots covered in artificial grass right

behind launch where there will be no worries about abrasion to the canopy from rocks and roots, stains from grass, or snagging the lines on branches.



Figure 13 Setting up above the launch apron at Montmin.

Others, especially groups of novice pilots or tour groups of pilots from far off countries, continue on, setting off for the dirt and persistent clumps of grass in the clearing beyond the launch apron. They drop their giant, rounded or rectangular packs and clump together, recovering their breath and reviewing the scene.

PARAWAITING

"Sacrifices prepare one to commune with the sacred, bring about a strong degree of commitment to sacred experience, and indicate appropriate deference to reinforce the extraordinary character of the sacred." (Belk et al, 1989: 7)

It is early yet for good thermals. Rather than risk a sled ride and the hassle of getting back to the launch, most pilots hold back from launching and settle in to wait for the weather to develop, for just the right conditions for good, steady lift. Others hang back because they are hesitant, nervously contemplating their first flights from this site and intimidated by the buzzing scene. This site, likely many times larger than their home site with crowds to match, is sloped and broad like an amphitheater with the apron its stage: a challenging setting for a nervous pilot or faint-of-heart novice to ignore the crowd and focus on the air and their routines.

With nothing to do waiting pilots enter the sport's liminal state – parawaiting.

Parawaiting is a recurring ordeal. A purgatory spent waiting for the weather to favor the pilot. Pilots bound up to a launch excited and eager, ready to go, heart rate up from the approach, only to be usually confronted by an unwilling window. Air too light. Air in the wrong direction. Air too scary and strong. No matter the cause, it is out of your control. There is nothing to do but wait, watch the windsock, wishing, praying or cursing it to take shape in the right direction. Wait and wait, perhaps for hours or the whole day. An energy-sucking interval of boredom in which a nervous or doubting pilot may lose all their nerve and a more experienced one their focus.

Hasty pilots may try to assert their intent to fly over the weather's will, but they are soon dealt a lesson. At the best, they launch into dead air or sink, left to glide down and hope they make the landing. At worst, they launch into unstable, angry air and end up fighting to fly, battered about, their wings deflating or collapsing, pitching and twisting, struggling to keep from hitting a tree, ridge or the ground. That is, if they are able to launch at all. Testing the wind, some don't even make it off the cliff before they are blown to the side into a bush, a tree, or dragged across the launch apron like small trash carried off by a breeze.

Rather than become the day's "hero to zero", pilots wait. This is the time to get oriented to new sites with a site review, check one's gear, snack, nap, chat and joke and tell tall tales, watch the weather or amuse oneself watching the other pilots. Guides, instructors, friends or random pilots occupy some of the time by pointing out the prevailing winds, the local geography, key points and popular cross country routes. Local etiquette for set-up and launching, traffic rules for soaring the ridge off of launch, and common sites for rotor along the apron are discussed.



Figure 14 Typical parawaiting routines (clockwise): socializing, staring at/cursing the weather, site briefs, napping.

In this interval of relative non-activity a roving videographer is able to interview pilots on the reasons for their initial involvement with flying.

Motivations for Participation

Contrary to what may be implied by popular, as well as academic, perception, pilots are not necessarily drawn to paragliding in search of deviant thrill (Shoham et al 1998, 2000; Tator, 2011), rebellion from society (Lyng, 1990), or out of a desire to confront fear or prove oneself against death (Celsi et al 1993). During the fieldwork three frequent types of motivations to try the sport emerged from current pilots: a long-standing dream to fly, introduction by friends or family, or an impulse to try it after seeing it.

Realizing a Dream

Pilots frequently mentioned paragliding as fulfilling some long-held dream, usually involving childhood dreams or visions of flying. These pilots characterized flying as something they had always wanted to do:

"Flying it's something, it always was in my mind or was in me, as a little boy when I walked around I visualized myself 300 feet higher in the air and just looking down." (FM, German born Canadian expert paraglider and licensed single-engine pilot)

"You know I had a lot of dreams when I was a kid about flying. And, I had my own helicopter in my dreams, and I would cruise all my friends around. (chuckles) And I did the Superman thing sometimes, flying around." (SR, American instructor)

"I was ... dreaming about flying when I was little boy. And, when this sport came across, I saw that this was the most easiest way: the cheapest and the most close to the nature." (Aleš, Slovenian intermediate pilot)

Often these types of pilots mentioned arriving at paragliding after exploring other aerial practices, for example skydiving, hang gliding or single-engine flying. Some kept current licenses to pilot various kinds of aircraft, and saw each as a specific tool for different conditions. Others now devote themselves strictly to paragliding. For one Danish pilot, paragliding was a replacement for his ambitions to be a commercial pilot abandoned for family reasons: "I can do this in my, ah, free time, so I'm still some kind of pilot."

Friends, Family

For some normative influence played a role in starting, similar to Celsi et al (1993). Often it is a tandem from a friend, family member or commercial operation that sparks a desire and need to fly. As one female Swiss competition pilot whose brothers also compete said, "One (brother) took me on a tandem. And so, I got addicted!"

Unlike in Celsi et al however, this is not a "lets try it together" pact between friends that leads skydivers to organize their first jumping outings for thrills or bonding events like bachelor's parties, or because they'd be too scared to try it alone. Instead, several paragliders mentioned starting because their parents or siblings flew hang gliders (older pilots) or paragliders (younger pilots). For example, during the fieldwork I spoke with two different father-son pairs of visiting pilots on holiday, two separate young acro pilots whose fathers owned a paragliding school, and several families in the business of instructing, tandem flying or selling flying equipment. For these pilots, particularly for those growing up in Alpine paragliding hubs, flying is a normal activity, a family thing, a local sport, or even a common employer; and it is common to find paragliders starting in their teens. This isn't to say that this normalcy denies the sport's dangers, but rather that in these contexts participation is not exotic, rebellious, nor necessarily an escape from family nor daily working life.

Saw it, Had to Try It

Many pilots said they did not know that paragliding existed until it suddenly came to their notice and captured their imagination, after which they were seduced.

"I looked down [from a mountain] and I saw a bunch of what looked like parachutes, you know a bunch of people that looked like they were skydiving...I didn't know anything about paragliding, so I drove down here, took a tandem that day, and I was like (shakes head indicating hooked). It was just the most awesome feeling being out over the ocean, um, you know, you know the whole thing: the wind in your hair, and just the feeling of being up in the air and free, you know. Just an awesome feeling." (BT, American intermediate pilot)

Another pilot mentioned walking along the beach and upon seeing people fly overhead having the feeling of having to find out what that is and try it. A variation of this motivation for participation was a pilot who has dedicated his life – his employment and leisure - to paragliding who said that he was initially not interested in paragliding but took it up after several weeks watching pilots fly because the "beauty of it, the flow of it kind of took me in" (GN, American comp pilot, instructor and paragliding journalist).

Belk et al (1989:7) observe that: "Individual commitment to the sacred is so strong that initial experience with the sacred may result in conversion - an identity change resulting in an unshakable conviction." It was common for the interviewed pilots to have made a life commitment based on their first experiences.

"When I started I was ... in central France ... just travelling and I saw lots of guys flying and it looked very nice for- I started like this and, I'm still flying 17 years after." (MF, French recreational pilot)

"From the day I discovered the paragliding I stopped everything [I] just do that." (PM, French paragliding coach)

For PM this meant giving up all his other outdoor or adventure sports. The list of prior sports mentioned by paragliders was varied and included activities such as kayaking, mountaineering, rock climbing, skydiving, sailing and scuba diving. Other pilots mentioned prioritizing paragliding yet maintain involvement in, *e.g.* skiing, kiting, sailing or snowboarding, reserving those others particularly for days when conditions weren't flyable.

Adrenaline

Counter to popular image, most pilots denied being in the sport for an adrenaline rush, though adrenaline is acknowledged to sometimes (but not always) be a part of the experience or an initial motivation⁷. Instead different aspects of the experience, such as relaxation, natural experience or play, sustained these pilots' involvement.

"Um, in this sport I don't get an adrenaline rush, I get more of a relaxation which is totally opposite of what I thought. Turns out to be a really nice complement for ah, ending the day or, you know, relaxing." (DB, American advanced-intermediate recreational pilot)

⁷ It should be emphasized that all but one of the pilots interviewed were pilots focused on the "standard" paragliding practices described in the background chapter on the sport, rather than acro pilots.

This informant DB is a former skydiver who took up that sport for the adrenaline, but switched to paragliding as an alternative to the constraints of that sport, *e.g.* dependence on planes, cost, and short airtime. His surprise at not finding adrenaline in paragliding perhaps shows that he entered it initially imbued with teleoaffective structures from a different set of practices (skydiving), only to find that the emphasis in adrenaline from that practice array did not suit this new experience. Celsi et al (1993) model an evolution of motives in which skill acquisition decreases the adrenaline provoking sensations of risk and danger. This model implies that DB, when entering a new high-risk sport as a beginner without skills, should have initially received an adrenaline experience. That he did not points to alternatives such as a) after skydiving DB experienced flying through the sky slowly in paragliding as less risky and dangerous than dropping through it for five minutes; or b) that adrenaline is not the salient embodied sensation generated by the experience.

Another pilot volunteered an experience that falls more in line with the evolution of motives model of Celsi et al (1993):

"Well, 1st maybe the first year was a shot of adrenaline, maybe... and right now it's the perspective, it's feeling from the wind and all that stuff.... And the, **the play with all the wind movements** [uses his hands to illustrate the wing moving in the air]. **This is, this is cool.** I don't know if... if you stay on the ground you can't feel it. And, and air always moves. You can't imagine if you don't fly." (PK, German intermediate pilot and former hang glider, emphasis added.)

In contrast however to Celsi et al (1993), other paragliders commonly voiced similar non-adrenaline motives without clearly aligning to a scale of progressive skill attainment. For example, novice pilots articulated similar motivations for flying as expert pilots, as in this quote from a young female novice from Hungary: "It's very nice, you feel free and ah, you look around and everything, everything is so beautiful from the sky." This is not to deny that adrenaline can be a component of the practices of paragliding. There are plenty of opportunities for fear and danger – both subjective and objective. Rather, it opens up new possibilities when considering the relationship between risky-sports, fear, danger, motivation and adrenaline, for example, the possibility that aspects of the bodily activities of this sport – its own unique play with the air – evoke sensations that outweigh sensations of fear or danger. That is, the different embodied experiences of paragliding induce their own stages of emotion. An alternate interpretation would be that adrenaline is not included among the acceptable ends within the teleoaffective structure of paragliding, though this does not seem reasonable with the presence of comp and adventure flying, nor acro – paragliding's ultimate expression of a dance with adrenaline (Adrenaline and Turbulence, 2009).

