

## SEVERE LOCAL STORMS CULTURAL HERITAGE

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### I. INTRODUCTION

Far to be just obsolete aspects or old fashioned cultural remnants, the popular nouns used to describe severe storms represent the quintessence of Peoples' awareness on atmospheric hazards, of the fears they aroused and of the myths they recalled. This work is devoted to the collection of popular nouns used (many of them still in use) when referring to severe storms and their aspects. Whenever it is possible, an explanation of their etymon is given or proposed according to the available cultural evidences. All the informations achieved and here reported were dig out during the authors spare time, starting from Friuli Venezia Giulia and then, pushed by curiosity, moving to neighbour regions, countries and continents. This collection is, of course, nor fully complete neither totally correct; moreover, being a work in progress, this collection will clearly achieve benefits from every feed-back or suggestion.

### II. HOURLY FREQUENCY OF DMC ON THE SOUTHERN SIDE OF THE ALPS

Tornadoes are, by far, the most impressive aspect of severe storms, both for their relative rareness and for their extreme impact on people and properties. It is then not surprising that, even in a small region like Friuli Venezia Giulia (hereafter FVG) more than five nouns are used referring to tornadoes. In FVG, in fact, even if these events are relatively rare, they are enough frequent to keep alive their memory in the whole region from year to year. Moreover, being Friuli Venezia Giulia a crossroad of Peoples, every different migration put into this ethnic melting pot its knowledge and tradition.

The most common class of nouns used referring to tornadoes in FVG is that which associate this accessory cloud to the tail of animals. Among the different variants, one of the most used is “**codamussa**” (**tail-of-the-donkey**). It is interesting to notice that many of the FVG tornadoes are quite weak (Giaiotti et al., 2007, Bertato et al, 2003), then often characterized by a relatively unstable vortex, whose behaviour is quite well mimicked by the nervous movement of a quadruped's tail. Differently from FVG, in Sicily the noun used referring to tornadoes (essentially waterspouts) is “**turrita**” (**the-column**), this because, probably thanks to the weaker drag exerted by open sea, even small waterspouts can remain stable for a long time in their column-shape aspect.

Another class of nouns adopted in FVG is that which connect tornadoes to snakes; among all the variants, “**bisson**” (**huge-snake**) is the most frequent. Even for this noun, it is possible to interpret the fast movement of snakes

with the behaviour of small tornadoes (or of simple funnel clouds) which characterize FVG climate. Similar nouns are used even in South Africa, where tornadoes are called “**inkanyamba**” which is a winged-snake that lives in waters and flies in the sky looking for his mate.



FIG. 1: tornado observed at Villalta di Fagnana. It clearly shows a “rope” or “tail” shape.

An interesting blend between the nouns based on animals realm and esoteric aspects is represented by the terms “**codabava**” (**tail-of-the-old-woman**) and “**bissabova**” (**snake-of-the-old-woman**)<sup>a</sup>. According to several agrary traditions of FVG (Ginzburg, 1996), in fact, even dust devils are often related to witches, which are often considered responsables of hail (produced by witches on the top of tall mountains, some of them called “baba”, and then thrown on the plain and valleys). The connection between witches, tornadoes and dust devils is present even in other Italian regions. As an example, in Umbria (central Italy), tornadoes and dust devils are called “**la vecchia**” (**the-old-woman**). A similar tradition is present in Northern africa and in Arabia but, in that area, dust devils and tornadoes are believed to be produced by a male chief of genies called Zaoubaa.

Not all the found nouns have their roots in agricultural traditions (animals or legends). In fact, a word often used in FVG, in the neighbour Veneto and Istrian Peninsula to indicate tornadoes and waterspouts is “**seon**” and “**seonere**”, which spring out respectively from the latin noun “**scione**” (**pipe**) and “**scione aer**” (**pipe-of-air**). This nouns, currently still in use popularly, clearly indicate an attempt to scientifically describe, if not explain, tornadoes. Quite surprisingly, very few nouns (only one to the authors

<sup>a</sup> This translation is based on the interpretation of “bava” and bova” as “baba”, a noun still used in FVG to indicate old women and which comes from the Slave noun “babicka” which means “grandmother”.

knowledge), are based or simply referred to the rotation of tornadoes which, on the contrary, is the relevant aspects and essence of the current scientific studies. The only noun found concerning rotation of tornadoes is “**foradorie**” (**gimlet**), it is present only in some small areas of FVG and it seems quite recent.



FIG. 2: Waterspout observed in may 1982 on the Gulf of Trieste with a snakeish shape.

Even the popular expression currently used in Italy referring to tornadoes, “**tromba d'aria**” (**trump-of-air**) does not mention the swirling of these phenomena, but only their shape, differently from the word tornado, which comes from the Spanish verb “*tornar*” (to-turn). It is even interesting to underline the fact that, since the word use in Italian is “trump” and not “funnel”, maybe this is related to the noise produced by tornadoes. In fact, a verb often used in Friulian to indicate the strong noise of the stormy winds is “**businà**”, whose root is in the latin noun “*buccina*”, which was a trump used by roman legions during their marches. In this way, the noise of the storm is compared to the noise of a marching army similarly, even if differently, to what is done with the English expression “squall line”.

Quite often, tornadoes and straight-line winds are confused in popular traditions. However, a word often used in FVG to indicate severe winds related to thunderstorms is “**bogadizza**” whose etymology is still unclear. The most plausible explanation of the origin of this noun refers to the frequent migrations (voluntary or imposed) of Slave people into the friulian plain. The slovenian expression “*bog-je-da*” (send-by-god), sometimes referred to weather phenomena, sounds quite similar to “bogadizza” specially adding to “*bog-je-da*” the suffix “-izza” often associated to feminine words. If this interpretation would be correct, the noun “bogadizza” might be translated as “she-send-by-god”.

It is not possible to face popular words and traditions without tackling even lightning. Lightning, in fact, represent a peculiar phenomenon, which in FVG was once called **tarlup** (the noun is currently almost disappeared in common speaking). The origin of this noun is still not clear, but it might be ascribed to the same root of **teshup**, a god of thunder and lightning of the indo-european empyrean.

### III. ACKNOWLEDGMENTS

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