

"A Descent into the Maelström: A Precursor of *Eureka*"

By Alejandro Marlo Valle Caraballo

Paper submitted in fulfillment of the requirements for the degree in
English Philology and Languages

DIRECTOR:

Norma Ojeda

Author's note

Alejandro Marlo Valle Caraballo, Foreign Languages Department,
National University of Colombia, Bogotá.

Code number: 445137

E-mail: amvallec@unal.edu.co/magnusbloodx@hotmail.com

May 19, 2016

Acknowledgements:

This work is dedicated to my family for all the time we have been apart, and to my teacher
for all her trust and support.

Abstract

This study aims to interpret "A Descent into the Maelstrom" as a precursor of *Eureka*, and as a portrayal of Edgar Allan Poe's cosmic vision. The tale is about a fisherman who survived a terrible whirlpool in Norway. The Maelstrom, as it is known, unleashes an exceptional fury, this time due to the influence of a hurricane. Poe wrote this story from elements that have aesthetic characteristics of the sublime, and the sublime is, at the same time, the source of the mental state of the fisherman and the narrator. This mental state leads the fisherman to realize that he can save himself, and in the narrator it causes a series of changes in their value system. The interpretation proposed in this study considers the story as a representation of Poe's stance against the scientific method promoted during the nineteenth century, and against the two axioms – deductive and inductive method - that claimed to be the only path to truth and knowledge. The correlation of the above elements and the correspondence between the scientific perspectives that Poe presented in the two works are taken into account. Poe proposes that the scientific method is insufficient to understand the universe, and gives great value to the imagination and intuition as complementary perceptions to achieve truth and knowledge.

Key words: Sublime, positivism, Maelström, imagination, intuition, scientific method.

Resumen

Este estudio tiene como objetivo interpretar "A Descent into the Maelström" como el predecesor de *Eureka*. Este cuento es sobre la narración de un pescador que sobrevive un terrible remolino en Noruega. El Maelström, que es como se conoce, desata una furia excepcional, en esta ocasión, debido a la influencia de un huracán. Poe compuso este cuento a partir de elementos que poseen características estéticas de lo sublime, y lo sublime es al mismo tiempo el origen del estado mental del pescador y el narrador. Éste hace que el pescador se dé cuenta de que puede salvarse y en el narrador origina una serie de cambios en su sistema de valores. La interpretación propuesta en este estudio considera el cuento como una representación de la postura de Poe en contra del método científico promovido durante el siglo XIX, y en contra de los dos axiomas – método deductivo e inductivo – que reclamaban ser los únicos caminos hacia la verdad y el conocimiento. Aquí se tiene en cuenta la correlación entre estos elementos y la correspondencia entre la perspectiva científica que Poe presenta en ambos trabajos. Poe propone que el método científico es insuficiente para entender el universo, y le da un gran valor a la imaginación y a la intuición como sentidos complementarios para alcanzar la verdad y el conocimiento.

Palabras claves: Sublime, positivismo, Maelström, imaginación, intuición, método científico.

Table of Contents

Introduction.....5

Justification.....6

General Objective.....8

Specific Objective.....8

Limitations of the Study.....9

State of the Art.....10

Theoretical and Referential Framework.....24

"A Descent into the Maelström: A Precursor of *Eureka*".....40

Conclusions.....63

Bibliography.....67

Introduction

Edgar Allan Poe has been considered the inventor of the detective novel, and science fiction. Nonetheless, his works are endowed with a deeper sense. He partakes in the scientific debate of the Nineteenth Century from a literary standpoint. "A Descent into the Maelström" is one of his contributions to the topic of the scientific method. In the tale, Poe appeals to aesthetic features of the romantic literary movement, such as the picturesque, and the gothic novel, namely the sublime, and the grotesque. This work is almost perfect in terms of the relation between the aesthetic features and their function in order to achieve what the tale is intended to portray. According to authors such as Sweeney, the protagonist managed to survive due to his aesthetic approach to the Maelström. In opposition to points of view of this type, this interpretation is intended to unveil the tale as the portrayal of Poe's interest in the scientific method, and in general, the exaltation of imagination, and intuition, which are the means the fisherman resorts to in order to save himself. These concepts are further elaborated in Poe's masterpiece *Eureka*. Whilst in "A Descent into the Maelström" the importance of these features lies in their vital nature, in *Eureka*, Poe resorts to them in order to reveal what he thought was the essence, origin, creation, present condition, and destiny of the material and spiritual universe.

Poe's tales of ratiocination are about reasoning. But not about reason confined to the limits of methods. In his tales, Poe depicted his criticism against the Nineteenth Century scientific method which confines reason, and consequently, the soul, to crawling. "A Descent into the Maelström" is interpreted here as a depiction of Poe's interest in exploring imagination, and intuition as means of acquiring knowledge.

Justification

There is no doubt that Poe is one of the most important authors in literature; his work has inspired H.P Lovecraft, Jules Verne, Stephen King, Agatha Christie, Sir Arthur Conan Doyle and Alfred Hitchcock's films among others. Moreover, he inspired most of the current theories about the universe, and our understanding of it was enhanced by his masterpiece *Eureka*.

In different tales, Poe depicted rationality as the way to survive. The main characters in his tales use rationality to overcome difficulties. "A Descent into the Maelström" is not the exception. The whirlpool itself, as a giant cryptogram resolved by the old fisherman, is both the setting and a depiction of the dynamics of the universe -including its cyclical nature. This character embodies Poe's "poet-mathematician" endowed with a high degree of the ratiocination that is characteristic of others of Poe's characters such as Dupin, who also represents this hybrid figure. The fisherman managed to survive the Maelström resorting to reason. But it is his imagination and his intuition which leads him to such a realization. The fisherman's hair became white as a result of the traumatic experience of facing the whirlpool, and it crowns the fisherman as the embodiment of a third path to achieve knowledge. In this tale, technology is represented by the fisherman's broken watch, but it is shown as a warning of how reliance on technology can lead to a fatal fate or misfortune. There is such a conceptual universe in the very core of the whirlpool that needs to be revealed.

The importance of this interpretation is that it aims to unveil ADITM as a portrayal of Poe's interest in science and cosmology. Poe's point of view about this topic is further elaborated in *Eureka*, and it is presented as a criticism of traditional scientific methods,

namely those of positive science. Poe partook in the intellectual debate of the 19th century, and contributed by providing his insight of what science should be. Humankind's knowledge about science, as an instrument to enhance our understanding of the universe, would not be the same without Poe's contributions. His tales of ratiocination are considered to be early attempts to arrive at his complete vision of the universe. Poe's works are examples of how literature stands out to express the voice of the outsider. Poe was considered an outsider whose work was first appreciated in Europe. But the echo of his outstanding intellectual outlook prevails in the realm of astronomy by means of *Eureka*. Thus, the following objectives are the core of this study, and direct the intended interpretation to its aim.

Objectives

To interpret "A Descent into the Maelström" as a portrayal of Poe's standpoint against the scientific rigor of the Nineteenth Century, and as a precursor of *Eureka*.

In order to achieve the general objective, it is necessary to elaborate the interpretation from the specific objectives which are:

To describe the role of the broken watch in the story;

to identify the function of the sublime, and the grotesque in the tale.

to interpret the Maelström as a depiction of the universe Poe describes in *Eureka*;

to interpret the fisherman's grey hair as a symbol of the accumulation of knowledge, as a representation of the fisherman's new state of consciousness, and his approach to unity;

to interpret imagination and intuition as main features in the tale, which are a common element in Poe's ADITM and *Eureka*.

to interpret the fisherman as an embodiment of the third "path" to knowledge further elaborated in *Eureka*.

Limitations of the Study

This study does not intend to describe the relation between the tale and any of the literary or ideological movements of Poe's time nor literary currents since it shares characteristics from different periods of the author's artistic life. Nevertheless, aesthetic theories such as those of the Picturesque, the Sublime and the Grotesque will be important in order to approach the role of the setting as a main feature to achieve the intended effect in this tale. It is not the task or purpose of this paper to find a relationship between this tale and any other of the tales related to the literary tradition of sea tales such as *Moby Dick*, *The Rhyme of the Ancient Mariner*, *Twenty Thousand Leagues under the Sea*, and *The Narrative of Arthur Gordon Pym* among others.

This study does not attempt to fully interpret *Eureka*, notwithstanding, the concepts that are considered necessary to fulfil the objectives are elaborated and explained for the sake of this study. Those concepts are criticized and parodied, as in the case of inductive and deductive method, while in the case of intuition, it is exalted and elevated to a higher stance in comparison to the inductive and deductive methods. "A Descent into the Maelström" is interpreted as a portrayal of Poe's interest in science and cosmology. Thus, the aforementioned features are key to establish the relation between the tale and *Eureka*.

In order to enrich the argumentation of the topic in question, it is significantly important to review the state of the art related to Poe's cosmological vision and his insight of the scientific method. The relation between the concept of intuition in *Eureka* and the role it has in ADITM is of the highest relevance. The following essays, and articles of different authors regarding Poe's works in relation to the topic proposed here, are a remarkable contribution to elaborate the intended interpretation.

State of the Art

In "Beauty, the Unreal, and the Willing Assumption of Disbelief" by Jerome McGann (2004) the author states that the old fisherman survived the Maelström due to a series of realizations about himself and the circumstances, and because he treated his experience as a decipherable system of signs. The author holds that the fisherman's story is a moral lesson for the narrator and the tale, an aesthetic lesson for the reader. The fisherman tells the narrator how through a series of realizations, he managed to find a way out of an impending death. It was his curiosity and self-awareness of the surroundings what led him to scape. There is a similar approach in "Beauty and Truth: Poe's 'A Descent into the Maelstrom'" by Gerard M. Sweeney (1973). In this article, the author states that what saved or helped the fisherman escape from obliteration was his "poetic appreciation of nature" instead of his scientific ratiocination. The author also holds that the fisherman gets caught in the Maelström because he "lets his watch run down", and therefore he fails to leave the area on time.

In "Poe and the Powers of Mind", Robert Shulman (1970) debates the insights about the mental, psychological and intellectual powers depicted by Poe as features of the protagonists of his stories. According to Shulman, Poe's aesthetics and cosmology are very important to understand his fiction and poetry. In "A Descent", as in other tales, "the setting is at the same time a symbol and a world of imagination made substantial in order to establish unconventional states of mind where ordinary reason and common sense are superseded and strange mergings, suggestions and discoveries can occur" (Shulman, 1970).

In "Poe and the Theme of Forbidden Knowledge", Zanger states that "A Descent" is, along with "Morella", "Ligeia" and "Manuscript Found in a Bottle", organically linked

by the shared theme of forbidden knowledge. Zanger explains that "the idea of a body of knowledge, the gaining of which can bring destruction is, of course, a traditional one, having its major source for Western Europe in the Genesis (J) account" (Zanger, 534). According to Zanger, in the nineteenth century "knowledge was normally perceived as a good" (Zanger, 534). In contrast, the idea of a destructive knowledge was embodied, by Goethe's *Faust*. In order to gain his knowledge, he resorted, consciously and deliberately, to forbidden magic. However, by regarding the four tales in which Poe specifically talks about forbidden knowledge, it is obvious that Poe's protagonists are, unlike Faust, very reluctant seekers of revelation. Poe's protagonists are forced or seduced into the pursuit of the knowledge they acquire. In "A Descent", the fisherman discovers himself possessed with "the keenest curiosity" which propels his wish to explore the depths of the whirlpool. On page 538, the author establishes a very interesting relation between the metaphoric way the protagonist of "Ligeia" speaks about her eyes, and the language the protagonists of "MS Found in a Bottle" and "A Descent into the Maelström" use to describe their desire to explore the depths of the whirlpool: "How have I, through the whole of a midsummer night, struggled to fathom it. What was it that something more profound than the well of Democritus which lay far within the pupils of my beloved." To corroborate this association the author resorts to the epigraph to "A Descent into the Maelström" taken from Glanville which talks about "The vastness, profundity, and unsearchableness of His works, which have a depth in them greater than the well of Democritus." Then, Zanger quotes what Democritus actually said, namely, "Of a truth we know nothing, for truth is an abyss." In this part, the relation between truth and the abyss is also revealing.

If truth is "sublime", then the path to reach it must also be so. According to Kent Ljungquist, in "Descent of the Titans: The Sublime Riddle of Arthur Gordon Pym", (Ljungquist, 2014) Poe's tales are imbued in a sense of sublimity. The author talks about the "terror sublime", a term coined by Burke to describe the mixture of elevation and horror in the experience of fear. Then, Ljungquist continues to state what Poe thought about the thrilling horror: "There are points of tempest which afford the loftiest and truest poetical themes - points where pure beauty is found, or better still heightened into the sublime by terror." Ljungquist applies Eakins's metaphor which is notable in "Dream-Land" whose speaker, like Pym, has undergone the fate of Lazarus. He has awakened from his trip, out of space and time, and is able to tell of his visions after undergoing a calamity that supposedly guarantees death; however, he lived to tell his story. In "Dream-Land", the absence of color -the lilies are all white and the woods are pallid grey- is notable. For Pym, the vision of whiteness is a fleeting but impressive boon to an individual who has undergone such tribulations. Pym's beatific vision is allowed to him only after his venture through the blackness of Tsalal. The author of this article resorts to Eakins's speculation to clarify the meaning of the white figure. For Eakin, the white figure is a "quester after ultimate knowledge in the company of the captain of "MS Found in a Bottle", "Ligeia" and the old mariner of "A Descent into the Maelström". If Poe's most literal avatar of the heroic seeker after final knowledge must be by definition larger-than-life, the figure is an allegorical, representative of the search for sublime knowledge located beyond the veil of space-time existence.

