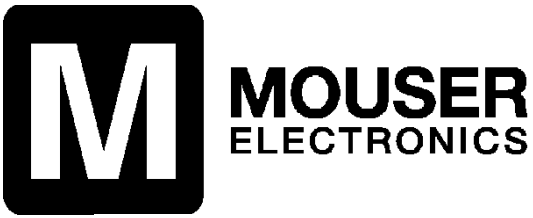
The Adventures of Professor Ventura, Bart and Clarke

Newton C. Braga

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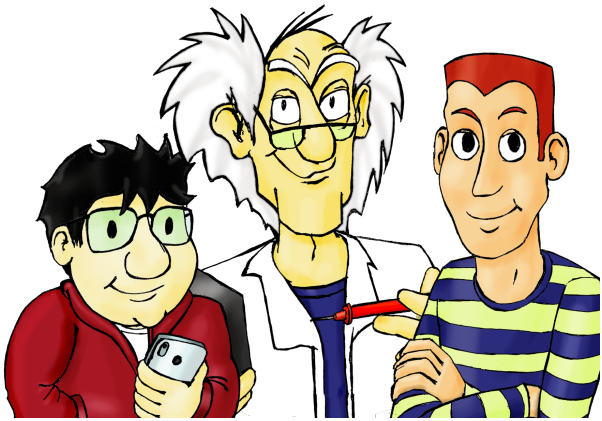
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Introduction

Imagine a crazy but very well-intentioned teacher, who knows about technology and other sciences and his two students involved in the greatest adventures and all this in a small town where a technical school operates. Using electronic technology from different periods, from improvised material to microcontrollers and other resources, they get involved in funny problems, solve mysteries, and even solve community problems. This is Professor Ventura with his students Bart and Clarke. In this book, I chose some of the funniest adventures I wrote since when I imagined the characters in the 60's and then modified them to be part of a series, published in an 80's magazine and later on my website, with an evident modernization. You will not only have fun with these characters, but you will also be able to enjoy the technology they practice, the technology of "makers" or makers of things and even teach your children, nephews, nieces or grandchildren to assemble interesting things. At the end of each story, selected from the dozens that I have published over the years, I will give projects that you can set up or teach how to set up, especially if you are a teacher and intend to bring technology to your students. Welcome to the maker's world of Professor Ventura, Bart and Clarke's crazy adventures and projects.



Newton C. Braga – 2020

The Story of the Characters

We have a good number of funny stories on the website involving our character Professor Ventura, and his students Bart and Clarke. In these adventures, the characters make use of a lot of science and technology, especially electronics. In the introduction to the series, we talked a little about this character, but not all about the true story which surrounds his creation. Let us go back to the subject, reporting exactly how we had the idea of creating this character, and his two students Bart and Clarke.

When I was very young, at the age of 11, and beginning to be interested in technology, I started taking my first steps in electronics by reading articles and books, I came across a series of very interesting stories published in the magazine Eletrônica Popular and which was a Brazilian translation of Popular Electronics American edition, from which I later became a collaborator.

The stories dealt with two characters, Juca and Chico, who were two young electronic technicians involved in adventures, showing creativity and knowledge, mainly improvisation skills such as Prof. Gearloos by Walt Disney, which was later extensively explored on the MacGyver series on TV. And, that was in the 60s, when there were still radio and TV repair shops, usually with a common entrance door in small towns in the countryside of Brazil, with televisions and radios piled up waiting to be repaired.

Inside, a technician with his or her soldering iron and a multimeter was working eagerly to repair everything from the broken iron wire to televisions. It was a profitable activity at the time, but we barely see it nowadays. This type of business still exists only in far-flung cities.

The original series was written by John T. Frye, called Carl and Jerry and later Mac's Shop launched in October 1954. He wrote 119 stories which came out until November 1964 with some interesting characters and themes equally important with the technology of that time.



An interesting story of John T. Frye's work can be found at:
http://www.copperwood.com/carlandjerry.htm.



