

Message of Fire

An examination of the distances between the signal fires lit to announce the fall of Troy and determining if the relay system could work as found in the play “Agamemnon” by

Aeschylus

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Introduction

Signal fires have been used throughout the centuries as a means to communicate long distances before the age of telegraphs and wireless communication. Cultures from all over the globe have employed this method in both times of war and peace; Greece is no exception. But in the play *Agamemnon*, by Aeschylus, one discovers a relay fire stretching many hundreds of miles and spanning two continents. Could this have actually been accomplished? Is this physically possible and if so how far did the relay of fires stretch? Also does the play contain enough data to give the reader an accurate picture of the immensity of the task?

The objective of this paper is not to prove that these events happened but to examine the data given in the play and to determine if the signal fire relay could work given the vast distance the message would have to travel. Also, this paper will examine the locations mentioned as signal stations and chart them out to give the reader a visual representation of the path the message traveled. Let us begin with a brief summary of the context in which we find the topic of this paper, lines 281-of *Agamemnon*.

Agamemnon and Metaphor

When reading *Agamemnon* the reader can interpret events within the play both in a literal or metaphoric way. *Agamemnon* like other tragedies of the classical world used historical settings as a backdrop to frame more complex ideas about the human mind and spirit. Though places and events believed by the ancient Greeks to have been real historical truth are used, modern readers should use caution when trying to strip away the fact from fiction. The signal fires found within the play are a great example of the interplay between historical places and fictional events.

When reading lines 281-319 of *Agamemnon* the reader finds a complex system of relay fires announcing the Fall of Troy and the homecoming of Agamemnon. This would be a literal interpretation but Aeschylus might not have had that in mind.

In the article *Figures in the Text: Metaphors and Riddles in the Agamemnon* by Gloria Ferrari, the author offers a different look at the fire relay. She puts forth the idea that the flames are the coming of the Furies, the daughters of Night; with Clytemnestra herself becoming vengeance for the death of Iphigenia. Ferrari argues that the description of the exchange of signal fires would have called to mind for the audience the image of the traditional torch relay race that was held on the night before the Olympic Games. This metaphoric interpretation of events shows us that there are many ways of looking at the passage from different angles.

When it comes to historical truth with the play, a modern reader must realize that Aeschylus wasn't going for accuracy when it comes to distances and the plausibility of the fire relay system. He was using known geographic locations that his audience would be familiar with and then takes creative licenses with accurateness all in the name of dramatic effect. Modern readers can find this within many famous works. One modern example is *The Da Vinci Code* by Dan Brown. In the opening of the novel Brown talks about "The Rose Line" and the floor plan of The Louvre without using accurate descriptions found in the actual museum in Paris. Even The Rose Line is a work of fiction used as a plot device. Readers don't look to Browns description of the museum as an accurate map, but as a familiar setting that has been altered to fit the narrative of the story. The same goes for Aeschylus. He uses known geographic features that his audience would be aware of and also to ground his play in the real world. But he also doesn't demand that these distances should be taken as literal truth.

As stated previously, this paper is not trying to prove that these events took place in history but to judge *if* it could work if reenacted today. Now let us take a look at some work that has been previously done on the fire relay found within the play *Agamemnon*.

Works of geography

When it comes to the geography of the classical world, in particular the areas dealing within this paper, there has been much scholarship done. As stated previously, Aeschylus used real geographic locations in the fire relay system, though some of the exact locations are now lost to time. Scholars have been studying the geography not only of this play but of all the major works dealing with the Trojan War to understand just how important the landscape was to the events within the epic. The first such attempt was carried out by German businessman turned archeologist, Heinrich Schliemann at Hisarlik. His dig for the historic Troy set off a chain reaction of scholars looking to piece together what is actual historic fact and what was purely myth. In the case of Homer, scholars are still trying to sort out what is fact and fiction, including the actual existence of the bard (though most academics will agree that he was a collection of nameless singers over time and a composite figure). The area known today as The Troad has been the subject of many works. One such particular work, *The Troad: An Archeological and Topographic Study* by J.M Cook will give the research one of the most comprehensive looks at the geography of Northwestern Turkey, the historic location of Troy and the Trojan War. This work is important because it gives us a tremendous amount of information about the starting point for the signal fires, Mt. Ida, as well as describing the region around Troy. Through the book doesn't not go into more detail about locations of the beacon fires, it does offer the reader a tremendous amount of scholarship for those wishing to explore how geography plays a role in the Iliad.

Another example of some scholarship that deals with geography is *The Agamemnon of Aeschylus: A Commentary for Students* by David Raeburn & Oliver Thomas. In this book the authors state that “The main geographical difficulties are the huge distances between some pairs of beacons, and our inability to locate three of the toponyms (289 Macistus, 302 Lake Gorgopis, 303 Mt. Aegiplanctus).¹ This reinforces other sources used in this paper when dealing with lost locations. As the reader will see, mapping the location and distances of the beacon stations is not an easy task.

This by no means is all the scholarship out there dealing with the geography of the Troad and the poems and plays of the ancient Greek world. But this should give the reader a starting point in their own exploration of the topic. Now let us begin to look at the topic of this paper and start with the actual play.

Agamemnon

“...and now I watch for the light, the signal-fire breaking out of Troy, shouting Troy is taken.”² This quote is taken from the first few lines of the play *Agamemnon*, which is the first part in the only completed Greek trilogy to make it down to present day, which is called *The Oresteia*. These lines are spoken by the Watchman atop the roofs of Atreus as he scans the horizon for a signal that Troy has been taken by the Greeks. The signal mentioned is a set of fires to be lit, starting with the first atop Mount Ida and then relayed back to Argos through a series of

¹ David Raeburn & Oliver Thomas, *The Agamemnon of Aeschylus: A Commentary for Students* (New York: Oxford University Press, 2011) 100

² Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 103. Lines 10-11 in Greek

stations along the way. This system was put in place by the wife of Agamemnon, Clytaemnestra, to alert her of the fall of Troy and of her husband's return. This paper will not go into any more detail about the plot of the play as it is irrelevant to the topic at hand. What we have now established is the motive of this complex system being put into place.

The use of signal fires in history

Before we examine the signal fire relay found in the play it is worth mentioning that the idea of this system is not unfounded in history. In fact many cultures have employed this method of communication throughout the world at various points in history. A great example is the use of signal fires along the Great Wall of China.

Because of the vast distances between beacon towers along the Great Wall, smoke signals and torches were used as a method to bridge the gap of communication over the vast distances. Langyan, translated as "smoke of the wolf" so named for the burning of wolf dung to create the smoke or fire on the frontier, was an effective method of warning other stations of an invasion by hostile forces.³ In other areas of the Great Wall vegetation was used in the same method. This gives us a historical leg to stand on when it comes to assessing the validity of using fire to communicate over long distances. Other cultures such as Native Americans in North America used smoke and fire to communicate over long distances such as the fires mentioned in the journals of Lewis and Clark, "about 10 A. M. we saw the smoke arrose as if the country had been set on fire up the valley of this creek about 7 ms. distant we were at a loss to determine whether it had been set on fire by the natives as a signall among themselves on discovering us, as is their custom or whether it had been set on fire by Capt. C. and party accedentially. the first however

³ "Wolf Smoke Signals War." chinaheritagequarterly.org, last modified March 14, 2014, http://www.chinaheritagequarterly.org/articles.php?searchterm=006_wolf.inc&issue=006

proved to be the fact, they had unperceived by us discovered Capt. Clark's party or mine, and had set the plain on fire to allarm the more distant natives [*NB: heard a gun from Capt C's party & fled quite over the mountain thinking it their enemies Blackfoots*] and fled themselves further into the interior of the mountains.”⁴ Again we have another example from a different time and part of the world where fire was used to communicate a message via long distance. This only strengthens the argument that signal fires can work and have been employed to connect people and messages over vast distances. Now let us take a moment to explain the methodology of how the distances and places were chosen for this paper.

Methods used to determine distance and locations in the text

Within the lines 281-318 of *Agamemnon* we are given both specific and non-specific names of beacon stations arranged by Clytaemnestra to alert her of the fall of Troy. But some of the names cannot be found on a modern map. When this happens the author has taken it upon himself to give an approximation of the site. In the latter stages of the relay signal, we are only given descriptions of the places. In this instance the author will turn to other sources or use his best judgement in calculating the distances to reach the Watchman on the roof. This is by no means an indication that the author claims these locations to be the exact spot Aeschylus was referring to in his play, but an educated guess as to an approximate location or a substitute location in the same area. These approximations or substitutions will be noted as not to confuse the reader.