To further explore the Celsi et al (1993) model of evolution of motives it is appropriate at next consider the training practices for student pilots. To ground this consideration training practices are first related through thick description before presenting them more analytically.

Journal of Practices, Part II – Mid-Morning

STUDENT PILOTS

"Enjoyable activities have clear goals, stable rules, and challenges well matched to skills" (Csikszentmihalyi, 2002: 63).

Commentary and conversations in multiple languages accompanied by strange moving of hands emanate from various clusters of pilots as they watch the tandems, student pilots and occasionally more advanced pilot launch. Technique, gear, errors or exhibitions of skill are silently or not so silently assessed and critiqued amongst friends, summing up each pilot who steps onto the apron. An underdressed pilot wearing a fleece beanie and no helmet while clipped into a super lightweight harness mismatched to his beginner wing struts forward to launch. The peanut gallery of pilots subjects him, amongst themselves, to particular derision and snarky jokes:

"He's gonna hit the sink, and end up in the drink." (For launching in the wrong part of a cycle.)

About his beanie: "They left it and they molded it. Only actually goes rigid on impact," laughs.

His friend laughs, "He also uses that, ah, system where you fly by hindsight." More laughs.

Before these bored, watchful eyes, busy instructors littering the apron alternately talk into radios, coaching flying students, and usher their remaining students to launch into the air before conditions pick up and the peak rush begins. Their students come forward like little ducks one after another from different lines of threes and fives, each sweating in the sun waiting with helmet and harness on, waiting to be chosen, their wing ready in a rose on the ground next to them or in their hand.

On the apron an instructor is working with a student. The student is standing, facing out towards the lake for a forward launch, lines ready. After checking his gear and having fixed the student's set up mistakes the instructor deems him ready to go and counts off the pre-flight check in his own way with the student by in turn saying "one" and touching his harness buckle; "two", his helmet; "three", his leg buckles; etc. going through each step of the pre-flight confirmation before finally saying ok in French. The instructor points to something at the launch window, showing the student. They talk a bit as he explains, periodically gesturing radio in hand. Then, directions done, the instructor steps back, putting his hands up to mirror the configuration of student's arms. As he does this he continues to walk backwards, to indicate that the student should come forward. The student follows him, walks

forward and brings up his wing as the instructor raises his own arms as if also doing so. The student is looking up at it his wing he moves. The wing is crooked, leaning farther down on the right. The instructor puts his left arm out (the same side as the wing's lowered side) to indicate that the student should move that way to center himself under the wing. The student jogs to that side, then forward, passing the instructor, and launches. Once in the air he sits down into the harness. He flies off, out of view; the instructor intently continuing to direct him via the radio the whole time.

The next French student launches in poor form. He is running forward, wing over his head, as his instructor shouts at him in a normal tone to keep running, "Run! Run! Run!" His wing drifts slightly to his left. He either doesn't feel this or doesn't know how to interpret what he is feeling. Instead of running towards the right to counter it back into the correct heading, he tries to get into his seat and fly off, while clutching his lines. The watching pilots instantly react like angry fans viewing a televised football match from home, yelling what he should do the way they would if they were his instructor, without actually yelling loud enough so that he would hear:

T: "Oh no. No! no! Run, run, run!" N: "Don't hold on to the-" *T*: "-Let go of the risers!"

The yelling is unconscious, a totally natural reaction. The student's hasty attempt to sit down changes the weighting under his glider, inducing dangerous forward and back oscillations so that when he gets into the air and gets picked up by the breeze his angle of attach is too high, making him appear to lean back.

N: "You want to use your controls, that's what they're there for!" Chuckles dismissively.

Then the wing oscillates forward again, straightening the pendulum angle back to vertical. The student flies forward while his harness twists side to side in echo of the oscillation. As the pilot flies forward and is now stable, T says, "Geez."

R jokes, "I'm crazy for cocoa puffs!" in a high, mockingly hysterical voice, to break the tension. N says, "I get quite cynical watching people take off."



Figure 15 Novice pilot falls down while trying to kill his wing after aborting a launch.

Reprogramming Humans to Fly

"If you want to do par- really enjoy the paragliding or hang gliding, which is a <u>real flying</u>, you need to know more, you need to do more <u>be ready first</u>. Then you're going to be very safety. Then you're going to enjoy it. And then, I can tell: paragliding, hang gliding is absolutely safety sports." (HK, Korean former test pilot, now instructor)

The process of learning the practices of paragliding is a process of rewiring in which pilots are trained, through bodily repetition, to shed intuitions from life on the ground would be dangerous for life in the air. That is "... when we learn a practice, we learn to be bodies in a certain way" (Reckwitz, 2005: 251). As one instructor put it while describing commonalities that he sees in all students learning to ground handle, or kite their wings:

"People give the same inputs. As we try to teach them the ground handling part of paragliding, um, everybody seems to react and make the same mistakes and reactions to the wing. ...**Handling the wing on the ground from the reverse position is ... counterintuitive**, and everybody seems to do what's

intuitive... they wanna make the same mistake and do it intuitively, and it's very counter intuitive. So we have to kind of re-program everybody the same way." (SR, American instructor, emphasis added)

This instructor refers to a reprogramming of intuition in a very specific context, one whose learning student and intermediate pilots also described as a struggle and need for "rewiring". More broadly, Mathews (2006: 62) emphasizes that in humans, especially for more complex behaviors, "the stimulus-response connection is *learned*." The ability to condition certain reflexes, that is "rewiring" or "reprogramming", supports the idea that we can, through embodied regimes, retrain other human reactions and connections to transform and reframe previously counter-intuitive, strange, unknown and possibly terrifying experiences into routine, normal, even rational moments. In paragliding learning to "be bodies in a certain way" helps pilots produce safe reactions, be calmer and more confident, act unconsciously, and enter the flow. It is in the practices, in the learning of their routines, that a pilot is (ideally) inculcated into careful piloting safety.

Ground handling is critical training that introduces students to the wing and its controls safely through kiting on the ground: bringing the wing up, guiding it forward or across a space, and "killing it", i.e. setting it down, in different variations. These are components of the bodily routines of launching and landing. Through repetition of these practices nascent pilots begin to develop a kinetic connection with their wing and its inputs, learning how to communicate and move with it. Fighting it and trying to muscle it around gets one nowhere. A wing wants to fly how the air guides it, yet each wing has its own behavior. A skilled pilot learns to surrender and adapt to a wing without losing control. Watching a truly expert pilot kite is a revelation: fused with their wing they dance with it in a ballet, leading the dance instead of being led.

People who want to learn are exhorted that whatever they do, "you want to look at the good human being instructor. That's good" (HK, Korean former test pilot, now instructor). As Collins (2001: 116) asserts: "Mastery of a practice cannot be gained from books or other inanimate sources, but can sometimes, though not always, be gained by prolonged social interaction with members of the culture that embeds the practice."

This social interaction includes formal and ad hoc, social instruction. Through working with and watching a skilled paraglider novices are trained to fly safely and manage risk through developed, proven routines, among other things: training in proper handling of the equipment, appropriate reactions to situations, and developing the ability to evaluate conditions so that they can predict what will happen. Watching others' mistakes and listening to more expert pilots parse these errors complements this training while reinforcing and adding to practice specific "sayings" and teleoaffective structures.

The formal part of paragliding training happens through a gradual process in which instructors "engineer the environment" so that a day's total flying context, from the weather to the equipment, stays within a student's skill level. Part of this engineering is to reduce instances where pilots will be required to consciously think through too many actions. In this sense the paragliding learning process facilitates the skill development required to obtain flow, according to Csikszentmihalyi (2002, 60):

"The important thing to realize here is that activities that produce flow experiences, even the seemingly most risky ones, are so constructed as to allow the practitioner to develop sufficient skills to reduce the margin of error to as close to zero as possible."

In this context, reducing margin of error foremost means eliminating the possibility for decision-making mistakes. By matching the environment to student skill level instructors offer them the opportunity to meet acceptable challenges as they develop needed routinized behaviors.

Reducing the need for intellectual processing of actions (that is Cartesian as opposed to embodied cognition) is achieved by introducing students to gradually unfolding sets of layered practices in order to progressively habituate them to routines "notable for their unconscious, automatic, un-thought character" (Swidler, 2001: 83). As related in the thick description above, instructors establish a context in which novices mimic and enact routines before they fully understand what they are in order to build up "muscle memory" through repetition. Beginner pilots are coached through each routine with gradually less and less input from the instructor as they advance. For example, in their first flights the instructor sets up every bit of their gear for them as they stand in it passively; next students are not allowed to launch until the instructor rechecks the student's own set up and verifies it is safe. Students don't decide when to launch on their own, but rather are told when to go by an instructor, who then progressively lets them decide when to launch on their own to the point where they are independent pilots who must decide on their own if a day and site is flyable or not within their skill level.

Instructors use simple language and commands, but don't limit themselves to words, employing extensive visual cues. In early flights many instructors help guide students' launch routines by standing in front of them and moving their arms the way they want the student pilot to, similar to a ground traffic controller at an airport signaling. In the air where students are first coached via radio by an instructor watching them intently from the ground. Initially this extends as far as telling them when to turn right and left across the ridge, when to fly out towards the landing, etc. The instructors make sure to return to the LZ before their students in order to talk them through the steps of their landing, or have a colleague there to do so. All of these routines serve to minimize conscious thought and processing, reducing a student's need to simultaneously deal with multiple stimuli so that they can enter into Merleau-Ponty's "pre-reflective experience of reality" (Matthews, 2006: 51).

Training in this manner allows the pilot to enact the bodily parts of a practice that they may have read about or heard about in ground school lectures before these performances are routinized within them. In fact, flying while instructed over radio is jokingly called being a "radio-controlled pilot", and though one may execute the actions, someone is not a true paraglider until they display the ability to enact routines on their own and make their own decisions so as to be the "pilot in command". As soon as possible, students are expected to perform the mental routines themselves in the form of appropriate perceptual assessments and judgments combined with the right bodily routines in response to flying conditions and stimuli. As Reckwitz asserts, "if somebody 'carries' (and 'carries out') a practice, he or she must take over both the bodily and the mental patterns that constitute the practice" (2005: 250-252).



