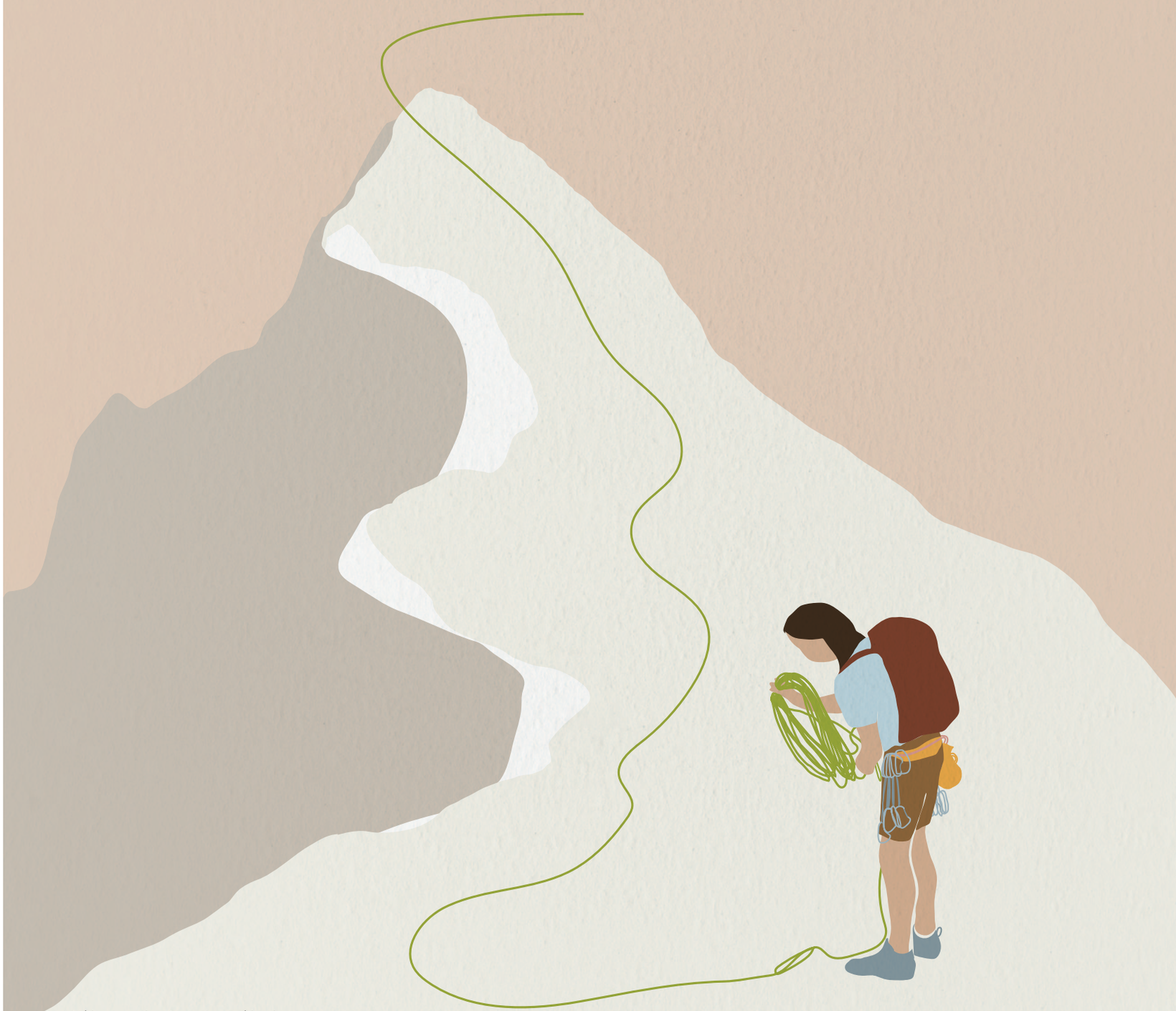
We really need to **do better**



Vielleicht wird dieser selbstkritische Artikel nicht allen gefallen!? Die in Frankreich lebende Bergsteigerin Anne van Galen zeigt Mut und traut sich, Stellung zu beziehen. Wir als Redaktion unterstützen ihren Mut. Ihre wichtige Frage: Wie können wir als professionelle Führungskräfte im Bergsport (Bergwanderführer:innen, Kletterlehrer:innen, Ski-, Canyoning-Guides, Bergführer:innen usw.) noch besser in unserem Risikomanagement werden? Da sie den Artikel auf Englisch geschrieben hat, veröffentlichen wir ihn im englischen Original.