Distances will be calculated in miles as the crow flies. This means that the distances will be measured using the shortest distances between two points. Because fires would have to be visible

⁴ “*The Journals of the Lewis and Clark Expedition*”, accessed June 10, 2015
http://lewisandclarkjournals.unl.edu/read/?_xmlsrc=1805-07-20.xml&_xslsrc=LCstyles.xsl

to alert the next station, we must assume that there were no obstructions blocking the view of the watchmen along the way. We must also assume that weather conditions were perfect and that visibility was at a premium. If the weather was bad or there was poor visibility, the signal fire system would not have worked. The text does not indicate foul weather or any other factors that would lead to a breakdown in the system so we must assume that all was well. All calculations of distance were made by using the standard height of a Greek man during the Mycenaean period, and the elevation of the possible or exact locations of the beacon sites. The website *How Far is it Between*,⁵ a subpage of Free Map Tools, was used to fix a straight line between the points of interest. Let us now examine the average height of a Greek man at this time and how far he could see given a specific elevation.

Height and elevation

According to the website *The Greek Age of Bronze* the average height of an Achaean was between 5'6 and 6'0. This figure is based on the dimensions of the armor used.⁶ By using these figures in conjunction with the mathematical formula to calculate visible distance at sea level, the average Greek man at this time could see between 2.65 and 2.9 miles in perfect conditions.⁷ Now if we factor in the different elevations for the signal stations mentioned the range of visibility increases. Using the same website as before we can use these numbers to get an

⁵ "How Far Is It Between", Free Map Tools, accessed June 10, 2015

<http://www.freemaptools.com/how-far-is-it-between.htm>

⁶ "Armor", The Greek Age of Bronze, accessed June 11, 2015

<http://www.salimbeti.com/micenei/armour1.htm>

⁷ "How Far Can the Human Eye See On The Ocean", Research Maniacs, accessed June 11, 2015

<http://researchmaniacs.com/QuestionsAnswers/HowFarCanTheHumanEyeSeeOnTheOcean.html>

approximation of how far the watchman at each signal station could see in perfect conditions. These figures will be used at each station when available. The next question one would ask is how big were the signal fires used? Let us turn to the text to see what it has to say.

Signal Fires

Scanning lines 281-318 the reader will see that only the barest of information about fuel for the fire is given and the size of each is not indicated. Line 288 mentions pitch-pine which could be referring to a type of pine tree,⁸ though this is not clear. There is a type of pine that grows in Greece called *Pinus sylvestris*⁹ which would have been available to various signal stations along its route. Also in lines 295-296 the text states “Fire for word of fire! tense with the heather withered gray, they stack it, set it ablaze”¹⁰. Now we have a clear source of fuel during the middle portion of the fire relay. But again the actual size eludes us. What we can infer is that each signal fire had to be large enough for the next station to see. A small fire might be seen, but then again it might not. The watchmen needed clear signals to relay the message back to Argos so it would have to be something big. One would think that each watchman along the way would not want to incur the wrath of the queen by not fulfilling their duty. One could speculate and come up with various sizes and fuel mixtures for each beacon but again there is not enough information in the text to give us a clear answer. We will have to assume that each pyre was large enough for the next station to see. Let us now turn to the actual fire relay and each point along the chain starting with Troy itself.

⁸ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 114

⁹ David M Richardson, *Ecology and Biogeography of Pinus* (Cambridge: Cambridge University Press, 2000), 18 https://books.google.com/books?id=YawYOzQmcHEC&pg=PA18&lpg=PA18&dq=Pinus+rigida+++greece&source=bl&ots=SHialpYCND&sig=m9UnxNp7QMMvbHz69akkoyxD_Hw&hl=en&sa=X&ved=0CDgQ6AEwBmoVChMImZ- iuoqlxglVyh6sCh14NQAG - v=onepage&q=Pinus+rigida+greece&f=false

¹⁰ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 114. Lines 295-296 in Greek

Troy to Mycenae

As stated in the text, the purpose of the fire signal relay was to inform Clytaemnestra of the fall of Troy and the return of her husband, Agamemnon. The exact time between each watchman spotting a fire and then relaying it with his own is not mentioned in the text. Being stationed in the same area for over ten years one would assume that the fuel for each station would need replenished year to year and that they would have one at the ready in case of a message. We have no frame of time between the fall of Troy and the last fire being spotted by the Watchman atop the palace of Agamemnon. It could have been hours or it could have been days. Even the fact of when each station was set up in not mentioned. We will just assume that they came into being shortly after the start of the war by orders of Clytaemnestra. Now let us look below at our first figure, the distance between Troy and Mycenae

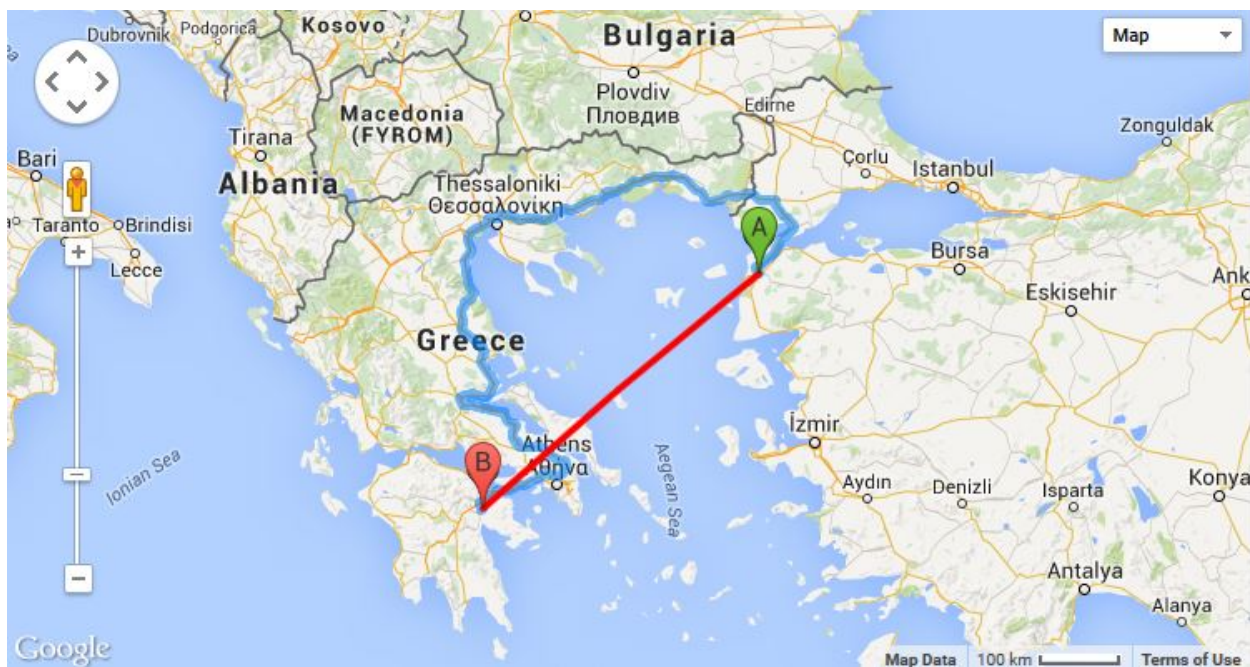


Figure I: Troy to Mycenae

This first figure shows the distance between Hisarlik (the presumed location of Troy) in Turkey and the palace of Mycenae, the home of Agamemnon. The distance between the two points is 258.014 miles¹¹. Now the distance between Troy (A) and Mycenae (B) is too great to be seen by the naked eye, meaning that someone in Mycenae would not be able to see the city of Troy burning. This would back up the plays use of a signal fire relay to communicate the destruction of Troy back to Clytaemnestra. So let's examine what the text says and then move point to point along the stops. Our first two points are Troy and Mount Ida.

