The Ecological Discourse Analysis on the Animal Themes in the American Literature Walden

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Abstract

This research contains three objectives: analyzing the ecological philosophy themes in American Literature Walden, interpreting the ecological meaning of the animal theme by using the Componential Analysis, and establishing the Ecological philosophy themes network of the animal theme in American Literature *Walden*.

The research adopts a qualitative study, the research tools include HyperRESEARCH, Microsoft Word, and Microsoft Excel spreadsheets, which are used to collect and identify ecological discourses. The componential Analysis is used to analyze the ecological meaning of the animal theme in the American Literature *Walden.*

The results revealed that Thoreau's essay Walden is a nature essay that contains abundant animal themes and profound ecological thoughts through the Componential Analysis and establishment of the Ecological philosophy themes network of the animal theme. The interpretation of this essay from an EDA perspective not only enriches studies of this classical work but also is of practical significance and contemporary relevance in the era of ecological civilization construction.

Keywords: Ecological Discourse Analysis, the Animal Theme, the American Literature

Introduction

Ecological Discourse Analysis (henceforth EDA) is an ecology-oriented analysis of discourse from the perspective of linguistics based on an ecological philosophy or ecosophy (He and Wei 2018b: 66). An ecology-oriented analysis focuses on language use in discourse, aims to expose the effects of language on environment. Under the guidance of ecosophy, EDA attempts to analyze the ecology of discourse from consumerism to nature poetry, criticizing ecological destruction behavior, and preserving eco-friendly relationships between man and nature (Stibbe, 2015). The purpose of EDA is to increase people's ecological awareness, improve people's ecological behavior and promote the benign development of the ecosystem.

Henry David Thoreau, the father of American nature writing, was an advocate of green civilization with pastoral idyll (Buell, 1995), the writings of a pastoral or rural character in which something of the element of the landscape is depicted. Thoreau saw nature as a genuine restorative, healthy influence on man's spiritual well-being, and regarded it as a symbol of spirit (Tong Ming, 2008). His writings can be counted as "ecological discourses", which contain profound ecological ideas. In this way, Thoreau exerted all his life to describe and praise nature in his works. To find out the Ecological philosophy themes for the ecological discourse analysis on American Transcendentalism Literature, one of Thoreau's writings,

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Walden, is purposively selected as the data of the study. This essay is a typical nature essay, in which Thoreau not only depicted the active participation of wildlife in nature like mammals, fowls, insects, and fishes but also vividly described landscapes like the earth, the moon, the summer sun, the stars, the field, etc.

The common framework that many researchers use to analyze ecological discourse is interpreting the text, specifically, Ecocriticism is applied to interpret literary works. Ecocriticism is ecological literary criticism or ecologically oriented criticism that combines literature and ecology. The appearance of Ecocriticism offers a perspective to explore the relationship between man and the natural world in literature. For example, Jonathan Bate has taken Keat's poem to interpret the ecological ideas in the article The Ode 'To Autumn' as Ecosystem and found that his poem itself is an image of ecological wholeness that offers the attentive readers a sense of being at home (Coupe, 2000).

This study aims to interpret the ecological meaning of animal themes expressed in Walden by using the Componential Analysis to reveal the ecological philosophy themes represented in the discourse of American Transcendentalism Literature. The interpretation of this essay from an EDA perspective not only enriches studies of this classical work but also is of practical significance and contemporary relevance in the era of ecological civilization construction.

Research Objectives

1. To analyze the ecological philosophy themes in American Literature Walden by Theme-Rhyme Analysis (Halliday 1994, 1985, 2004) and Thematic Progression (Halliday, 1994; Daneš, 1974; Paltridge, 2000).

2. To interpret the ecological meaning of the animal theme in the American Literature *Walden*, using the Componential Analysis (Nida,1975).

3. To establish the Ecological philosophy themes' network of the animal theme in the ecological discourse of the American Literature *Walden*.

Research Methodology

1. Research Methodology

The research adopts a qualitative study.

2. Population and Sample

The population of this study is all American Transcendentalism Literature from the 19th century which meets the characteristic criteria of American Transcendentalism Literature: individualism, idealism, and glorification of nature (Lindsey, 2012; Izaguirre, 2014, 20; Realo et al., 2002).