In "Poe's Nubian Geographer" Ljungquist talks about the possible sources for "A Descent" and gives relevance to the influence of Jacob Bryant's book *A New System; or, An*

Analysis of Ancient Mythology (1807). Bryant's work clarifies an important allusion and invites a re-evaluation of the sources of "A Descent". According to Ljungquist, in view of Poe's familiarity with Bryant's work and its "affinities in diction and imagery at several points, it should be acknowledged as a significant source along with the *Encyclopedia Britannica* and the story "Le Maelström: A Fragment", which appeared in *Fraser's Magazine*." Thus, he points out two image patterns which could have been influences for Poe's fisherman and the setting of "A Descent". The first and most important one for this study is "a Latin quotation, which Poe transferred, unchanged to the opening paragraph of "Eleanora" (IV, 236), it follows and is footnoted in reference to a book by Muhammad al-Idrisi called *Geographia Nubiensis*: "Agressi sunt mare tenebrarum, quid in eo esset, exploraturi." Bryant provides an immediate translation: "They ventured into the sea of darkness to explore what it might contain" (Bryant, IV, 79-80). While one cannot prove that this passage informed Poe's description of the mariner's thrust for exciting knowledge, his reading in Bryant provided an apt metaphor for this quest (74). This passage is completed with the footnote 7 in which Ljungquist speculates that "since Bryant mentioned the Nubian geographer in an extensive discussion to the ancient Titans, Poe probably seized upon the allusion to elevate the status of the mariner's experience above mortal proportions." The other image pattern that, according to the author, is striking by its similarities, is the following passage in the *Ancient Mythology*:

The vast unfathomable abyss, spoken of by the poets, is the great Atlantic ocean; upon the borders of which Homer places the gloomy mansions, where the Titans resided. The ancients had a notion that the earth was a widely extended plain; which terminated abruptly in a vast cliff of immeasurable descent. At the bottom was a chaotic pool, or ocean; which was so far sunk beneath the confines of the world, that, to express the depth and distance, they imagined, an anvil of iron tossed from the top would not reach it under ten days. (Bryant, IV, 77-78)

In "Poe's Sense of an Ending", Paul John Eakin quotes a "well-known" passage of *Marginalia* (Graham's American Monthly Magazine, March, 1846) in which Poe gives an account of his personal experience of the farthest reach of consciousness, nothing less than a "glimpse of the spirit's outer world". In *Marginalia*, Poe describes some of his plots as "experiments" designed to demonstrate the possibility of an accurate mortal record of "posthumous consciousness". For Poe, a basic plot for the pursuit of such knowledge begins to emerge as a movement of approach and entry, and as a movement of withdrawal and return - similar to the behavior of the tides or streams. To this fundamental motion of approach and return from a "supernatural" realm of "vision" or "ecstasy", continues Eakin on Poe's *Marginalia*, the passage adds one more clarification: "the moment of revelation itself, that is, the climax of this plot, can be but an inappreciable point of time" and hence, it is rather in terms of an image than as a paraphrase or other exposition, that its content can be rendered. According to Eakin, in "The Power of the Words", Poe defines the motive for the dream-journey as "the thirst to know". Eakin, debating Wilbur's one-way formulation, states that the mortal "thirst to know" is not fulfilled in the journey out, but in the journey out and back. In this article, Eakin introduces what he has called the Lazarus plot. Thus, he selected "Ligeia" and "ADITM" as illustrations of the two principal types of Lazarus fictions in Poe. According to Eakin, when the fisherman discovered that his watch has run down, he flings it into the ocean, for he has reached the end of time between one world and the next. Then the author talks about the fisherman's state of mind on the threshold of the maelstrom since it reflects precisely "the ambition to know all and yet survive what Poe's Lazarus fictions are designed to gratify, "thirst of knowledge." For Poe, understanding the ways of god in nature, is beyond the scope of man's powers, and, a journey towards knowledge is inseparable from destruction, for knowledge lies beyond death.

In "Psyche and Setting: Poe's Picturesque Landscapes", Sharon Furrow (1973) remarks that Poe thought that the rule of visual arts could also be applied to literature, mainly regarding the unity of composition. To Poe, both writer and painter should strive to present "one pre-established design". Then, Furrow quotes the following fragment from "Twice-Told Tales": "With careful planning, 'a picture is at length painted' which gives the reader a sense of totality". According to Furrow, the aforementioned statement suggests that Poe made a conscious use of pictorial imagination in creating his own works. In fact, Furrow continues saying that Poe's pictorialism is thematic in function. This means that "the setting" is often described in more detail than the characters, and that the external world acts out a drama which reflects the interior world of the protagonist - in "A Descent", the fisherman's state of mind is a reflection of the wilderness of the setting as per the intended interpretation. Furrow focuses her attention on Poe's pictorial presentation of the natural world. His landscapes and seascapes have a function in his tales and they are visualized according to the conventional pictorial modes of the sublime and the picturesque. According to Furrow, "Poe uses imaginary landscapes to depict man's alienation from his external environment, either as metaphors or an ideal paradise or as allegories of interior journeys into the psyche".

In "Observation, Inference, and Imagination: Elements of Edgar Allan Poe's Philosophy of Science", Axel Gelfert (2012) states that Poe is an intriguing character for "any exploration of the historical interrelationship between science, literature, and philosophy". Gelfert explains that *Eureka* has been studied for the anticipations of later scientific developments. However, Gelfert asserts that it should be read as a contribution to the discussion of the scientific method in Poe's time. According to Gelfert, this

methodological interest is also portrayed in Poe's tales of ratiocination, and it "gives rise to a proposed new mode of -broadly abductive- inference" (Gelfert, 589). This new mode of inference was attributed by Poe to the figure of the "poet-mathematician", who relies on creative imagination and intuition. Gelfert focuses particularly on Poe's views about natural philosophy and the scientific method. Gelfert's dissertation is mainly drawn on Poe's *Eureka*, which offers an explanation of the origins and evolution of the physical Universe, along with a critique of traditional accounts of the scientific method. In his article, Gelfert attempts to show that Poe claims to have identified a new method of inference which transcends induction and deduction. It enables "its practitioners to move imaginatively from our imperfect and fallible everyday empirical matters to a deep understanding of the fundamental principles that govern the world of universal phenomena" (Gelfert, 590). Gelfert argues that this third -broadly abductive- mode of inference "is best developed among those 'poet-mathematicians' who, like Kepler, are endowed with a superior faculty of the imagination" (Gelfert, 590). Gelfert asserts that Poe's scientific interest is a feature of his tales of ratiocination, and claims that "Poe's hybrid figure of the "poet-mathematician" must be taken seriously since without poetic imagination and intuition, Science would necessarily remain incomplete even by its own standards" (Gelfert, 590). In his article, Gelfert quotes Lawrence Frank (2003: 30) to assert that Poe was writing "at a time when both a resurgent evangelicalism and a conservative Natural Theology were confronted by a positivistic science", and he says that it is "against this historical backdrop that one must read *Eureka*" (Gelfert, 591). According to Gelfert, J. Brander Mathews declared Poe to be the master and inventor of the modern story. Nonetheless, Gelfert explains that Poe did not speak of "detective stories" but of "tales of ratiocination". Gelfert states that only three of these tales feature Dupin, and that an example of a 'non-detective' application of the

ratiocinative method may be found in Poe's story "A Descent into the Maelström". According to Gelfert, after realizing that "he is physically powerless to extricate himself from his predicament", the fisherman observes the floating objects around him, and concludes, "partly from memory, and partly from present observation", that cylindrical objects are last to be sucked up by the whirlpool. The fisherman holds onto a cask and saves himself, by appealing to ratiocinative inference. Gelfert explains that when Sherlock Holmes - or Dupin - solves a crime, the inferences involved are not always elementary nor typically deductive; instead, they involve choosing from among several competing explanatory hypotheses, all of which are, to different extents, compatible and supported by the empirical evidence. Gelfert asserts that in contemporary epistemology, they are abductive inferences, this is, "inferences to the best explanation", and explains that "what counts as the 'best' depends on the context" (Gelfert, 595). In footnote 18, Gelfert states that "the continuity between the Dupin stories and those stories that are told by a first-person narrator, who recounts reasoning processes under conditions of psychological pressure (*ADITM*, *The Pit and the Pendulum*, etc.), is important, for it is the latter conditions that often create the impulse for abductive reasoning" (Gelfert, 595). In footnote 21, Gelfert explains, based on Reichertz (1990), that at least in the case of Arthur Conan Doyle's Sherlock Holmes, "the inferences lack the Peircean element of guesswork and spontaneous (context-driven) hypothesis-generation that, for Peirce, are characteristics of abduction (as opposed to mere hypothetical reasoning)" (Gelfert, 595). Gelfert quotes a formulation by Charles Sanders Peirce on abduction:

Abduction is the process of forming an explanatory hypothesis. It is the only logical operation which introduces a new idea; for induction does nothing but determine a value, and deduction merely evolves the necessary consequence of a hypothesis. Deduction proves that something *must* be; Induction shows that something *actually is*

operative; Abduction merely suggests that something *may be*. (CP 5: 171; quoted after Harrowitz 1988: 181) (Gelfert, 596).

Gelfert explains that for Peirce, it was abduction what was needed "as the first starting of a hypothesis and the entertaining of it, whether as a simple interrogation or with any degree of confidence" (CP 6: quoted after Niiniluoto 1999: 240) (Gelfert, 596).

Gelfert states that Poe's use of ratiocination is more specific in the Dupin stories, and is connected with the figure of the detective. *The Murders of the Rue Morgue* (1941) begins with a dissertation of the human being's mental features. In the story, Dupin proves, through a series of conjectures on the basis of evidence that have been disregarded by the police that the killings were actually carried about by an escaped orangutan. Gelfert explains that "along the way, Dupin laments that E.F Vidocq, the famous French criminalist and the first director of the Sûreté Nationale, impaired his vision by holding the object too close, and by doing so, necessarily lost sight of the matter as a whole. Gelfert explains that Vidocq's failure, to think the matter as a whole, is not an isolated one, and asserts that in *Eureka*, Poe criticizes Baconian inductivism on similar grounds, as can be read in the following excerpt of *Eureka*: "The error of our progenitors was quite analogous with that of the wise-acre who fancies he must necessarily see an object the more distinctly the more closely he holds it to his eyes" (*Eureka*, p. 11). According to Gelfert, there is a critique against inductivism in *The Purloined Letter*. In the story, the police prefect failed to recover a stolen letter 'even though the prefect's inductive methods, of which Dupin admits "were not only the best of their kind, but carried out to absolute perfection" (Poe, 1844). According to Gelfert, there is a crossed reference in *Eureka* to *The Murders in the Rue Morgue*. In the story Poe suggests that it is the "roughnesses", the "peculiarities", the

"protuberances", and not the inductive generalizations (or universal laws of deductive logic) that contain the key to the puzzle-solving ability of reason" (Gelfert, 597). Gelfert wants to show that Poe's *Eureka* provides a connection between 'detective-styled' ratiocination and abduction in the scientific context, and explains that abduction is to encompass both creative hypothesis-generation and inference to the best explanation. Gelfert explains that instead of establishing a direct causal-historical link between Poe's *Eureka* and Peirce's account of scientific inference, his article should be understood as "an attempt to illuminate an affinity that exists between the two" (Gelfert, 598).

Another interesting approach is that of Tracy Ware in his "A Descent into the Maelström": The Status of Scientific Rhetoric in a Perverse Romance" (1992); according to Ware, there is an orthodox reading established by Margaret J. Yonce in 1969. From the perspective proposed by Yonce, the story involves an archetypal descent and reascent, and a successful quest for "spiritual transcendence" (Yonce, p, 26). On the other hand, Fred Madden proposed an ironic reading which "questioned both the success of the quest and the authority of the protagonist" (Ware, 77). Ware explains that he will focus on the three aspects that are relevant for the two readings: the status of science, the status of religion, and the importance of the eccentric frame. Ware states that for Yonce, and implicitly for her followers (including Hoffman, Sweeney, Murphy, Finholt, Frank, Ketterer, and Eagan), "ADITM" should be read as analogous to *The Rhymer of the Ancient Mariner*. Ware explains that in both works "a preliminary narrator meets a second narrator who tells a sublime story with a religious moral" (Ware, 77). Ware states that for Yonce, Poe's fisherman and Coleridge's mariner gain the authority of "prophet seer's", and their task is to lead others to the truth revealed to them. According to Ware, Daniel Hoffman believes

that the fisherman embodies the ratiocinative principle. For Ware, the story becomes problematic when one reads it more closely. He states that "Poe shows that scientific reasoning is not always a reliable guide" (Ware, 78). Ware states that "the broken watch that causes the men to be caught in the maelström in the first place is an apt symbol of the unreliability of technology" (Ware, 78). Ware states that the two authorities - Jonas Ramus and the *Encyclopaedia Britannica* - are not cited so much as parodied. For Ware, the scientific inadequacy joins the broken watch to confirm the relevance of Glanville's essay "Against Confidence in Philosophy and Matters of Speculation" (Glanville, 1676). Ware states that he cannot see the enlightenment and rebirth that the orthodox reading finds in the story.