Von Anne van Galen

Dear colleagues,

This is not going to be a nice article about our beloved playground.

The point of my argument is that we as mountain professionals are simply not good enough when it comes to risk management. There are many ways in which we can improve. And must improve. We need to try harder. When it comes to accidents in the mountains involving trained guides, the numbers are horrendous. To quote an article from 2023 written by avalanche consultant Mike Austin:

"Between 1995 and 2018, a total of 121 French guides died in mountain incidents. To give context, expressed as a percentage this is almost identical to that of US soldiers serving in the Vietnam War.[1]

If we examine the avalanche incident rate of mountain professionals more closely, we begin to understand the scale of the issue. As early as 2002, a meeting of the International Federation of Mountain Guides (IFMGA) indicated that more people died when travelling with a mountain guide than without one.[2]

In Switzerland over a five-year period, 18 % of avalanche victims were traveling with a guide at the time of their accident. This figure has remained steady over a 20-year period.

In France over a 20-year period, 14 % of avalanche deaths occurred despite the presence of a mountain professional in the group.[3]

In North America, figures are similar. Canada's rate exceeds 21 %.[4]*"*

Why am I writing this uncomfortable article? Well, because I have to.

As a mountaineer who has lost many friends, as a mountain professional, as a risk manager for high hazard companies and as the mother of a teenage daughter who is starting to develop her own love for mountaineering, I think these statistics are unacceptable.

As a human being with a moral imperative to care about human life, I think we need to prioritise bringing this statistic down. Society's opinions about mountain sports, and especially accidents (including the social and economic costs thereof), is rapidly changing. If we do nothing to improve these death rates in the near future, it is a certainty that our mountain sports will become far more restricted by external regulators. And this seems to me an undesirable outcome – but the regulatory squeeze is already being felt:

- We have the example of Italy, where it is forbidden by law for mountain guides to go out with avalanche risk 4 or 5.
- Due to many incidents and rescues, mayors around the Mont Blanc massif simply close the mountains when conditions are precarious. As a result, we mountain professionals risk losing terrain suitable for guiding.
- In winter 2015, the prefect of the Hautes Alpes threatened to close the mountains after the death of 15 people by avalanches in only 23 days. (On a personal note, one of those victims was my climbing partner, an accomplished mountaineer, one of New Zealand's strongest rock climbers in her day and the mother of a lovely teenage daughter.)
- Also in winter 2015, the French guides association urged all its members to stay on slopes of less than 30 degrees when skiing, no matter what …

And if we are still unconvinced, my final argument for why we should become better risk managers is, of course, climate change. As mountain professionals, we witness the forefront of the effects. Global warming makes the already uncertain mountain environment even more unpredictable. Recent winters have delivered several examples of avalanche situations that differed drastically from those originally predicted.[5] We have to learn to deal with this better and faster. It is inconvenient when the weather or avalanche forecast does not match reality, but it cannot be an excuse for us making a decision that will lead to a fatality.

How could we do better?

Widen our margins with a focus on consequences
So why do our clients hire us? Because we give them a great time. We know the best spots, bring them to the best viewpoints, break trail, coach them when they are afraid, listen to their stories, tell interesting stories ourselves. Yes, we have an extraordinary job. But in the eyes of most of our clients, the main reason they pay us is because we can keep them in one piece. For a client, any accident, let alone a fatal one, is an unacceptable outcome. But facts do not reflect this. Quite a distressing number of people who entrust their lives to the hands of a mountain professional still lose their lives. Especially in avalanche terrain. And, for some strange reason, we have become used to it. The key words when working with clients ought to be humility, installing large margins with a focus on consequences, creating options, and a decision-making process which is transparent and can be reproduced.