The sample of this study was Walden, which was first published in the year 1854 and consists of 18 chapters that detail Thoreau's life experiences and inner thoughts in the woods of Walden Pond, and each chapter has its unique topic.

3. Research Tools

The research adopts a qualitative study, the research instruments are HyperRESEARCH, Microsoft Word, and Microsoft Excel spreadsheet used to collect and identify ecological discourses.

4. Data Collection

Data collection concerns two periods:

(1). Becoming familiar with the essay Walden, taking notes, thoughts, and impressions in the margin of the printed text.

(2). Coding data by using Theme-Rhyme Analysis. However, Theme-Rhyme Analysis is not enough to analyze the ecological discourse since it focuses on one sentence which is at the syntactic level. Therefore, Thematic progression is adopted to sort the data from the semantic level. In this stage, the computer software HyperRESEARCH version 4.5.6 is used for data coding and data classifying the ecological themes.

5. Data Analysis

The componential Analysis(Jackson,1996; Nida, 1975) is used to interpret the ecological meaning of nature themes of an essay Walden.

The establishment of Ecological philosophy animal themes' network of the ecological discourse in Walden is used to present the Ecological properties of animal themes.

6. Conceptual Framework

The conceptual framework as Figure 1.

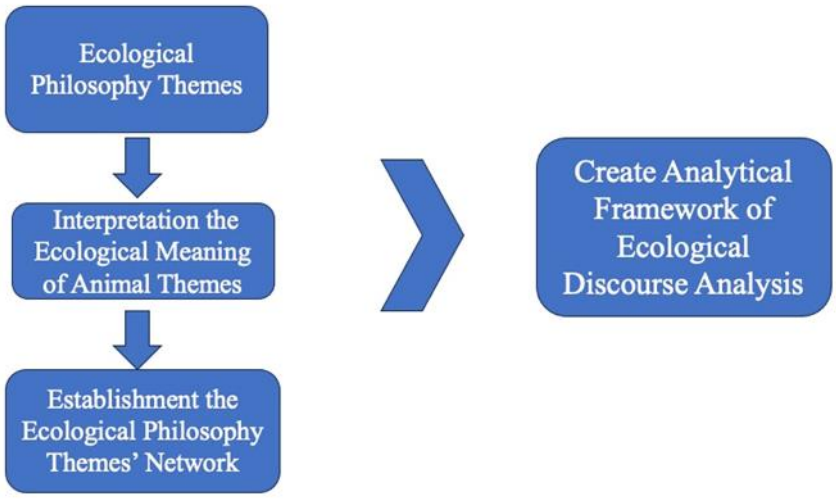


Figure 1 Conceptual framework
(Source: Constructed by the researcher, 2024)

Research Results

Objective Research 1 To analyze the ecological philosophy themes in American Literature Walden by Theme-Rhyme Analysis (Halliday 1994, 1985, 2004) and Thematic Progression (Halliday, 1994; Daneš, 1974; Paltridge, 2000).

Objective Research 2 To interpret the ecological meaning of the animal theme in the American Literature Walden, using the Componential Analysis (Nida,1975).

Objective Research 3 To establish the Ecological philosophy themes' network of the animal theme in the ecological discourse of the American Literature Walden.

This section comprises three parts:

1. The analysis of the ecological philosophy themes in the American Literature *Walden* using HyperRESEARCH.

2. The interpretation of the ecological meaning of animal themes in *Walden* using the Componential Analysis.

3. The establishment of Ecological philosophy animal themes' network of the ecological discourse in *Walden*.

1. The selection of ecological philosophy themes by using HyperRESEARCH

Based on the theme-rheme analysis and the thematic progression proposed by Halliday (1985, 2004), 180 nature themes were identified by using HyperResearch, and the semantic domains of 180 nature themes in *Walden* include 69 animals, 49 plants, 17 landscapes, 9 terrains, and 36 features and products of the Earth.

This article selects the largest number of data, the 69 animal themes to study, the animal themes are as follows: kitten, rabbit, hare, mice, squirrel, mole, mink, raccoon, cattle, buffalo, cattle, cow, calf, horse, pig, sheep, goat, ox, wolf, skunk, moose, deer, giraffe, dolphin, monkey, tiger, muskrat, mink, chicken, duck, geese, cock, sparrow, chickadees, jay, robin, swallow, phoebe, partridge, owl, hawk, eagle, loon, hummingbird, woodcock, pigeon, veery, wood pewee, chewink, thrasher, turtle, tortoise, snake, lizard, shiner, chivin, roach, pickerel, eel, perch, pout, mussel, frog, bullfrog, ant, wasp, waterbug, butterfly, bee.