In the *Annotated Tales of Edgar Allan Poe*, Stephen Peithman contributes by providing interesting insights and valuable information to support the intended interpretation. For Stephen Peithman, the fisherman's instinct, along with his ability to imagine and to think, saved him, and yet he does not understand this (Peithman, 104). The fisherman assumed that he could tell when to go through that critical area of the sea by relying on his watch, unaware that it had run down. According to Peithman, this is a display of pride. In another annotation, Peithman explains that the fisherman is calm enough to reflect about his surroundings and in consequence, he is able to see the beauty and grandeur of nature, so that, with new eyes he begins to understand the way this new world works, and in this fact lies his salvation (Peithman, 105). These are just examples of the annotations in Peithman's annotated version of Poe's "A Descent into the Maelström".

In "Poe's Peering Eyes of Science", Christopher Kearns states that Poe's critique of the perspective of Nineteenth-century science began early in his literary career. According

to Kearns, it can be found in his 1929 "Sonnet – To – Science". In *Eureka*, Poe tries to "reconcile the perspectives of science and poetry, concluding that the universe is itself a vast literary plot" (Kearns, 73). He says that "much of Poe's literary career was shaped by his attempt to reform positivistic or instrumental rationalism along literary or poetic lines, and by his underlying preoccupation with the possibilities and deficiencies of scientific and analytic forms of thinking" (Kearns, 73). Kearns quotes Hoffman's argument. "Hoffman argues that because Science and Time transform this into a world of dull realities, imagination is effectively exiled to 'a somewhere other', a place which he associates with Al Aaraaf" (Kearns, 74). Poe, says Kearns, "attempts to ground reason differently and that his tales of ratiocination represent one version of this attempt" (Kearns, 74). Kearns states that Poe makes an "attempt to recover some aspects of Science for the poetic imagination in the title poem of *Al Aaraaf*", and goes on to say that "viewed within the framework of "Sonnet -To Science" Poe's choice of Brahe's star as the subject and scene of "Al Aaraaf" is particularly interesting for several reasons" (Kearns, 75). The first reason, says Kearns, is that it dramatizes an ideal reversal of the positivistic gaze. Second, it might seem an anticipation to of several key theories of psychoanalysis. Third, "by moving from "Sonnet – To Science" to "Al Aaraaf" Poe stages a recoil from reason, which, like *Eureka* and the Dupin tales, attempts to discover the poetry at the very heart of positivistic reason" (Kearns, 75). Kearns concludes that in spite of Poe's reputation as an aesthete, he "was not willing to conclude that a devotion to beauty necessarily excludes an appetite for truth", and states that "Poe refashioned the image of reason, placing poetic imagination at his heart" (Kearns, 76).

According to Elizabeth Vincelette, *Eureka* is Poe's "most ardent appeal to bring his audience to his vision of truth" (Vincelette, 36). In "Beauty, Truth, and the Word: The Prophecy and Theology of Poe's *Eureka*", she states that "Poe questions the narrowness of intellectual methodology, i.e., the tendency to categorize reasoning process as either inductive or deductive, as *á priori* or *á posteriori*, and insists that reasoning should not be limited to such "either/or propositions" (Vincelette, 37). She states that Poe's philosophy is driven by metaphysics, with its ontological implications and attendant emphasis on relationships. Vincelette points out that in "Mellonta Tauta" and in *Eureka*, Poe "uses Aries Tottle (Aristotle) and Hog (Bacon) to critique Aristotelian deduction and Baconian induction as insufficient means to understand the universe" (Vincelette, 37). To Poe, says Vincelette, science and art imitate each other, and the poet and scientist have the responsibility to explain the universe. She states that Poe's characters mirror this belief. An example of this is Auguste Dupin, who represents both the poet and the scientist. In "Sonnet – To Science", Poe questions the overdependence on empiricism as the means to understand the universe. Vincelette states that Poe questions how to use science but does not deride it as a discipline. She quotes Benjamin Fisher to illustrate this point: "Poe's primary objection to science was that it often appeared, inaccurately, as the term for workings of unrelenting logic or of eighteenth-century" both of which denied "imagination any importance in the ordering of the world's thinking" (Vincelette, 38). According to Vincelette, Poe's concern with proportion matches Burke's romantic analysis of the sublime. She remarks that Ljungquist "argues that Poe uses sublimity in *Eureka* as a metaphor for God's power".

The contributions that are described in the state of the art enhance and support the intended interpretation either by means of presenting different points of view, or by supporting the ones the following essay aims to achieve. Nonetheless, the discussion would be pointless if it were not founded on solid bases. In consequence, resorting to important literary theory, whose relevance is a great contribution, is necessary to the elaboration of the interpretation.

Theoretical and Referential Framework

"A Descent into the Maelström" displays features of gothic fiction and tales of ratiocination. Nevertheless, for the sake of this interpretation, "A Descent into the Maelström" is also regarded as a tale within the gothic fiction literary tradition, since it shares characteristics of gothic aesthetics such as the picturesque, the sublime and the grotesque. The following theories give account of the origins of Gothic fiction, its definition and main characteristics.

In her book *Gothic Fiction: The Beginnings*, Audronė Raškauskienė (R. 2009) states that it is well known that the eighteenth century is the "Age of Reason". Nevertheless, the "Age of Reason" seems to be full of complexities and ambiguities. The author compares Johan Georg Hamann's (1730-1780) repudiation towards all rationalistic abstractions and insistence on the primacy of sense experience and imagination, with that of his contemporary, Richard Price (1723-1791), an uncompromising rationalist for whom "reason is the natural and authoritative guide of a rational being." Nonetheless, for Raškauskienė, "both reason and feeling were recognized as springs of human behavior in the eighteenth century and we may assume that contemporaries were aware of the complicated and intricate reciprocal relations between them." (Raškauskienė, 2009 page 7). Raškauskienė provides an outlook concerning the approach to reason during both the first and second half of the Eighteen Century. He expounds that at the beginning of the century there is a "depersonalizing of external nature, from the cooperative universal Mother to universal, unalterable physical laws." The belief in the importance of man's personal relation to God, the Father, languishes. The confidence in man's rational powers, which are no longer seen as an infinite faculty, decreases. However, a keener sense of reliance on

them remains. In the second half of the century, values were slowly redefined, so that "emotional assurance tends to supplant the appeal to reason as expressed in logical trains of thought." Raškauskienė remarks that this change of ideas was influenced by David Hume in the middle of the century, and that it was, because of him, possible to contend that "Reason and Nature go hand in hand." However, Raškauskienė asserts that "Hume proves that it is utterly impossible to get outside human perceptions to an objective reality, even so far as to verify in a single instance the relation of cause and effect." Raškauskienė remarks that according to Hume, "our reason, neither does, nor is it possible it ever shou'd, upon any supposition, give us an assurance of the continu'd and distinct existence of the body. That opinion must be entirely owing to imagination." Raškauskienė quotes a note by Basil Willey, in which he express, that "by the very completeness of his destructive efficacy", Hume "showed that man cannot live by reason alone" (Raškauskienė, 2009, page 8).

For Raškauskienė, another instance of the emotional climate of the century and its imaginative peculiarities is the cult of melancholy, which "distinguishes the second half of the century, to which the pleasures of horror were added and which found its expression in the -Graveyard- poetry and the Sentimental and the Gothic novel" (Raškauskienė, 2009 page 7). Since the term "Gothic" is of the highest importance for the unfolding eighteenth-century aesthetic discourse, it is very relevant to illustrate its genesis as it is currently known. Raškauskienė emphasizes the fact that the word "Gothic" bore a negative connotation from the end of the seventeenth century to the beginning of the eighteenth century. The reason is that its original meaning referred to the barbarian northern tribes or "Goths" and it was related to "lack of cultivation and taste" (Raškauskienė 2009, page 11). Notwithstanding, Raškauskienė asserts that a defense of the English against the Greek

appeared in 1762 in *Letters of Chivalry and Romance* by Bishop Hurd. Hurd states that "the fancies of our modern bards are not only more gallants, (sic) but, on a change of scene, more sublime, more terrible, more alarming, than those of the classic fablers. In a word [...] the manners they paint, and the superstitions they adopt, are more poetical for being Gothic." Raškauskienė appeals to David Punter's opinion that "the eighteenth century possessed a somewhat foreshortened sense of past chronology, and from being a term suggestive of more or less unknown features of the Dark Ages, 'Gothic' became descriptive of things medieval - in fact, all things preceding about (sic) the middle of the seventeenth century" (Raškauskienė 2009, page 11).

According to Edith Birkhead in her book, *The Tale of Terror*, the credit of having introduced Gothic romance and of having made it accepted, must be assigned to Horace Walpole (Birkhead 1921, page 16). His *Castle of Otranto*, which was published on the Christmas Eve of 1764, was but another display of the Gothic that had found embodiment fourteen years earlier in Walpole's miniature castle at Strawberry Hill. In an age devoted to good sense and reason, he released his medieval tale. His interest in "things medieval", Birkhead states, was not that of an antiquary; instead, it was that of an artist who loved old things because of their age and beauty (Birkhead 1921, page 17). Raškauskienė also highlights Horace Walpole's role in the Gothic revival. Raškauskienė explains that Walpole's interest in the Gothic and things medieval, motivated him to build a gothic castle, and, to write *The Castle of Otranto* (1764), which was subtitled as a Gothic story. As a consequence, in the last decades of the eighteenth century, the main application of the term "Gothic" was in architecture. Nevertheless, it also started to be applied in literature as a description of the supernatural and fantastic in Gothic Tales or the Gothic Romances.

According to Raškauskienė, "the word 'Gothic' started to appear as a synonym of the words 'supernatural', 'grotesque' and 'fantastic'" (Raškauskienė 2009, page 12).

Raškauskienė appeals to Gillian Beer's opinion that the gothic novelists rediscovered the power of sensation. "But now", Raškauskienė explains, "sensation was linked to the grotesque, the sublime and the supernatural" (Raškauskienė 2009, page 14).

According to Raškauskienė, the concepts of the Sublime and the Picturesque are very important to understand the aesthetic context of the Eighteenth Century. Raškauskienė states that the topic of aesthetic enquiry which generated the greatest interest during this period was the Sublime. The most important aesthetic work in this period, according to Raškauskienė, was Edmund Burke's *A Philosophical Enquiry into the Origins of Our Ideas of the Sublime and Beautiful* (1757). Raškauskienė explains that for Burke, smallness, smoothness, delicacy and gradual variations are characteristics of the Beautiful. The Beautiful evoked love and tenderness. In opposition, vast, magnificent and obscure objects produced awe and terror, or the Sublime. According to Raškauskienė, from the aforementioned statement it can be inferred that the cornerstone of Burke's aesthetic is emotion, and the basis of his theory of sublimity is the emotion of terror (Raškauskienė 2009, page 17). Burke stated of the Sublime that:

"Whatever is fitted in any sort to excite the ideas of pain, and danger, that is to say, whatever is in any sort terrible, or is conversant about terrible objects, or operates in a manner analogous to terror, is a source of the sublime; that is, it is productive of the strongest emotion which the mind is capable of feeling. I say the strongest emotion, because I am satisfied the ideas (sic) of pain are much more powerful than those which enter on the part of pleasure" (Burke 1757, page 111).

According to Burke, the effects of torments on the body and mind are much greater than those of pleasure. This statement is linked to the definition of the Grotesque found in "A

Glossary of Literary Gothic Terms"¹. In this glossary, Douglass H. Thomson describes the Grotesque from a literary standpoint as "a mutation of the character, plants and/or animals" (Thomson, 13). According to Thomson, "this mutation transforms normal features and /or behaviors into veritable extremes that are supposed to be frightening and/or disturbingly comic".

About Obscurity, Burke stated that "to make anything very terrible, obscurity seems in general to be necessary" (Burke, 133). Regarding Power, Burke stated "I know of nothing sublime, which is not some modification of power" (Burke, 138). On this topic, Raškauskienė states that "even before Burke the power of an angry God expressing His wrath through nature had been considered as the supreme source of the Sublime" (Raškauskienė, 18). According to Burke, other sources of the sublime are Vastness, Infinity, Difficulty, Sound and Loudness, and Suddenness. Concerning Vastness, Burke stated that "greatness of dimension is a powerful cause of the sublime" (Burke, 147). Infinity "has a tendency to fill the mind with that sort of delightful horror, which is the most genuine effect, and truest test of the sublime" (Burke, 148). "Another source of greatness" according to Burke, is difficulty. "When any work seems to have required immense force and labor to effect it, the idea is grand" (Burke, 153). Burke states about sound and loudness that "the eye is not the only organ of sensation by which a sublime passion may be produced" and explains that "sounds have a great power in these as in most other passions" (Burke, 160). About suddenness, Burke states that "a sudden beginning, or sudden cessation of sound of any considerable force, has the same power", and that "the attention is roused by this; and the faculties driven forward, as it were, on their guard"

¹ "A Glossary of Literary Gothic Terms" <http://www.saylor.org/site/wp-content/uploads/2012/05/engl403-1.3.1-A-Glossary-of-Literary-Gothic-Terms.pdf>

(Burke, 161). In addition he says that "whatever, either in sights or sounds, makes the transition from one extreme to the other easy, causes no terror, and consequently can be no cause of greatness", and he explains that "in everything sudden and unexpected, we are apt to start; that is, we have a perception of danger, and our nature rouses us to guard against it" (Burke, 161). About the passion caused by the sublime, Burke states that:

"The passion caused by the great and sublime in nature, when those causes operate most powerfully, is astonishment: and astonishment is that state of the soul in which all its motions are suspended, with some degree of horror. In this case the mind is so entirely filled with its object, that it cannot entertain any other, nor by consequence reason on that object which employs it. Hence arises the great power of the sublime, that, far from being produced by them, it anticipates our reasonings, and hurries us on by an irresistible force. Astonishment, as I have said, is the effect of the sublime in its highest degree; the inferior effects are admiration, reverence, and respect" (Burke, 130).