Figure 16 A French instructor (center, orange shirt) launches a student using audio and visual cues (his arms show the pilot the direction to move to maintain the wing centered overhead) as a student from a different group sets up his gear.

Correct performance demonstrates that the student can fly safely enough to

venture out to fly independently and continue learning on his or her own:

"To get them to a point where they get to experience it and just watching them transition into becoming, you know, someone who's flown solo and is the pilot in command up there. From, who they are at the end of the day, from

who they were at the beginning of the day is, is pretty cool to see." (SR, American instructor)

Although initial competence may not mean fully unconscious mastery of the routinized behaviors, to develop fully pilots are expected to continually practice, to "stay current", and continually learn through the trial and error of their own experience:

"But at a certain point you have to internalize it so that it's **intuitive**, so it takes, you know, it takes a long time of making mistakes, um, until you have internalized, you know, well enough." (GN, American comp pilot, instructor and paragliding journalist emphasis added)

How exactly a pilot performs these routines is ultimately up to them. As one of the guides on the trips said to the students: "But you just - you know we say all this and then everyone going 'yeah, yeah', but it doesn't happen in the air because you, YOU take over as you're a pilot. You know, you are your own person."

Journal of Practices, Part III – Mid Day

THE LAUNCH APRON

With the conditions picking up at midday the huge take off is suddenly packed, with pilots, wings, little nodes, videographers and tourists covering every bit of available ground. The chaotic mass manages itself via an unspoken choreography. Various open wings dot the apron, laid out curved like horseshoes, linked to a standing pilot by long, extended lines. Tandem pilots from Annecy's many commercial operations open up and layout their extra large wings directly onto the apron, rapidly hooking in harness, spreader bars, calling forward their passenger, briefing them and hooking them in. They fly dozens of flights a day, launching rapidly after arrival over and over while less experienced pilots still fiddle about. Solo, non-student pilots wait in loosely formed, ad hoc lines, each pilot keeping tabs on the general order and their own place within it. If one hesitates too long to advance, another steps up and spreads out his or her wing. If a pilot on the apron "potatoes" too long – wing set up on launch, pilot fully ready, but hesitant, watching and waiting for the streamers to be 'just right' - a more aggressive pilot steps forward, weaving through wings, students, and tandems to throw their wing down ahead of the offender, spread out and launch. Others simply layout their wings at the rear of the apron, pull up, and walk, hop or launch over the other laid out canopies, weaving through the crowd to fly off the slope.

EQUIPMENT SET-UP

With a seasoned eye W finds his spot on the far side of the apron. He wants to set up his glider quietly, out of the wind and away from the crowd. He methodically pulls out each piece of kit from his pack: helmet, flight suit, hydration pack, flight deck, harness and wing. He puts on his flight suit; changes into this high-ankle, rigid-soled boots. Then he removes his wing from its protective sheath, unfurls it across the grass and starts checking his lines. He picks up the right risers, then the left, checking each set of lines for twists or tangles from back to front, clearing them methodically. Snags are righted and then each set of lines is clipped into the carabineers on his harness. The ends of the speed bar get clipped into place, flight deck attached, hydration pack, backpack and bag sheath stowed in the harness. He dons his gloves and helmet. Next he puts on his harness, buckles the leg and chest straps, roses up the wing and walks over to the apron.

LAUNCHING ROUTINES

Confident and calm after finishing his regular, methodical gear set-up routine quietly away from the crowd, W watches the windsock and streamer while he waits in the queue. He feels the air on his face fluctuate and change, listens to intermittent vario beeps and watches how the wings of launching pilots react to being raised. Do they stay balanced and even? Or resist, oscillating or pitching to one side? Are pilots on certain parts of the apron getting collapses or struggling to get the wing up in the right direction? Do the steamer and windsock move the same way? How much do they lift up, drop or flutter? He scans the sky, checking the height and watching the movements of the pilots already in the air. Are they still gaining sufficiently or have they been flushed out? Does the air look smooth or rowdy?



Figure 17 Pilots at Montmin uniformly low, flushed out by a general sink cycle.

Now it's his turn at the head of the line, or an instructor or less confident has sized him up and signaled him to yield the next turn to him. He makes his way to a good opening on the apron, sets his rosed wing down on the carpet and opens it. His friends or the guides help him spread it out cleanly and evenly as he re-checks his lines quickly. Facing the wing, his back to the launch window, he takes the risers crossed into his hands for a reverse launch, while grasping the brake toggle loops as well. He raises his forearms slightly to pull up the wing into a clean wall, setting it down again gently. Air enters the leading edge and fills the front part of the cells, standing the wing wide eyed on the ground. Sections of the crisp nylon rustle faintly, brushed by passing air currents. His vario beeps and he turns his head slightly, checking first over one shoulder, then the other at the windsock and streamer. Using these cues he assess the timing of the thermal – is it just starting or is the cycle dying out? If he waits will the thermal get better, weaken or become too strong?

Choosing his moment he yells, "clear" to signal his intent, shifts his body weight back and by leaning while slightly pulling his risers diagonally up and back he raises his wing up. The risers straighten up, still crossed. Still facing the wing, W looks up rapidly to check for snags or debris in the lines before turning around to face the lake. The lines uncross as he faces forward. Taught lines press his body as the pressurized wing pulls upward straining to lift off and fly. Feeling the wing overhead, he looks up quickly side-to-side, verifying that it is even, subtly checking its forward progress with the brakes as he does. Leaning forward, brakes still in his hands, but arms stretched straight back behind him, he yells "launching" and trots forward without running, keeping his head up and gaze aimed towards an invisible forward point. As he advances his wing begins to fly, lifting him as it rises in the airflow. His feet take half or a few steps more in the air as he moves airborne over launch. He passes the edge and, keeping the brake toggles in his hands to steer, pushes his foot in his stirrup to slide back into his harness. Combining slight brake input and weight shift on the right he turns in that direction and flies along the ridge, rising continually in the upward flowing air deflecting off it.

GAINING LIFT

"Being in a world where entropy is suspended explains in part why flowproducing activities can become so addictive." (Csikszentmihalyi, 2002: 61)

W flies along the tree-covered hillside, gauging lift through feel and his instruments. Towards the end of the ridge, he turns 180 degrees, to his left, away from the cliff, and once more tacks along the air flowing over the slope. A few passes like this, and he is high enough to turn a full 360 degrees into the thermal wicking off

of launch. He continues to turn in it as he rises, smelling the sweetness in the air, his vario beeping urgently sharper and faster as he gains height. He goes as high as he can until the drifting thermal takes him too far back over the hill. He exits and flies away towards the south. Other pilots are there working one of the house thermals - a curve in the ridge where the shape of the land consistently catches and channels thermals upward. He heads to them, enters the thermal and feels the jerk of the wing through his harness pulling his body as the wing pitches up, deflected by the edge of the rising column of air, then a small inching forward as it surges back down, oscillating as it hits a patch of sink. Finding the lift again he turns in the same direction as the other pilots, joining the gaggle.

The lift is sharper and narrower than expected. Lower than the others, he works his body and brake inputs to turn tighter and flatter circles, trying to stay in the stronger parts of the thermal and maximize the lift gained in each turn. As he gains altitude he widens his turns, making larger circles in responds to the wider, smoother air. With each turn he gauges his position relative to the land – his proximity to the mountain near him, the mountain ranges on the other side of the lake – while keeping an eye on the other pilots around him. He aims to get high enough to breakaway and straight line it to Les Dents, soar them a bit and catch another thermal, work it until high enough, then shoot over the ridge and travel downwind towards the next range. From there he can work the thermals and ridges to enter the Arvais range, ultimately landing back at the lodge. Well, this is his goal.

Free-Flight

FREEDOM AND UNITY

Pilots' descriptions of their experience of flying are marked with themes of freedom, nature, solitude, spirituality, challenge and satisfaction. When asked about flying it is quite common for their responses to touch on some or all of the dimensions of optimal experience.

Interviewer: "Can you describe how you feel when you're flying?"

Paraglider: "It's, it's kind of like a feeling of a - solitude. **You're up there, it's you, maybe it sounds corny but you and God and the wind.** And, and you know it's, it's a great way to collect my thoughts and just enjoy the feeling of the wind and, and actually trying to, you know, find where the lift is (moves his hand around as if it's the glider in the air), and to ah keep, keep up (laughs)." (TB, American intermediate pilot, male, former skydiver, emphasis added)

"I don't know, paragliding just, in the moment I'm really focused on what's going on, what's going on with the weather, the wind, but then, afterwards it just makes me -just feel - very centered, and it's sort of my spiritual ...my (looks up to the left pondering) religion (looks to right and grins, chuckling slightly) I guess you could say (shrugs). Um. I don't know, that's. People go to church every Sunday, and I'm flying every Sunday." (LA, American intermediate pilot, female, emphasis added)

Both of these pilots describe flying as a pleasurable, aesthetic and spiritual experience that reflects aspects of the sacred, as defined by Belk et al: "We take the sacred in the realm of consumption to refer to that which is regarded as more significant, powerful, and extraordinary than the self" (1989:13). For these pilots the result is personal renewal through "centering" or being able to "collect my thoughts".

Several pilots mentioned the freedom and wonder at being able to fly with just what nature gives you rather than with an engine:

"To me it's the most free way to fly you know, without motor ... it's sort of magic because your paraglider can come inside a backpack, you put it in a car, you just walk in the mountains, and then you've got just the sun who makes you (gestures with his hand, imitating a thermal), rise up and then you can

make kilometers and discover the sky. Yeah, **it's quite magic**." (MB, French paragliding coach and recreational comp pilot, emphasis added)

This type of enjoyment is one of the critical components of Csikszentmihalyi's optimal experience, a pleasure he attributes to going beyond what one "has been programmed to do" and achieving "something unexpected, perhaps something even unimagined before" (2002: 46).