I. Troy to Mount Ida

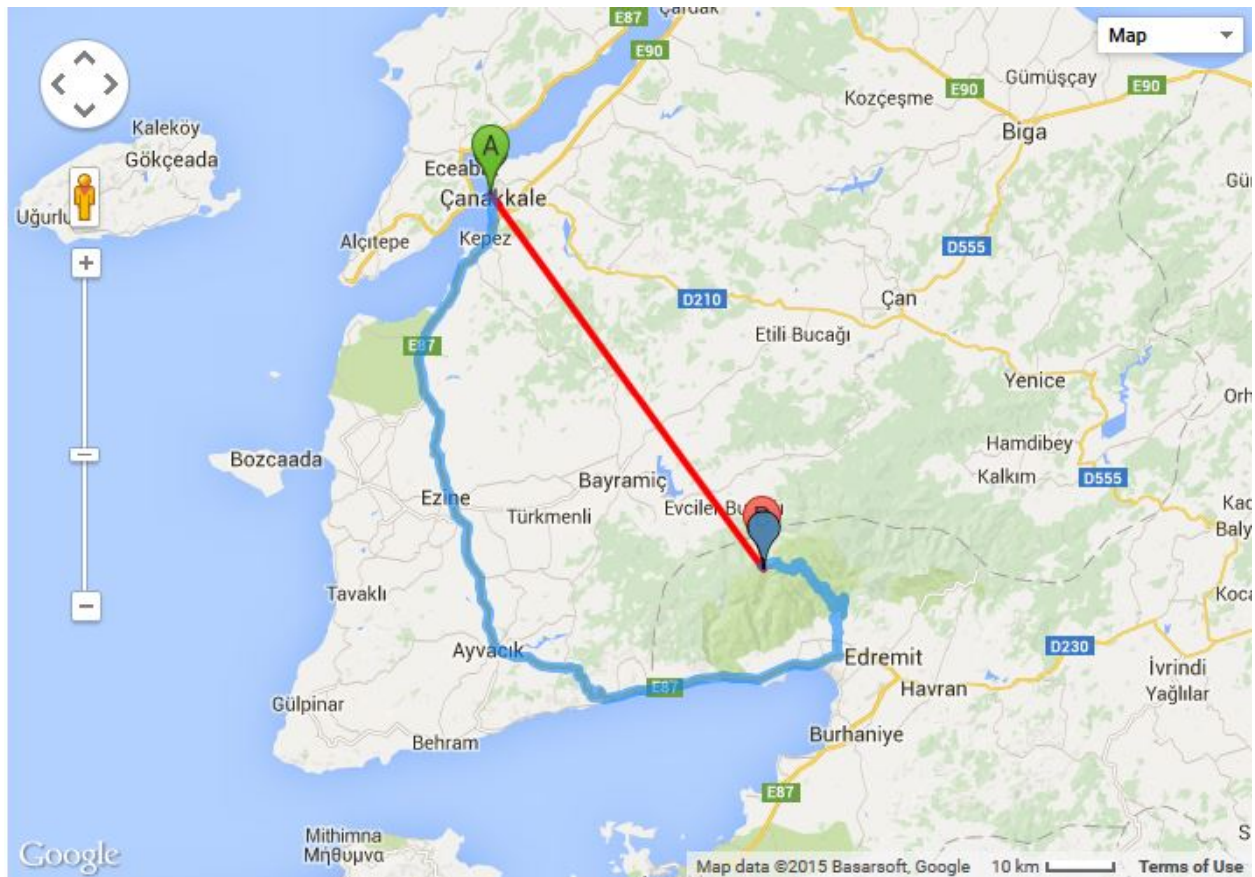


Figure II. Troy to Mount Ida

¹¹ "How Far Is It Between", Free Map Tools, accessed June 10, 2015
<http://www.freemaptools.com/how-far-is-it-between.htm>

“The god of fire- rushing fire from Ida!”¹² This is the first line the reader encounters where a location is mentioned in the text. Mount Ida (B) is 38.639¹³ miles southeast of Troy (A) and sits at 5,820 feet above sea level¹⁴. Using this information we can determine if a watchman standing atop Mount Ida could see the fires of Troy. Based on the figures posted on the website *How far can a human eye on the ocean*, at the elevation of 5,000 feet the human eye can see 83.67 miles¹⁵. The watchman would have to be above 1,050 feet to see Troy and as close to the summit as he could to make sure his fire was seen by the next relay station. So it is possible that a person near the summit of Ida could see Troy burning below and would have the altitude working in their favor by giving them height enough for their fire to be seen. But could the next point on the relay see the fire atop Ida? Let us take a look at the next stop, Ida to Lemnos.

II. Mount Ida to Lemnos

¹² Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 114. Line 281 in Greek

¹³ “How Far Is It Between”, Free Map Tools, accessed June 10, 2015

<http://www.freemaptools.com/how-far-is-it-between.htm>

¹⁴ “Mount Ida, Turkey”, mountain-forecast.com, accessed June 11, 2015, <http://www.mountain-forecast.com/peaks/Mount-Ida-Turkey>

¹⁵ “How Far Can the Human Eye See On The Ocean”, Research Maniacs, accessed June 11, 2015 <http://researchmaniacs.com/QuestionsAnswers/HowFarCanTheHumanEyeSeeOnTheOcean.html>

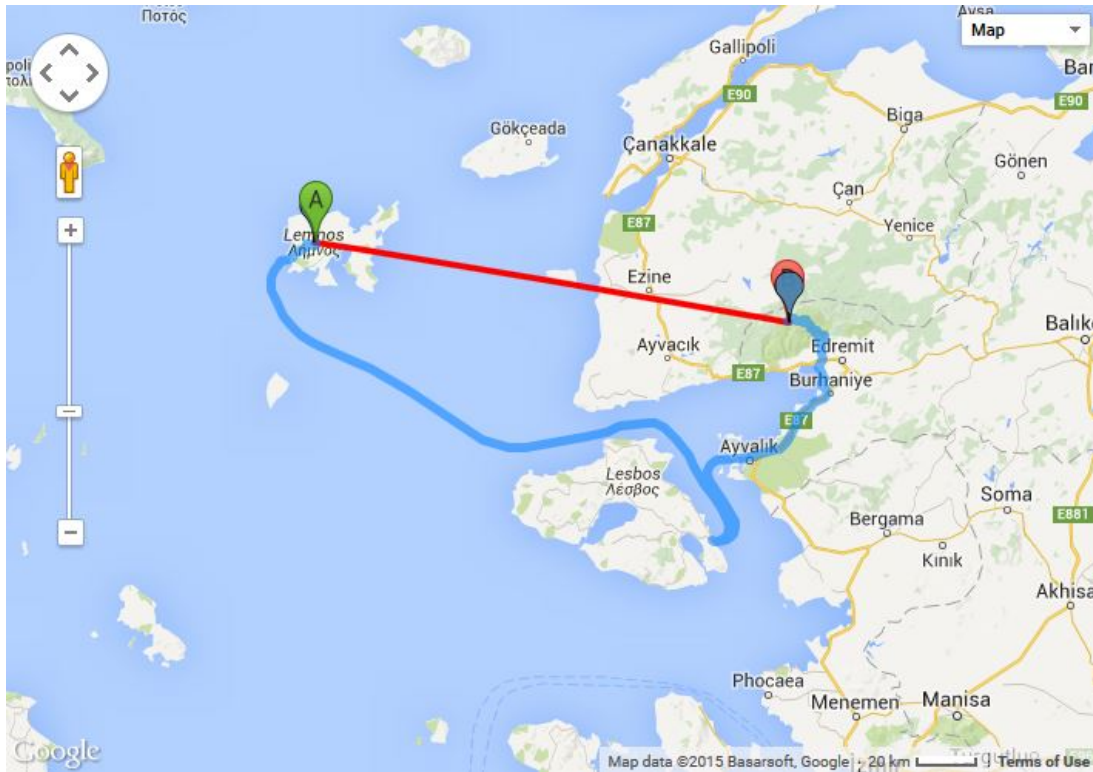


Figure III. Mount Ida to Lemnos

“From Troy to the bare rock of Lemnos, Hermes’ Spur...”¹⁶ Moving westward the next stop on the signal relay is the island of Lemnos (A). This is where the reader will encounter the first problem when trying to trace the exact path set up by Clytaemnestra. The problem lies with “Hermes’ Spur.” This location does not appear on any modern map of Lemnos and there is very little in the ways of scholarship done to pin down an exact location. In *“The Handbook For Travellers in Greece”* it states that “The E. side presents to the sea a bold rock, identified as the beacon site in Aeschylus’s magnificent description.”¹⁷ This passage would indicate that at least until the late 19th century there was a site associated with the signal fires on the island but any

¹⁶ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 114 Line 284 in Greek

¹⁷ John Murray, *Handbook For Travellers of Greece* (London: Albemarle Street, 1884), 600

https://books.google.com/books?id=7c0GAAAAQAAJ&pg=PA600&lpg=PA600&dq=hermes+rock+++lemnos&source=bl&ots=2nEYYM0Ldd&sig=iI0XJfS21AcUOnDyUAS-C2DW5A0&hl=en&sa=X&ei=bj53VYFkgY_IBPPYgbgF&ved=0CCcQ6AEwAg-v=onepage&q=hermes+rock+lemnos&f=false

modern reference to the site is nonexistent. David Raeburn and Oliver Thomas state that either the north-east or north-west promontory of Lemnos might be the location¹⁸. But again this is a guess. So we must now use our best judgement and substitute a location on Lemnos to stand in for Hermes' Spur.

