

# ONCE UPON A TIME... A SCIENTIFIC FAIRY TALE -VOLUME I-





# Once Upon a Time...

## a Scientific Fairy Tale

- Volume I -

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“Sometimes reality is too complex.  
Stories give it form.”

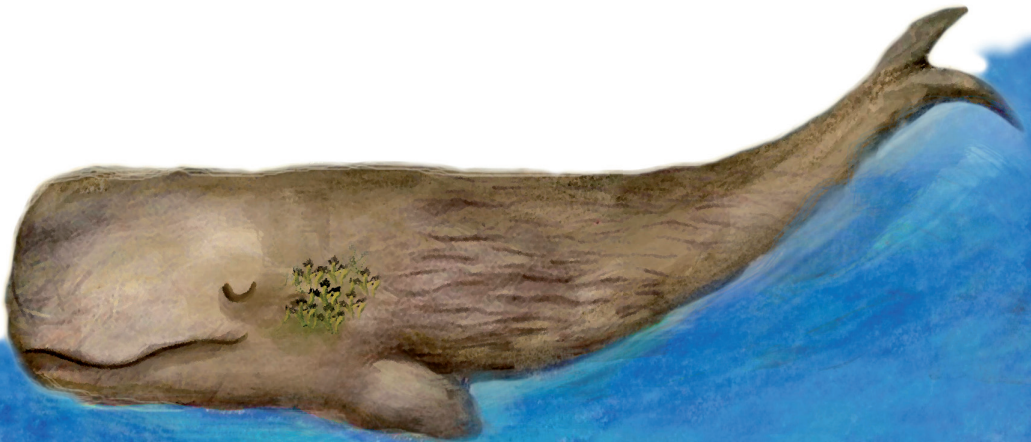
*Jean Luc Godard*

“People think that stories are shaped by people.  
In fact, it’s the other way around.”

*Terry Pratchett*

“Education is the most powerful weapon  
which you can use to change the world.”

*Nelson Mandela*



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# Introduction

Once upon a time, a number of adventurous scientists moved out from the known terrain of scientific literature to explore the terrain of science related story writing and storytelling. They aimed to create short stories, which address the current threats our oceans undergo due to “human-made” climate change, contamination and exploitation.

The first part of the adventure is now completed. The imagination formed into words and several illustrators took a step further to transform words into images. We present before you these adventures and invite you to sail with us.

“Once Upon a Time... a Scientific Fairy Tale. Volume I”, is an anthology of nine stories, two poems and one sustainable lifestyle guide. This is the first result of a collaborative effort of 29 scientists (the “Once Upon a Time-team”, OUAT-team) and the professional support of several artists. The protagonist of the stories and poems are marine and terrestrial animals, grown-ups and youngsters, people like you and us.

As scientists, the OUAT-team members know first-hand facts of the ongoing atmospheric and ocean warming, of the snow and ice sheets diminishing in recent years... Such information of the current changes in climate is transmitted to the public through, for example, the reports of the “Intergovernmental Panel on Climate Change” (the IPCC). The reports that the IPCC publishes are based on the scientific knowledge developed by many scientists worldwide. The reports are

open to the public and we invite you to visit <http://www.ipcc.ch>.

Nonetheless, we are also aware that the public is bombarded not only with information, but also with misinformation. Therefore, we decided to look for a way to further transmit scientific knowledge.

With our stories, the OUAT-team aims to tell you about our oceans in an amusing and entertaining way. Adults and children can read the stories together, adults can tell the stories to children; children, adults, youngsters can tell the stories to each other... The images illustrate some highlights of the stories. Furthermore, wherever we felt additional information or scientific explanations were needed, we have appended them at the end of the stories: in our “Would you like to know more?” sections. All in all, the stories aim to contribute to the understanding, protection, discovery and use of the oceans. We hope that you will learn about our oceans and share our call to raise the awareness about our environment, our home, our need to respect and take care of it.