The achievement of this unexpected, magic state of human flight requires meeting challenges presented by nature. However, this is not about meeting such challenges through conquering or physical struggle but rather requires embodied engagement through utilization of sense, body and mind:

"I really enjoy actually doing something without an engine, without additional noise and just using the Nature and being with the nature. **Try to be one with it...you feel every little thing what's happening out there, and you have to work with it. You cannot fight it.** So it's not a thing of muscle power. Some people think I am strong and big that's why I can fly (chuckles). So it's nothing to do with [that]. That's what I really like a lot." (FM, German born Canadian expert paraglider and licensed single-engine pilot, emphasis added)

These four pilots' comments belie the dramatic moments of struggle and catharsis that Celsi et al (1993) interpret as emblematic of extreme sports participation. While the first two pilots describe a sort of release, but not a dramatic catharsis, the challenge and freedom when trying to gain altitude and stay in the air mentioned by these pilots touches more on a spiritual unity with natural forces. Csikszentmihalyi characterizes this as "becoming one flesh" in which loss of self is born out of "a concrete experience of close interaction with some Other, an interaction that produces a rare sense of unity" (2002: 64). This sense of union can be with the physical environment, a team, an event, or other "usually foreign entity" (*Ibid*). While only the first two paragliders above out of all of those interviewed explicitly mentioned God or religion, the sensations mentioned by several of the pilots echo the triggers, such as flow, and emotions, such as aesthetic appreciation, unity and wonder, and subsequent spiritual

interpretations experienced by the participants Schmidt and Little's (2007) study on spiritual leisure experiences.

Another informant, after mentioning that when paragliding he felt like a bird that feels that opportunity has arrived when he feels the right wind during a flight, went on to elaborate how for him a proper unity with the natural elements of the practice ensures safety:

"I need to behave by myself, I need to obey ... the kind of natural thing, is wind, all kind of thing is. Then really I can flying with the safe...When I'm flying. I'm pretty much feeling in the wind, and temperature and wind, pretty much me, the wind, and temperature." (HK, Korean former test pilot, now instructor)

The integrality of the practice of paragliding to interaction with natural forces mediated via human designed equipment supports Schatzki's assertion that "nonhumans are active components of practice-arrangement bundles, shaping activity, redirecting practices, and inducing decisions" (2005: 478). One practice theory oriented interpretation of this pilot's comment is that "obeying" represents submerging one's conscious self into the full practice array bundle of physical and mental, human and non-human. Such a union implies not fighting with the natural forces but sensing them, working with them, and doing as they require. This integration increases safety by removing risk induced by pilot errors such as misinterpretation of the wind, i.e. of the natural forces in which they are performing.

One competition pilot described a similar kind of "obeying" the variety of active components of a practice as accepting and embracing all the elements of the practice-arrangement bundle, and related this to successful flying. After volunteering how it is important to internalize competition practices until they are intuitive, he analyzed why he did not get the results he wanted in his last competition:

"It's not stimulus, ah, outside of **itself.** It is what it is, it is part of it...competition flying is a routine after awhile, you know it's the same as

cross country flying. It's all the same; you know it's all part of its own practice...

But at a certain point you have to internalize it so that it's **intuitive**, so it takes, you know, it takes a long time of making mistakes, um, until you have internalized, you know, well enough. And in my last competition I made a ... a mistake again, which, umm, you know I got greedy and I lost the competition because I didn't shift my gears down. I didn't - I didn't stay disciplined, and you know, strategic. I flew with a little too much emotion for a competition task." (GN, American comp pilot, instructor and paragliding journalist.)

This self-reflection implies that if he had followed some array of mental activities and stages of emotions acceptable for the ends and projects of comp flying he would have also enacted the appropriate routinized behavior needed to win the task. This pilot's expression of failure as greed and lack of discipline reflects an interesting parallel to the prior informants "need to behave and obey" the natural elements. It also implies a disruption to the creation of flow. Consider the parallels between GN's comment on flying with Csikszentmihalyi's quote from a rock climber:

"**But when things become automatic, it's like an egoless thing**, in a way. Somehow the right thing is done without you ever thinking about it or doing anything at all...It just happens. And yet you're more concentrated." (2002: 62-63, emphasis added).

Getting greedy reintroduces the ego and "life's artificialities" (Csikszentmihalyi, 2002: 59), disrupting the temporal focus of an optimal experience and its relaxed sense of control.

These self-admonitions to release one's ego and not neglect the more cerebral aspects of a practice's teleoaffective structures, the "ends, projects and emotions" we commonly think of as occurring within the brain and heart, implies that one must surrender oneself completely to all the modes of a flying practice across all its planes – bodily, mental, emotional- in order to be successful at it. Parts of the mesh cannot be pulled out at random because it crosses "the distinction between the allegedly inside and outside of the mind and body" (Reckwitz, 2002: 250-252).

CHALLENGE AND ENGAGEMENT

Paragliding practices require coordination of the body with things and the environment - handling the glider, timing actions while launching, finding and flying in thermals, and landing; theoretical knowledge; and proper mental states, for example sensing the conditions or a "good mood and to be concentrated". For paragliders:

"It's really complicated to be good at that moment. You have to produce the performance on that day." (PM, French paragliding coach)

The mercurial nature of the elements and the need to adjust to them generates everchanging challenges that keep pilots continually engaged with the practices of paragliding, as this exchange with two Australian pilots explains:

Pilot 1: "You know a lot of sports I get quite bored with really easy. I'm not sure why (shakes head) but ah, paragliding I've never – paragliding, flying in general I never got bored with." (PL, Australian advanced pilot)

Pilot 2: "Um, it's always a challenge. It's a different game every time. I mean it's a similar answer to if you asked a surfer why does he surf. And it's a buzz. I mean-" (NL, Australian intermediate pilot)

Pilot 1: "Yeah, I guess that's a good analogy. Every wave's different you know, um, it's to do with the, the geology, like the lay of the land, the way the wind is blowing, and the heat that day, what's the atmosphere doing. It's all these things and you're - And to try to work it out in your head is quite difficult. Sometimes you just do everything sort of in the back of your mind, it's all happening, in sort of the back of your mind, not consciously. So, I guess that's what keeps it interesting. (Shakes head)."

The first pilot's continued engagement with paragliding hints of "wants fulfilled only in practice, their satisfaction attributable to effective practical performances" (Warde, 2005: 142). This pilot's description of doing everything in the back of one's mind suggests a link between drawing on competence in the routinized behavior of paragliding practices and the merging of action and awareness described by Csikszentmihalyi (2002) in his theory of flow. In fact, Warde (2005) talks about proficiency specifically as a way to flow and other psychic rewards. Concentration is linked to flow, and flow to escape and liberation, among many other sensations. These pilots go on to describe a "stripping out of life's artificialities" (Csikszentmihalyi, 2002: 59) and an escape from mundane day-to-day concerns experienced during their engagement in the practices of paragliding:

Pilot 2: "And, when you're up there nothing else matters. You're flying, all, you know, all your worldly concerns are just gone. It doesn't matter what you had for breakfast (shakes head)." (NL, Australian intermediate pilot)

Pilot 1: "- Relationship problems-" (PL, Australian advanced pilot)

Pilot 2: "- Nothing like that." Shakes his head, smiles.

Pilot 1: "- it's all gone." Waves hand to show "it" going away and laughs. Pilot 2 laughs.

Pilot 2: "It's just flying, you know you just focus.... It's very in the moment you know it's, it's, yeah. It's like riding a motorbike or something like that you know, you- you're just part of the machine." (Emphasis added.)

These comments parallel the sense of flow and unity with equipment found by Schouten and McAlexander among Harley Bikers (1995) and the "thrill" of surfing, a transcendent harmony, achieved through unity with a natural force larger than oneself identified by Stranger (1999) among Australian surfers. Stranger characterizes this unity as an aesthetic experience emblematic of the postmodern condition (*Ibid:* 265).

As Csikszentmihalyi warns, the flow state can become highly addicting due to this deeply satisfying escape from the mundane and self concern, coupled with the empowering feelings of mastery and confidence that accompany it:

"Thus enjoyable activities that produce flow have a potentially negative aspect: while they are capable of improving the quality of existence by creating order in the mind, they can become addictive, at which point the self becomes captive of a certain kind of order, and is then unwilling to cope with the ambiguities of life." (Csikszentmihalyi, 2002: 62).

In fact the first pilot (PL) in the exchange above mentioned having made "huge sacrifices with work and, and how I run my whole life is around flying really." As

discussed in the section on motivations for participation, several pilots interviewed spoke of a deep passion to fly and to "only fly". In some cases this means giving up other sports or leisure pursuits. In others, it means prioritizing flying before work and family life as PL has. Even for pilots who did not go this far, balancing family and work with flying was described as a juggling act.

This common juggling act doesn't necessarily mean all pilots are necessarily addicted flow junkies. Two essential cores of the practices of paragliding are the mercurial nature of meteorological condition, and the need to regularly engage in the practice to develop and maintain the necessary bodily routines, the muscle memory. These offer a different impetus for prioritizing one's time for flying. A commonly attributed reason for a work-family-flying juggling act was a desire to leave one's self open to fly when the winds were favorable, to be able to: "fly whenever you can, and when the conditions warrant" (DB, American pilot, advanced). Unfortunately the right weather and winds for great flying days do not appear on demand and do not adhere to the modern calendar of weekdays for work, weekends off. Add to this the combination of travel to flying sites plus parawaiting, and pilots' free time for other activities dwindles.

Of course there are pilots deeply addicted to the sport. In some cases pilots speak of craving and needing paragliding so intensely that even serious personal accidents do not disrupt their desire to fly. One thirty-four year veteran of flying, both of hang gliding and paragliding, said, when asked why he returned to flying after breaking his jaw and having half his face collapse in a paragliding accident at age 28-neither his first nor last accident:

"Umm... You know people really want it. People really want it. We can't interrupt it... So, even that, that's my passion. You know: really, I want it. No matter what, just I want it." (HK, Korean former test pilot, now instructor)

It's easy from the outside to question the rationality of such an attitude and, as a researcher, to want to examine it for deviance. However, this pilot started at fifteen, having built his first hang glider in 1975, and "grew up" in the sport, having been involved with the birth and development of both paragliding and hang gliding in Korea. His entire working life has been immersed in these two practice webs, his life evolving in tandem with their evolution. Earlier in the interview he volunteered: "Mostly, mostly I can say now I grew up with the hang glider and paraglider.... so I can't erase my flying." He also said of paragliding, "I love without engine...I can feel the natural. That thing is I felt a real bird. And then I felt this is my life." Flying is so deeply ingrained both in his life history and self-identity that despite past accidents it is inseparable from his embodied cognition of the world, and hence of his self. The practices of paragliding and hang gliding are, for him, part of how "the world is understood", and his life history reflects an actor both engulfed by and representing, both shaped by and shaping a practice (Reckwitz, 2002: 2002).