The highest point on Lemnos and the one that would offer the best vantage point of spotting a fire from Mount Ida (B) and relaying that to Mount Athos (the next link in the chain) would be Mount Skopia (A). One must first understand that Mount Skopia is not located on the eastern side of the island but closer towards the west. The reason for the choosing of this site is based purely on elevation and position to be seen. The author is not implying this was the spot Aeschylus was writing about.

Mount Skopia sits about about 1, 410 feet above sea level¹⁹. The distance between Mount Ida and Mount Skopia is 91.172 miles²⁰. This is an incredible distance for a fire to be seen. This would lead us to believe that the pyre a top Mount Ida was huge. It would have to be to be seen at such a great distance. Even if the signal station was on the eastern side of the island it would still be a tremendous feat to be able to spot a fire burning that far away on a mountaintop without artificial aid. But as we know this is a work of fiction so we can suspend the reality of it and move on to our next point on the relay, Lemnos to Mount Athos.

III. Lemnos to Mount Athos

¹⁸ David Raeburn & Oliver Thomas, *The Agamemnon of Aeschylus: A Commentary for Students* (New York: Oxford University Press, 2011) 100

¹⁹ Nigel Wilson, *Encyclopedia of Ancient Greece* (New York: Routledge, 2010), 421
https://books.google.com/books?id=8pXhAQAQBAJ&pg=PA784&lpg=PA784&dq=Mount+Skopia&source=bl&ots=okHqEo_lpi&sig=KnC1_j7_eJBM1iSp3uIMXUOcuqg&hl=en&sa=X&ei=ajh3VYC_CMm5sAX81YKoBw&ved=0CDYQ6AEwAg-v=onepage&q=Mount+Skopia&f=false

²⁰ "How Far Is It Between", Free Map Tools, accessed June 10, 2015
<http://www.freemaptools.com/how-far-is-it-between.htm>

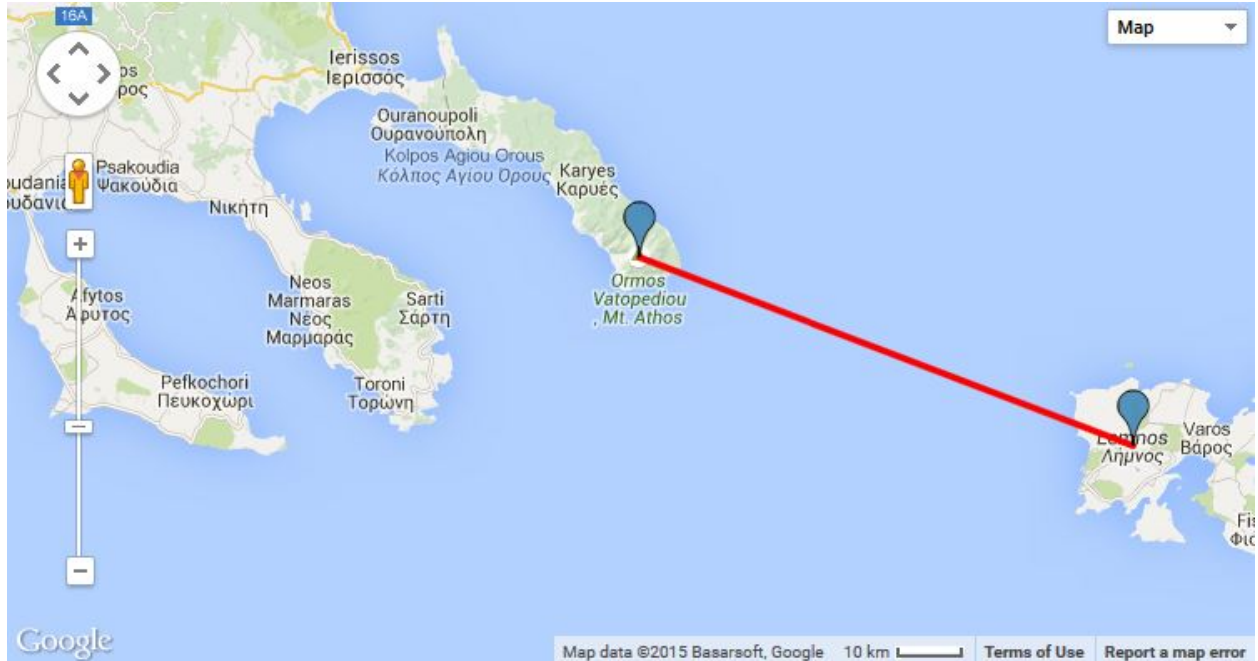


Figure IV: Lemnos to Mount Athos

“and the Escort winged the great light west to the Saving Father’s Face, Mount Athos hurled it third in the chain...”²¹ As the exact location of Hermes’ Spur is lost to time, Mount Athos is a location that is as well known today as it was in the Classical World. In fact Mount Athos is listed on UNESCO’s website as World Heritage Site.²² The reader again has a tangible anchor point in the chain of signal fires.

Mount Athos sits at about 6,670 feet above sea level²³. This elevation would offer a great location for a signal fire to be seen at a distance. It would also offer the watchman posted the ideal location to spot the fire coming from Lemnos in the east. The distance between these two

²¹ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 114 Line 285 in Greek

²² “Mount Athos”, UNESCO, accessed June 11, 2015

<http://whc.unesco.org/en/list/454>

²³ “Mount Athos”, Mount Athos, accessed June 11, 2015

<http://www.inathos.gr/athos/en/>

points is smaller than the previous junction, Just 46.128 miles²⁴ lies between Mount Skopia and Mount Athos. At the elevation of 6,670 feet, the watcher has a range of visibility greater than the one posted on Mount Ida. He would be able to see approximately 90 miles, more than enough to cover the distance between Lemnos and Athos. With a big enough fire on Lemnos, the watcher on Athos could see the signal and light his fire for the next stage of the relay.

IV. Mount Athos to Mount Makistos

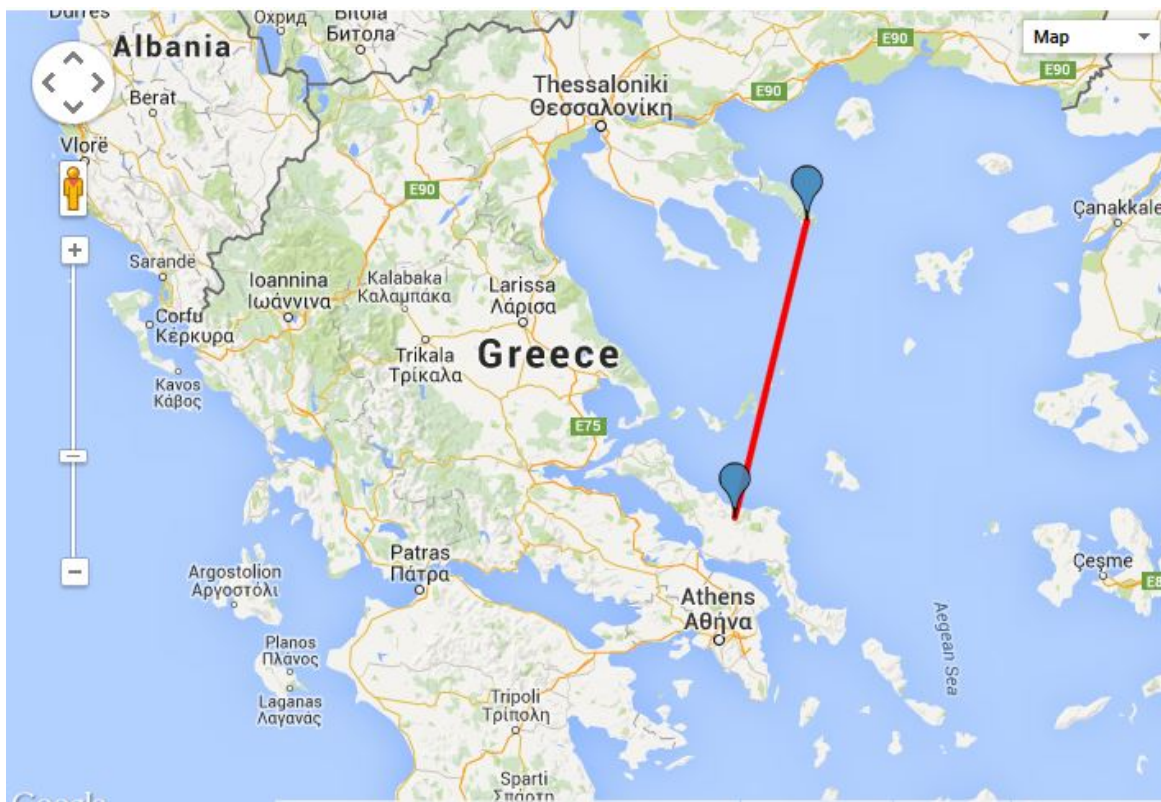


Figure V: Mount Athos to Mount Makistos

²⁴ "How Far Is It Between", Free Map Tools, accessed June 10, 2015
<http://www.freemaptools.com/how-far-is-it-between.htm>