This is an ongoing project., Please, feel free to contact us with suggestions for improvements and interactive extension of the existing concepts. The stories were first released in German, English and Spanish; more languages have followed Filipino, Chinese, Portuguese and are on the make: French, Taiwanese, Italian, Korean, Russian, Hebrew...



For the time being, dear reader, come! Follow us through several adventures from the deep sea to the table of your house!

*Hadar Elyashiv, Gema Martínez Méndez, Dharma Reyes Macaya*

*OUAT-Coordination Team*

*Bremen, 31st of August 2017*

# Catalina is Inara

Vicente Durán Toro

*Illustrations* Carolina Guarnizo Caro

And she was born in front of the Channel  
And her grandfather called her Catalina  
And Catalina opened her eyes for the first time—  
Here, in our land  
And Catalina saw the water, the seas and the ocean  
And she saw that they were fierce and peaceful,  
And Catalina heard the voice  
And the voice took form and said:  
'Your name will not be Catalina anymore—  
Because the currents will call you Inara, Spirit of the Water.'  
And Catalina was not Catalina anymore and she became Inara.



In eleven winters, Catalina fell in love with it,  
In eleven winters, Catalina grew up with it,  
Effervescent white foam,  
Offshore Lacao's coast  
As a dark body of water—  
The Chacao Channel boast.

The Chacao is being furious, the sailors are telling,  
By massive high tides its waters were lifted  
The Channel is being sad, women were whispering,  
By gusts of 40 knots its waters were shifted.

No fury, no sadness  
Catalina declared,  
Of Chacao's madness  
We should be aware.

We live  
Cutting forests!  
Clogging rivers!  
Our lives are being consumed  
By the energies produced.



In the dawn of a clear day,  
Catalina sailed away.  
A quest for energy she begun,  
To save the island and its people,  
Before nothing could be done.

Dashing, in the prow of a ship, a name could be read,  
The Polarstern Icebreaker was floating ahead.  
To which adventure are we heading?  
Catalina, for the first time, was dreading.

She took her chances,  
She jumped on board,  
Eluding despair  
Feeling elation  
Not knowing that there  
She will find her vocation.



As a stowaway Catalina was taken  
And for a couple of nights  
In the dungeons forsaken  
'A girl on my ship?' the captain bawled  
'For the labours of the sea, you are too small.'

Fearless, Catalina showed her teeth,  
'Curses from heaven!' she cried  
'I might be young, I might be a girl  
But my acts will define my soul as a pearl.'

'What bring you to our swirling waters?' Catalina inquired  
'What is your crusade?'  
'What is this job, that if done by me,  
Just cannot be made?'



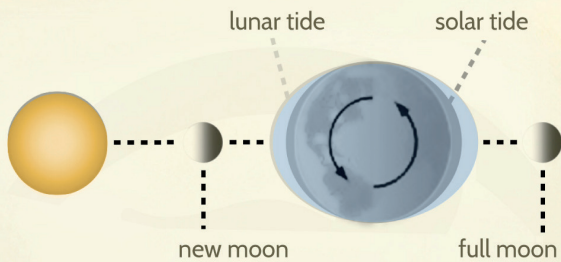
'We are oceanographers.' The Captain replied  
'We are studying the Chacao's remarkable tide,  
Seeking for a renewable energy source,  
Hidden in its great tidal force.'

'And if you find this submarine power?' Catalina asked  
'We install turbines that move with the flow of the tides.'  
'Turbines at the bottom of the Channel?' Catalina replied  
'To obtain tidal power that the ocean provides.'  
'But what happens if the energy is over?' Catalina hesitated  
Only then the Captain knew what the girl necessitated.

He smiled and explained  
'The sun and the moon move our seas  
Using the gravity, perpetual gathering force  
Creating tides, currents and waves.'

And Catalina saw the motion of the turbines  
And how they spun following the currents  
And how with every turn, new energy was formed  
So Catalina studied her deepest love,  
The Chacao Channel  
And Catalina helped her town  
And brought renewable energy  
Because as long as above the Channel  
The sun arises and the moon wanes  
The Chacao will provide energy until the end.

## spring tide



## neap tide