We see from these sections on unity and challenge that physical interaction with natural forces is a compelling part of experiencing the practices of paragliding. Merleau-Ponty (1962) believes the body plays an integral role in knowing, understanding and acting. The ways pilots speak of the senses and union with the natural dimension of flying, the kinetic experience, points to the indispensible role that well developed embodied consciousness plays in the practices of paragliding. Pilots don't divide paragliding between mind and body, but draw on both together throughout their flights because the practices of paragliding blur "the distinction between the allegedly inside and outside of the mind and body" (Reckwitz, 2002: 250-252). The mind cannot fly alone, for it requires the body to not only sense of and "know" the world that it flies through, but also to mediate with the flying equipment to perform the practice. Similarly the body does not fly alone, but requires the knowledge stored in the mind to deploy its bodily knowledge.

Pilots experience this intermingling and requirement to experience flying through both body and mind as an attractive and addicting contrast to everyday life. The kinetic aspects of the sport are experienced as facilitators to concentration and hence flow, while internalized routines help eliminate extraneous mental distraction and facilitate achievement of the sensation of acting harmoniously and unconsciously in a flow state.

Journal of Practices, Part IV – Late Afternoon

COMRADES IN FLIGHT

"Ecstasy marks the extraordinary character of sacred experience and distinguishes it from the common pleasures of everyday life." (Belk et al, 1989:8)

T has the same cross country goal as W and is working the same area of lift. W spots him and both of them whoop it up as they turn in the air – greeting each other with spontaneous yells and bird calls of excitement: "Caw-caw! Caw-caw!" There are pilots in the air all over the valley, in gaggles at Les Dents, under the flat bottoms of the fat cumulous clouds and crossing over the lake. Across the valley, pilots launching from Entreverne rise up as if the ridge were continually squirting out little colored drops to add to the sky. Pilots are launching everywhere– Forclaz, Planfait, Entreverne, Seminoz. It's turned on: fat lift everywhere. An epic day.

THE LANDING ZONE

"This spirit of communitas emerges from shared ritual experiences 'which transcend those of status-striving, money-grubbing, and self-serving" and act as 'proofs that man does not live by bread alone."" (Turner 1972 as cited by Belk et al, 1989: 7).

The day and light are waning. With each gradual, lazy move of the sun lower in the sky, the thermals weaken. After checking in with the different pilots, we drive down to retrieve the ones who have landed. First to Doussard, the huge, grassy, multiple football-field sized area that is the main Annecy landing zone.



Figure 18 Explanatory map posted at the Doussard landing zone, showing the prescribed landing patterns and relevant nearby restrictions.

As with the launch the LZ is buzzing with activity as pilots variously land, kite their wings in the wind for practice, pack up or share beers at the snack stand on the side of the landing. The constant inflow of pilots coming in to land adds a three dimensional spectacle to entertain waiting pilots and onlookers. Pilot after pilot flies overhead, turns in for their downwind leg and gets into formation relative to the other landing pilots, coming in behind anyone who's lower to the ground. There is no control tower or radio communication between the landing pilots, the orchestration is the sum of each pilots' actions. Bordered on one side by a large sports hall, and on the other by an equally large hang gliding landing field, this month usurped completely by gypsy caravans, the landing is so long and wide it would be embarrassing to miss it. The LZ is already dotted with pilots variously walking forward still under inflated gliders after touching down, putting their wings down, or just kiting for fun. Once dropped down, the pilots rose up their wings and bring them over to one side to pack up. They unfurl them, lay them out flat and check the lines, some detaching risers from the harness. Then they fold them using their preferred routine, alone, or together with a friend.

REUNION AND DEBRIEF

The packing ritual gives plenty of time to observe and critique dramatic landings, or sigh in empathetic relief. After packing, novices and instructors consult, going over questions, pointers, errors or mistakes. Pilots share experiences and knowledge. Tandem passengers walk off with family and friends, sharing exhilarated squeals as their pilot and assistant take care of the equipment and packing up. Pilots drinking at the snack stand compare flights and routes flown, teasing each other and trading jokes. Broad smiles and laughs abound as pilots revel in satisfied feelings from good airtime in great conditions.

Novice: "How was your flight?"

Advanced Pilot: "Great! It was so smooth and buttery up there. Hero Air." After she asks, he proceeds to clarify what the term means.

Intermediate Pilot: "Did you feel it?"

Novice nods: "It was the best flight of my life!" Starts laughing. Advanced Pilot: "Niiice!" Starts clapping, asking, "See what I mean?" Novice: She laughs and nods, as he exclaims, "Hero air!"

W doesn't join the group at Doussard. Instead, hours later with the sun and lift fading and too short to reach his goal of flying all the way back to the lodge in St. Jean de Sixt, he radios R to let him know he'll have to land somewhere along the way. R relays local knowledge to fly along a certain ridge line that will lead him, if the lift isn't working, to a safe landing field right off the highway that runs to the lodge. It's a large, easy-to-spot field free of rotor-producing obstacles, and has a windsock to signal wind direction. It'll be an easy landing and fast retrieve home from there. The group parks at the field to wait for their day's cross country hero, and soon W is spotted overhead. He loses altitude and comes in for a final glide over the field, moving fast in the breezeless conditions. About a meter above the ground he pulls his arms down straight on the brake toggles to flair and his feet touch down softly. He turns around and kills his wing, bringing it down to the ground. He gathers it by the lines into a rose to make it easier to carry.

T comes up to congratulate him. The joking and debrief begin. They start to trade stories about their flights as they walk back down the field to pack up near the van. Grinning broadly W tells T that he spotted chamois goats as he flew over a local peak. The conversation moves on to the ascent rate of his fastest moving thermal, the route he took, peak altitude, losing lift, jumping across ridges, the points where he thought he would sink out but just barely scraped back up. At the van he's greeted with hellos and: "Good job!" "All right!" "Uncle Brother!" "Nice flight!"

W puts his wing down, takes off his harness and removes his helmet and flight suit, then packs up just as methodically as he set up. The group chats and jokes around while they wait, teasing each other, asking him questions about his flight, or trading their own tales.

K: "It was a lot easier than I thought it was going to be. It looks like a really big valley, and it is a big valley, but I went right across it."

J: "*N* was saying that time of the day everything - the rocks are giving off, the trees are lifting, the whole air is like magic."

T helps W fold his wing as they continue to talk – where they lost each other, where he flew instead. T rationalizes excuses to cover his disappointment in not having also flown the same XC, how he was too tired to break through enough to go the full distance, wanted to land to be safe, etc. Earlier, at the regular LZ he was rattled, disappointed, frustrated, pissed off. There is none of that now. He's psyched about his friend's accomplishment and glad to share in his happiness.

Communitas

As related in the thick-description above, the post-flight reunion and debrief is a critical integrative moment when pilots come together after a shared day in the field of practice. While joining together in bodily activities such as packing away equipment, sharing a drink or a meal or sharing transportation away from the landing zone they also exchange know-how, understanding and stages of emotion. Questions are asked between friends, pilots, students and instructors: where the best lift was, cross country routes taken, how low saves were enacted or where sink won out the day, what one went wrong in a landing, or where launch technique could be improved. Experiences are reviewed, described and digested. The good and bad are discussed openly or silently to oneself. Happy emotions are exchanged as peak achievements are cheered, while on bad weather days downcast moods after nonexisting or frustrating flights may subdue a group of pilots. This indicates that the socialization between pilots – their interplay not just after flying but across the full site of the social composed by the practices of paragliding - plays an important part in transmitting and maintaining these practices through various routinized behaviors.

The post-flight debrief is just one ritual in mesh of practices-arrangements that is the site of the social in paragliding. A sense of communitas between the pilots arises from and through the sharing of all of the day's rituals: from the arrival, parawaiting, launching, thermalling, landing, reunion and debrief. These moments are lived vividly, experienced together and then relived again repeatedly in ongoing exchanges of shared jokes and stories, laughs and knowing looks, throughout the day and week.

The practices of paragliding are Shatzki's (2005) "site of the social" joining pilots together into a specialized community or subculture with a common interest to fly in a certain way (free flight through natural forces) via a specific shared medium (paraglider technology). Feelings of communitas are fostered within these practices through common know-how and performance across practice specific bodily and mental activities that are perceived as unknown to others outside of the sport; profoundly experienced stages of emotions; and flow states, including release from the ordinary, experience of the sublime and transcendence. As we'll see in the next analysis section on hand talk, they are also fostered and reflected by phatic communication.

Journal of Practices, Part V – Evening

HANGING OUT

Long after the flying is over, the pilots continue to relive the flying experience through their discussions. Even when they have moved beyond the day's flying anecdotes the topic inevitably turns to paragliding: trading flying gossip or retelling older stories; teasing each other with innuendos and jokes that invariably hinge on insider flying references; recording the day's flights in their flight logs; reviewing maps and debating where to fly tomorrow, the day after or the day after that; discussing tomorrow's weather; sharing videos of the sport.



Figure 19 A pilot records flights in his logbook.

In the afternoon the youngest pilot in the group distinguished himself with an embarrassing overshoot of the LZ, putting down in the gypsy encampment. At dinner one jokester crowns him the King of the Gypsies and a competition of sorts ensues to come up with the funniest related nickname. In the days to come this becomes the group's in-joke iterated on and inserted into any moment that allows. Even years later the pilot will retain his moniker, the other pilots reviving the joke at unexpected moments on Facebook walls or in person, reviving old times. His is not the only nickname earned on this trip, and these insider-names are deployed online occasionally like birdcalls through the distances that separate these pilots across the globe.

Throughout the evening even the pilots' bodies are still flying, at least one would think so the way their hands continually activate the wing controls. When they talk their hands come up to their shoulders as if holding their brakes. They raise them unevenly and bounce them about illustrating turbulent air or jerk them down rapidly in a landing flair. Arms, hands and whole bodies are put into action to illustrate a rapid weight shift turn from a flying anecdote. Even if there is something in their hands, for example an ice cream cone at dessert, it ends up being jokingly made to rise in a thermal or dramatically spin in an acro death spiral like children playing out scenarios with their action figures or toy racecars.