Another interesting contribution to enrich the discussion on the Sublime proposed by Raškauskienė is taken from John Baillies' "An Essay on the Sublime" (1747). In this essay Baillies stated that:

Hence comes the Name of Sublime to everything which thus Raises the Mind to fits of Greatness and disposes it to soar Above her Mother Earth; Hence arises that Exultation and Pride Which the Mind ever feels from the Consciousness of its own Vastness – That Object only can be justly called Sublime, which In some degree disposes the Mind to this Enlargement of itself, And gives her a lofty Conception of her own Powers (Baillies, 1747)

From this excerpt, Raškauskienė states that "we may suppose that the greatness of the Sublime offered intimation of a great power which, in its turn, became the mirror of the power of the human mind and imagination" and that "Gothic romances which drew on the wildness and grandeur of nature for their inspiration and Graveyard poetry elevating the mind to ideas of wonder and divinity, partook of the Sublime" (Raškauskienė, 20).

Another key aesthetic theory is that of the Picturesque. Raškauskienė explains that Edmund Burke, in his *Enquiry*, distinguished two aesthetic categories, the Sublime and the

Beautiful. However, Burke also "opened the way for others to identify new aesthetic categories" as Martin Price notes in his essay "The Picturesque Moment" (1965, page 262). According to Raškauskienė, it was William Gilpin (1724-1804) who next attempted to establish the Picturesque as a third category. Raškauskienė states that in the early decades of the eighteenth century the Picturesque used to have two meanings. Raškauskienė appeals to Hipple's notes to explain that when applied to literary style, it meant "vivid" and/or "graphic". When it was applied to scenes in nature, it meant "eminently suitable for pictorial representation".

In his essay "On Picturesque Beauty" (Gilpin, 1792), William Gilpin attempted to differentiate the Beautiful from the Picturesque. Raškauskienė states that while Burke "linked the Beautiful with smoothness", Gilpin "suggested that the essential characteristics of the Picturesque are roughness, irregularity, and variety" (Raškauskienė, 25). According to Raškauskienė, Gilpin "finds picturesque beauty in different natural scenes, expressing an appreciation of the scenery of vapour, fog and mist in different atmospheres and lights" (Raškauskienė, 25). Raškauskienė states that "once the appeal of the picturesque is given moral and religious grounds, we may say that the Picturesque moves towards the Sublime" (Raškauskienė, 29). He also states that in Gilpin's writing's, there are suggestions about the aesthetic and the moral put in conflict. Raškauskienė explains that for Gilpin "the idle man or the bandit is pictorially more interesting than the industrious citizen, the ruined abbey or the terrible castle may appear to the picturesque eye more than the busy center of parish life or the peaceful homestead" and that for the sake of the picturesque men do "for what in real life they are despised – loitering idly about, without employment" (Raškauskienė, 27). According to Raškauskienė, Gilpin was not in favour of the fashion witnessed in the later decades of the eighteenth century, when ruins were created as a picturesque accent. On the

other hand, Raškauskienė explains that "a ruin ivy – clad and mouldering, showing the triumph of nature over man's endeavours, the quintessence of melancholy satisfied an emotional demand of the time for historical colour and excitement, connected with the growing cult of the Gothic" (Raškauskienė, 25). According to Raškauskienė, Uvendale Price "shared Gilpin's views, and noted that a thunderstorm, a ship catastrophe or the eruption of a volcano may provide the picturesque scenery" (Raškauskienė, 27). In the conclusion of this topic, Raškauskienė states that in two directions, the Picturesque worked to satisfy "the emotional and intellectual demands of the time" (Raškauskienė, 28). Raškauskienė concludes that "in one sense it was neo-classical in the way in which it looked back to a tradition of ideal landscape, the painters and the poets". On the other hand, he says that "it encouraged descriptive writing, served as the setting of Gothic fiction and looked forward to the romantic movement in its recognition of the power of nature in such things as evening scenes, and its love of abruptness and variety" (Raškauskienė, 28). Along with the concepts outlined above, it is key to consider other theories regarding positivism and the scientific method relevant to the intended interpretation.

According to Antonio Rodriguez Huéscar, "el Positivismo es el movimiento intelectual dominante en la segunda mitad del siglo XIX" (Page 83, translation by author)². The roots of Positivism "can be clearly pursued to Kant and the Enlightenment – mainly, in its encyclopedic nature - , and, with less clarity, to Descartes and Bacon, and which ramifications penetrate our century, and extend, yet, through some sectors of the philosophic spheres of our days" (Page 83, translation by author). These are Rodriguez' words in his foreword of Auguste Comte's *Discurso Sobre el Espíritu Positivo* (*Discourse*

² "Positivism is the dominant intellectual movement of the second half of the Nineteenth century" (Page 83, free translation by author).

on the Positive Spirit). Rodriguez states that there are two major features of Positivism: The proscription of Metaphysic, and the rigorous demand to abide by the facts – reality – in any type of research. On www.philosophybasics.com, Positivism is defined as “the view that the only authentic knowledge is scientific knowledge”. On this website it is stated that “such knowledge can only come from positive affirmation of theories through strict scientific method (techniques for investigating phenomena based on gathering observable, empirical and measurable evidence, subject to specific principles of reasoning)”. Rodriguez states that: “Toda especulación intelectual que no cumpla la condición de científica será considerada vitanda y atentatoria a los altos intereses de la auténtica sabiduría” (Page 84)³.

Regarding philosophy, he states that:

“La filosofía queda así reducida a ser, o bien una reflexión sobre la ciencia (teoría del conocimiento, lógica, teoría de la ciencia), o bien una mera coordinación o sistematización de los resultados de las ciencias particulares – enciclopedia -, cuyo conjunto orgánico se considera entonces como la ciencia universal y esta es la aspiración del positivismo” (Rodriguez, 84)⁴

The principles of Positivism are:

1. Demand of reality.
2. Usefulness in opposition to uselessness.
3. Certainty in opposition to uncertainty.
4. Accuracy in opposition to imprecision.
5. Positive in opposition to negative
6. Relative in opposition to the absolute.

³ Rodriguez states that “every intellectual speculation that fails to meet the scientific criteria will be considered avoidable and threatening to the true knowledge” (page 84, translation by author).

⁴ “Philosophy is reduced to be a reflection about science (theory of knowledge, logic, and theory of science), or merely a coordination – systematization – of the results of particular sciences – encyclopedia -, organically grouped and considered the universal science; and, this is the aspiration of Positivism” (page 84, translation by author).

In *The Scientific Outlook*, Bertrand Russell states that in order to arrive at a scientific law there are three main stages: "the first consists in observing the significant facts; the second in arriving at a hypothesis, which if it is true (sic), would account for these facts; the third in deducing from this hypothesis consequences which can be tested by observation" (Russell, 58). He explains that "if the consequences are verified, the hypothesis is provisionally accepted as true" (Russell, 58). He clarifies that "it will usually require modification later as the result of the discovery of further facts" (Russell, 58). According to Russell, "science, in its ultimate ideal, consists of a set of propositions arranged in a hierarchy, the lowest level of the hierarchy being concerned with particular facts, and the highest with a general law, governing everything in the universe" (Russell, 59). He explains that "the various levels in the hierarchy have a twofold logical connection, travelling one up, one down; the upward connection proceeds by intuition, the downward by deduction" (Russell, 59).

In *Conceptual Analysis and Philosophical Naturalism* by David Braddon-Mitchell and Robert Nola, they explain the concept of abductionism. According to them:

"...the abductionist response to external-world skepticism claims that (1) the hypothesis that the actual world is roughly as we perceive it to be is a better explanation of our experiences than the hypothesis that, say, we are disembodied dreamers and (2) if the hypothesis that p is the best explanation of one's experiences, then one can come to know that p by an inference to the best explanation" (Braddon-Mitchell and Nolan, 2009)

So far, the general aspects of romanticism and positivism have been described in order to have the foundations to compare Poe's two compositions. The comparison is carry out through Bakhtin's concepts of architectural form, compositional form, and heteroglossia.

Mikhail Bakhtin's thought has been key to the development of language, poetics, and aesthetics. His contributions to literary criticism through different concepts. First, those that are critical to the concepts presented by the Formalists. In their essay "The Formal

Method in Literary Scholarship"⁵ (1928) Bakhtin and Medvedev explained the misconceptions and inadequacy of the Russian Formalist's concepts and methodology. This criticism was determining to put an end to the dichotomy between "form" and "content" in order to construct a sociological poetics and to achieve a broader and more accurate approach to literary works. Second, the concepts explained by Bakhtin in his essay "The Problem of Content, Material, and Form in Verbal Arts" (1926), as a response to the dichotomy between "form" and "content" proposed by a primitive formalism, suggest an opposition among three elements: form/material/content. The fundamental contribution lies in a new idea of the "form" which is considered on two levels; architectural and compositional (Pouliquen, 15). The main insights of the aforementioned essay are summarized by Hélène Pouliquen in her essay "La Literatura y la Ideología: Estudio sobre la Estética Verbal (Introducción a la Socio crítica)"⁶ (1992). Although Bakhtin's essay is synthesized by Pouliquen, the discussion on architectural and compositional form is enhanced with some excerpts from the original essay. Third, the concept of Heteroglossia is relevant to identify the discourses of the characters.

Bakhtin's concepts of "architectonic" and "compositional" form. These concepts are outlined by Hélène Pouliquen in her essay "La Literatura y la Ideología: Estudio sobre la Estética Verbal (Introducción a la Socio crítica)". She focused on the problem of the genesis of the literary text signification. According to Pouliquen, the literary text is an interpretation of the story that is produced in an absolutely particular and new way, but as an original – and polysemic – affirmation/deconstruction of one or several previous systems

⁵ The Problem of Content, Material, and Form in Verbal Arts. (1990). From *Art and Answerability: Early Philosophical Essays by M.M Bakhtin* (First ed., Vol. 9). Austin, Texas: University of Texas Press.

⁶ Pouliquen, H. (1992) "Literature and Ideology: A Study on Verbal Aesthetics (Introduction to Sociocritics)", Universidad Nacional de Colombia 11-29.

of interpretation of the world- ethical and political- born in the core of a community (Pouliquen, 7).

The first part of Pouliquen's essay sets out the problem of the genesis of literary text at a theoretical level, through the conceptualization produced from the perspective of the sociocritics of the literary text, and it is supported by Bakhtin's "Sociological Poetics", Mukarovsky's "Literary Semiology", Lukacs' aesthetics, and L. Goldmann's "Genetic Structuralism". Although Pouliquen's essay is built upon the aforementioned concepts, the part which is considered here is the one relative to Bakhtin's concepts.

In different sections of her essay, Pouliquen explained Bakhtin's "Architectural" and "Compositional" forms. She states that Bakhtin provided two fundamental modifications to the traditional binary opposition between "form" and "content". First, the central concept of "form" was called "verbal material" by Bakhtin. In second place, Bakhtin inserted, a third element in the form-content opposition which is that of "form". According to Bakhtin, "form" refers to the form of a content, which is absolutely realized in the verbal material and inextricably bound to it (Pouliquen, 20). That is to say that the "architectural form" is the universe of a literary work, the global organization of both, content and material. On the other hand, the "compositional form" is the form of the verbal material per se (Pouliquen, 15).

Pouliquen explains that the "architectural form" is the "internal form" of the "aesthetic object." This "aesthetic object" is the result of an "author-creator" and a "receiver's" evaluative activity (Pouliquen, 20). For Bakhtin, the "architectural form" is, specifically, the literary nature of an artistic work; it is fundamentally, an axiological system, an "evaluation", an "appreciation" of the world, which encompasses an "ethical-cognitive" content through specific verbal material (Pouliquen, 24).

In his essay "The Problem of Content, Material, and Form in Verbal Arts" (1926), in *Art and Answerability* (1990), Bakhtin states that "the object dealt with in aesthetic analysis is, therefore, the content of aesthetic activity (contemplation) directed toward a work" (Bakhtin, 267). According to Bakhtin, this content is the "aesthetic object", which in distinction to the external work (organized verbal material), "admits other approaches as well, and among these, first of all, the primary cognitive approach, i.e., sensory perception ordered by concepts" (Bakhtin, 267). The author expounds three tasks which should be achieved in an aesthetic analysis.