In other words, we should focus our decision making in avalanche terrain much more on consequences, not on probability. Being a successful mountain professional is about creating a great week for our clients, staying away from high consequence situations, even when the avalanche and weather conditions are extremely poor. And this is quite different from trying to figure out what is the coolest run we can do with a risk 3 at hand. Or to put it more simply, in the words of avalanche forecaster Karl Klassen:
"Assume you are wrong until proven otherwise."
"Learn to enjoy skiing on simple, moderate terrain."

Design protocols and best practices for good decision making in uncertain environments
If we are honest, most of the time it is not the famous "Restrisiko" (residual risk) that kills us and our clients. It is making suboptimal decisions somewhere in our planning or execution. Suboptimal, because there was too much (time) pressure, we held too many assumptions, too much tunnel vision, too much ego, we consulted too little with colleagues, etc., etc … Or maybe we were simply too tired or too distracted. Thanks to the research of Amos Tversky and Daniel Kahneman, which informed Ian McCammon's well-known "FACETS" approach, we are already acquainted with heuristic traps. But although we now seem to acknowledge them much better than we used to, we have not yet really established enough practices on how to deal with them once they have been identified. The 5-step decision protocol (see article in bergundsteigen #113) can be useful. Furthermore, Annie Duke in her book 'How to decide'[6] gives us many tips for better decision making in high uncertainty environments.
If we as professionals can clarify what makes a decision "good", and what makes it less good, we will also be able to rationalizes and defend our decisions better, if necessary. It does not make sense that we have standards for which methods and which gear to use, but, unlike other high-risk industries (e. g. aviation), we do not yet have standards for good decision making in high pressure, high uncertainty situations.

More focus on distraction management
Several bergundsteigen authors have tried to learn from a tragic rappelling accident in 2023. Many sensible things have been said. I find it interesting that the obvious seems not to have been stated: a lack of concentration in combination with a distraction might have been the root cause of this tragic accident. Just before falling to his death, the climber was speaking to another climber, whom he knew and who was rappelling next to him. They were conversing at the very moment when the victim arrived at the belay and had to secure himself with his belay sling. Of course, we will never know with certainty if a distracted mind was at the root of his tragedy. But how many people, including world class climbers, have had severe accidents "in their back garden" because of a lack of concentration in combination with distractions? Alex Honnold almost died because he forgot to tie a knot at the end of his rope when climbing with his girlfriend and her family. Lynn Hill miraculously survived a 30-metre fall after she forgot to finish her knot. She herself pinpointed a distraction as the root cause: somebody started talking to her while she was tying her knot. We know that because of how the brain works, driving and texting do not go together. Why do we let ourselves be similarly distracted during crucial rope manoeuvres on which our lives (or the lives of others) depend? In the high hazard industry, managing distractions is becoming an important element of workplace safety. And we all know that our risk management is only optimal when we are sufficiently fit, focused and alert. In our protocols, however, we do not pay systematic attention to these "fit, focused and alert" aspects. We would sooner focus on tying an even better knot or doing another partner check than concretely addressing the fact that we are not fully mentally present or are in a state of fatigue.

Manage internal distractions. Distractions do not only come from the outside world. Our own thoughts, fitness and hormones are also playing a huge role when it comes to absentmindedness or flawed focus. Someone who is dealing with a diverse palette of risks and uncertainties should be mindful of this, and ideally should know when and how to manage her or his inner distractors. We have a lot to gain here.