Figure 20 A pilot dramatically narrates steering his glider between obstacles during a poor landing (left). A guide discusses catching a thermal while ridge soaring – his index finger is pointed up, but cut off in the frame (right).

Embodied Communication - Hand Talk

Similar to the skydivers described by Celsi et al (1993) paraglider pilots share an insider language of phatic communication composed of specialized vocabulary and sign-language, which I label 'hand talk'. Between these, the later is more interesting in this study for what it indicates about the absorption of embodied experience into pilots' comprehension and communication of what it is to fly, demonstrated by the way they articulate background knowledge and understanding of the practice in physically expressive, routinized forms of communication.

Hand talk refers to the "routinized way" pilots use their hands, arms and even entire bodies for narration or illustration during instruction or conversation that reflects a practice specific "way the world is understood" (Reckwitz, 2002:250). Hand talk encompasses a wide repertoire of gestures used in objective and subjective communication. For example a pilot may hold their hand flat or very slightly cupped and use it to represent the paragliding wing, moving it about in space to demonstrate how it moved up, down or across the air as it flew. A sample is shown in the left image of Figure 21 below. A hand, finger pointed up, may be encircled in the air, rising as it turns as if in a thermal, as shown on the right side of Figure 20 above. Both hands may be held up near the shoulders, in the same manner and position that the pilot holds the brake toggles. From here they will move up to the ears or down to the hips in any number of the ways that a pilot can handle the brake toggles, risers or glider lines. An example is shown on the right of Figure 21. The hands are moved subtly or dramatically, as appropriate to the action in the narrative.



Figure 21 An instructor explains how to prevent a wing overshooting while launching. First he illustrates the wing surging forward with his left hand as he describes the phenomenon (left). Then, as he explains how to slow the glider down by braking, he brakes with his hands (right).

Where hand movements are accompanied in practice by bodily movements, the pilot may also move their body in a sequence corresponding to how it would be moved while flying. The left half of Figure 20 shows a very exaggerated version of a swerving, weight shift turn from a dramatized narrative of a harrowing landing. The speaker is a novice, and it is interesting to note that in actual fact that hand and body position would initiate the start of the SAT acro maneuver, a maneuver and sequence with which the pilot was completely unfamiliar with at the time the picture was taken. Thus, beyond displaying his own communicative personality, his physical exaggeration also signals his competency level. It expresses a less fine tuned, blunter, interpretation of the bodily routines involved in the flying act described by using a physical vocabulary appropriate for a different situation. As pilots advance and add to both their "muscle memory" and repertoire of flying routines, their hand talk can become more accurate and nuanced.

Hand talk allows pilots to share nuanced conversations when teaching or exchanging accounts of flights in which not all details need to be expressed verbally because it expresses a shared way "the world is understood" through their shared practices (Reckwitz, 2002: 250). For example a sudden landing can be described visually by rapidly flaring with the arms and hands, that is rapidly bringing them down simultaneously to the hips. Turbulence is indicated by moving the hands about side to side in little circles or up and down unevenly while moving the torso about. A fast flick of one "brake" down and up illustrates pumping air into the wing to releasing a wing tip collapse or cravat. Quite often only minimal speech is used, as in this typical vignette:

"The air was like (hand gesture for turbulence) and I was like 'whoa!' (Active hand movement indicating the pilot responded appropriately with active brake inputs, plus throwing the body about a bit side to side.)" (Field video transcript)

Bigger physical movements imply a greater amount of turbulence, or that the pilot's own discomfort with turbulence and resulting fear in the moment has left the pilot with an amplified impression of their size. As in any adjectival communication, interpretation in each situation is left to the listener.

Understanding the hand and body gestures through personal immersion in the practice is thus required to fully receive and understand the communication being conveyed. The unconscious transmission and decoding of the gestures taps a shared background understanding between pilots founded on mutually experienced routinized behavior that crosses "the distinction between the allegedly inside and outside of the mind and body" (Reckwitz 2002: 250-252). In the previous sample anecdote of turbulence encountered during a flight, the speaker's up and down, and side to side movements evoke the other pilot(s)' own experiences with thermal flying, and they comprehend immediately and unconsciously – through both rational and embodied cognition- the sensations and ramifications of this potentially sickening and gripping moment, in which the pilot momentarily loses control of the wing to the violence of the air that jostles him or her about in its harness like a little doll.

Such communication fluency requires a true initiation into the practices relevant to the discussion. For example, having flown as a tandem passenger is not enough, as the passenger does not see the hand motions of the pilot, and, unless a pilot themselves, they have either not felt the physical actions themselves or do not have the knowledge to interpret them. To return to the mistakenly signaled SAT maneuver mentioned above in the discussion of Figure 20, I can interpret the gestures having repeatedly watched close up videos of pilots performing the maneuver and seen pilots mimic its distinctive body sequences during conversation. However, although I have experienced the maneuver in the air as a tandem passenger, I can never have a full, embodied understanding of the gesture until I have executed it myself and built up the muscle memory developed in the repeated practice that its achievement requires.

All levels of pilots utilize hand talk appropriate to their own currency in the different practices of paragliding such that it appears an integral part of the tacit knowledge and routinized behavior of paragliding, another example of the taken-forgranted actions and routines of the practice (Swidler, 2001). For instructors, hand talk is an essential communicative device that helps shows novices bodily actions to reference and model when flying, since they can not watch and copy an instructor directly while flying in the air. As illustrated in the discussion on reprogramming pilots to fly, such signaling fosters embodied cognition of the practice while also complimenting and reinforcing actions repeatedly practiced with instructor guidance.

Why students so easily adopt hand talk is another matter. Perhaps it is imitation – they see their instructors and other pilots do it, so they do it too. Or perhaps, since hand talk usually accompanies the earliest explanations of their instructors, it part of their initial gateway to the practices' background knowledge, a way in which they form their early understanding of the physical sides of piloting being discussed. Or maybe it is simply an unconscious response to their emerging understanding of the flying experience which first becomes real, and is subsequently built upon, through bodily experience – a sign of immersion in:

"A universe in which the most essential is transmitted, acquired, and deployed beneath language and consciousness." Wacquant (2004: vii-viii)

This idea of mergence of the mind, body and conscious is supported when considering how closely this special insider communication mimics paragliding's actual bodily routines, and so reflects carrying out a practice by taking "over both the bodily and the mental patterns that constitute the practice" (Reckwitz, 2002: 250). This mimicry suggests a high degree of unconscious integration between pilots' bodies and the physical practice – their union with their wings and the dynamics of flying. Flying well requires the internalization of many tiny movements, actions and reactions so that they become unconscious. Of these, hands and arms have primacy in managing flying equipment. For example, observe in Figure 22 below how three pilots discuss a pilot launching. The middle pilot holds his hands as if bringing a wing up, yet neither of his companions is facing him. All three have their eyes on the action before them. Is the man's hand gesture meant intentionally to communicate to his companions? Is it done unconsciously? Or is holding his hands in front of him in this manner an integral part of him processing and understanding what is happening before him – a moment of embodied consciousness both in which he unconsciously

feels compelled to mimic the action, as well as in which this mimicry helps him understand what his eyes are seeing?



Figure 22 A French pilot raises his wing and initiates the sequence by pulling the risers like reins. Three German pilots comment on a pilot engaged in a similar launch routine.

According to Celsi et al phatic communication "transcends common understanding and gives fluidity and cohesion" to a subculture, particularly ones with shared liminal experiences (1993: 13). Hand talk appears to evidence not just a bond between practitioners, but also a strong bond between both human mind and body as well as with the things and context of the nexus of the practices of paragliding. The observation by Celsi et al (1993) supports the idea that the phatic communication of hand talk plays a role in transmitting and sustaining paragliding as a subculture, of giving it meaning and cohesion. So by extension does the embodied, kinetic experience of these practices.

DISCUSSION

PRACTICES AND EMBODIMENT

Embodiment provides access to Schatzki's "horizon of *possible* intelligibility" that constitutes the practices of paragliding (2005: 470). It is through its bodily practices that the invisible becomes known and is mediated through embodied consciousness (Schatzki, 2005: 470). Though its physical challenges are different from boxing and it does not require the same strength, like boxing paragliding is "a universe in which the most essential is transmitted, acquired, and deployed beneath language and consciousness" Wacquant (2004: vii-viii).

Safe paragliding requires proficiency in the routinized behaviors of its practices, a challenging and often counter intuitive mesh of bodily activities, mental activities, things and their uses, know-how, background knowledge and understanding and stages of appropriate emotion, that throw the pilot into contact with the sky, a previously unknown, invisible and "non-human" world. Embodied cognition is essential for immersion in this "thoroughly kinetic" universe that, like all practices, requires pilots "learn to be bodies in a certain way" (Reckwitz, 2005: 251). Instructors have developed a set of routines and explicit formulations to help students navigate their passage into the prescribed "ends, projects, uses of things, and emotions" that will help keep them safe on their flying journey (Schatzki, 2005). The emphasis in the beginning on showing over telling, doing over thinking reflects a tacit knowledge that Cartesian ways of knowing are insufficient to gain an understanding of this world and all of its dimensions.

Through reprogramming the pilot learns to make sense of – to make intelligible – numerous physical sensations such as kiting, the feeling of turbulence, the feeling of pressurization of the wing, the sickening feel of a total collapse of the wing. These exist for the pilot and become known through engagement in the web of practices of paragliding that, in addition to routines for moving bodies, include routinized ways that "the world is understood" and both are interlinked (Reckwitz, 2002: 250). Outside of the practice the above sensations are un-intelligible – that is, de-coupled from the goal of free-flight and from the technology that enables humans to imitate birds, they have either no meaning or completely different meanings. Intuition from practices outside does not make them intelligible within the context of paragliding.

Successful entry in the way this world is understood is unconsciously expressed through practice specific communication, a shared language that stretches beyond words and technical vocabulary to a special language of movement learned and communicated through the body. As found among the skydivers of Celsi et al (1993) this phatic communication joins pilots together, a sign of communitas signifying their shared membership in a secret world of invisible practices and knowledge.