“...and brought the word in flame to Mount Makistos’ brow.”²⁵ On the next leg of the signal fires path the reader encounters another unknown location. Mount Makistos is not found on any modern map and in the historical record the name is only found within the lines of *Agamemnon*. This presents a problem -where does one go next? With the pervious unknown, Hermes’ Spur, we might not have the exact rock but the island’s name still exists today to give us a general location and direction. With Mount Makistos it becomes guess work. The author will present two points of view and then assign a substitute location based on geography and distance from Mount Athos.

In the book, *The Browning Cyclopedia: A Guide To The Study Works of Robert Browning*, Robert Browning states that “Makistos = Macistos, a city of Tryphylia.”²⁶ A quick search for “Tryphylia” brings up a reference in the book *Greece* by George Grote, Esq giving the location in the Peloponnese²⁷ Upon further searches the Peloponnese keeps appearing. This presents a problem for the reader. The distance between Mount Athos and Tryphylia in the Peloponnese is

²⁵ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 114 Line 289 in Greek

²⁶ Edward Berdoe, *The Browning Cyclopedia* (New York: MacMillan & Co, 1892), 12

https://books.google.com/books?id=a6cVAAAAYAAJ&pg=PA12&lpg=PA12&dq=macistos+++greece&source=bl&ots=zaPOHnB95c&sig=-FFJxkWeebpaEpKB2Fb_Jq5_e6U&hl=en&sa=X&ei=g0R3VY2QMgIsAX9n4LoBw&ved=OCCAQ6AEwAQ-v=onepage&q=macistos+greece&f=false

²⁷ George Grote, *Greece* (New York: Peter Fenelon Collier, 1899), 131

https://books.google.com/books?id=HF1bAAAAYAAJ&pg=PA131&lpg=PA131&dq=Tryphylia+++greece&source=bl&ots=4PcQwCPWw6&sig=6YSIKsJLubKWgsRiOj6_b2ijUNA&hl=en&sa=X&ei=GUV3VbPWFsyQsAXe9oLoCA&ved=OCB4Q6AEwAA-v=onepage&q=Tryphylia+greece&f=false

too great with a distance of 223.130 miles²⁸

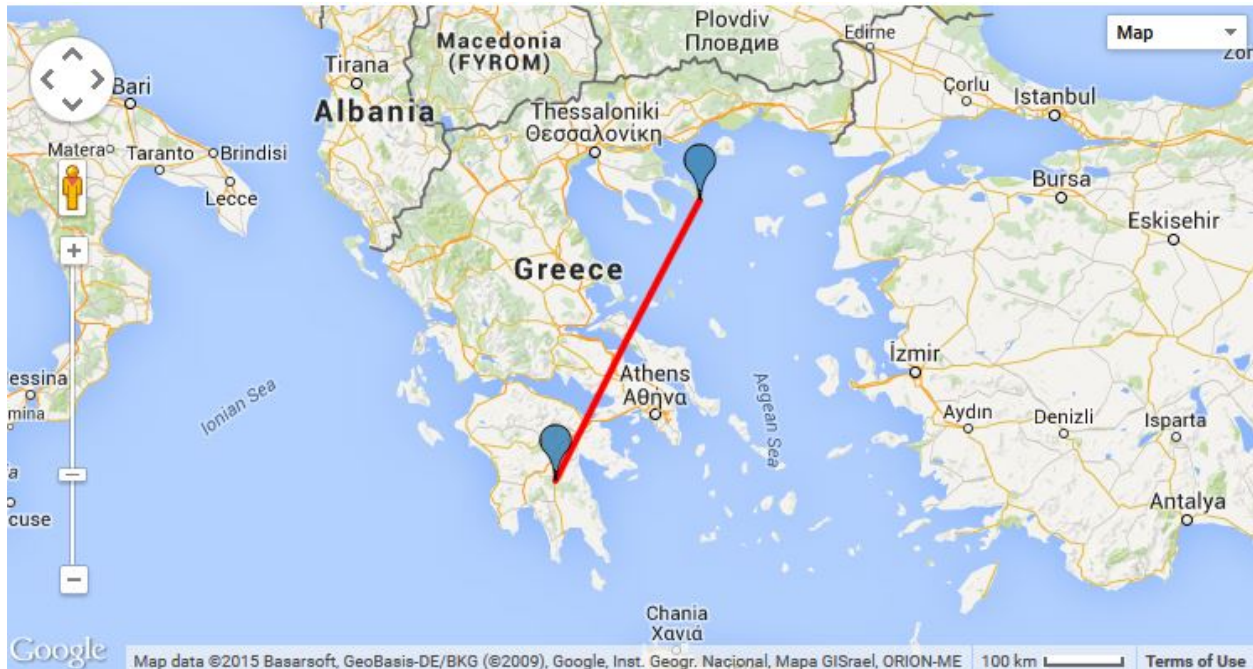


Figure VI: Mount Athos to the Peloponnese

As the reader can see, this doesn't seem a logical place for a signal fire. Even with the best conditions and elevations on the Peloponnese, the location is unfit due to its distance from Athos. This is where one could say it's just fiction and that accurate geography and distance were not a concern of Aeschylus. This may be true. But other authors and researchers such as Robert Fagles and W.B Stanford place Mount Makistos on the island of Euboea.²⁹

Euboea is a large island on the eastern side of Greece and is closer in proximity to Mount Athos than the previous location suggested by Robert Browning. But the reader will still have to contend with the absence of a physical location. There is no Mount Makistos on Euboea so the

²⁸ "How Far Is It Between", Free Map Tools, accessed June 10, 2015

<http://www.freemaptools.com/how-far-is-it-between.htm>

²⁹ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 294

author will substitute Dirfi, the largest mountain on the island, and the one with the best possible vantage point for spotting a fire from Athos and for lighting a fire to be seen on the next leg.

Dirfi sits at 5,791 feet above sea level³⁰, which would give the watchman stationed there the ability to see about 90 miles. Mount Athos being at over 6,670³¹ also giving the watchman the ability to create a visible fire that can be seen for a great distance. The space between these two mountains is 109.060 miles.³² This is still an incredible expanse to cover between the two points. We are still about 20 miles over what the math tells us so it is unlikely that this part of the fire relay could actually work. But we will never know for sure as we cannot accurately determine the distance with the actual location of Mount Makistos. Now let us move to yet another point in the fire chain that has no definite location.

