### A windsurfer's approach to life

#### **Abstract**:

When going for a short walk up the mountain this morning, this thought entered my brain:

"Life is like Windsurfing: No matter from where and how strong the wind blows, you can use it."

And instead of going on with the things I had in mind, I formulated this draft.\*

### Introduction:

In both windsurfing and life, one often needs to navigate through stormy, difficult waters in order to be successfull. While I leave the attempt to define the word 'successfull' for another day, I want to demonstrate what precisely I mean by that. I will use events out of my own life to spice it up. For those of you who don't know me already, I'm 36 years old, born in Kirchheim unter Teck. Since the age of six, I regularly go windsuring and think about physics. During the long car drives from Stuttgart to Etang de Lacanau (Bordeaux), I would ask my dad physics questions (I do remember some) which he would happily answer. As a secondary school math and physics teacher he was qualified. At the lake, my mum would take over and teach me windsurfing. No need to say she is very qualified too.

Fast forward to now: I just entered the final phase of my phd in experimental, high energy nuclear physics. **My Topic:** Direct photon production in Pb-Pb collisions at \sqrt{s\_{NN}}=5.02 TeV with the ALICE experiment at the LHC at CERN, to better understand those laws of physics, that were dominant during the first few moments of our universe right after the Big Bang.

Between Lacanau and now I've had an eventful life with many depressions and insanely beautiful moments. In this article, I want

do describe a few parallels between mastering life and mastering windsurfing. From the perspective of a pragmatic physicist at heart, whose ability to switch perspectives was trained especially through his studies of physics (12 years at uni;)) and psychoanalysis (four years).

Setting the stage

Most people agree, that life mainly consists of decision making. If you disagree, then I think you are a lucky, because you already manage to incorporate your intuition substantially into your decision making process. But in the end, its still decisions that you take. No matter the actual ratio of thought over emotion.

I start with some terminology, explained mainly in windsurfing vocab.

#### **CONDITIONS**

External conditions (EC):

- the conditions (wind & waves, kitesurfers, ships) are external circumstances which you can NOT change. At least not on immediate time scales.
- they correspond to everything you need to deal with in your life at any given point in time and space

'Internal conditions' (IC):

- the sail and the board:
- fins, base position, sail size, shape, downhaul + boom tensions, mast weight and bending curve etc.
- your body and your mind:
- your position on the board, the way you charge the board through your feet and arms by exerting forces through feet, hands, hipps (when hooked in to harness)
- your mind: actually all of the above is a result of your mind. So your

mind is the true game changer here

=> correspond to the things you C A N change. Immediately and anywhere.

### **CHOICES**

- A: Your gear and the way you apply it:
  - The opening angle of the sail with respect to the board length axis
  - the angle between board and wind direction
  - many of the internal conditions but not all.
- **B:** your absolute bearing'

## Strictly speaking B is determined by A.

**BUT:** You have an infinite set of choices in A and you have to pick one. Which one are you gonna take? This brings us to the next Keyword.

#### STRATEGY:

No matter what you think what your strategy is, even when you think you don't follow any strategy, there is still something I call

'effective strategy (ES)':

- Meaning even if you think you don't follow any strategy, for the
  outside universe, it will still look like you follow one. Imagine some
  observer O in another universe, watching you in your life through a
  wormhole. What will he/she/it see and think and write in a report
  about you (Y)?
- For instance:
  - Y usually waits until tired scrolling through altrupedia.space before going to sleep -usually around midnight. When sth random happens (for instance a PR comes in) Y might stay up until the morning)

- Y, at most times, just does what feels right and goes to places where Y feels happy
- What might O's short concise description of Y's strategy read like?
   one possibility:
  - "Y mostly acts upon random events and picks the specific probability distribution from which these events are drawn based on intuition"

How would you yourself describe your strategy? This probably greatly depends on your (current) level of happiness.

### scenario 1)

You are sad, life is treating you like shit, and you blame specifically yourself for it. You might say something like. Yeah well, I don't have a strategy, I just do what I want and run away every time I hate Heidelberg. No wonder there is no success in my life and other people don't recognize and appreciate me.

**Your label** for your self-perceived strategy:

• SPS1: not existent

# scenario 2)

You are in Tarifa, you feel great and realize there are so many great, appreciative people on this planet, that you don't worry at all about anything.

**Your label** for your self-perceived strategy:

 SPS2: Enjoy life to its fullest, trying to do sth good for the world at the same time

SPS1 and SPS2 are very different, but O's ES's label will be the same in both scenarios.

A physicist might want to say:

ES's transform invariantly whereas SPS's transform variantly under certain transformations in Minkowski space.

Or, another anology from phyics:

 One might say, SPS are intrinsic quantities whereas ES are extensive quantities.