Merleau-Ponty believes we are held captive by our "neglect of what our ordinary, pre-reflective experience of reality tells us" (Matthews, 2006: 51). In the examples discussed in the findings the halting of this neglect allows new perspectives and understandings. As competence in the paragliding domain increases, the intensely physical nature of the experience – the requirement to embrace it with mind and body in balance - engenders a shutting off of the primacy of the Cartesian mind in favor of an aesthetic experience of natural forces of the sky, an embrace and union with it. This union and engagement of the body with a "significant, powerful, and extraordinary" force greater than the self facilitates feelings of spirituality or sacredness, moments of flow or both, creating deeply satisfying experiences for pilots (quote is from Belk et al, 1989; Schmidt and Little, 2007). Just as the pilots' phatic language grows from and signifies the secret bonds pilots share together, so it also signifies a special union of mind-body practice within an individual pilot. By extension this implies the possibility of a special communication between pilot and air in which the air gives inputs and the pilot, mediated by harness and wing, responds – a sort of dance or play between human and nature:

"In the form and function of play, itself an independent entity which is senseless and irrational, man's consciousness that he is embedded in a sacred order of things finds its first, highest, and holiest expression" (Huizinga, 1949: 17 as quoted in Stranger, 1999: 268).

By extension the pilot can develop feelings of communitas, or union, with either the gear or the air, in a similar manner to how Dodson's (2006) mountain bikers come to perceive their bikes as extensions of themselves.

Interestingly, tacit skills require "continual repair and maintenance provided by the embedding community" (Collins, 2001: 117). Flying is a never-ending process of learning, in which one must "stay current" or lose embodied skills. This is commonly talked about as developing and retaining muscle memory. This special union of body-mind-nature is delicate. If the routines of the practice are not continually reenacted, the pilot looses them. If they do not continually interact with the equipment and the air they lose their fluency with it, and it becomes strange, foreign, hard to understand and likely scary. Just as they break the mind-body bond required within a practice, lapsed paragliders also break off their dialogue and union with the air, and are forced to initiate a formerly privileged conversation all over again.

EMBODIMENT AND RISK THEORY

The Extended Model of High-Risk Consumption

The flying experience revealed by the paragliders in this study shows several parallels to the extended model of high-risk consumption developed by Celsi et al (1993) among skydivers. 1) The paragliding experience is marked by all nine of the distinguishing features of flow and pilots report deep satisfaction from and craving for the challenges, opportunities for mastery and loss of self from flying (Csikszentmihalyi 2002). 2) Presence of phatic communication. 3) The presence of communitas that is formed from the flow, phatic communication and shared insider experiences – even if they don't produce flow. In addition, like the skydivers, several paragliders report reorienting their life around the activity, feelings of addiction, and strong self-identity tied to the practices of paragliding. 4.) Some pilots appeared to experience denouement and catharsis in their flights in the sense that they reported transformative experiences or a release from every day life.

However, very few pilots framed their flying experience as a dramatic narrative of struggle, overcoming or conquering that stand in as analogies for adrenaline charged experiences in Celsi et al (1993). While paraglider pilots do have moments of adrenaline, several pilots took pains to point out that this was not the enduring motive for their involvement. Instead of moments of grand dramatic struggle, the paraglider pilots more commonly mentioned release through deeply peaceful moments of relaxation, sensations of unity with the natural forces and even the need to "obey" or "chill". These comments point to an experience where competency, and hence ultimately flow, are not achieved by mastering an ability to conquer nature, but rather by mastering a letting go. Instead of fighting nature, to be successful pilots have to work with it. Fighting with nature, whether it is not listening to the wing when kiting or launching or not "obeying" the thermals, gets pilots hurt. Celsi at al (1993) do find flow, transcendence, even unity in the practice of skydiving, but subsume them into a role as facilitators of catharsis and release rather than ends in of themselves. The catharsis found in this study has a more sublime, subtle character, tinged with the sublime, spiritual and sacred. Not so much heroic action which implies human or individual primacy, but a giving up of a modernist, Cartesian narrative in favor of bodily union with the sublime, or even divine.

As a deeply embodied practice paragliders learn to reprogram and absorb themselves into a different set of mind-body routines and bodily practices for flying than, e.g. everyday life. The different framing of the experience compared to the skydivers in Celsi et al (1993) reflects how paragliding's practices are adapted to the unique spatial-temporal context of flying, with different "routinized ways of understanding, knowing how and desiring" than skydiving (Reckwitz, 2002: 250). Though the early parachute was the precursor for the early paragliding wing, the two wings have completely different aerodynamic properties suited for their different ends. One is meant to drop to earth, the other to stay aloft as long as possible. Similarly, skydivers and paragliders, are shaped by the different practice-arrangement bundles of their distinct webs - different ends, equipment, understanding of the physical world (one is a context for falling, the other is a context for rising) and temporal plane (a good jump is a rush of activity that happens in six seconds, a good flight hopefully at least lasts an hour); different ways of achieving ends (one performance is mediated by, and requires engine technology – a plane takes the pilots up into the air; the other has at its goal freedom from engine technology); and a different way of conceptualizing nature (something to be conquered or defied by dropping through the sky and living; versus a partner join to realize a dream to be part of nature, e.g. a bird). From this comparison it is natural to propose that skydivers and paraglider pilots could then have 1) different narratives of action in the world, 2) different embodied understandings of it, and, by extension, 3) different motivations for risky-sports consumption, or 4) possibly different framing or conceptualizations of risk itself.

Embodied Desire and Risk

Using embodiment to consider high-risk consumption forces us to consider the way embodied experiences shape the framing of needs. Warde describes consumption practices as directed "towards the fulfillment of self-regarding purposive projects" (2005: 147). The physical experience of the practices of paragliding, their personal rewards of flow and spiritual experience, and their social rewards of communitas - fulfill personal, physical needs. To draw on Merleau-Ponty:

"To be an embodied subject, then, is to be an active being, with needs which motivate actions and in relation to which elements in the surrounding environment are meaningful." (Merleau-Ponty as quoted in Matthews, 2006: 55-56)

For example, Stranger finds in the practice-mesh bundle of surfing, that risk-taking leisure activity becomes an embodied, playful experience that rewards out of its "profoundly aesthetic qualities," a description closer to the paragliding revealed in this study than the model of Celsi et al (1993). For paragliders, the embodied union with the natural elements gives different meaning to experiences outside of "normal" human comprehension, such as flying depending only on bits of nylon and natural forces. Through their activities paragliders gain understanding to a secret, invisible and foreign world of air, weather and physics.

Wacquant (2004, 2009) finds that bodily immersion in the practice of boxing ends up shaping and transforming not just boxer's physical, bodies but also their sensations, mental attitudes and desires. This implies that while some pilots may begin with adrenaline, as they gain competence from increased immersion in the physical practice of paragliding – its aesthetic dance with the wind -, their desires and mental attitudes shift towards other factors, for example the search for flow or an increased affection for union with nature, as Stranger's surfers do.

Inspired by Swidler, in this study we find that for researchers "the physical and the unconscious, automatic and taken-for-granted actions and routines" of paragliding help us look at it in a more nuanced way than a focus on mere "conscious ideas and values" related to risk would allow (2001:83). For example, the motivators above change the possible frames for the experience of paragliding beyond those proposed when we frame it as a risky-sport. That is, the embodied subjects involved in this practice are pursuing it from motivations and with more meaning beyond personal conquering of fear or adrenaline that theories formed apart from embodied cognition of the experience would apply, for example theories of deviance, edge work or dramatic acculturation to risk. Paragliders' consumption is directed towards Warde's (2005) self-regarding projects rather than towards the types of rebellious communication with society that researchers focused on deviant models of risk imply.

CONCLUSION

Using practice theory allows us to step away from structuralist or materialist biases that guide us to seek out evidence of prescribed forms of dialectics, oppositions and political struggles, and to instead focus on the activity under study itself. We can remain open to uncovering and documenting the facets of its acts, material goods, actors, processes, etc. without the burden of political struggle on the one hand or biological determinism on the other. From this neutral base we remain free to adopt and experiment with other ways of approaching the phenomenon at hand. We are able to explore both the internal experience of the practice as its adherents experience it, as well as how the sum of these actors may shape, guide or construct the practice as a larger social group or act. More importantly, we are able to remain open to the multitude of agents or forces that join in practice-arrangement bundles that would be left out of individualsociety or person-culture dichotomies. For paragliding this has been shown to include such important elements as the natural forces of the sun and air, the equipment used and pilots bodies and physical senses. Suitably, theories of flow and embodied comprehension, both rejecting in their own way strict Cartesian ontology, prove to be complementary theoretical tools from which to examine and open up this complicated array of mind-body-nature-things.

This openness makes practice theory an effective ontological and analytical tool for researchers wishing to study activities with elements of risk. Approaching an activity such as paragliding, a phenomenon little know, unfamiliar to most, and marked to outsiders by its "unnaturalness" and potential for risk, through the lens of practices allows us to set aside potentially restrictive framing biases and judgments and to instead seek out the nature of the phenomenon in all its multi-layered, intersecting dimensions. This allows us to move beyond a fixation with good/bad, normal/deviant dichotomies and instead investigate below the surface at the strands of the web that constitute the practice. Practice theory allows us to remain open to a phenomena's own framing of risk and its possible place in the understandings, rules and teleoaffective structures of a set of practices.

CONTRIBUTION AND LIMITATIONS

Firstly, this study provides a thick description of, and background information on a little researched phenomena. Secondly, while any study of practices is a snapshot of a dynamic nexus at the time of the research, I believe some of the insights generated by this examination can be applied more generally to other practicearrangement nets. In particularly the powerful role of embodied cognition in the enactment and mediation of this fundamentally kinetic experience, and the almost mystical sensations produced by using it to successfully navigate a powerful, unpredictable natural force like the air, should not only hold to paragliding practice meshes at other sites, and to other variations of paragliding practices such as acro and cross country flying, but also to closely related frameless, aerial free-flight practices such as hang gliding. However, I would hesitate to broadly apply this insight to all physical sporting activities nor other, non-sporting risky leisure activities, as the quality of the paragliding experience is the result of the unique mix of its practicesarrangement bundle.

Practice theory touches on so many dimensions that any study grounded in it is limited by how well the research can uncover and comprehend the complex web of the nexus it studies. For this study having only one researcher was a draw back. It would have been valuable to have multiple researchers so that the dimensions of this phenomenon could have been more deeply probed. This would have helped not just in covering more videographic "terrain", as a single person can only be in one place at one time capturing things from one angle, but would have also been of value to bring in a richer variety of perspectives to the analysis and triangulation. It would have been especially fruitful to have a mixed team of participant observers and nonparticipants when triangulating the analysis.