JOHN T. FRYE W9EGV

According to the reports, the stories were criticized for making electronics look too easy and that, in addition, unexpected things like explosions and smoke, that equipment designers were not able to predict, were common. I kept this approach when creating Prof. Ventura.

The author of the article talks about a story which I remember until nowadays, called The Meller Smeller originally published in English in 1957. In it, the "heroes" of the adventures assemble an electrostatic filter to eliminate the smell of a skunk that had installed itself in the basement of a house, and thus be able to get close to the smelly "animal", but an "accident with the circuit" reverses its action just when they are near the animal…



In the figure below, see the evolution of the character design.

Enthusiastic about the characters and their adventures, in the 60's I even did some fanfics

with the characters, creating some stories that I put on my website in Portuguese written in the years 1963, but which I have already transformed into Bart and Clarke's characters. The idea of creating my own characters came later.

The inspiration came from my trips to the countryside to rest and take a closer look at nature, as well as people's way of life. Two cities gave me inspiration to create the environment as well as some characters.

The first was Emilianópolis in SP, Brazil, a quite small town where I could still find people who had tube televisions at their homes and that the personal repair shops were still common, with their radios and televisions stacked by the door, waiting to be repaired or to be "cannibalized", having their parts removed to be reused.

The other was the well-known one for many Santa Rita do Sapucaí in MG, Brazil, where ETE Francisco Moreira da Costa, a Technical School of Electronics, works, with the Sapucaí River cutting through the city, its countryside climate, mixed with technology by the presence of students and teachers, and nowadays with an important technological industrial park.

It was the ideal scenario, and with the presence of the school it was exactly the environment I needed: a crazy teacher, a "maker" without limits, two enthusiastic students and some other funny characters.

The first, and most important, was Tubald, inspired precisely by a Hanna-Barbera cartoon in which there was a "small band" with a plump, funny-looking tuba player. It would be the ideal character, since in small towns there was always a band playing on the bandstand.

The original profession itself came from my grandfather's memory. My grandfather was a musician, conductor of one of those rural bands, a composer (he even made a song with my name when I was born, but unfortunately it got lost) he was a professional barber. Nothing better than a fat, naive-looking musician, barber in real life, a victim of Professor Ventura's mess.

And with him came other characters, also inspired by real situations such as the Mayor Saturn Spendthrift, Saturnino Bolsogrande in the original version in Portuguese, whose surname came from a time when political corruption reigned freely (very

updated). Bolsogrande would be closely linked to the space that these politicians had to store the bribes (some would put it under their underwear).

Several stories were written, using technologies from the 60's and after the 70's and 80's. But then I entered a new phase creating new stories with more modern technologies and even redoing some old ones with new technologies.

Professor Ventura will have phases in which we will mix the traditional maker of transistorized, tube and eventually integrated circuits relatively simple, with the modern, employing advanced technologies and even using some imagination, with things "from the future" such as quantum electronics and new "futuristic" characters will appear.

However, in this book we offer our readers some stories in the original old form and others new ones, written in recent times, with current technologies. And, I go further: at the end of each story, I put a practical project, so that you, who are already a maker and practices electronics, after reading to your children, nieces, nephews or grandchildren can interest them in a new type of adventure.

It can teach them how to become a maker, an assembler of electronic things, like the adventure heroes, and which nowadays is part of a new world with much more advanced technologies taught in schools.

Assembling electronic things, in technology classes and at home, they can go further with the knowledge of our books, articles on our website and encouraged by our heroes. For those who wish to go further we recommend our book Maker Manual (Soon in English) volume 1, in which the first practical steps are taught.

The Work Plan

The Adventures of Professor Ventura aim at teaching a bit of technology, basically electronic, computer and even other sciences in a fun way. Around a story, the Professor uses technological and scientific resources to either solve the problems that occur in a small town where he lives or create (unintentionally) these problems, always helped by his students Bart and Clarke.