Bakhtin states that the first task of aesthetic analysis is "to understand the aesthetic object in its purely artistic distinctiveness and to understand its structure, which we shall call henceforth the architectonics of the aesthetic object" (Bakhtin, 267). The second task is to understand the work of verbal art "in its entirety and in all its constituents as a phenomenon of language, i.e., purely from the standpoint of linguistics, without any regard for the aesthetic object it actualizes, solely within the bounds of those scientific regularities which govern its material" (Bakhtin, 267). Finally, Bakhtin states that the third task is "to understand the external material work as that which actualizes an aesthetic object, as the technical apparatus of aesthetic execution" (Bakhtin, 267). According to Bakhtin, the third task "presupposes the fact that one has already cognized and studied both the aesthetic object in its distinctiveness and the material work in its extra-aesthetic givenness" (Bakhtin, 267). Bakhtin states that in order to accomplish the third task, it has to be done by means of a "teleological method". The "teleological method" is defined by Vadim Liapunov in the notes in page 322 as "the procedure of assuming that all data are parts, teleologically linked to a whole; the object of analysis is to define the relation of parts to a whole – in other words, to seek the architectonics in a given subject of analysis" (Liapunov, 322).

Bakhtin explains that "the structure of a work, understood as a structure that actualizes the aesthetic object, we shall call the composition of a work" (Bakhtin, 267). According to Bakhtin, in works of material aesthetics there is a constant confusion of architectonic and compositional forms. In consequence, "the former are never clarified in principle or defined with precision, and are thus undervalued" (Bakhtin, 269). Bakhtin provides some examples of the methodological delimitation of architectonic and compositional forms. He states that "the aesthetic individuality" is "a purely architectonic form of the aesthetic object itself: what is individualized is an event, a person, an aesthetically animated object, and so on" (Bakhtin, 269). Bakhtin explains that "the individuality of the author as a creator possesses a special character and also enters into the aesthetic object" (Bakhtin, 269). The author clarifies that the form of individuality cannot be attributed, in the aesthetic sense, to a work as organized material, and says that the attribution of individuality, to a painting or a verbal whole for example, has only a metaphorical significance.

Bakhtin states that the form of self-sufficiency or self-containment which belongs to that which is aesthetically consummated, is the mere architectonic form "least of all capable of being transferred to the work as organized material" (Bakhtin, 269). According to Bakhtin, the latter is a "compositional teleological whole in which every constituent and the entire whole are goal-directed, they actualize something, they serve some end" (Bakhtin, 269). Bakhtin explains that the novel is "a purely compositional form of the organization of verbal masses", and it is through this compositional form that "the architectonic form of the artistic consummation of a historical or social event is realized" (Bakhtin, 269).

Another relevant concept is that of "dialogism" or "heteroglossia". In her book *The Bakhtin Reader* (2003), Pam Morris collected several essays by Bakhtin, Medvedev, and

Voloshinov. Among these essays there is Bakhtin's "The Dialogic Imagination" (1935). In it "language" is understood as absolutely stratified into simple social discourses each representing a particular ideological – belief system, "a way to see the world: heteroglossia" (Morris, 73). Morris emphasizes that it would be wrong to perceive 'dialogism' or 'heteroglossia' "as opening the way to total linguistic freedom" (Morris, 73). Instead, Morris states that heteroglossia is indeed "perceived as the constituting condition for the possibility of independent consciousness in that any attempt to impose one unitary monologic discourse as the 'truth', is revitalized by its dialogic contact with another discourse, another view of the world" (Morris, 73). According to Morris, in "The Dialogic Imagination", Bakhtin states that language is taken as "ideologically saturated", as "a world view" and even as "a concrete opinion", "insuring a maximum of mutual understanding in all spheres of ideological life" (Morris, 74). According to Bakhtin, a 'unitary language' "constitutes the theoretical expression of the historical processes of linguistic unification and centralization, an expression of the centripetal forces of language" (Bakhtin, 74). Bakhtin states that "a unitary language gives expression to forces working toward concrete verbal and ideological unification, which develop in vital connection with the processes of sociopolitical and cultural centralization" (Bakhtin, 75). Nonetheless, Bakhtin explains that "the centripetal forces of the 'life of language', embodied in a 'unitary language', operate in the midst of heteroglossia" (Bakhtin, 75).

According to Bakhtin, language at any given moment of its evolution, is stratified not only into linguistic dialects in the strict sense of the word, but also into socio-ideological languages such as: languages of social groups, 'professional' and 'generic' languages, languages of generations, etc.(Bakhtin, 75). Bakhtin explains that along with the aforementioned, literary language is one of the heteroglot languages. Bakhtin points out the

dynamic nature of stratification and heteroglossia, and says that they "widen and deepen as long as language is alive and developing" (Bakhtin, 75). Bakhtin explains that "alongside with the centripetal forces, the centrifugal forces of language carry on their uninterrupted work, alongside verbal-ideological centralization and unification, the uninterrupted processes of decentralization and disunification go forward" (Bakhtin, 75).

In the State of the Art, the authors that were chosen to support the thesis proposed in this study, posit different interpretations of Poe's work. A rather romantic interpretation of Poe's works is provide by Sweeney, Egan, Zanger, Ljungquist, Eakin, and Furrow. By contrast, Gelfert, Ware, Kearns, and Vincelette, are inclined to regard Poe as an author who used romanticism as an aesthetic means, but that was not a romantic. In order to frame the discussion of this study, the features of romanticism are described. Among these features, the theory of the sublime by Burke, is remarkably important. In opposition, the foundations of positivist science, and the definition of the scientific method are relevant to this study. Along with the different approaches to the work of Poe, Bakhtin's concepts of heteroglossia, architectural and compositional forms, provide a solid background in order to support and to elaborate the intended interpretation of "A Descent into the Maelström" as depiction of Poe's cosmological vision, and a precursor of his masterpiece *Eureka*.

"A Descent into the Maelström: A Precursor of *Eureka*"

The imagery displayed in "A Descent into the Maelström" is not by any means a result of improvisation, but, utterly the opposite. It is the result of a pre-conceived design in order to create an effect on the reader and to depict the author's insights about the cosmos and how mankind mistakenly approached it according to the existing concepts of the early nineteenth-century standards. Not only was every single word and every single detail in the setting was chosen with a purpose, but also the length of this tale was decided on with the devotion of a genius who wanted to bring the reader to truth, and truth is often, and in very great degree, "the aim of a tale" (Poe, 1842). *Graham Magazine*.

In "A Descent into the Maelström" truth is that the scope of mankind's vision of the great design of the universe was, and surely still is, very short. The reason of mankind's shortened vision is that the ways to approach knowledge are crooked, so that Poe proposes through his protagonists' mental features, a new way to achieve knowledge, and consequently, to understand the universe. Perhaps bearing that in mind, Poe chose to have the old fisherman tell the story to the narrator from the top of a mountain, so that they both had a general and broader view of the chaos unleashed by nature. The cliff from where the fisherman and the narrator were observing the overwhelming landscape is an attempt to depict that, after his terrible experience, the fisherman achieved a higher vision or understanding of the cosmos represented by the seascape -this is related to the gray hair as a symbol of accumulation of knowledge or the unaware use of this third way toward knowledge which appeal to imagination, intuition, and reason.

"A Descent" has been grouped along with Poe's tales of ratiocination and has very often been held as an early form of science fiction. However the tale has features of the

Gothic literary tradition such as the Sublime, the picturesque, and the grotesque, which are used to depict Poe's vision of the cosmos and the scientific method. The tale revolves around a whirlpool, known as the Maelström or Moskoe-ström, as the setting, and it is told by a fisherman to the narrator from the top of a cliff. Thus, it is told from a telescopic perspective. The fishermen got trapped in the terrible setting as consequence of the fisherman's reliance on his watch, which he realized to be broken. His feelings of horror are the result of the sublime experience of being trapped in the whirlpool.

He survived due to a set of realizations that resulted from the observation of the setting led by his state of mind. The fisherman states that an unnatural curiosity took the place of his original terrors, and for that reason he started to watch the numerous things that floated in his company. Nevertheless, the fisherman's two brothers, who are his companions, found their destruction since they did not achieve the fisherman's state of mind; instead, one of them fell off the boat, and the other became mad. The elements to support the interpretation, and to have a solid outlook, are the role of the broken watch, the sublime, the setting, the grotesque, and the dialogic contact between the fisherman and the narrator. Bearing this in mind, the aforementioned features of ADITM are key to identify the architectural form of the tale, so that it can be aligned with that of *Eureka*.

Since Viking times, Norwegians have been considered outstanding sailors. Furthermore, even a regular fisherman in nineteenth century should have been able to be aware of the position of the sun and the stars in the sky in order to estimate his time and his location when sailing. The fact that the fisherman in the tale relies on a watch in order to know the time when they have to leave the fishing area, to avoid the whirlpool, or at least to

cross the area when it is close to its slack period, is quite odd. The fisherman's watch is the element used as a motif to place the fishermen into such a predicament:

"The three of us -my two brothers and myself- had crossed over the islands about two o'clock P.M., and soon nearly loaded the smack with fine fish, which, we all remarked, were more plenty that day than we had ever known them. It was just seven, *by my watch*, when we weighed and started for home, so as to make the worst of the Ström at slack water, which we knew would be at eight" (Poe, 104)

At this point, the fisherman's reliance on his watch in order to estimate the time to safely leave the area, remains intact. Although he states that they "seldom made a miscalculation" (Poe, 103). So far, the fishermen had not realized that there was a storm approaching them; however, they immediately saw the horizon covered "with a singular copper-colored cloud that rose with the most amazing velocity" (Poe, 104). According to Peithman, copper has a reddish tint, which usually spells disaster in Poe's tales. Here, it indicates the first stage where the reliance on technology and science is at stake. The second reference to time, and the most remarkable one, occurs when the fisherman states that he "dragged" his "watch from its fob". The fisherman realizes that the watch was not going, so he flings it far away and then explains that it "had run down at seven o'clock! We were behind the time of the slack, and the whirl of the Ström was in full fury!" (Poe, 105). The fisherman miscalculated the time of the slack due to his reliance in the watch, and in consequence they crossed the whirl of the Ström when it was in its full fury. The watch is a device Poe used not only to trigger the story, but also as a symbol of how reliance on technology and science may lead to fatality. For Ware, "the watch is an apt symbol of the unreliability of technology" (Ware, 78). Apart from Ware's insight on this topic, there is a remarkable relation between the watch episode and Glanville's epigraph, which supports the idea of technology and human standards set in crisis.

"The ways of God in Nature, as in providence, are not as our ways; nor are the models that we frame any way commensurate to the vastness, profundity and unsearchableness of His works, *which have a depth in them deeper than the well of Democritus*" (Glanville, 1676)

Humankind does not understand the ways of God in nature since God's ways are not as our ways. Humankind needs, at least if it is compared with the "watch episode", to divide and to measure -to rationalize- the day into hours in order to achieve some control or knowledge of the surrounding environment, instead of staring at the universe to be aware of its signs. According to Peithman, "the fisherman has learnt from his experience in the Maelström: that words like time, laws, and society, are man-made conveniences, with little relation to the actual universe"⁷ (Peithman, 98). This shallow perception mankind has of the actual universal laws are the result of the naïve appreciation, and the short scope of mankind's vision of the ways in which the universe operates. The fact that fisherman has a device that allows him to measure the time -according to human standards- does not mean that universal phenomena will match the expectations he has of nature. Poe not only criticizes reliance on technology, and science, but also the naïve approach mankind has of the universe -through the scientific method of the time. The moment when the fisherman flings his watch into the ocean marks the break-up between him and his reliance on technology. Whilst Eakin states that the fisherman flings his watch because he has reached the end of time, the perception in this study is that he is now at the threshold of his mental becoming. The fisherman describes what he felt after being taken by a wave, "up... up as if into the sky", and continues to say that he "would not have believed that any wave could rise so high" (Poe, 105), and then down in such way that it made him feel sick and dizzy, as if he were "falling from some lofty mountain-top in a dream" (Poe, 105). The fisherman explains that while they were up, he could take a quick glance around, and in consequence

⁷ This account is found in Peithma's annotation number seven of *A Descent into the Maelström*.

he was able to spot their exact position in an instant, and states that if he had not known where they were, he would have not been able to recognize the place at all. At this moment he relates that he closed his eyes in horror. Even though the fisherman has not yet reached his new mental state, the references to the setting lead to feelings of horror that characterize the sublime.

As a consequence of his reliance on the watch, the fisherman is now enveloped in foam, at the threshold of the whirlpool. He explains that at this point the boat made "a sharp half turn to larboard and then shot off in its new direction like a thunderbolt", and is now entering the Maelström. The fisherman has a close view of the whirlpool, and, he is able to tell the story to the narrator with plenty of details about the setting. By means of the description given by the fisherman to the narrator, the elements which are the source of the sublime appear in the story in order to provide a logical background for the fisherman's consequent state of mind. The narrator also alludes to the setting; however, since the sublime operates in different ways in both characters, the effects of the sublime on the narrator are considered separately.

There are two approaches to the function of the setting in the tale in relation to the fisherman. First, as the background that triggers the feelings of awe and horror, and second as the pictorial representation of the characters' states of mind. The sources of the sublime, as described by Burke, fit the description of the setting given by the fisherman: difficulty, when the fisherman tells the narrator "I could not tell you the twentieth part of the difficulties we encountered 'on the ground' - it is a bad spot to be in, even in good weather" (Poe, 103). Then the protagonist tells the narrator that "...it became suddenly so dark that we could not see each other in the smack" (Poe, 103). Later on, there is another remarkable

reference to suddenness and obscurity when he says that "around in every direction it was still black as a pitch, but nearly overhead there burst out, all at once, circular rift of clear sky" (Poe, 104). Burke states that "a quick transition from light to darkness, or from darkness to light, has yet a greater effect" and explains that "with regard to light, to make it a cause capable of producing the sublime, it must be attended with some circumstances, besides its bare faculty of showing other objects" (Burke, 156). The light is in the tale not only another source of the sublime, but also an important element for the unfolding of the tale since the fisherman also needs light to be able to contemplate the scene.