2. The interpretation of the ecological meaning of animal themes in *Walden* using the Componential Analysis.

2.1 Animals Classification

According to Cambridge Dictionary, an animal refers to a living organism that feeds on organic matter, typically having specialized sense organs and a nervous system and being able to respond rapidly to stimuli, animals can be divided into mammals, fowls, reptiles, fishes, amphibians, and insects (Cambridge Dictionary). Based on the above definition, this article subdivided animals into mammals, fowls, reptiles, fishes, amphibians, and insects, and 69 nature themes belong to the semantic field of animal domains, 28 of them are mammals, 22 of them are fowl, 4 of them are reptiles, 8 of them are fishes, 2 of them are amphibians, and 5 of them are insects.

Modern taxonomy contains five kingdoms: Animalia, Plantae, Fungi, Monera and Protista, and every single living being can be categorized into the above five kingdoms. Swedish botanist and zoologist Carolus Linnaeus had introduced a taxonomy to categorize all living beings, he had classified all living beings into a hierarchical system, including domain, kingdom, phylum, class, order, family, genus, and species (Reid, 2009). This article intended to adopt the above animal classifications to distinguish the differences between each animal theme.

2.2 The Presentation of the Componential Analysis of Animals Themes

To find out the animal themes of the discourse in *Walden,* the Componential Analysis (CA), which is the analysis of words through structured sets of semantic features, was conducted to identify the semantic domain of themes. The semantic domains of 69 themes in the essay can be concluded as follows:

2.2.1 Mammals: kitten, rabbit, hare, mice, squirrel, mole, mink, raccoon, cattle, buffalo, cattle, cow, calf, horse, pig, sheep, goat, ox, wolf, skunk, moose, deer, giraffe, dolphin, monkey, tiger, muskrat, mink

According to Carolus Linnaeus's animal kingdom classification (Reid, 2009), 28 mammals can be subdivided into 7 order categories, 14 family categories, 4 genus categories, and 9 distinguished features, specifical division can be presented as follows as Table 1:

Table 1 mammals kingdom classification

Order	Family	Genus	Mammal	Distinguished features
Carnivora	Felidae	Felis	kitten	
		Panthera	tiger	
	Canidae		wolf	
	Mephitidae		skunk	
	Procyonidae		raccoon	
	Mustelidae		mink	
	Cervidae	Alces	moose	
		Cervus	deer	
	Equidae		horse	
	Suidae		pig	
	Giraffidae		giraffe	
Artiodactyla	Bovidae		cattle	Domesticated and raised for meat and dairy products
			buffalo	The Asian water oxen species
			cow	The female domestic cattle
			calf	The immature domestic cattle
			ox	The castrated male domestic cattle
			sheep	Farm animal with thick wooly coat
			goat	Have backward curving horns and a beard
Rodentia	Muridae		mice	
	Sciuridae		squirrel	
	Cricetidae		muskrat	
Lagomorpha	Leporidae		rabbit	smaller in size
			hare	bigger in size
Eulipotyphla			mole	
Cetacea			dolphin	
Primates			monkey	

2.2.2 Fowls: Chicken, duck, geese, cock, sparrow, chickadees, jay, robin, swallow, phoebe, partridge, owl, hawk, eagle, loon, hummingbird, woodcock, pigeon, veery, wood pewee, chewink, thrasher

According to Carolus Linnaeus's animal kingdom classification (Reid, 2009), 22 fowls can be subdivided into 9 order categories, 13 family categories, 8 genus categories, specifical division can be presented as follows:

Table 2 fowls kingdom classification

Order	Family	Genus	Mammal
Passeriformes	Passeridae	Passer	sparrows
		Pipilo	chewinks
	Tyrannidae	Sayornis	phoebes
		Contopus	wood pewees
	Turdidae	Turdus	robins
		Catharus	veery
	Paridae		chickadees
	Corvidae		jays
	Hirundinidae		swallows
	Mimidae		thrashers
	Phasianidae		chicken
Anseriformes	Anatidae	Ansa	duck
		Anser	geese
Galliformes	Gallus		cock
	Perdix		partridge
Accipitriformes	Accipiter		hawk
	Aquila		eagle
Strigiformes			owl
Gaviiformes			loon
Trochiliformes			hummingbird
Scolopacidae			woodcock
Columbiformes			pigeon