We do the same in thermodynamics when moving from intrinsic state descriptions (imagine a gas balloon and for every atom in it you describe its momentum and position at any given time) to a **more efficient effective macroscopic description:** 

Pessure \* Volume = N\_A \* k\_BT \* Temperature ( ideal gas equation )

*N\_A* and *k\_B* are constants so there is only 3 free variables in this equation. Once you know 2, you can deduct the 3rd and you know everything you could want to know about a balloon of gas. Will it rise? Will it explode? Can I use it as a pillow, etc.

Compare this to about **1e+23** \* **2** \* **3** = **6e+23** (that's a 6 with 23 0's) variables in a microscopic description of all atoms individually. Look up *Wikipedias* article on the Boltzmann constant if you want to learn more.

Historically we actually went the other way round: We started with the ideal gas equation and after the rise of statistical physics some people were quite happy, that one could **condense** 

Anyway, let's get back to my life-windsurf abstraction.

I got carried away on the point how A and B relate. And in my windsurflife model (WM) I claim:

If you are a somewhat proficient windsurfer, you will make many choices in A based on B (the absolute bearing you want to have at any point in

time during your sailing session until you're back at your van). If you are not so proficient, you will still land up at your van eventually, but maybe you will have to do the 'walk of shame' along the beach, carrying your gear against the wind through the sand. With 40 knots sideshore this gives you great exercise and the most natural skin peeling you can imagine. You need a lot of abs for that. Abs are not only made in the kitchen, but also on the beach.

### Let me recapitulate the key terms of the WM:

- external conditions (EC)
- internal conditions (ic)
- target bearing (tb)
- Strategy (s)
- effective bearing (EB)

A good windsurfer makes a wise choise of internal conditions, strategy and target bearing that will spare him the walk of shame and while maximizing pleasure and minimizing risks.

No matter how strong the wind blows, and how stable in speed and direction it is, you can always use it to your benefit. All you need to do, is follow my three step general problem solution strategy, exemplified in the following real-life scenario, that happens like this quite often around Tarifa I suppose:

**Problem:** A random combination of unfavorable events. You will understand the concrete problem when you read 1)

# 1) Assess:

- Note that the wind has changed or even better: is about to change
- There is a huge steep wave rolling in from luv which would catapult me 5m into the air if I keep my bearing and speed but there is one gap a bit upwind and one considerably downwind

- I'm already quite close to the Wind
- There is an inbound kitesurfer (in 99% of cases male in this scenario) on collision course which has to yield priority: Port Tack yields to Starboard Tack
- He looks like a beginner: probably not really fit to evade, doesn't know navel rules, or even worse: Thinks he is in the right because he is going towards the beach or sth
- If there was no kitesurfer I would clearly opt to go for the upwind gap. Because the more downwind you go, the more unstable you are. But there is.
- 2) Plan: Think of a mitigation strategy.

### 3) Do:

- Since luckily I'm in good shape at the moment, I feel confident to go
  for the downwind gap. This will make me really really fast for a short
  time and with a gust coming in, you normally don't want to be on a
  downwind course. But I still have a few seconds to accelerate by a
  few knots, reducing the impact when the gust hits me, so I'm not
  concerned, just really concentrated for the next 15 seconds: I
- build up body tension,
- unhook from the harness
- accelerate by a few knots and already turn downwind a bit (both at the same time)
- loosen my feet in the straps by just a little, as if in preparation for a jibe
- wait for the gust to hit me and then gauge it. Last chance to abort. If the gust is more or less what I expected:
- bear away to the maximum I need to bear away
- last minor course corrections such that I will pass through the gap

with the target bearing I want to have

• made it, happy

If there is strong gusty Levante, and you are close to structures on the land, you may experience variations from 15 - 35 knots and +-10 degrees in direction within a second. But you can control your muscles even faster. The last time I fell in the water because of a gust? I can't even remember. Why? Because I windsurf for 30 years now, 20 out of these in Tarifa, and all of the above steps I delegate to my intuition. I look at the water surface and already know what to expect in the next seconds. I don't get surprised anymore on the water. Unless, a kitesurfer just falls from the sky and I need to eject. One time his steering lines ripped my sun glasses from my head when I was already midflight. But, I blame myself for this close to fatal accident. Because it was my choice to go sailing on a busy beginner spot AND to not be 100% alert at all times.

In life I follow the same idea. And after 36 years on this planet, ~15 (~10 major) depressions (about one per year since I'm 20), one psychoanalytic psychotherapy (3-4 years, 3x50minutes per week), a few behavioral psychotherapies and also SRIs), I can proudly say, that I am on the right track to become as proficient in life as I already am in windsurfing.

The reason I share all this with you?

Because for what I have in mind, I can not do alone. And I think sharing this might help in

- a) getting you on board.
- b) might be valuable for somebody who is considering to do a psycho therapy and/or take medication.

My tip: at least do the 'Assess' step. You can still decide afterwards if you feel up for it. But in any case, you're gonna make a better decision after thoroughly assessing. And you can always ask me for help in

assessing your situation. I've got some experience with it;) best,

Stephan