

Medieval Lighthouses

16 - Final Pages

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The true origins of the lighthouse begin with the ability to create fire.

Fire is deeply embedded in the human psyche. Fear of the dark. Making fire. Worldwide, not just Europe. All faiths.

Fire was the only artificial source of light before the invention of electricity.

The use of controlled fire to send a signal of the most primitive kind has always been determined by access to three resources: fuel, air and spark.

There was no discernible beginning to the showing of a light at night for mariners.

To say that a light was a lighthouse is determined entirely by social context because the function lies in the local language and the physical structure in which the light resides is important.

The purpose for the setting of the light is also a factor. Lights that can be seen from the sea may be purposeful in aiding mariners or otherwise accidental.

At the end of the period of classical history marked by the two major civilizations of Greece and Rome, the idea of showing lights at night to assist mariners in their navigation was well established. (Volume 1 attributes the idea to the Greek culture.)

At the end of the Roman period, the use of lighthouses fell into abeyance.

There is a step change between the showing of a light from an existing structure that happens to be useful, and the building of a structure specifically for that purpose.

During the centuries of this study, lighthouses seem to be associated with the degree of stability of a given political system. Since the period from 400 to 1000 represented a protracted period of political instability, and in the absence of reliable records, we see virtually no confirmed cases of lighthouses in use.

The absence of detailed historical records throughout the Dark Ages eliminates the possibility of knowing with certainty where the showing of lights, whether inadvertently or deliberately, assisted mariners.

Throughout the period from 400 to 1000 there is no firm evidence for the building or use of actual structures that we might loosely call a lighthouse.

We can be confident that significant assistance to mariners was given by monks, hermits, anchorites and members of Christian orders in general when they showed lights that we term Ecclesiastical from their places of abode and worship. This tends to parallel the same activities that involved votive offerings from the ancient Greek culture described in Volume 1.

From the start of the colonial period early in the 14th century, ineffective and irregular lights were shown from colonies as beacon fires or lanterns.

The transition from the showing of Ecclesiastical lights to the 'modern' concept of lighthouses begins with the recognition that lighthouses should comply with a basic business model.

The core medieval period contains an undeniable tradition for the use of fires to assist mariners, especially promulgated by the effectiveness of the Hanseatic League.

The lighthouse at Genoa is special in medieval times because it gives clear evidence of being transitional in the sense that it was commissioned for mercantile purposes and funded privately, but manned by monks.

The business model for the building of lighthouses begins to appear in the seventeenth century along the coast of East Anglia in England where the safety of coastal coal-carrying ships is of value to the industrial revolution.

In these cases we see the first formal adoption of leading lights - two separated lights to offer a safe course for navigators through waters with hidden obstacles.

There are, however, some isolated examples of leading lights in use in Europe during earlier times.

One of the most important factors delaying the development of reliable, efficient lighthouses is that the methods used to create the light remained primitive until the development of lighting technology in the nineteenth century.

The period when lighthouses began to be constructed using engineering principles and employing deliberate design is considered to have started with the Smeaton Eddystone lighthouse of 1756. This period approximately coincides with the start of the Industrial period in England.

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The Last Word

In the Stygian darkness of the clouded, moonless night, the early hominid and his shivering family huddle together in the cave. The air, pleasantly warm in the day, has gained a chilling edge. The warmth of their bodies is their only comfort as, in their smothering blindness, they try to sleep, fearful of the monsters and spirits that prowl the void. Theirs is to be a short, hungry life of survival in a world they can never understand. Their days are filled by the search for food and shelter. Their nights are interminable baths in the blackest ink, awash with dread.

It will be a thousand lifetimes before they find fire - that mysterious saviour that enables so much more in their lives. At first it is the fire of surprise, from a natural event like a lightning strike, or a bush fire when molten lava comes close. They learn to revere fire, but they cannot create it; and when, for those precious times that they borrow it from nature, it seems uncontrollable. But fire is good. Fire is God-given. On those rare occasions when they find fire, they try to keep it alive, but when it dies the darkness returns and brings back blindness and fear.

Thousands of millennia pass.

One day, he discovers that two rocks struck together make a spark. And if there is some dry material nearby it might initiate fire. It is a miracle. The rocks are special: he doesn't know their names - flint and pyrites. Found only in special places. He has no science. He will never know that fire is a trilogy: Fuel, air, spark. Fuel to burn, an oxygen atmosphere of at least 15% (air has 21%) and a spark of heat. This is magic. This is good.

To his search for food and shelter, he now adds the hunt for the driest, most combustible materials (tinder). With no spark there's no fire. So this magic sets his descendants on a different path to the future. With fire available at will, the world is a different place. Food can be cooked instead of eaten raw. That will keep him and his family alive longer, and they will enjoy the warmth and companionship of others as they sit in darkness by the fire. But it is the effect of fire on his soul that he does not recognize; alleviating darkness, giving warmth and comfort. And protection from evil.

Control of fire has so many uses. Fire is everything when you have nothing. But there is something much deeper about fire.

The world's religions and cultures all embrace fire. In Greece, Hestia is the goddess of the hearth and Prometheus the bringer of fire. In the Hindu religion Agni, god of fire, is central to Vedic rituals. In Zoroastrianism, fire is a symbol of truth and purity. And in the Roman world the Vestal Virgins tend the eternal flame of Vesta. Fire, the life-giver. Fire the language of the gods.

Are we surprised that this part of the human story has planted something deep in our subconscious minds? The ability to create light is positive, something good. Darkness is negative, something bad. Metaphors abound for right and wrong, good and evil, positive and negative - even knowledge and ignorance. And with all these associations the lighthouse stands out from almost everything else embedded in the motifs of associations and social cultures.

The use of matches to make fire has been with us for only two hundred years. Before then the making of fire was one of life's essentials. The tinder box. Fuel, air, spark. Throughout history.

But so much more than that: the ability to make light. In the first four verses of the Bible, God creates heaven, earth, water and light. And the contrast between the associations of light and darkness are the same in Islam as in Christianity. And in Buddhism too light represents wisdom, dark represents ignorance. Wherever we make light, we are being positive, fighting the evils of darkness. For the same reasons, light is life and darkness is death, and so when humans enter dark spheres they have always sought light for guidance. These are the true origins of the lighthouse. In a sense, the principle of the lighthouse was born when that early ancestor discovered fire and how it gave light. Since that time it has been about opportunity, and those opportunities have been limited by the availability of resources. The structures were irrelevant. It has all been about light.

And, until the arrival of electricity, the light was fire. This has been a book about fire.