The characters:

PROFESSOR VENTURA - He is an elderly who teaches mechatronics, electronics, and physics at the Technical School of Electronics in Lemon city. With great interest in technology and science he is always experimenting with circuits and strange devices. He spends most of his time in the lab, along with his students doing interesting experiments or trying to solve the problems afflicting the city or involuntarily creating them. Professor Ventura is a true "maker" DIY fan, Do It Yourself building skillfully the strangest electronic devices.

BART AND CLARKE - They are two seniors at the technical school who love electronic technology and all that is scientific, they are the professor's fans and help him at every opportunity. Bart is the most active and smart while Clarke is somewhat limited by his weight that is above average, slower in physical activities as well as thinking. The dialogues that show the differences between the two of them make it easy to understand the explanations of scientific and technological principles of "artifacts" involved in the adventures.

PROFESSOR THEODORE CRICK - He is the principal of the technical school and tolerates the crazy experiments of Prof. Ventura, supporting the old master who in fact when does

something wrong is not intentionally. He knows nothing about electronics.

TUBALD WEATHERCOCK - He is the main victim of Professor Ventura's experiments, always getting into funny situations, but in totally unintended and unexpected ways. Tubald is the town barber and, also a musician in a band. He plays tuba and is considered to have the most "powerful" lungs of the region (or of the bands of those "bands", if you like). He is married to Mrs. Ginevra Weathercock and lives in Newville.

SATURN SPENDTHRIFT - Is the mayor of the town, also called "preboste" title given by a political enemy. The derivatives of the nickname, sounding to have a double meaning, take the mayor to situations narrated which become pathetic, critical, and even funny. The mayor's presence allows the author to criticize the politics in a smooth way in many of the stories.

Other minor characters but permanent:

Maestro Ronald - The Conductor of the band and the town pharmacist

Dr. John Cyrus - The town dentist

Chief Marins - The local police chief who is a friend of Prof. Ventura

Cop Oliver - Local police officer

Christopher Openedeye - Night watchman

The Place

The Lemon city, named after the founder Lemonion Pluckwood, an explorer who wanted to conquer the West, stumbled on a "cursed" lemon tree and stayed there long enough to found a small village which soon turned into a town.

The economy, of course, is based on endless plantations of lemon trees and the juice factory, "Lemonmill".

The square is between the two main streets, one which concentrates the stores and ends at the technical school, its

backyard looks at the river, and the other connects the town with the highway, becoming a bridge over the river.

The river makes a turn that surrounds the town and it is quite wide and deep. There is a street that goes up and down a hill in curves ending at Newville, the only neighborhood that is away from most of the town. At the top of the hill we have an old, abandoned mansion and a cemetery which will be the scenarios of some interesting adventures.

All the adventures always happen in these scenarios with these characters as the center, as well as others that may come out with eventual appearances.

Technical Specifications

An important point to note is that all the adventures seek teaching a bit of technology, especially electronics and mechatronics, in a very gentle way. The devices and circuits involved are always analyzed by Professor Ventura that explains them to Bart and Clarke. Due to this fact, even if it is not causally linked to the people that are not from the technical area, it makes the work very didactic. It is easy to learn a lot of technology, computer science and electronics and their basics in a fun way.

The Professor, as a true maker, uses advanced resources and basic things from the use of old valves to microcontrollers, drones, mobile phones, etc.

The first stories of Prof. Ventura were published in the magazine Eletrônica Total (Brazil), and will be available on our website, for interested readers to have fun. The first to be made available is Dental Interface. The illustration made at the time for Prof. Ventura, Bart and Clarke are shown below. The teacher and his students are changing their "face" and soon their new, more modern aspects will be shown to the readers.

This story of Professor Ventura, Bart and Clarke was published by the magazine Eletrônica Total 67 - April 1994 and was based on real facts as noted at the end of this text.

For this new publication on the internet, some minor changes in the text were made, aiming at a technological update, but the essence of the extraordinary phenomenon involved remains.