2.2.3 Reptiles: turtle, tortoise, snake, lizard

According to Carolus Linnaeus's animal kingdom classification (Reid, 2009), 4 reptiles can be subdivided into 2 order categories, 4 family categories, specifical division can be presented as follows:

Table 3 reptiles kingdom classification

Order	Family	Genus	Mammal
Testudines	Emydidae		turtle
	Testudinidae		tortoise
Squamata	Colubridae		snake
	Lacertidae		lizard

2.2.4 Fishes: shiner, chivin, roach, pickerel, eel, perch, pout, mussel

According to Carolus Linnaeus's animal kingdom classification (Reid, 2009), 8 fishes can be subdivided into 6 order categories, 3 genus categories, specifical division can be presented as follows:

Table 4 fishes kingdom classification

Order	Family	Genus	Mammal
Cypriniformes	Squamata	Notropis	shiner
		Nocomis	chivins
		Rutilus	roaches
Esociformes			pickerel
Anguilliformes			eels
Perciformes			perch
Gadiformes			pout
Mytiloida			mussels

2.2.5 Amphibian: frog, bullfrog

According to Carolus Linnaeus's animal kingdom classification (Reid, 2009), 2 amphibians can be subdivided into 2 genus categories, specifical division can be presented as follows:

Table 5 amphibians kingdom classification

Order	Family	Genus	Mammal
Anura	Ranidae	Rana	frog
		Lithobates	bullfrog

2.2.6 Insects: ant, wasp, waterbug, butterfly, bee

According to Carolus Linnaeus's animal kingdom classification (Reid, 2009), 5 insects can be subdivided into 4 order categories, 2 family categories, specifical division can be presented as follows:

Table 6 insects kingdom classification

Order	Family	Mammal
Hymenoptera	Formicidae	ants
	Vespidae	wasps
Hemiptera		waterbugs
Lepidoptera		butterflies
Hymenoptera		bees

3. The establishment of Ecological philosophy animal themes' network of the ecological discourse in *Walden*.

From the componential analysis, we can draw the ecological philosophy animal themes' network diagram in Walden written by Henry David Thoreau as in Figure 2-8.

From Diagrams 2-8, the ecological animal themes network in *Walden* written by Henry David Thoreau falls under the same semantic domain, which is the nature domain. Thoreau utilizes these themes to express the ecological meaning throughout his essay.