On account of the vastness, there is a comparison of the boat with a feather; however, the following one is quite remarkable since it precedes the turning point of the fisherman's state of mind. He says that "on the larboard arose the *world of ocean*" and then he goes on to say that "it stood like a *huge writhing wall* between us and the horizon" (emphasis is mine) (Poe, 105). Both – *world of ocean* and *huge writhing wall* - are references to the vastness of the whirlpool. Then, the fisherman tells the narrator that "it may appear strange, but now, when we were in the very jaws of the gulf" he "felt more composed" than when they were approaching it. Then, the fisherman starts to think about "how magnificent it was to die in such a manner", and about "how foolish it was", of him, "to think in so paltry a consideration" as his own individual life, "in view of so wonderful a manifestation of God's power". In this scene, the fisherman shifts from a feeling of horror to a feeling of astonishment. On this topic, Burke states that he "knows nothing sublime which is not some modification of power" (Burke, 138), and Raškauskienė states that, even before Burke, the power of an angry God, whose wrath is expressed by means of nature, had been considered the supreme source of the sublime. Here, God's power is expressed by

the universe. The scene of the change of the fisherman's state of mind is strategically placed as part of the composition of the tale. As a consequence, of the sublime experience in the Maelström, the fisherman now has a new state of consciousness. Burke explains that "the passion caused by the great and sublime in nature, when those causes operate most powerfully, is astonishment" (Burke, 130). According to him, astonishment is the effect of the sublime in its highest degree, and the inferior effects are admiration, reverence, and respect. The fisherman states that he will "never forget the sensations of awe, horror, and admiration with which" he "gazed about" him. The change in the fisherman's state of consciousness does not happen suddenly, but rather gradually. This gradual change in his state of horror to consciousness, happens along with the change of the setting. After the moment when the fisherman states that he is "more composed", he tells the narrator that "there was another circumstance which tended to restore his self-possession", and explains that it was the cessation of the wind.

The succession of events in the tale is organized in such way, that the function of pictorialism in the tale is explicit; the setting is acting out the fisherman's current state of mind. The Maelström was overwhelmingly chaotic when the fisherman was in a state of confusion and horror; when he confessed to be more composed, there was a cessation of the wind. According to Furrow, Poe's pictorialism is thematic in function and the setting is often "described more in detail than the characters", and the external world acts out a drama "which reflects the interior world of the protagonist" (Furrow, 16). Furrow states that Poe "uses imaginary landscapes to depict man's alienation from his external environment, either as metaphors for an ideal paradise, or as allegories of interior journeys into the psyche" (Furrows, 16). In ADITM the alienation of the fisherman from his external environment -

the universe represented by the Maelström - is depicted by the fact of relying on his watch, instead of the observation of his surroundings. Nevertheless, the setting of the tale has a double function: one as the source of the sublime for the fisherman, and the second as an allegory of the fisherman's journey into his own psyche, from a state of unawareness and alienation, to a new state of consciousness. This new state of consciousness is again represented by the setting when he finds his salvation and the storm ceases. The fisherman states that he leaped overboard "before a great change took place in the character of the whirlpool" (Poe, 107), so that after he decided to follow his intuition and leap, the setting started to change. He explains that "the slope of the sides of the vast funnel became momentarily less and less steep", "the gyrations of the whirl grew, gradually, less and less violent", and "the bottom of the gulf seemed slowly to up rise" (Poe, 107). The setting is acting out the fisherman's new state of consciousness and the fading of the features of the sublime. The description of the setting is rich in references opposed to the suddenness that was present at the beginning of his journey into the whirlpool, and now, the sky is clear, the winds have gone down, and the full moon is setting radiantly in the west. The fisherman states that he found himself "on the surface of the ocean, in full view of the shores of Lofoden, and above the spot where the pool of the Moskoe-strom had been. His unawareness and alienation are represented by the chaotic setting and his eyes "closed in horror"; now, it is the light, the calmness, and his full view of the shores of Lofoden, representing awareness, and his new state of consciousness in full operation.

But, not only the fisherman experiences the sublime and has a shift in his state of consciousness. The narrator refers to the sea as dark and vast. He states: "I looked dizzily, and beheld a wide expanse of ocean, whose waters wore so inky a hue as to bring at once to

my mind the Nubian Geographer's accounts of the Mare Tenebrarum" (Poe, 98). He said that they "had now been ten minutes upon Helseggen", to which they "had ascended from the interior of Lofoden", so that they "had caught no glimpse of the ocean until it had burst upon" them from the summit. The narrator explains that there "the vast bed of the waters, seamed and scarred into a thousand conflicting channels, burst suddenly into phrensied convulsion". So far, the narrator's account of the setting is full of references to features which are sources of the sublime such as vastness, darkness, suddenness; in addition, he states that he became "aware of a loud and gradually increasing sound, like the moaning of a vast herd of buffaloes upon an American prairie" (Poe, 98). At this point the narrator confesses that he became aware of a loud sound, and now the sublime starts to operate in his consciousness. It is revealed through the narrator's stream of consciousness. In his internal polemic, he compares his background knowledge with the scene he is currently contemplating. The narrator becomes apprehensive as a result of shocking landscape and starts to question the information that he had acquired from sources different from that of the experience. He states that at length, he said to the old man: "this can be nothing else than the great whirlpool of the Maelström", to which the fisherman replies: "so it is sometimes termed... We Norwegians call it the Moskoe-strom, from the island of Moskoe in the midway" (Poe, 99). The fisherman's reply directly confronts the background knowledge of the narrator, who confesses that "the ordinary accounts of this vortex had by no means prepared" him for what he saw. The effects of the sublime landscape on the narrator are astonishment, and apprehension, so he starts giving more value to what he is now contemplating than to the descriptions he has read in books. He states that those accounts of the vortex by Jonas Ramus⁸, "cannot impart the faintest conception either of the

⁸ According to Peithman in his annotation 11 Jonas Ramus (1649 – 1718) "was a pastor in the diocese of

magnificence, or (sic) of the horror of the scene – or of the wild bewildering sense of the novel which confounds the beholder” (Poe, 99). This tale constantly confronts the accounts gathered through the senses against the background knowledge acquired from the Britannica Encyclopedia. This confrontation is expressed by the narrator’s voice. This is explicit in two more passages: first, when the narrator refers to Ramus’ description, he says that “there are passages of his description, nevertheless, which may be quoted for their details, although their effect is exceedingly feeble in conveying an impression of the spectacle”; the second, when the narrator states that “the attempts to account for the phenomenon” some of which seemed to him “sufficiently plausible in perusal – now wore a very different and unsatisfactory aspect” (Poe, 101). Even though the narrator is safe at the top of Helseggen, it is clear that he is shocked by the scene and the sublime overwhelms him. As a result of witnessing the grandeur of nature, the narrator is now in a mental state which is favorable for the receptiveness of other’s opinions. At this point, the sublime succeeds in imposing its effect on the narrator by means of the scene. Nevertheless, another determinant factor that operates in the narrator’s psyche is the story told by the fisherman. He is affected by the fisherman’s story. The way the story affects the psyche of the narrator is better explained by means of Bakhtin’s concept of Heteroglossia. However, it is necessary to outline Poe’s cosmic vision before going on to introduce the way in which Heteroglossia operates in the story.

In regard to Poe’s scientific standpoint, each character – the fisherman and the narrator - enacts a different approach to knowledge. Thus, Poe sets the stance of the

Aggershus, whose descriptions of Norway are quoted extensively by Bishop Pontoppidan, who is quoted by the Britannica, paraphrased in turn by Poe” (Peithman, 99).

Enlightenment – as the banner of the dominant ideology of Nineteenth century, namely positivistic science and its scientific method – in conflict with the one he proposes which disregards the means and focuses on the end – the one concerning imagination and intuition. The former embodied by the narrator, and the latter by the fisherman. This conflict is evident in the dialogic contact between the characters.

According to Bahktin, the concept heteroglossia refers to language stratified into simple social discourses each representing a particular ideological belief system – a way to see the world. In ADITM, the fisherman tells the narrator his experience in the Maelström, and by doing so, there is a dialogic contact between the fisherman's way of seeing and understanding the world and that of the narrator. The way in which the fisherman perceives the world is that of a naïve person who is unaware of his own wisdom, and more important, of the way to systematically achieve and classify knowledge. He explains that "the island in the distance is called Vurrgh by Norwegians...these are the true names of the places – but why it has been thought necessary to name them at all is more than either you or I can understand" (Poe, 98). On the other hand, the narrator's belief system led him to trust information from the Britannica Encyclopedia; he says "these are the words of the Encyclopaedia Britannica" (Poe, 101). Whilst the voice of the fisherman represents the unofficial discourse in the tale, the official discourse is represented by the voice of the narrator. The official discourse in the 19th century was the one of the Enlightenment and it was characterized by reason and scientific reasoning. By contrast, the unofficial discourse appeals not only to reason but also to imagination and intuition; it is characterized by an apparent absence of scientific reasoning, and the unawareness of the wisdom it carries. It would be expected for the official discourse to be the authoritative one, but as the fisherman

tells his story, the authority of the narrator's discourse is diminished, whereas the discourse represented by the fisherman's voice is reinforced by the scene the narrator is witnessing, and by the fact that the fisherman makes use of words of acknowledged scientific truth:

"Since my scape, I have had several conversations on this subject with an old school-master of the district; and it was from him that I learned the use of the words 'cylinder' and 'sphere'. He explained to me - although I have forgotten the explanation - how what I observed was, in fact, the natural consequence of the forms of the floating fragments - and showed me how it happened that a cylinder, swimming in a vortex, offered more resistance to its suction, and was drawn in with greater difficulty than an equal bulky body, of any form whatever" (Poe, 108).

By contrast, the narrator's belief system begins to lose strength. It becomes obvious in his internal monologue: "the attempts to account for the phenomenon - some of which, I remember, seemed to me sufficiently plausible in perusal - now wore a very different and unsatisfactory aspect" (Poe, 101). The struggle for hegemony between the belief system of the narrator and that of the fisherman is expressed in the tale by means of the narrator's stream of consciousness - the narrator begins to doubt the information in the encyclopedia. The story affects the narrator because it challenges his background knowledge and takes over his psyche, he begins to trust the fisherman, and by trusting him, he is prepared to shift values to those of the fisherman's belief system. From a pictorial standpoint, the whirlpools that the narrator beholds while listening to the fisherman, symbolize the narrator's interior world. That is, the shift while accepting the facts of the tale as plausible.

The characters also represent different approaches or paths to knowledge: one of the scientific reasoning, and the other which represents a new alternative by resorting to imagination and intuition. The ideology represented by the narrator, of course, is that of scientific reasoning, and the values of the enlightenment. Poe uses this character to criticize

the scientific rigor. It is diminished and satirized by means of the sublime story told by the fisherman while contemplating the astonishing landscape. In addition, the two scientific authorities in the story, Jonas Ramus and the *Britannica Encyclopedia*, are, according to Ware, "not cited so much as parodied" (Ware, 78). Concerning the fisherman's two brothers, they represent inductive and deductive methods. Peithman sees that "the fisherman's two brothers rely on traditional methods to save themselves, but both make the fatal assumption that the ship is the safest spot to be" (Peithman, 103). Ware also says that "the inadequacy of the protagonist's brother is revealed by his lack of any such 'wisdom'" (Ware, 78). Whilst in ADITM, both the inductive and deductive methods, embodied by the fisherman's two brothers, are doomed to disappear, the fisherman survives because he represents, as it is further elaborated in *Eureka*, a "median law". This "median law" is an alternative to the inductive and deductive method, a third way to knowledge. A way characterized by observation, inference, imagination and intuition. According to Gelfert, Poe's interest in the scientific method is echoed in his tales of ratiocination. Where he attributes this broadly abductive mode of inference to the figure of the "poet-mathematician". The fisherman survives the Maelström by appealing to the median law, but mainly for appealing to his imagination and intuition.

In *Eureka*, Poe defines intuition as "the conviction resulting from the deductions or inductions of which processes" are "so shadowy as to have escaped his consciousness, eluded his reason, or bidden defiance to his capacity of expression" (Poe, 6). By "his capacity of expression" Poe refers to Kepler's law of planetary motion. He states that Kepler guessed his laws, imagined them and "reached them through mere dint of intuition" (Poe, 6). The fisherman relies on his ability to think and imagine, and it is due to the

conviction resulting from what he thought and imagined, that he got the confidence and the courage to leap overboard. The key elements to the fisherman's survival are his imagination and intuition.

In ADITM, Poe conjoined several elements for the sake of its composition. The elements that are relevant for the interpretation in this study as a precursor of *Eureka*, and Poe's cosmic vision are: the broken watch, the sublime, the grotesque, the setting – as the source of the sublime, and as a representation of the universe -, and the characters.

