





HOW THE SKY RECEDED AND THE STARS FADED

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Abstract

Since the beginning of time, man has been enchanted about the beauty of the night sky and its star lore. The sky and its host became the hub around which life revolved, as in navigation of the Oceans, prediction of the seasons and weather, religious activities and legends of different civilizations. This continued until the entrance of electricity, the bulb and the invention of television.

The discovery of electricity, the commercially patterning of incandescent bulb and finally the invention of television might have contributed to mankind's disenchantment of the night sky. Television watching has captivated the general public to the extent that it would be difficult to get the people abandoning their televisions to watch the sky in the night. Any attempt to reintroduce the beauty of the night sky and its star lore to the people must of a necessity include well planned television program since watching television has become a way of life. Recent lunar eclipse and the ceremony which took place in the Buwku municipality and its environs attest to the long standing relationship which use to exist between the people and the sky which unfortunately is almost forgotten.

Introduction

On the 2nd of December 2017, I happened to have gone to bed too early and by 10 pm I was already up wondering how I could sleep again till morning knowing that morning was about nine hours away. In my attempt to while away the night I decided to walk across the street to a super market at a petrol filling station for my favorite chocolate flavored soya milk. Co-incidentally the sky¹ was so bright that the massive light pollution in my neighbourhood was rendered meaningless, and the stars were so gorgeously bright as if they had just been released from a diamond polishing shop. Except for the occasional movement of illuminated grey clouds across the moon, the sky was a mighty planetarium ready for action, but my attention was not so much on the dome above me.

The Night Sky, a forgotten enchantment

As I was quickly retracing my steps back home, happily sacking my fan Chocó as a teaser, for the cocoa flavored soya milk, I felt a compelling need to look again into the sky one last time before entering the gate of the house. And there, in the sky, right at my gate, in all its glory and majesty, mighty Orion, stood at my gate. Orion, the great hunter, who boasted of his ability to wipe the world of all wild animals, only to be stung by a lonely scorpion, I have always admired and wondered what makes Orion so popular among the constellations. It is said, Orion could be seen from any inhabitable part of the Earth but not once in all these years did I have the real

¹ Accra is the capital of Ghana and it is located on latitude 5 N 33' 21.67 and longitude 0 11' 48.84 W, credit stellarium.com

opportunity of recognizing this constellation in the sky as it stood right at my gate. The famous belt of Orion, that God Himself challenged Job if he could lose (Job 38:31)², was very conspicuous (Alnitak, Alnilam and Mintaka). Big reddish Betelgeuse, Bellatrix and bluish white Rigel were all visible for the naked eyes. Saiph and the dagger were not as bright but yet conspicuous for the naked eyes. Not far from Saiph was Sirius. If the legend is true, that Orion was in love with Merope, then, it stands to reason, why Merope was also not far from the hunter, her beloved.

Since I could not contain all these alone, I went to call a fellow graduate of WAISSYA 2017³, and it was a little past midnight, to bear me witness of the stately visit of mighty Orion at our gate. In his excitement, he remarked, I have always thought this whole Astronomy stuff is boring but not anymore. With the help of stellarium we map up the sky and navigated our way around Aldebaran the brightest star in the constellation Taurus which was very close to the moon, Capella, Uranus, the Planet, Electra and Alcyone etc.

Fig .1: the seven sisters also called Pleaides, credit IAU

As I was trying to catch my sleep later that morning, the excitement and the comment of my colleague kept ringing in my ears. "I have always thought this Astronomy stuff is boring but not anymore", if a B.Sc. computer science graduate could not find joy in the raw Astronomy, how would ordinary none science person in the street find anything exciting about the jargons and terminologies in Astronomy?

²The Abrahamic religions: Judaism, Islam and Christianity recognizes the Old testament as an inspired Scripture. And as of 2005, estimated 54% (3.6 billion people) of the world's population as adherents of an Abrahamic religions. Wikipedia 17 April 2018

³ West African Summer School for Young Astronomers 2017 which was held in Ghana on the 31 July to 5th August of the same year. www.astrowestafrica.org

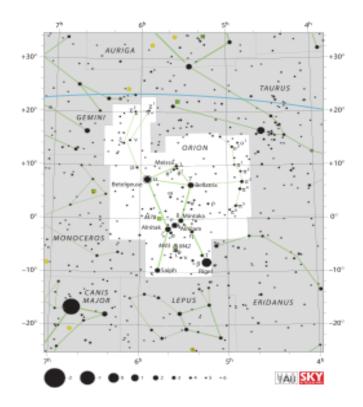


Fig. 2: Orion, credit IAU

The following day, 3rd of December, at a little pass 10 pm I went again to see if Orion would still be at my gate, Unfortunately, He had move away from my gate and gone over to my neighbours', two or three blocks away. While I was still trying to navigate the sky three University students living in my neighbourhood, taking an evening stroll approached me and inquired if I needed help. I took the opportunity to tell them the stories, the legends around the constellations while I help them navigate the sky with Orion as the centre. Within a short time these students had fallen in love with the night sky and were willing to see me the following day for more details. But for the mosquitoes, this would have been the best means of communicating Astronomy with the public as it has been done from time in immemorial; telling stories and showing the people the beauty of the night sky, until the discovery of electric power, commercially patenting of the incandescent bulb and the invention of television (Stephens 1997).