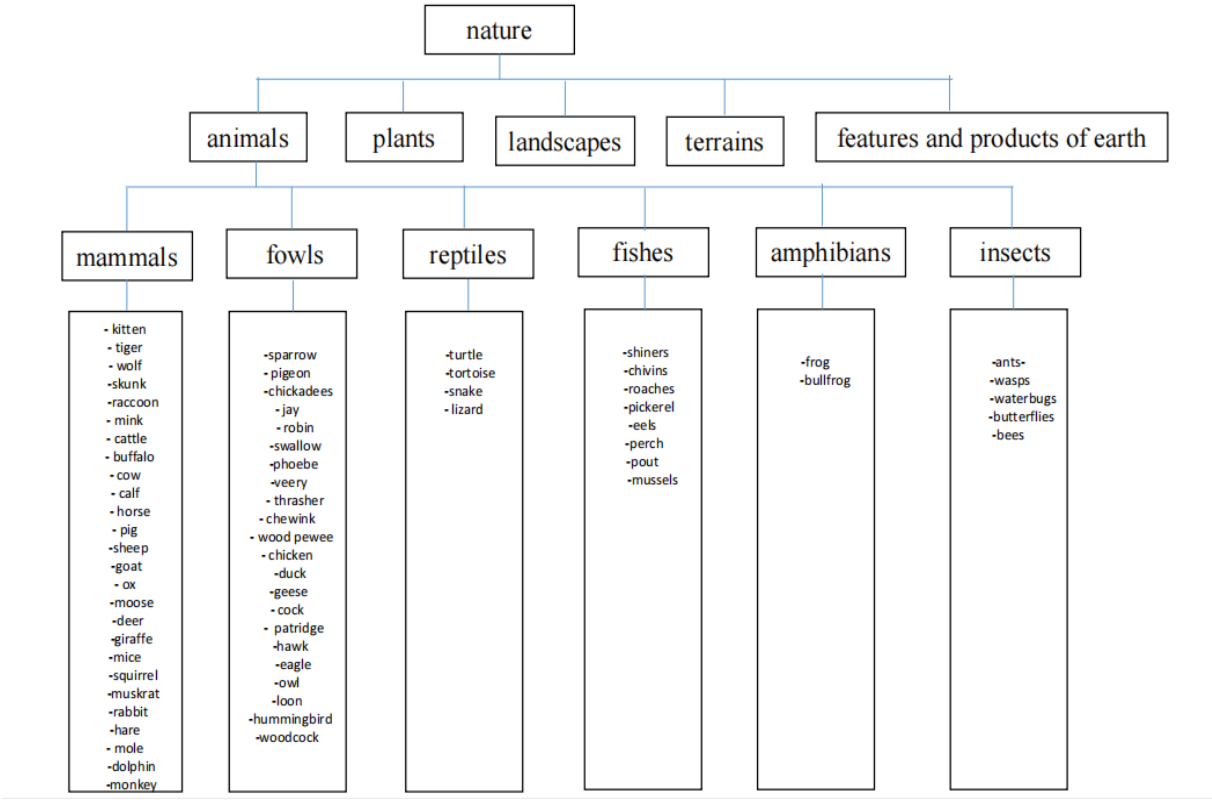


Figure 2 The ecological philosophy animal themes' network in *Walden*.
(Source: Constructed by the researcher, 2024)

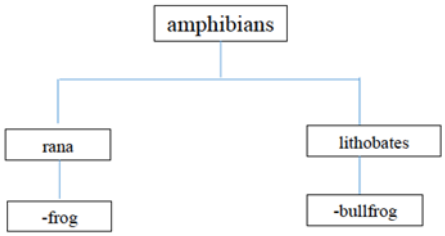


Figure 3 The ecological philosophy amphibian themes' network in *Walden*.
(Source: Constructed by the researcher, 2024)

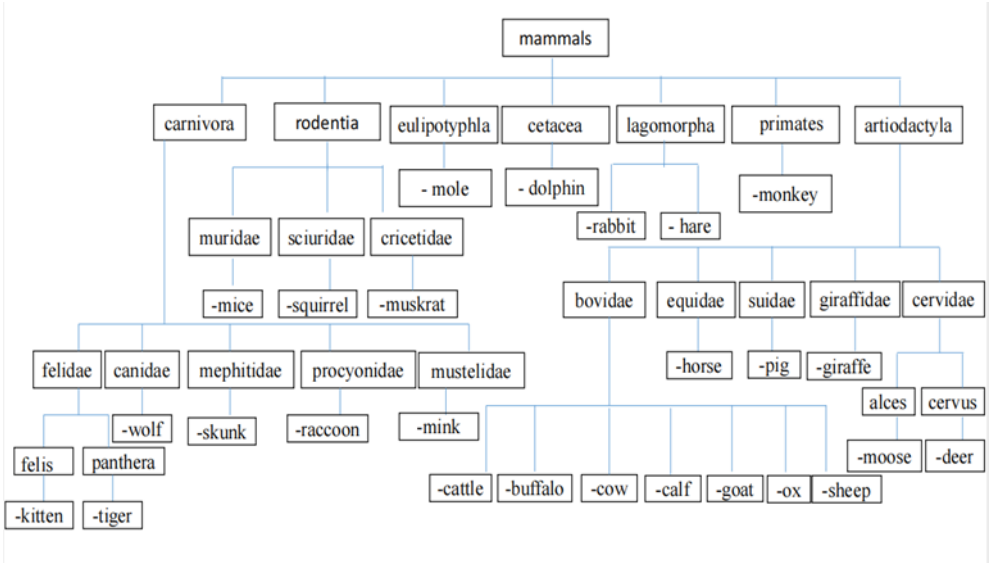


Figure 4 The ecological philosophy mammals themes' network in *Walden*.
(Source: Constructed by the researcher, 2024)