The role of the broken watch is to express the inability of humankind to describe and to understand the universe only by means of science. The watch is technology, and technology is nothing else but applied science. Mario Bunge states that "la ciencia como actividad – como investigación – pertenece a la vida social; en cuanto se la aplica al mejoramiento de nuestro medio natural y artificial, a la invención y manufactura de bienes materiales y culturales, la ciencia se convierte en tecnología" (Bunge, 11)⁹. Peithman explains that "like the Ancient Mariner, who is guilty of pride (hubris) in his killing of the albatross, the fisherman is also guilty of pride in his assumption that he has some control over his environment simply because he has a watch" (Peithman, 105)¹⁰. The malfunction of the watch reveals the limits of positivist science – and its scientific method - to render a precise description of the universe and the way it works. When the fisherman flings his watch into the ocean, he also flings the rigor of science along with its limitations. This is a symbolic act of rejection of the scientific method as the only way to achieve knowledge.

⁹ "science as activity – as research – belongs to social life; when it is applied to the improvement of our natural, and artificial environment, to the research and manufacture of material, and cultural goods, science becomes technology" (Bunge, 11)(translation by the author) .

¹⁰ Annotation 28.

The setting and the story are the source of the sublime in the tale. The elements of the sublime – vastness, suddenness, difficulty, obscurity, light, noise, and power – are used to describe the setting. Thus, the setting and the fisherman's terrible journey produced the feelings of horror. This horror produces the state of astonishment in the fisherman. It is due to this state of astonishment that he starts to contemplate – to observe with amusement – his surroundings. Driven by the observation of the Maelström, he imagines the way to save himself. Like the fisherman, the source of the sublime for the narrator is the seascape he is observing while the fisherman tells him his story. Moreover, the story also produces feelings of horror in the narrator. Nonetheless, there is a change in the narrator's psyche, from horror to astonishment. This new state of consciousness is favorable for the narrator to shift values. Burke states that "the torments which we may be made to suffer, are much greater in their effect on the body and mind" (Burke, 111). While in the case of the narrator the change takes place only in his psyche, in the fisherman the changes are produced in his body and mind. At the end of his journey, he has aged and his hair has become gray. The function of the sublime in the tale is to provide a background for the changes in the characters' consciousness. Poe uses the grotesque to portray the transformation of the characters. Of course, this is a means to unveil his vision of mankind's stance toward the universe. That is, the fisherman's physical and mental change represents the accumulation of knowledge after his initial state of unawareness. Here, his gray hair is considered a symbol of accumulation of knowledge because he witnessed the beginning of the universe represented by the Maelström, and the collapse of it. Besides, he was very close to being sucked by the whirlpool in its rush to its vortex. In other words, he was close to achieving a state of unity with the universe represented by the Maelström.

In this study, imagination and intuition are interpreted as key features of the tale. The fisherman survives the Maelström by dint of his capacity to imagine and by following his intuition. This is, the sublime produced the state of astonishment in the fisherman. In his state of astonishment he contemplates – observes – his surroundings and imagine how to save himself. By observing the scene, the fisherman realizes that some objects are more susceptible to be absorbed by the whirlpool. He arrives at the conclusion that cylindrical objects are last to be sucked up by the whirlpool, and he imagine that by lashing himself to the water-cask he would be the last to be absorbed by it. By following his intuition he leapt overboard – he performed the intuitive leap.

In the tale, Poe portrayed his scientific outlook. He put at stake the hegemony of positivist science as the only means to achieve knowledge. He used the fisherman to incarnate the profile of the ratiocinative principle. A regular man who has the capacity to understand and to interpret the universe outside the rigor of the scientific method. Scientific rigor as understood here, matches the definition of positivism: "the view that the only authentic knowledge is scientific knowledge, and that such knowledge can only come from positive affirmation of theories through strict scientific method (techniques for investigating phenomena based on gathering observable, empirical and measurable evidence, subject to specific principles of reasoning)"¹¹. Poe used the aesthetics of the romantic literary style, and endowed imagination and intuition with a great importance in order to achieve knowledge; however he was not against science, but against the positivist radical stance as the only valid means to arrive at "valid" conclusions. The fisherman rudimentarily and unconsciously applies scientific reasoning in order to realize facts which

¹¹ Retrieved from www.philosophybasics.com on May 4th 2016.

lead him to imagine the way to escape from his impending death at the chasm of the vortex. The train of reasoning applied by the fisherman matches the three main stages to arrive at a scientific law proposed by Bertrand Russell: observing the significant facts, arriving at a hypothesis, deducing consequences that can be tested by observation.

"It was not a new terror that thus affected me, but the dawn of a more exiting hope. This hope arose partly from memory, and partly from present observation. I called to mind the great variety of buoyant matter that strewed the coast of Lofoden, having been absorbed and then thrown forth by the Moskoe-ström. By far the greater number of the articles were shattered in the most extraordinary way – so chafed and roughened as to have the appearance of being stuck full of splinters – but then I distinctly recollected that there were some of them which were not disfigured at all" (Poe, 108).

This excerpt matches the first stage. The fisherman does not stare at the general setting, but rather focus on *observing* the "significant facts. Then he continues with his narration:

"Now I could not account for this difference except by *supposing* that the roughened fragments were the only ones which had been completely absorbed – that the others had entered the whirl at so late a period of the tide, or, from some reason, had descended so slowly after entering, that they did not reach the bottom before the turn of the flood came, or of the ebb, as the case might be. I conceived it possible, in either instance, that they *might* thus be whirled up again to the level of the ocean, without undergoing the fate of those which had been drawn in more early or absorbed more rapidly" (Poe, 108)(My emphasis).

Here, the fisherman states a sort of hypothesis by *supposing* that "the roughened fragments were the only ones which had been completely absorbed", that "the others had entered the whirl at so late a period of the tide, or, from some reason, had descended so slowly after entering, that they did not reach the bottom before the turn of the flood came, or of the ebb, as the case might be", and "that they might thus be whirled up again to the level of the ocean, without undergoing the fate of those which had been drawn in more early or

absorbed more rapidly". From this hypothesis, he deduced consequences and tested them by observation.

"I made, also, three important *observations*. The first was, that as a general rule, the larger the bodies, the more rapid their descent; - the second, that, between two masses of equal extent, the one spherical, and the other of any other shape, the superiority in speed of descent was with the sphere; - the third, that between two masses of equal size, the one cylindrical, and the other of any other shape, the cylinder was absorbed the more slowly" (Poe, 108)(Emphasis is mine).

The fact that Poe had the fisherman perform this train of reasoning, shows that he was not against science but against its extremes. That is, against the rigor of considering it as the only authentic knowledge, and its reliance on only two methods. Science is not sufficient to understand and interpret the universe. Where these limits prevail, Poe posits imagination and intuition as complementary to science. Vincelette states that "Poe questions how to use science but not deride it as a discipline" (Vincelette, 38). According to her, Poe questions the narrowness of intellectual methodology. In the tale, the gaps in the fisherman's "scientific" reasoning, are filled with imagination and intuition. Vincelette explains that since intuition has arisen from "those deductions and inductions", it is therefore born of reason. She asserts that intuition is beyond perception, and that since perception can be limiting, "imagination has to continue where the limits of perception ends" (Vincelette, 42), because "imagination is limitless" (Vincelette, 43).

The elaboration of tales from a romantic perspective, in order to find a balance between poetry and positivist science, is thematic in Poe. In ADITM, he used the setting, and the dialogic contact between the fisherman and the narrator, to put scientific rigor at stake. According to Kearns, "the poet's burden, we might say, is not simply to recoil from positivistic reason, but to reform it" (Kearns, 74). Regarding Poe as a romantic, who was

against science, is a mistake. Kearns states that what is particularly important about Poe's response to science is that "he does not think in terms of polar opposites but in terms of shifting the ground of thought so that science and poetry include each other" (Kearns, 74). The way in which the three stages posited by Russell, match the train of reasoning displayed by the fisherman is remarkable. Of course, he followed these stages unknowingly. He was unaware that he was using scientific reasoning.

Through the setting, the characters, and the plot, Poe depicts his vision of the world. He sees the Universe as a cyclical plot – God's plot – which is susceptible to be known not only through the scientific method, but from all possible approaches. To Poe, the scientific method is limited to its own boundaries. In his works, intuition and imagination become a valuable tool for acquiring knowledge. The Maelström represents the Universe itself. The Universe in Poe's imagery is longing to achieve its original state of unity. The giant whirlpool absorbs everything in its wake to unity. The description provided about the Maelström matches the description of the universe given by Poe in *Eureka*. The whirling motion of the Maelström symbolizes that of the galaxies. The reference to the universe heading toward its oneness is clear in the following excerpt:

"Here the vast bed of the waters, seamed and scarred into a thousand conflicting channels, burst suddenly into phrensied convulsion – heaving, boiling, hissing – gyrating in gigantic and innumerable vortices, and all whirling and plunging on to the eastward with a rapidity which water never elsewhere assumes except in precipitous descents" (Poe, 99)

In the following part, Poe describes how the "innumerable vortices" start to join into an only giant oneness:

"In a few minutes more, there came over the scene another radical alteration. The general surface grew somewhat more smooth, and the whirlpools, one by one, disappeared, while

prodigious streaks of foam became apparent where none had been seen before. These streaks, at length, spreading out to a great distance, and entering into combination, took unto themselves the gyratory motion of the subsided vortices, and seemed to form the germ of another more vast" (Poe, 99).

The cyclical nature of the universe is mirrored in the performance of the Maelström. Poe depicts this cycle in a minimalistic way. On the contrary, Poe presents a more detailed version of his vision of the universe in *Eureka*. Thus, it clearly follows that ADITM is a precursor of *Eureka*, and a portrayal of Poe's cosmic vision.

The Maelström is a depiction of the universe and its workings. First, the swirling movement of the whirlpool resembles the spiral character of the universe. Second, the clusters of galaxies are present in the tale. The narrator describes innumerable vortices *whirling* and *plunging*. Third, the tendency to unity. The narrator explains that "these streaks spreading out to a great distance, and entering into combination, took unto themselves the gyratory motion of the subsided vortices, and seemed to form the germ of another more vast" (Poe, 99). Here, the gyratory motion of the subsided vortices entering into combination, say, the attraction that makes smaller vortices enter in combination resembles the power of gravity. The vortex of the Maelström is similar to a black hole. In other words, it sucks everything in its event horizon. The connection between the similarity of the Maelström to a black hole – at least analogically – and the fisherman's grey hair and aging, makes a phenomenon such as a time-space singularity poetically delivered by Poe stand out. In relation to this topic, Eakin states that the fisherman represents the search of sublime knowledge, which is located beyond the veil of space-time existence. But, identifying the correlation between the two works ratifies this perspective.

Regarding the compositional form, the elements of the sublime are present in the description of the Universe. The Maelström is described as vast, dark, powerful; a place where surviving is difficult. In *Eureka*, the narrator – the reader – describes a vast universe: "The mean distance from the Earth to the Moon – that is to say, from the heavenly body in our closest vicinity – is two hundred and thirty-seven thousand miles. Mercury, the planet nearest the sun, is distant from him thirty-seven millions of miles" (*Eureka*, 47). Regarding power, the narrator alludes to the matter of the Earth as equal in weight to at least two sextillions and two hundred quintillions of tons. He states that "not the strength of all the myriads of beings who we may conclude inhabit the planetary worlds of our system, not the combined physical strengths of all these beings – even admitting all to be more powerful than man – would avail to stir the ponderous mass a single inch from its position" (*Eureka*, 48). Moreover, in the following excerpt of *Eureka*, *difficulty* and *vastness* are present:

"Our fancies thus occupied with the cosmical distances, let us take the opportunity of referring to the difficulty which we have often experienced, while pursuing the beaten path of astronomical reflection, in accounting for the immeasurable voids alluded to; in comprehending why chasms so totally unoccupied and therefore apparently so needless, have been made to intervene between star and star, between cluster and cluster; in understanding to be brief, a sufficient reason for the Titanic scale, in respect of mere space, on which the Universe of Stars is seen to be constructed" (*Eureka*, 52)

In ADITM and *Eureka*, Poe portrayed his scientific outlook. This is, scientific method must not be limited to deductive or inductive methods of reasoning. He proposes that the scientific method has gaps, and that those gaps are to be filled with imagination and intuition:

"Now I do assure you most positively" – proceeds the epistle – "that I represent these matters fairly; and you can easily understand how restrictions so absurd on their very face must have operated, in those days, to retard the progress of true Science, which makes its most important advances, as all History will show, by seemingly intuitive leaps" (*Eureka*, 3)

What Poe criticized was the radical stance of positivist science regarding the means to attain knowledge, not knowledge itself. He called attention to the importance of the "end" – the knowledge attained. This is evident in the following quote:

"The end with them, was a point of no moment whatever: - 'the means!' – they vociferated – 'let us look at the means!' – and if on the scrutiny of the means, it was found to come neither under the category Hog, nor under the category Aries (which means ram), why then the servants went no farther, but, calling the thinker a fool and branding him a 'theorist', would never, thenceforward, have to do either with him or his truths" (*Eureka*, 3)

The correlation between the sublime in order to describe the Universe, and Poe's scientific outlook in ADITM and in *Eureka*, finds echo in the architectural forms of the tale and the manifesto. It is in the architectural form that he aesthetically consummates his cosmic vision.