Another limitation of this study is that it focuses on observing and talking to currently active pilots. This presents a type of survival bias in that pilots who stay active in the web of practices are likely to have different outlooks on it than those who have left it. On the one hand this shouldn't matter because practices exist in their enactment, and so we need not consider people outside their practice-arrangement bundles. On the other hand, probing the edges of a practice where participants are on the thin side of the web of inter-linkages might reveal less positive views or more ambivalent experiences. For example, one has to wonder if lapsed pilots would relate the same glowing impression of union with nature.

FUTURE STUDIES

There are a few ways to extend this study. One would be to take a longitudinal approach and follow the same pilots, the same locale, or another dimension of the practice web over time, to see how and at what nodes the practice-arrangement bundles of paragliding iterate and evolve. In particular it would be interesting to monitor the interplay between the sport's continually evolving equipment and its teleoaffective structures.

A second interesting area of study would be to expand on the relationship between diffusion of practices and pilot-to-pilot contact, particularly related to the management of risk and safety through improved flying competency across the nexus of pilots, instruction, and site norms. For example, in data not elaborated on in this paper, several pilots mentioned how the broad adoption of a different reverse launch routine, the learning of which some pilots found required difficult "re-wiring" of physically ingrained routines, had improved safety in the sport. So, for example, in a study of practice web diffusion, one could examine the role the Internet may play in speeding such practice iterations, in that it spreads intellectual knowledge and visual awareness of new ways to enact a practice without "hands-on" instructor assistance. The question then would be how "watching good pilots" online, *e.g.*, in online videos, may substitute for watching them in person in regards to embodied learning and understanding.

APPENDIX A

Glossary

A select glossary of paraglider terms drawn from Pagen (2001), fieldwork, personal experience and other sources. There are variations in these terms between British and American English, along with regional variations. The American vocabulary is generally used in this essay.

"Beep - beep- beep- beep-booong"	Imitation of the noise a vario makes in sink. The faster the beeps, the greater the lift. Said more slowly, with a low pitch ending.
"Beep - beep- beep- beepbeepbeep!"	Imitation of the noise a vario makes in lift. Said with an increasingly rapid voice with a high pitch ending in imitation of a vario.
A-lines, "A's"	The front set of lines on the wing canopy.
Acro	Acrobatic flying in which the wing is manipulated to induce (and recover from) maneuvers such as spirals, tumbles or stalls.
Angle of attack	Describes the angle of the wing where the front is higher than the back.
Asymmetric	Partial collapse of the wing on one side so that the wing is no longer symmetrical. Can initiate uncontrolled turns to that side or degrade into spins.
Big Ears	Maneuver in which pilot uses the breaks to pull in the outer ends of the wing to increase descent: 'pulling the ears'.
Carbon seagull	Derogatory term for a type of ultralight, non-motorized aircraft.
Certified	A wing that has been certified under an EN standards scheme as having passed tests for airworthiness, response and recovery to deflations and stalls, spin performance etc. Testing is conducted by actual pilots flying wings submitted for testing (rather than via simulation).
Chase driver	Retrieve driver. May have to 'chase' a pilot over a course or distance in order to be near them when they land. Communicates with the pilot via radio and looks for them/follows them as they fly.
Comp	A paragliding competition. As an adjective, a pilot who competes or gear used in competition. Implies higher performance, skill or experience.

Coring a thermal	Turning in the 'center' or 'core' of the thermal where lift is strongest (and so pilot rises fastest). Requires skill and tight turns.
Deflation	When the air loses pressure in part or all of the wing.
Full bar	Speed bar pressed to its maximum extension for top speed. Lowers the angle of attacke, decreasing drag.
Full Stall	When the entire glider losses lift due to an excessive angle of attack that prevents airflow across the glider. Also an intentional acrobatic maneuver induced by completely pulling and holding the breaks down.
Gaggle	A cluster of pilots working (flying in) the same thermal.
Ground handling, aka Kiting	Technique for bringing the wing up and down and keeping it in the air while standing on the ground. Trains use of brake and risers (controls) and sensitizes to wing characteristics and 'feel'.
Hang tension	Holding the break toggles with minimal tension from the arms (elbows) hanging down.
Hang, hang-y	Prefix, adjective or noun designating an associating with hang gliding, "The place was full of hangs." "He's a hang-y."
Hill, "the-hill"	A flying (launch) site, often one's local, regular site.
Huck	To jump or throw, as in to 'huck oneself off a cliff' or to 'huck a reserve' (throw one's reserve). Used sometimes for launching even though pilots don't literaly jump off a cliff, but float off it.
Landing, "Landing!"	The landing zone. Also an expression yelled by a pilot at busy landing zones to indicate that they're coming in to land; or by, <i>e.g.</i> an instructor to indicate that students who are kiting wings should lower them.
Launch	Where one launches, i.e. starts a flight.
Launch potato	<i>Derogative</i> Someone who stands or sits around on launch with their gear set up waiting too long for conditions to be right, often backing up the launch queue for other pilots.
Lift	An area of rising air, "Then I hit some lift." Measured in meters per second (mps) or feet per second (fps).
LZ	Landing zone, usually a designated or official field, cleared area or other zone in a specific area with a windsock or streamer to indicate wind direction.

Marges	Cumulous nimbus clouds which are taller than they are wider (like Marge Simpson's hair): an unstable cloud with high energy (excessive upward force) and potential to storm. Indicates overdevelopment. Dangerous.
Mountain flying	Flying in mountainous or hilly terrain. Usually using more thermic, potentially turbulent air in more changeable conditions due to valley winds and mountain wind patterns.
Mushy	Lack of regular pressure felt in the breaks, can be an indication of an impending stall.
Para-	Prefix, adjective or noun, designating an association with paragliding.
Para-waiting, parawaiting	The often frustrating interval of time spent waiting for the wind conditions to be right for flying. Usually spent at a launch, alternately in the vicinity of launch or at an LZ.
Paraglider	A pilot or the wing that one flies.
Pilot-in-command	The pilot in charge, used to refer to a fully independent pilot who (actively) makes his or her own decisions while flying, as opposed to a student who is coached over the radio by an instructor.
Pod, cocoon harness	A special, semi-reclining harness that wraps around the pilot. Reduces drag, to reduce drag, designed for competitions and xc flying.
Proto, prototype	An uncertified wing that is either a prototype of a design in progress; or a wing designed for higher performance that the manufacturer does not intend to market generally. Not submitted for certification. Flown by test and competition pilots, especially 'team' pilots.
RC, Radio controlled	A radio controlled hobby plane or helicopter. Can also be used to refer to a pilot flying according to an instructor's radioed directions, for example beginners or first time SIV clinic pilots executing unfamiliar maneuvers.
Reserve	Safety parachute carried in case of accidents.
Retrieve	Getting picked up after flying, usually XC. The person who picks one up is a 'retrieve driver' or 'my retrieve'.
Reverse position, aka cross breaks	Facing the wing when kiting or bring it up at launch so that the risers and breaks are crossed, with the right break remaining in the right hand, left in left hand. To many a counter intuitive way of holding the controls (right hand actually controls left side when facing wing).
Ridge lift	Lift generated by air hitting a ridge or other landform.

Riser (s)	The reinforced points where the harness is clipped into the wing. Joins the ends of the series of lines coming down from each side of the wing.
Rotor	Downward swirling or circling air that forms directly downwind from any object such as a building, tree or other paraglider in the air.
Seat	The harness one sits in while flying
Sink	A downward moving airmass. Not liked by pilots.
SIV	Safety in Vol. See maneuvers clinic.
Sled ride	A flight directly from the launch to the landing, shorter, often associated with beginning flights or a failure to find lift. See also Top- to-bottom.
Speed bar	A bar or fabric webbing connected to lines attached to the wing, which, when pressed with the foot, lowers the wing's angle of attack, thereby decreasing drag.
Spin	The rapid uncontrolled turning of a glider due to a stall on one side.
Spiral, Spiral dive	A succession of tight 360° turns, induces a fast rate of descent. Can be done intentionally to descend faster.
Stall	When air has stopped travelling over the top and bottom of the wing, leading to inertia. The wing stops flying and will drop rapidly.
Take a wrap, 'a wrap'	Wrapping the break lines around the hand to shorten the travel. Used to increase feel or pressure on the breaks.
Tandem	Verb and noun indicating flying with two people at once: a pilot and a passenger: 'a tandem', 'flying tandem' or "going tandem'.
Team pilot	Pilot sponsored by a wing manufacturer who flies as part of their designated competition team, testing crew or both. Indicates a closer relationship with the manufacturer than simply being 'sponsored'. Several Paragliding schools also sponsor designated team pilots.
Test pilot (aka Factory pilot)	A pilot who gets paid to tests wings for a manufacturer or testing agency. Wings are tested in flight by putting them through a series of maneuvers that will simulate rough conditions and in-air accidents and then measuring the wing reactions. Requires a high degree of skill, knowledge, and nerve.
Thermal	A lifting air mass. Used by pilots to gain and sustain altitude. Contains moving masses of both lift and sink.
Tip(s)	Wing-tip, the end(s) of the wing.

Top-to-bottom	A sled ride (U.K. English). See also sled ride.
Tow	Launching by means of a winch or other mechanical line-tow system. Common in flat land areas. A noun, verb and gerund ("a tow", "to tow", "towing").
Uncertified	Equipment (wing) that has not passed a series of certification tests which rank (categorize) the wing according to its mix of performance and safety. Some equipment, or less frequently sold sizes, are intentionally not submitted for certification tests (cf. proto).
Vario	An instrument that emits beeping sounds to signal altitude and rate of ascent and descent based on barometric pressure. May have an integrated GPS and/or allow downloading of data.
Weight shift	Shifting one's weight to one side to induce movement in the wing by changing the center of gravity under it (<i>e.g.</i> as part of a turn to that side).
Wind dummy	Pilot who launches first to test the wind and show the location of thermals and conditions to other pilots. In competitions, a designated role performed by volunteer (non-competition) pilots.
Wing	The paragliding wing, aka 'paraglider' or 'canopy'
Working a thermal	Turning successive 360 degree turns in a thermal to gain lift; may take a lot of work to continuously stay in the lifting part of the thermal in order to reach the desired altitude.
XC	Cross country - a type of flying in which the goal is distance, reaching a specific point, or both. Implies landing in a different area than the launch, or making ad hoc decisions on where to land in response to changing conditions.

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