Mount Makistos to Messapion

³⁰ "Dirfi, Greece", mountain-forecast.com, accessed June 11, 2015,
<http://www.mountain-forecast.com/peaks/Dirfi>

³¹ "Mount Athos", UNESCO, accessed June 11, 2015
<http://whc.unesco.org/en/list/454>

³² "How Far Is It Between", Free Map Tools, accessed June 10, 2015
<http://www.freemaptools.com/how-far-is-it-between.htm>

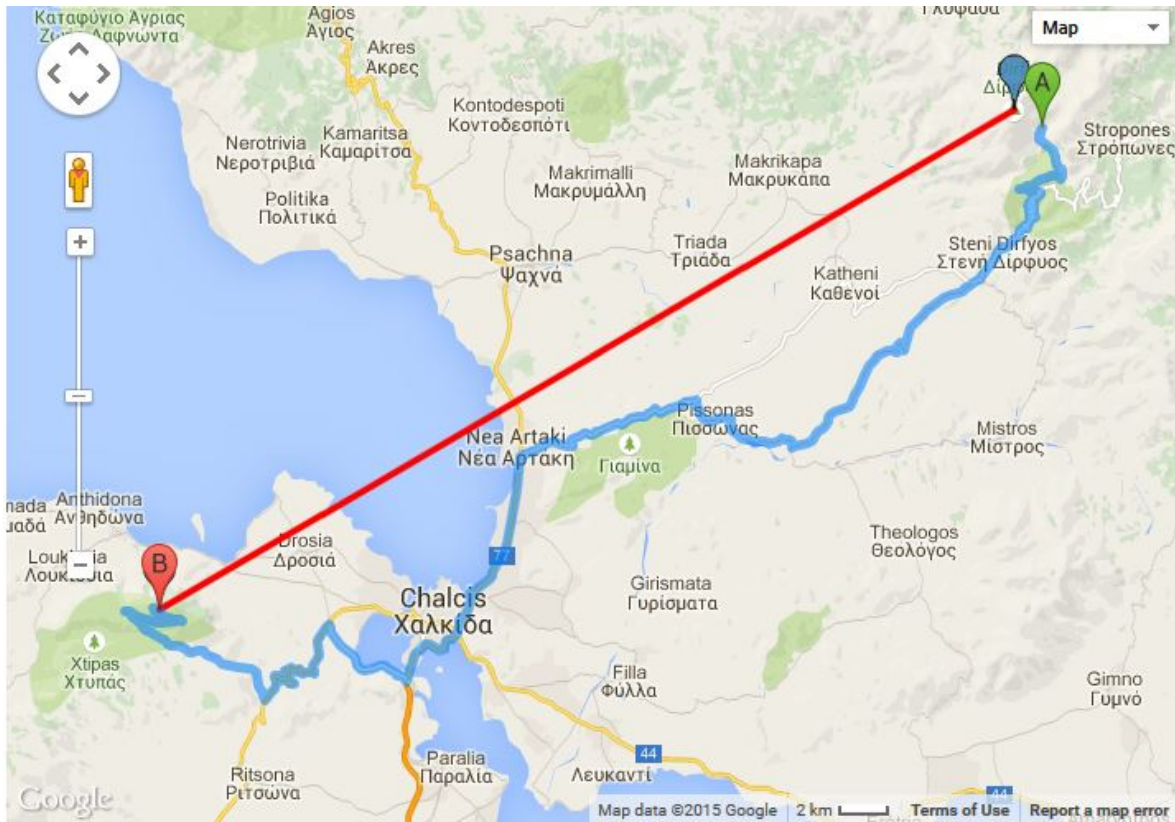


Figure VII: Mount Makistos to Messapion

“No time to waste, straining, fighting sleep, that lookout heaved a torch glowing over the murderous straits of Euripos to reach Messapions’ watchmen craning for a signal.”³³ Once again the reader runs into an issue of where to go next. In this case both points, Makistos (A) and Messapion (B), are relative areas. Mount Messapion is mentioned as a physical location in *A Dictionary of Greek and Roman Biography and Mythology*³⁴ but it gives no definite location as to what specific mountain the statement is referring to. In fact, Messapion is a small mountain range and the location mentioned by Aeschylus could refer to any peak in the range. This is

³³ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 114 Line 294 in Greek

³⁴ Various, *A Dictionary of Greek and Roman Biography and Mythology*, ed. William Smith (London: John Murray Albemarle Street, 1880), 1054

<https://books.google.com/books?id=VzMGAAAAQAAJ&pg=PA1054&lpg=PA1054&dq=Mount+Messapion&source=bl&ots=2yamCHbCbN&sig=oGYe5W350IhTHIZk64JANIGRkGg&hl=en&sa=X&ved=0CCUQ6AEwAWoVChMIhvd9l-MxglVUAiSch0EcQst-v=onepage&q=Mount+Messapion&f=false>

backed up by the Greek geographer Pausanias in his book *Guide to Greece: Central Greece*.

³⁵Robert Fagles states that “Mount Messapion is unidentified but evidently on the mainland”³⁶

All we can do is look at the elevations in the peak and plot a point on the map.

The distance between Mount Makistos to Messapion is 22.289 miles³⁷. Author Barry Strauss gives an elevation for Mount Messapion as 3,350 feet above sea level³⁸ though again which mountain he has chosen is not identified. With this short distance and with both elevations being higher than 1050 feet, giving the watchmen more than 38.34 miles of visibility, it is possible that the fires could be seen by each party³⁹. But without having a definitive location for each one can only speculate as to the success of this junction of the beacon fires. Moving further into the mainland we come to a location we can locate on a map, Mount Kithairon.

Messapion to Mount Kithairon

³⁵ Pausanias, *A Guide to Greece: Central Greece*, trans. Peter Levi (London: Penguin, 1979), 94

³⁶ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 294

³⁷ “How Far Is It Between”, Free Map Tools, accessed June 10, 2015

<http://www.freemaptools.com/how-far-is-it-between.htm>

³⁸ Barry Strauss, *The Trojan War: A New History* (New York: Simon and Schuster, 2006), 36

³⁹ “How Far Can the Human Eye See On The Ocean”, Research Maniacs, accessed June 11, 2015

<http://researchmaniacs.com/QuestionsAnswers/HowFarCanTheHumanEyeSeeOnTheOcean.html>

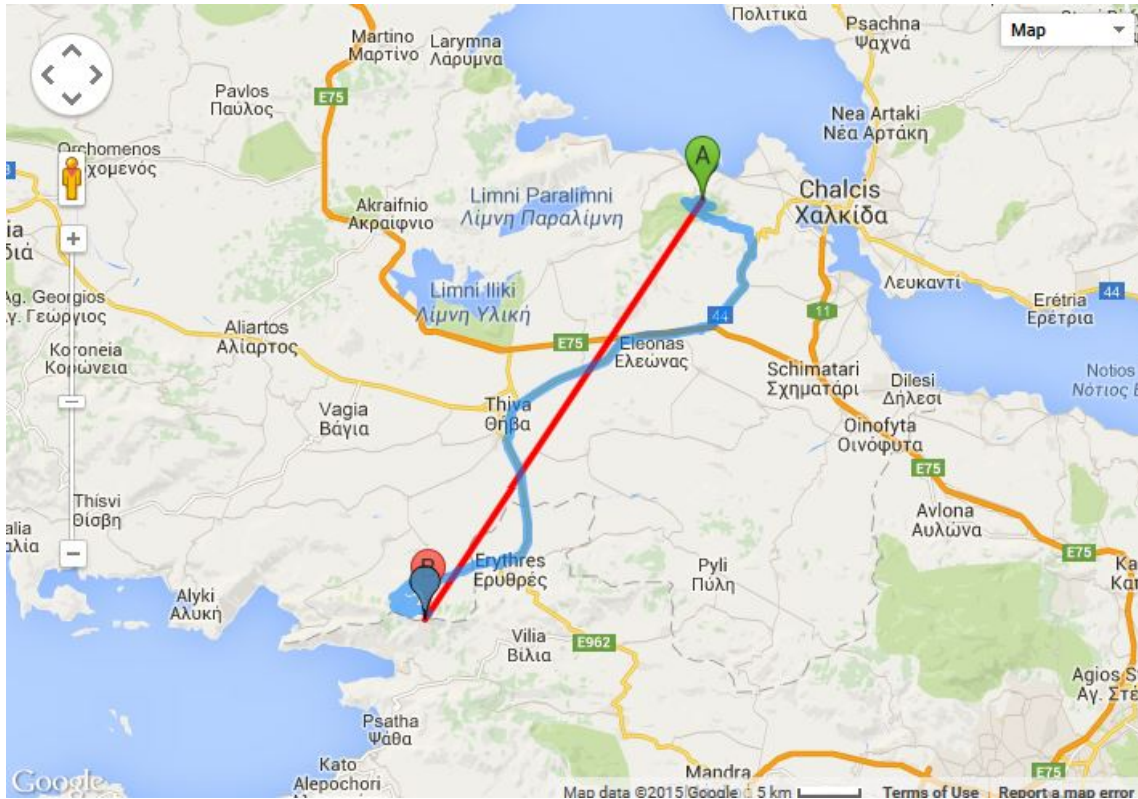


Figure VIII: Messapion to Mount Kithairon

“...it springs the Plain of Asopos, rears like a harvest moon to hit Kithairon’s crest and drives new men to drive the fire on.”⁴⁰ The next leg on the signal fires path takes us to Mount Kithairon which according to Encyclopedia Britannica is actually a mountain range separating Boeotia from Megaris and Attica.⁴¹ Its highest elevation is 4,623 ft. above sea level⁴² and lies 23.306 miles from Messapion⁴³. One can assume that at these elevations and distance this junction of the fire beacon relay would work as long as the highest peaks were used in the

⁴⁰ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 114 Lines 298-300 in Greek.