In ADITM, Edgar Allan Poe portrays the struggle of humankind in order to understand the Universe, represented by the Maelström. Poe used the fisherman to portray his critique against scientific rigor. This character unknowingly applied a train of reasoning that matches the three main stages proposed by Russell, to arrive at a scientific law. By doing so, he realized the way to save himself. Nonetheless, he also appealed to his imagination and intuition. Through this imagery, Poe aesthetically consummated his cosmic vision. In other words, *the success of humankind at understanding the universe lies in the completeness of the scientific reasoning, and it is complete by filling in its gaps with imagination and intuition*. By contrast, in *Eureka*, Poe depicted what he thought was the essence, origin, creation, present condition, and destiny of the universe. The narrator explains that the traditional methods of scientific reasoning, confine investigation to crawling. He states that science makes its more important advances "by seemingly intuitive

leaps" (*Eureka*, 3). Poe developed his cosmogony through scientific knowledge, imagination, and intuition. That is to say, *that the scientific reasoning is incomplete if it is deprived of imagination and intuition, and that the failure of humankind to understand the universe lies in this incompleteness.*

Whilst in ADITM, the fisherman understood the nature of the Maelström because his imagination and intuition led him to an unaware train of scientific reasoning. In *Eureka*, the writer of the epistle was able to describe the cosmogony of the Universe through scientific reasoning, but also by resorting to imagination and intuition. This reciprocity, along with the correlation of the elements of the sublime, and the scientific perspective displayed in both works, provide the foundations to affirm that ADITM is a precursor of *Eureka*.

Conclusions

"A Descent into the Maelström" is a precursor of *Eureka*, both are portrayals of Poe's cosmological vision. In both tales, Poe depicted the Universe as cyclical, overwhelming, and knowable. Thus, ADITM was an earlier attempt to portray the universe; it shows that Poe was not against science, but rather against the rigor of its methods, and its stance as the only way to attain knowledge; in both works, imagination and intuition are supplementary to science.

In ADITM, he depicted the Universe from a romantic perspective, in a vivid way – pictorially-, and represented by the Maelström. In *Eureka*, he described the Universe from a perspective of transcendence and vastness. The features of the sublime are present in both works.

"These streaks, at length, spreading out to a great distance, and entering into combination, took unto themselves the gyratory motion of the subsided vortices, and seemed to form the germ of another more vast (sic). Suddenly – very suddenly – this assumed a distinct and definite existence, in a circle of more than half a mile in diameter" (ADITM, 99)

"It was required, in a word, that the stars should be gathered into visibility from invisible nebulosity – proceed from invisibility to consolidation - and so grow gray in giving birth and death to unspeakably numerous of complex variations of vitalic development; it was required that the stars should do all this – should have time thoroughly to accomplish all these Divine Purposes – during the period in which all the things were effecting their return into unity with a velocity accumulating in the inverse proportion of the squares of the distances at which lay the inevitable End" (*Eureka*, 52).

In the first excerpt, the narrator of ADITM describes the formation of the Maelström as he observes the scene. He talks about small vortices entering into combination to form the vaster one, taking unto the gyratory motion of the subsided ones. The similarity with

Eureka is evident, both seem to be talking about the sum of forces on their way to achieve unity.

Poe was conversant with the scientific method and the philosophy of science of his time. This is evident when he alludes to Augusto Comte: "The Nebular Theory of Laplace has lately received far more confirmation than it needed, at the hands of the philosopher Comte" (Poe, 37). According to Antonio Rodriguez Huéscar, positivism, whose flag bearer was Comte, is the dominant intellectual movement during the second half of the Nineteenth century (Page 83, translation by the author). But, in Poe's time, positivism was only part of the intellectual discussions. This fact reveals that Poe was part of the intellectual debate. His discourse was not against science, but rather in favor of a balance, of an equilibrium where science and poetry complement each other. Kearns states that "Poe attempts to ground reason differently and that his tales of ratiocination represent one version of this attempt" (Kearns, 74). Poe criticized the radical standpoints of scientific positivism, "the view that authentic knowledge is scientific knowledge."¹²

This critique is carried out in the narrator's stream of consciousness. The narrator's belief system is that of the scientific reasoning, so that when he confronts the scene while listening to the fisherman's story, he begins to doubt his background knowledge. While the narrator's stream of consciousness reveals a lack of confidence in the accuracy, and the scope of the sources of his knowledge, the fisherman's voice – the voice of experience - becomes the authoritative one. The voice of the fisherman is reinforced by the setting and by the fact that his speech is empowered by the technical jargon he learnt from a school teacher. On the other hand, *Eureka* is a manifesto of what Poe thought was the best

¹² From: www.philosophybasics.com

explanation of the origin, creation, present condition, and destiny of the Universe – in Poe's time of course. The manifesto was written by dint of imagination and intuition. This is inferred from the tale itself since it starts by criticizing the two traditional paths to knowledge, namely inductive and deductive methods. In *ADITM*, these paths to knowledge are represented by the fisherman's brothers. In *Eureka* Poe uses the names of Aristoteles and Bacon to carry out his critique. In both, *ADITM* and *Eureka*, these two traditional paths to knowledge are demeaned. The fisherman's two brothers, unlike him who is crowned with white hair as a way to represent being admitted into a sort of kingdom of wisdom, are doomed to die. In *Eureka*, the authors of the traditional systems are parodied. Their names are ridiculed and reduced, from Aristotle to Aries (which means ram), and from Bacon to Hog, in order to undermine the value of the systems they represent. In both works, Poe not only exploited his interest in the scientific method, but he also portrayed what he thought was the highway to knowledge, and his rejection of the axiomatic scientific method, by means of his characters.

In both works Poe exploited imagination and intuition. In *ADITM*, the fisherman's state of overwhelm led him to observe the setting almost with reverence. He inferred what objects were less susceptible to be sucked up by the Maelström, and imagine the way to escape from it. On the other hand, in *Eureka*, Poe exalts intuition as supplementary to science. In his compositions, he wanted to provide solid ground to the truths he revealed. The way to provide it was by elevating imagination and intuition to a high category. By contrast, Rodriguez states that every intellectual speculation that fails to meet the scientific criteria will be considered avoidable and threatening to true knowledge (Rodriguez, 84)¹³.

¹³ Comte, A. *Discurso Sobre el Espíritu Positivo* (1980 ed.). Prologue by Antonio Rodríguez Huéscar.

Poe revealed scientific truths, but also, *truths* that he realized through imagination, and intuition. So, by elevating them, he endowed his truths with veracity. This goes hand in hand with his criticism of the ancient ideas which confine investigation to crawling. In *Eureka*, the author formulates the following question: "because of the snail is sure of foot, for this reason must we clip the wings of the eagle?" (Poe, 3). Poe elevates intuition to the category of an eagle, while the inductive and deductive methods are demoted to the category of a snail.

In both works there is a correspondence in the way Poe used the verbal material. He ingenuously combined the compositional resources of romanticism, specially the sublime and the picturesque, with the scientific perspective of his time. The sublime is the main element to describe the universe in both tales. His works mirrored his interest in knowledge, and in a balance between his imaginative and intuitive character and the scientific perspectives of his time.

"A Descent into the Maelström" portrays, the overwhelming experience of understanding the universe from a romantic perspective. The fisherman's triumph resides in the train of reasoning originated in his state of astonishment. He proceeded from a purely imaginative, and intuitive state, to a new state of mind where reasoning prevails. The tale reveals that Poe was passionate about science and knowledge. The main difficulty, in fulfilling the objective of interpreting ADITM as a precursor of *Eureka*, lay in the misconception of considering Poe a romantic. As a writer he appealed to the poetic devices of literary romanticism. However, as a poet and man of science, he devoted his life to understand and describe the Universe. Poe understood the cyclical nature of the Universe. It is present in both works, it is explicit in *Eureka*, and it is represented by the Maelström

which appears periodically as the result of forces whose origin cannot be satisfactorily explained by neither the narrator nor the fisherman. This cyclical nature is depicted by Poe in "The Island of the Fay" and in "a Descent into the Maelström" by means of romantic literary devices. Herein lies the possibility of a whole new approach to Poe's work by studying other tales with the same architectural form along with Poe's letters. This type of studies could render a better understanding of Poe's cosmic vision which has had a great impact in the scientific field through *Eureka*.

Bibliography

- Bakhtin, M. (1990). Supplement: The Problem of Content, Material, and Form in Verbal Art (1924). In M. Holquist & V. Liapunov (Eds.) & K. Brostrom & V. Liapunov (Trans.), *Art and Answerability: Early Philosophical Essays* (First ed., pp. 257-322). Austin, Texas: University of Texas Press.
- Ballie, J. (1953). An essay on the sublime. In *The Sublime: A Reader in British Eighteenth-Century Aesthetic Theory* (pp. 87-100). Los Angeles, California: University of California Press.
- Birkhead, E. (1921). *The Tale of Terror*. doi: eBook #14154]
- Burke, E. (1757). *The Works of the Right Honourable Edmund Burke, Vol. I. "A Philosophical Inquiry into the Origin of Our Ideas of the Sublime and Beautiful; with an Introductory Discourse Concerning Taste"* (Online version).
Retrieved from: <http://www.gutenberg.org/files/15043/15043-h/15043-h.htm>
- Braddon-Mitchell, D., & Nola, R. (Eds.). (2009). *Conceptual Analysis and Philosophical Naturalism*. Cambridge, Massachusetts: The MIT press
- Bunge, M. (1996). *La Ciencia, su Método y su Filosofía*. Bogotá D.C: Panamericana Editorial Ltda.
- Comte, A. (n.d.). *Discurso Sobre el Espíritu Positivo* (1980 ed.). Barcelona: Ediciones Orbis, S.A. Prologue by Antonio Rodríguez Huéscar
- Eakin, P. (1973). Poe's Sense of an Ending. *American Literature*, 45(1), 1-22.
doi:http://www.jstor.org/stable/2924535
- Furrow, S. (n.d.). Psyche and Setting: Poe's Picturesque Landscapes. *Criticism*, 15(1), 16-27. doi:http://www.jstor.org/stable/23100095
- Gelfert, A. (2012). Observation, Inference, and Imagination: Elements of Edgar Allan Poe's Philosophy of Science. *Science and Education*, 23(3), 589-607. Doi: 10.1007/s11191-012-9551-8
- Gilpin, W. On Picturesque Travel. From *Three Essays on Picturesque Beauty*, 2nd edition (1794). <http://www.ualberta.ca/%7Edmiall/Travel/gilpine2.htm>
- Kearns, C. ((fall, 2002)). Poe's Peering Eyes of Science. *The Edgar Allan Poe Review*, 3(2), 73-77.
- Ljungquist, K. (n.d.). Descent of the Titans: The Sublime Riddle of "Arthur Gordon Pym" *The Southern Literary Journal*, 10(2), 75-92. URL: <http://www.jstor.org/stable/20077588>

Ljungquist, K. (1976). Poe's Nubian Geographer. *American Literature*, 48(1), 73-75. Retrieved from Jstor. Stable URL: <http://www.jstor.org/stable/2925315> .Accessed: 06/05/2014

McGann, J. (n.d.). Beauty, the Irreal, and the Willing Assumption of Disbelief. *Critical Inquiry*, 30(4), 717-738. URL: <http://www.jstor.org/stable/10.1086/423770> Accessed: 10/05/2013 16:45

Martin P. *The Picturesque Moment.* " *From Sensibility to Romanticism.* Essays Presented to Frederick A. Pottle. Ed. Frederick W. Hilles and Harold Bloom. Oxford University Press, 1965, p. 262.

Mastin, L. (2008). Positivism. Retrieved May 4, 2016, from http://www.philosophybasics.com/branch_positivism.html.

Social Heteroglossia, Critique of Formalism. (2003). In P. Morris (Ed.) & G. Roberts (Comp.), *The Bakhtin Reader* (2003 ed., pp. 73-135). London: Arnold, a member of the Hodder Headline Group.

Peithman, S. (1986). A Descent into the Maelström. In *The Annotated Tales of Edgar Allan Poe* (pp. 96-109). New York, New York: Avenel Books.

Poe, E. A. "Marginalia [part V]," *Graham's Magazine*, vol. 28, No. 2, March 1846, pp. 116-118 Retrieved from: <http://www.eapoe.org/works/misc/mar0346.htm>

Pouliquen, H. (1992) *Literatura e Ideología: Un Estudio Sobre Estética Verbal (Introducción a la Sociocritica)*, Universidad Nacional de Colombia 11-29.

Raškauskienė, A. (2009). Gothic Fiction: The Beginnings. Vytauto Didžiojo universitetas.

Russell, B. (1954). *The Scientific Outlook* (2nd Ed.). Woking and London: Unwin Brothers.

Shulman, R. (1970). Poe and the Powers of the Mind. *ELH*, 37(2), 245-262. doi:<http://www.jstor.org/stable/2872400> Accessed: 06/05/2014

Sweeney, G. (1973) "Beauty and Truth: Poe's 'A Descent into the Maelstrom'" *Poe Studies*, Vol. VI, No. 1, 6:22-25 Published by: eapoe.org
Stable URL: <http://www.eapoe.org/pstudies/ps1970/p1973108.htm>
Accessed: 25/03/2014

Vincelette, E. ((fall, 2008)). Beauty, Truth, and the Word: The Prophecy and Theology of Poe's *Eureka*. *The Edgar Allan Poe Review*, 9(2), 36-54. Retrieved May 06, 2014, from www.jstor.org/stable/41506296.

Ware, T. (n.d.). "A Descent into the Maelström": The Status of Scientific Rhetoric in a Perverse Romance" *Studies in Short Fiction*, 77-84.

Zanger, J. (1978). "Poe and the Theme of Forbidden Knowledge". *American Literature*, 49(4), 533-543. Retrieved from Jstor. Stable URL: <http://www.jstor.org/stable/2924772>. Accessed: 06/05/2014