More international exchange of best (technical) practices
Although I have lived in the French Alps for a long time, I first had to experience a very critical abseil situation before I changed from the good old Prusik Brems Knot to the French Machard. While rappelling from Repentance in the Cogne valley some eight years ago, my rope became stuck behind some ice structure. Water was spraying everywhere, and it was not long before I was soaked to the bone. My rope was as drenched as me and there was no way that I could get my prusik going again. If I had not managed to get an ice screw in, it would have been a very sad ending to an intense morning. Later, a French guide and friend Arnaud Guillaume who works for ENSA told me that their research showed that the Machard is the only friction hitch which functions in any circumstance. I was therefore glad to see that in bergundsteigen, the industry preference for the Machard friction hitch had also landed, but I wonder why it took so many years after the French research results were published. The European adoption of the Scottish Bothy Bag has a similar story. I discovered this magic tent some ten years ago during a wilderness winter first aid training course in the Swiss Alps with a Scottish mountain guide. I am very scared of the combination of wind and cold and since this training I always have two bothies with me on my winter weeks with clients (for the record: the clients carry the

bothies). And as a trainer of “Aspirants”, I recommend that they always have this item as a life saver. Again, I was very glad to see bergundsteigen supporting these emergency shelters … but also a little sad, because it took two huge accidents on the Haute Route to make the bothy bag recommended standard kit for winter traverses.

Given the above track record, I wonder how many abseil incidents it will take until dynamic lanyard systems (Petzl Connect Adjust and comparable systems) will become the gold standard in all Alpine countries. Of course, these are only random examples. My point is: we should work on a more open international exchange of best practices and research results.

Involve clients in risk management and decision making

For some of us it might be a strange idea, but our clients can be a useful resource when it comes to risk management. Not only because we have trained them in basic skills such as avalanche rescue, but also because they have brains. Inviting them to use these brains before, during and after a tour makes us as a team less vulnerable to mistakes in our decision making. By involving more eyes and ears in our observation and analysis, we are able to gather more information about our environment and circumstances.

I know, for example, a guide in La Grave – Paulo Grobel – who already includes his clients systematically in his risk management. Every day, no matter if it’s a distant 7000 m peak in Nepal or “just a tour in the backyard with a colleague or friend” – he starts with team-wise mapping out (visually on a piece of paper) the route options, risks and countermeasures to take. We can definitely learn a lot from these kinds of practices.

Just culture and intervision:
“Let him, who is without sin, cast the first stone?”

Often, in the aftermath of an accident in the mountains, we hear hasty attempts at non-judgemental compassion from the guiding community, such as: “It could have happened to me as well.” Or that “the guides took all possible safety measures”. I saw this same phenomenon when I was working as a police officer. The very fact that “the outside world” is constantly judging us, makes us feel the need to protect each other, and close ranks. Of course it is right not to judge one another without knowing the exact circumstances. And yes, I would really appreciate the support of my colleagues after a fatal accident, because I can imagine how devastating a situation like that must be, not only for the people left behind, but also for the guide. But on the other hand, I believe that sometimes the “we do not judge each other” mantra is not conducive to learning. Guiding is a very isolating and sometimes lonely business. The nature of the business begs for systematic guides intervision: a “Just Culture”, in which the right questions can be asked and different viewpoints and new perspectives for action can be exchanged. In my experience, intervision provides us with opportunities of indepth introspection and learning. Everybody who has been a guide in the mountains for some time has these stories at hand. In my experience, sharing these stories with colleagues in order to learn is crucial. But unfortunately, in guide training we still often focus on the newest avalanche search method, pulley system or jurisprudence, refraining from sharing with each other the real problems that keep us awake at night, or the times we felt ashamed because it was sheer luck rather than good guiding that kept us alive.I was very happy with recent issues of bergundsteigen, in which people wrote honestly and bravely about sometimes painful nearmiss stories from their guiding experience, focussing on learning. I think this is a great step forward.

Foto: Hans J de Vries

Anne van Galen arbeitet im Bereich Resilienz und Sicherheitsmanagement für Hochrisikobranchen. Sie liebt Durchquerungen mit Kunden im Winter. Unter anderem war sie die erste Niederländerin, die den Peuterey-Integrale auf den Mont Blanc kletterte.