⁴¹ “Cithaeron”, Encyclopedia Britannica, accessed June 15, 2015, <http://www.britannica.com/place/Cithaeron>

⁴² “Cithaeron”, Encyclopedia Britannica, accessed June 15, 2015, <http://www.britannica.com/place/Cithaeron>

⁴³ “How Far Is It Between”, Free Map Tools, accessed June 10, 2015 <http://www.freemaptools.com/how-far-is-it-between.htm>

communication. This is the last point on the fire relay that we have concrete locations to base our two points. The next point is one that is only a description.

Mount Kithairon to Mount Aigioplankton

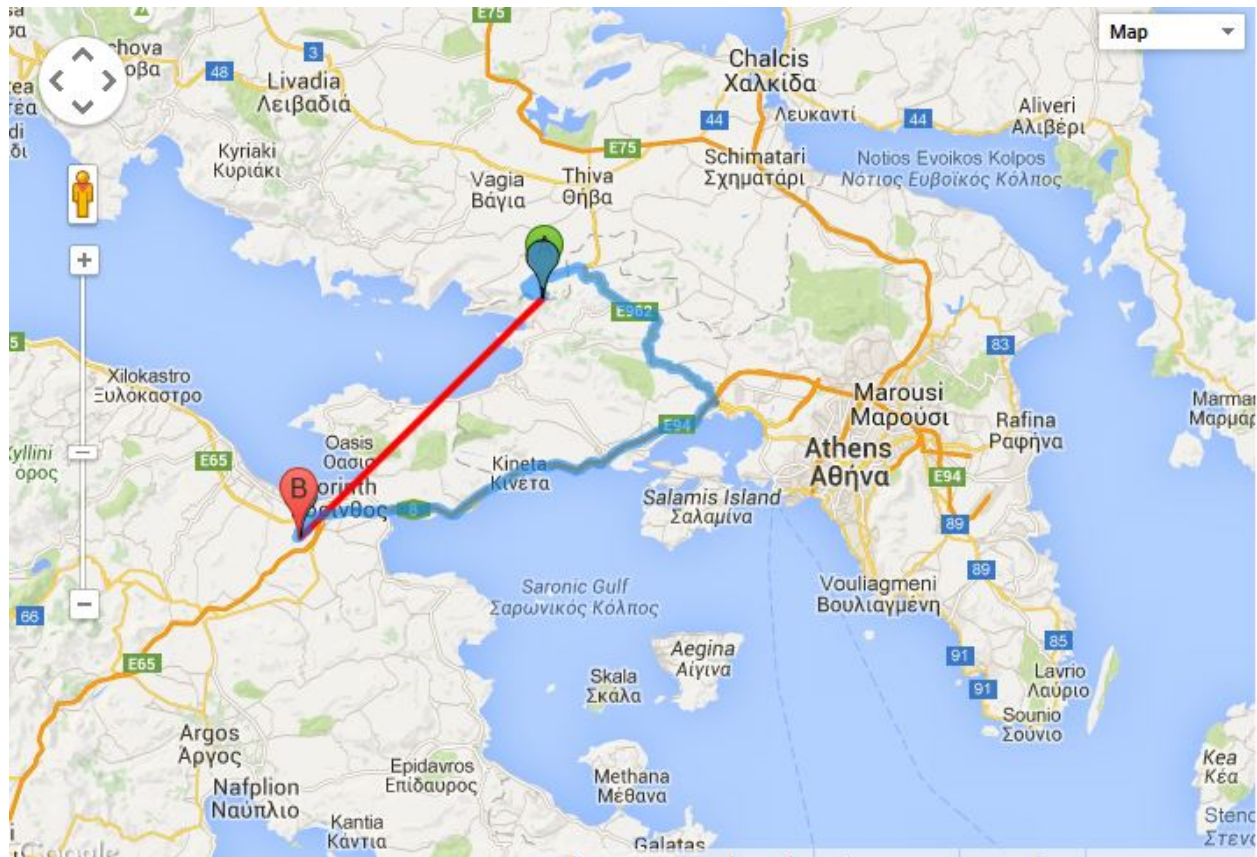


Figure IX: Mount Kithairon to Acrocorinth

“That relay pants for the far-flung torch, they swell its strength outstripping my commands and the light inflames the marsh, the Gorgon’s Eye, and it strikes the peak where the wild goats range...”⁴⁴ These lines are the most cryptic of the passage dealing with the signal fire relay. The reader encounters three locations that are unknown; the marsh, the Gorgon’s Eye, and the peak where the wild goats range. With the first two way points (marsh, The Gorgon’s Eye) no definite

⁴⁴ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 114 Lines 301-304 in Greek

place can be located on maps or in scholarship that indicate where Aeschylus had in mind. The third location, “the peak where the wild goats range,” has been identified in some references but in others only vague possible locations are given. In the book *Studies in the Topography of Chalcis and Euboea*, S.C. Bakhuizen states that a possible location is Mt. Kandhili⁴⁵. Other authors such as Robert Fagles give a general location somewhere near the Isthmus of Corinth⁴⁶. At this current time there is no way to accurately determine which location Aeschylus had in mind. Because of this the author has taken it upon himself to add a substitute location, Acrocorinth, in Corinth, based upon the possible location found in Fagles work. The author of this paper is not stating that this is the location that Aeschylus mentioned. Acrocorinth is a monolithic rock that sits above the ancient city and would have been known and used during the time of the writing of *Agamemnon* and fits the general location.

Basing the distance between Mount Kithairon (A) and Acrocorinth (B) we get a distance of 28.960 miles. The Acrocorinth sits at 1886 feet above sea level⁴⁷. Based on the descending elevation between the two sites it is possible for the watchman on the Acrocorinth to see a fire burning atop a peak in the Kithairon range as long as its elevation is 1050 feet or more⁴⁸. But in the end this is just speculation and one cannot determine with any accuracy if this leg of the signal fire relay would work as no definite location for “the peak where the wild goats range ” is known.

⁴⁵ S.C. Bakhuizen, *Studies in the Topography of Chalcis on Euboea*, (Leiden: E.J. Brill, 1985) 140, <https://books.google.com/books?id=v9EUAAAAIAAJ&pg=PA174&lpg=PA174&dq=mount+aigiplankton&source=bl&ots=vahgqwE8qk&sig=5udm9p72Ae581-LJ4fTYnt2ajY&hl=en&sa=X&ei=9IN3VYT3IMjSsAXOt4C4DQ&ved=OCCAQ6AEwAA-v=onepage&q=mount+aigiplankton&f=false>

⁴⁶ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 294

⁴⁷ “Acrocorinth”, Peloponnese.eu, accessed June 15, 2015

<http://www.peloponnese.eu/peloponnese-attractions/acrocorinth>

⁴⁸ “How Far Can the Human Eye See On The Ocean”, Research Maniacs, accessed June 11, 2015

<http://researchmaniacs.com/QuestionsAnswers/HowFarCanTheHumanEyeSeeOnTheOcean.html>

The peak where the wild goats range, down the Saronic Gulf, to the Black Widow's Face