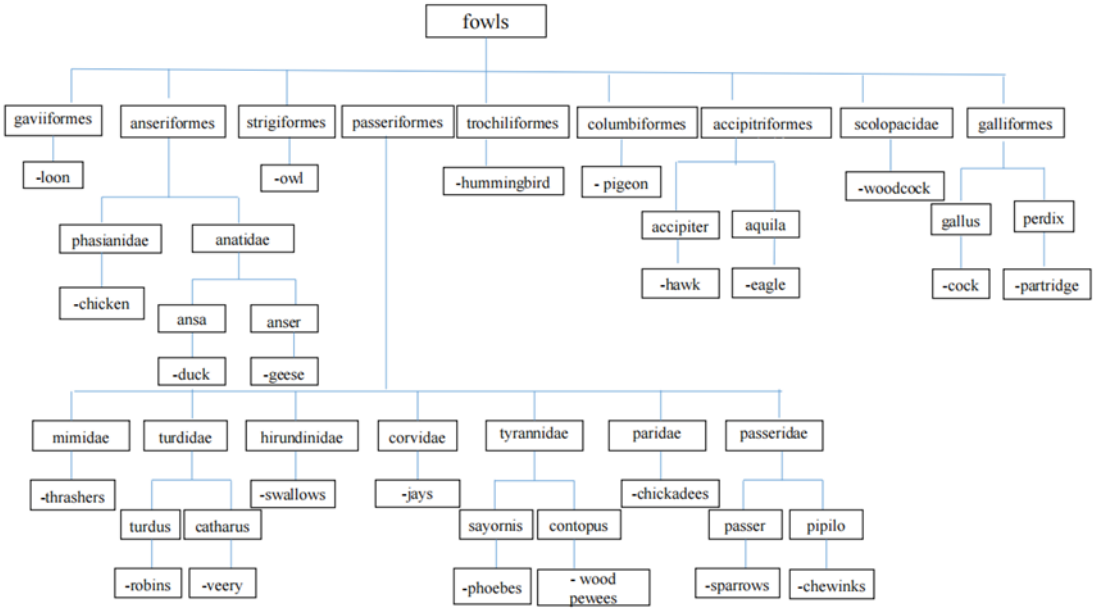


Figure 5 The ecological philosophy fowl themes' network in *Walden*.
(Source: Constructed by the researcher, 2024)

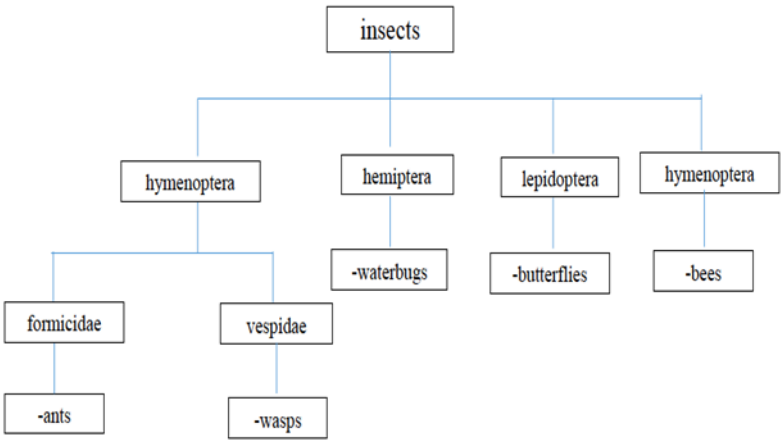


Figure 6 The ecological philosophy insects themes' network in *Walden*.
(Source: Constructed by the researcher, 2024)

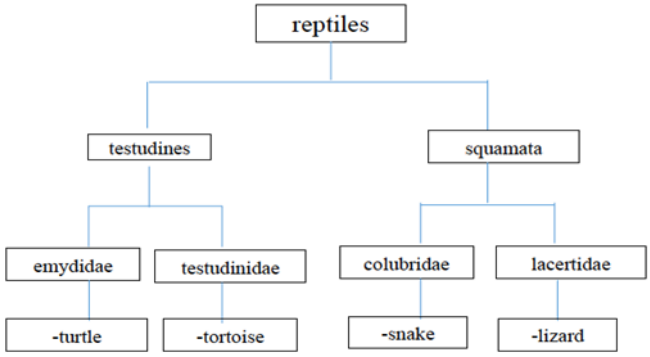


Figure 7 The ecological philosophy reptiles themes' network in *Walden*.
(Source: Constructed by the researcher, 2024)