Of all the folktales I was told during my childhood, none was as audacious as the story of how the Sky receded from Earth and far from the reach of man. The story has it that, once upon a time, the Sky was very close to Earth and as a result was at the reach of man, there was regular interaction between the host of the Heavens/Sky and the inhabitants of Earth. This state of affairs continued until one day, an old woman decided to make an exceptionally long pistol for pounding her *fufu*⁴. Any time she used her long pistol to pound her *fuful*, the pistol kept hitting the Sky, and this continued until eventually the Sky receded far from the reach of the pistol of the old woman and out of the reach of anyone else. As I was growing up, most of the folktales I was told made sense to me since they could be related to everyday life, but not this story about how the Sky receded. Some have explained this story as how there was separation between God and man as in the sense of introduction of sin. But the story of the old woman, the pistol and the act of pounding has engaged my mind until my

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⁴ Fufu is a Ghanaian dish made of pounded tuba either; cassava, Cocoyam, yam, and plantain

interest in star gazing and star lore developed from causal hobby to passion of the general study as an amateur Astronomer.

Since the beginning of time, man has been enchanted by the night sky and its star lore. For centuries the star lore, afforded man relatively constant markers of the sky for the purpose of navigation, weather forecast, religious festivals and also influenced architectural designs. This was how things were until the discovery of electric power, incandescent bulb and the invention of television from 1879⁵ to 1936(Review and Herald, 312, 1972).

These three additions to the life of man, metaphorically pushed the Sky far away from the Earth and from man. The introduction of electricity and the bulb made the night sky too bright for the stars to shine and gradually lost their hold on the imagination of man. As if that was not enough, the invention of Television in September 1936(Review and Herald, 312, 1972) bewitched and captivated the imagination of man from most of the activities which use to be their preoccupation in the night, including star gazing. It has been documented that, television viewing can be very addictive and most modern people are hooked to television viewing in its various forms (Stephens, 1997). Today, people seldom admire the night sky and its star lore.

Conclusion

Astronomy, unlike, most of the other sciences, is better off with the active participation of non-scientist and the general public(including cultural Astronomy). It is obvious that, a good television program would be an effective mobilization tool for this endeavor.

Just like the Saffarianpour brothers⁶ did in Iran in 2001 (Nazemi, 2017), who captivated their countrymen with television program on Astronomy and Space Science, carefully planned Television programs would reignite the interest in the study of Astronomy and space Science and with it will come the renewed interest in the night sky and its star lore. Such a program can include interviews with the experts in space Science and Astronomy, exposition and familiarization of our solar system. Scientific breakthroughs in space probe and unmanned missions to some of the planets in our solar system and elsewhere. This could also include the exposition of the technology behind space science and astronomy. Not only the technology behind space science, but also how our ancestors have used the knowledge of the celestial bodies for farming, navigation on the oceans and for predicting seasons and the weather.

During the recent total lunar eclipse which was experienced in Ghana, the people of Buwku, in the North eastern corner of Ghana marked the lunar phenomenon with an unusual ceremony which date back to the beginning of their earliest ancestor who settled in the place. The people have always held the view that the moon which plays an invaluable role in their lives especially during the nights, is vulnerable and subject to attacks by wild beast. And as they always do as cattle herdsmen and crop growers,

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⁵ The bulb was patented on January 27th 1880

⁶ In 2001 the Saffarianpour brothers started a daily program on their national television which lasted for over sixteen years and captivated their countrymen even as amateur astronomers

any time a wild animal attack any of their herds, the whole community come together and with all sorts of weapons and tools amidst shouting and the use of any substance that would assist in creating loud noises to scare the wild beast off. In the same fashion, during the 27th July 2018 total lunar eclipse, the people massed up in the principal streets of the town, in their farm gears and all sorts of noise making implements like drums, empty cans and whistles, guns, bows and arrows while shouting with the hope of scaring off the wild beast that has attached the moon. This incidence came as a surprise to most of the citizens of Ghana who were astonished at the belief of the people in the 21st century. It is obvious that modernization has eroded the people of their beliefs and practices which were held by our forebears. There is an Akan⁷ proverb that says that "where ever an animal is tied to a post, it is only at that same place can the animal be untied or release". If indeed the Sky lost it hold on the imagination of our people, at the account of the introduction of television into man's life, then man could only be introduced back to the sky through the same process, television viewing. Any attempt to communicate Astronomy and our history with the celestial bodies with the Public and to get them to love the night Sky and the star lore, must include very interesting television programs.

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⁷ The Akan is the largest ethnic group in modern Ghana, they account for about 45% the population (www.idexmundi.com/ghana/demographics profile)