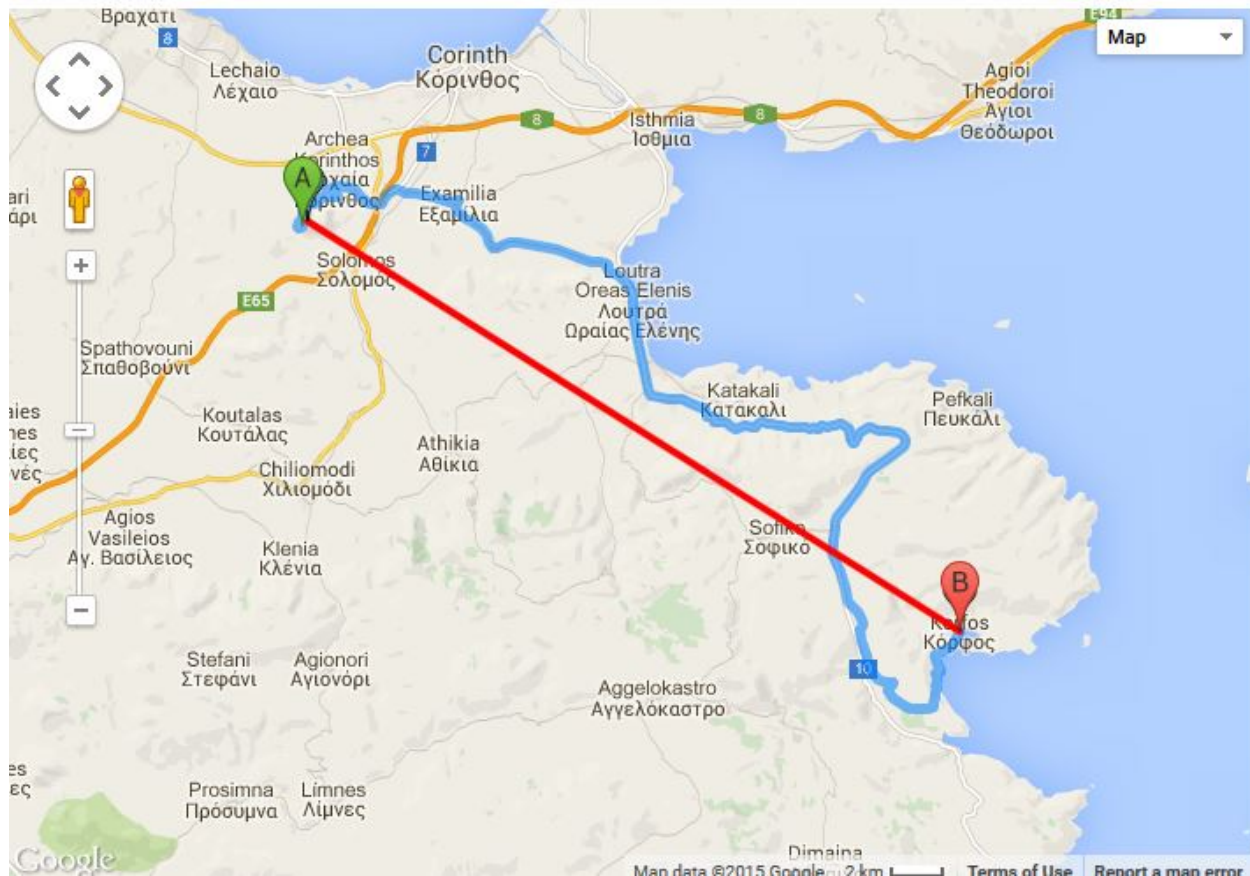


Figure X: Acrocorinth to Korfos

“They spare nothing, eager to build its heat, and a huge beard of flame overcomes the headland beetling down the Saronic Gulf, and flaring south it brings the dawn to the Black Widow’s face—the watch that looms above your heads—and now the true son of the burning flanks of Ida crashes of the roofs of Atreus’ sons!”⁴⁹ This passage is the final leg of the long journey of the signal fire. Again we find ourselves with less than favorable information. The exact location of “the peak where the wild goats range” is undetermined, the point or points down the Saronic

⁴⁹ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 114. Lines 306-310 in Greek

Gulf are not mentioned “The Black Widow’s face” could mean Mount Saint Elias or even Myceane itself.⁵⁰ There is no way for sure to pin down exact locations for this passage. All the reader can do is substitute locations along the route down the Saronic Gulf such as the author did in Figure X and give an estimate of how far the signal fire might have traveled before moving inland to its final destination.

The author has chosen the town of Korfos on the Saronic Gulf as a stand on for the unknown point or points. The distance between Acrocorinth (A) and Korfos (B) is 16.432 miles. Elevations are irrelevant for this portion of the argument as exact locations are unknown.

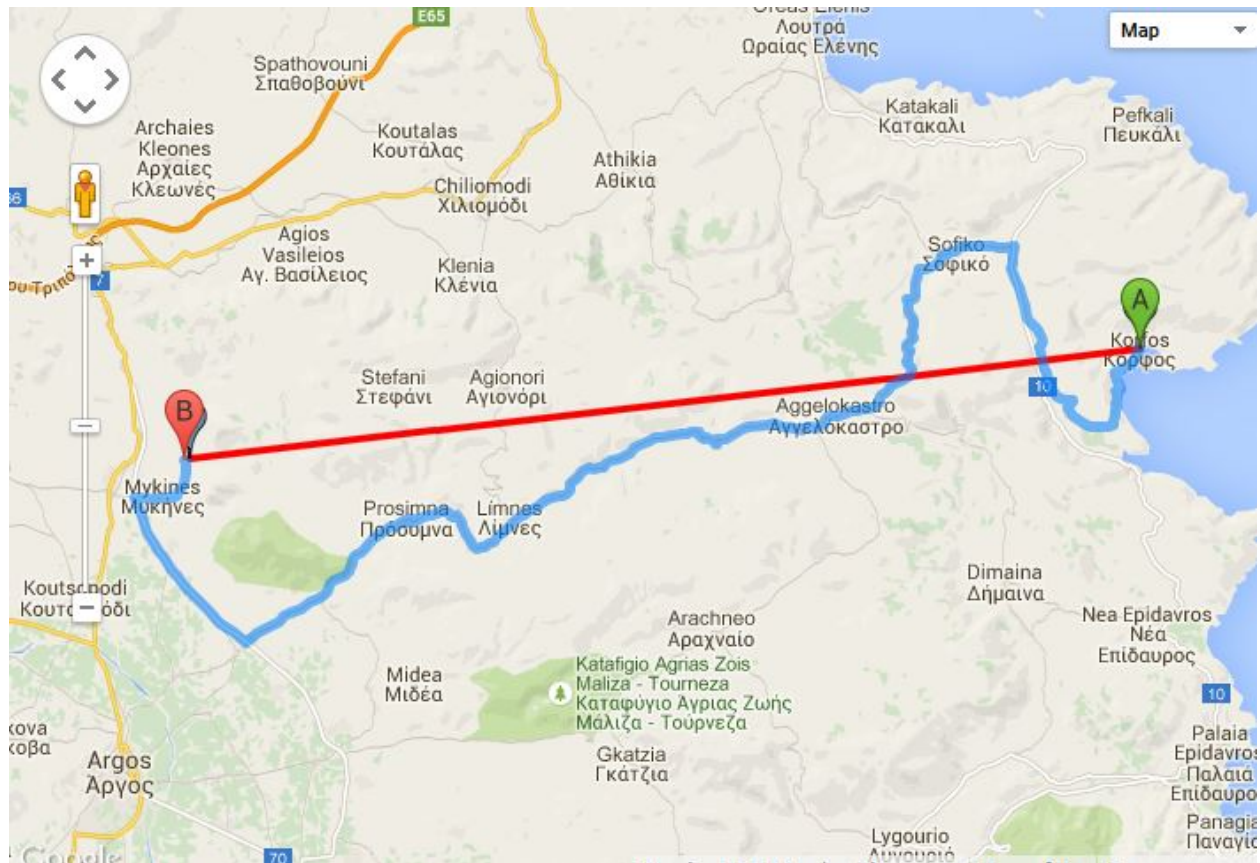


Figure XI: Korfos to Mycenae

⁵⁰ Aeschylus, *Agamemnon*, trans. Robert Fagles (New York: Penguin Books, 1984), 294

The last figure gives the reader a visual of how far the fire would have to travel on its final leg of the journey. The two locations chosen are substitutes as there is no exact way to determine where Aeschylus had in mind. All we know is that the last fire was seen by the Watchman in the play. If we use Korfus (A) and Mycenae (B) we get a distance of 20.292 miles. This is as much as we can infer based on guesswork.

Conclusion

When dealing with this work of fiction it is safe to say that Aeschylus was not going for accurate distances or worried about exact locations. The fire beacon relay was written for dramatic effect and to excite the audience, and later the reader. As stated earlier, this paper's purpose is not to prove the historical accuracy of the events but to determine if it would be possible given the information found within the lines of *Agamemnon* along with places found on our modern maps and the answer is no. We cannot determine it because the exact locations are either lost to history or not detailed enough. The author of this paper did substitute locations for ones not fully known just to give the reader an idea of how far the signal fire could have to travel between points. Given this information it also seems unlikely that it would work because the points between Ida and Lemnos are too great. The fire chain would have ended there. But in the end, lines 281-318 in the play offer a dramatic sequence that illustrates the power and geographic reach of Clytaemnestra. Readers will search for the missing locations for years to come and *Agamemnon* will enthrall readers as long as it is remembered. That, in the author of this paper's opinion, is the most important point of all.

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