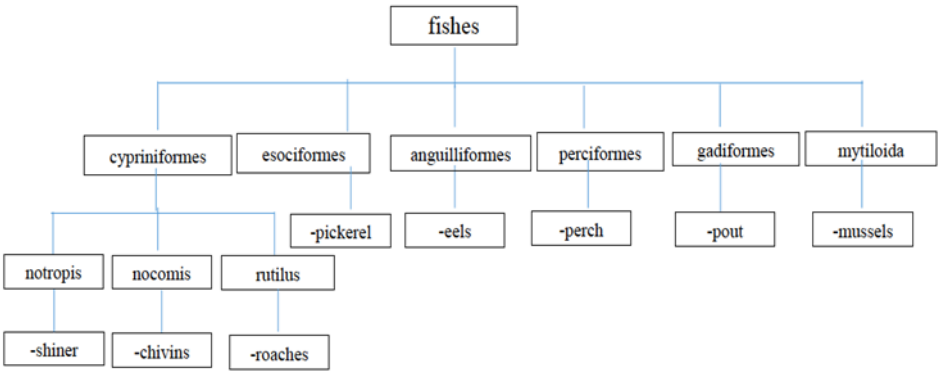


Figure 8 The ecological philosophy fish themes' network in *Walden*.
(Source: Constructed by the researcher, 2024)

Discussion

1. Research Objectives

The research objectives emphasized on identification of the animal nature theme, the interpretation of the ecological meaning of the animal theme, and the establishment of the Ecological philosophy themes' network of the animal theme in the ecological discourse of the American Literature Walden. The key findings expose that American Literature Walden is a nature essay that has abundant ecological themes. This study places its focus on the interpretation of the ecological meaning of the animal theme by using the Componential Analysis, by which the ecological properties of animal themes are revealed. This study aligns with the three research questions and research objectives.

2. Research Results

This study results reveal the ecological discourses on the animal themes in American Literature Walden, the reason for conducting this study is to reply to the worldwide ecological crisis from the subjects of Linguistics. This is consistent with the development of Linguistics subject, and this is consistent with the need to cope with environmental destruction with the development of science and technology.

This study aims to get the ecological properties of animal themes by using the Componential Analysis. The reason for this is that few researchers adopted the Componential Analysis to analyze the nature themes in the American Literature Walden, since Ecolinguistics is newly developed. This study is consistent with the development of the subjects, especially in the field of Ecological Discourse Analysis.

The third objective of this study is to establish the Ecological philosophy themes' network of the animal theme in the ecological discourse of the American Literature Walden. After analyzing the animal themes by using the Componential Analysis, the establishment of the themes' network of the animal theme is to vividly illustrate animal themes' ecological properties. This is consistent with the research objectives three to fulfill the framework construction of the Ecological Discourse Analysis in future research. More importantly, an analytical framework of Ecological Discourse Analysis can be established based on the three objectives.

3. Conclusion

This study analyzed and interpreted the ecological themes expressed in the American Literature *Walden*, by Henry David Thoreau. It was found that the ecological meaning expressed in the discourse of this essay involves the harmonious relationship between human beings and nature, the prominent theme is the nature theme, which portrays the ecological meaning of the harmonious coexistence between man and nature. The nature theme that was found in the ecological discourse of Thoreau's essay *Walden*, is in line with the findings of other ecological discourses of his writings. Peng Xiying's analysis of Thoreau's *Walden*, from the appraisal theory of Systemic Functional Grammar, has shown that Thoreau intended to adopt the positive meaning of words to express his appreciation for animals, plants, and non-human living.

Recommendations

Theoretical Recommendations:

The Ecological Discourse Analysis is newly developed, no researchers conducted such a study to analyze the ecological discourse on nature themes, to analyze the animal themes by using the Componential Analysis, and to establish the themes' network of animals theme, therefore, therefore, this study works as a pilot to do Ecological Discourse Analysis. What's more, based on the three objectives, an analytical framework can be built for analyzing Ecological Discourse.

2. Policy Recommendations

Academic research can offer suggestions for policymakers to make ecological policy according to academic research. Implement strict ecological protection rules to force people to follow.

3. Practical Recommendations

Improve people's ecological protection awareness, advocate for calling for reducing environmental protection, and increase ecological awareness to protect the environment and earth.

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