Good measuring is important

I have hesitated a long time about incorporating the need for more meaningful measuring into this list. In companies I have worked for I have seen great things happening because of clear health and safety goal setting. But in the dungeons of all this measuring I have also witnessed very questionable practices. Managers driving an injured colleague to the hospital in their personal car and insisting on him coming back to work the next day ("I know that you are a welder, but you can still sit behind a desk!"), in order to avoid an official hospitalisation and sick leave in the records. Or what to think about a member of an executive committee going to lengths in order to have his accidents statistics tweaked so that he would not lose his number one position in the industry listing. Or even people being happy that it was "only a subcontractor" that ended up severely injured in hospital ("not on my statistics").

But last Saturday I was at a festive evening with home-made food and some jazzy live music. I came there equipped with wheelchair and crutches after a recent operation. At a certain moment five guide friends stood around me and we were exchanging typical 50+ guide's experiences: a couple of years ago, Yvan had had his two knees replaced at the same time in order to be able to go to Greenland four months later. Marco had experienced a difficult ski season because of his not-so-well-placed hip prosthesis. Eric had to go to Grenoble the following week to have his ankle arthritis treated (the same as me!). And Christophe (still climbing French 8th grade routes) confessed he would need a new hip, but he was trying to postpone it as long as possible.[7]

With Stéphane Monari I didn't talk health issues. But when he told me he had just guided for eight weeks in a row, mainly training new guides for the ENSA, of course we came across the French guides death rate statistic. He explained to me that after these statistics became public, the ENSA had fundamentally changed their way of doing things. Instead of recruiting only the best of the best alpine climbers (the "half gods"), they now focused more on recruiting people with the right personality. And to become a teacher you now have to be a very experienced pedagogical guide and work with actual clients at least six months a year. The curriculum focuses much more on risk management, the psychological aspects of the job, communication with clients and decision making. Two extra weeks have recently been added in focusing on off-piste guiding.

According to Steph, this is completely changing the French guide culture. "The time of omerta is over. The new generation has a very different approach. There is more open dialogue about, for example, psychological issues and there is also more open exchange between us guides about misses and near misses. And a very practical example: we now have WhatsApp groups per valley or region and in winter mountain professionals can share their observations and questions".

ENSA's example further convinced me that without statistical transparency, we limit our opportunities for improvement. If we are able to step away from professional ego (also at the organisational level) and be humble and open about our numbers, we will see increased motivation to invest in changes to improve those numbers.

To round it up

We do a lot of things right when it comes to keeping ourselves and our clients safe in the mountains. And I am very aware of the fact that nobody leaves the hut in the morning with the intention of having an accident. And yes, fate or bad luck do sometimes interfere with our good intentions and flawless preparation. And we certainly should not underestimate the effects of repeated risk exposure. But this only underlines that our high risk, high consequence biotope demands a "state of the art" response in dealing with the always rapidly changing risks, including ourselves.

I have tried to define various pathways for improving our practices. These have been based on experiences in the risk management industry and in the mountains. The central idea is to benefit as much as possible from "new knowledge". Together with specialists in the field, I hope to be able to elaborate more on these various subjects in coming issues of bergundsteigen. Do not hesitate to give your input!

Sources and notes

1 1600 active French guides – 5.2 deaths per year give a 0.328125 % per annum. x8 (Duration of US involvement in Vietnam) gives a mortality rate of 2.65 % over the same time span. Death rate of US soldiers in Vietnam was 2.7 % (source American War Library).

2 Decision making in avalanche terrain ISSW 2004 Iain Stewart Patterson.

3 Sources ENSA & SLF.

4 Patterns of death among avalanche fatalities: a 21-year review. CMAJ. Boyd J, Haegeli P, Abu-Laban RB

5 Example: https://www.slf.ch/de/lawinenbulletin-und-schneesituation/avablog/2022/23/avablog-14-15-maerz-2023/

6 Duke, Annie (2020). How to decide? Simple Tools for Making Better Choices, Portfolio.

7 Of course (not always so) healthy aging in mountain sports could fill an upcoming bergundsteigen issue.

Illustration: grafische auseinandersetzung – Anna Hoellrigl