



Athens Journal of Philology

Quarterly Academic Periodical, Volume 10, Issue 2, June 2023

URL: <https://www.athensjournals.gr/ajp>

Email: journals@atiner.gr

e-ISSN: 2241-8385 DOI: 10.30958/ajp



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Nalayira Divya Prabandham Kannan and Greek Herakles - Union of Binary Oppositions in Fighting with Animals and the Formula for Variation

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Published by the Athens Institute for Education and Research (ATINER)

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The *Athens Journal of Philology (AJP)* is an Open Access quarterly double-blind peer reviewed journal and considers papers from all areas of sports and related sciences. Many of the papers in this journal have been presented at the various conferences sponsored by the [Languages & Linguistics Unit](#) and the [Literature Unit](#) of the Athens Institute for Education and Research (ATINER). All papers are subject to ATINER's [Publication Ethical Policy and Statement](#).

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The current issue is the second of the tenth volume of the *Athens Journal of Philology (AJP)*, published by the published by the [Languages & Linguistics Unit](#) and the [Literature Unit](#) of ATINER

Gregory T. Papanikos
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- **Dr. Stamos Metzidakis**, Head, [Literature Research Unit](#), ATINER & Emeritus Professor of French and Comparative Literature, Washington University in Saint Louis, USA.

Important Dates

- Abstract Submission: **28 August 2023**
- Acceptance of Abstract: **4 Weeks after Submission**
- Submission of Paper: **2 May 2024**

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Second Language Vocabulary Teaching and Learning: Inspecting Alternatives and Analyzing Results

By Pedro Luis Luchini* & Gabriela Mariel Ferreiro[±]

For a long time now, the teaching and learning of L2 vocabulary has been underrated in second language acquisition (SLA). However, in the last three decades, there has been a reemergence of interest in this field and different proposals and perspectives have arisen that strengthen and encourage due attention. The purpose of this paper was to inquire into the effectiveness of the implementation of an array of vocabulary tasks to facilitate vocabulary acquisition. Three teachers of English at a private secondary school in Mar del Plata, Argentina, participated in this action research. Data were gathered by means of field notes, teaching activities, self-assessment reports and evaluation meetings. The results obtained shed some light on L2 vocabulary teaching and some new viewpoints are discussed that could help other language teachers develop conceptual knowledge to tackle lexical instruction. The decision to embark on this action research study led these three teachers to reflect upon their own teaching practice with regard to L2 vocabulary instruction and thus take cognizance of the importance of the inclusion of L2 vocabulary teaching on a regular basis in their classes. Finally, some suggestions for further research in this area were given.

Keywords: vocabulary teaching/learning, L2 vocabulary, action research

Introduction

For a long time, the teaching and learning of L2 (second language/foreign language) vocabulary was a neglected and underestimated area in the field of Applied Linguistics. Instead, a great number of second language researchers and teachers alike have centered their attention on syntax thus disregarding the critical aspects related to vocabulary learning and teaching and their pedagogical implications.

However, for the last three decades, researchers began to direct their attention to lexis and its role leading to a reemergence of interest in the area of vocabulary acquisition and learning strategies. Appreciation of the significance and implications of these areas has paved the way to a considerable amount of research in their place of intersection: vocabulary learning strategies. However, the issue of whether vocabulary learning strategies should be implicitly or explicitly taught is still debatable. While some researchers argue that the best predictor of vocabulary learning strategy use is previous vocabulary learning strategy instruction, others believe that we should not be carried away in our enthusiasm for strategy training since its improvement is relatively weak and not all strategies appear to be used

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spontaneously. Barcroft et al. (2011) make reference to this and express that lexis, from the old Greek for *word*, denotes all the words that exist in a language, that is to say, the vocabulary of a language. Similarly, Caro and Mendinueta (2017) state that lexis, vocabulary and lexicon are synonymous. This same concept is reinforced when Larsen-Freeman and DeCarrico (2010, p. 18) mention that lexis and vocabulary involve "... not only syntax and morphology but also phonetics, phonology, semantics and lexis (that is, vocabulary)". At this point, it seems necessary to clarify that, in the present study, the concepts of lexis and vocabulary will be used interchangeably.

This paper describes an action research carried out by three teachers along with their own groups of learners in a private secondary school in Argentina in which they explored the area of vocabulary learning and teaching. In the first section, some findings related to already existing theories and other research studies on vocabulary acquisition will be presented. In the next part, the research area, the instruments employed to collect data and the participants will be described. In the last section, some suggestions for further research in the area will be made.

Literature Review

In 1985, Krashen introduced the Input Hypothesis, and postulated that L2 acquisition takes place when learners understand input that offers grammatical forms that are at " $i + 1$ ", which means that the grammatical forms are slightly more advanced than the present state of the learner's interlanguage (Ellis 1997, Lightbown and Spada 1993). In the same year, Long extended Krashen's theory (Lightbown and Spada 1993). His interaction hypothesis highlights the position of comprehensible input but asserts that it is most effective when modified through the negotiation of meaning. Long's perspective was rebutted by many other linguists and theorists such as McLaughlin (1987) for being too vague and imprecise to provide an account of the process of second language acquisition, contending that modified teacher input facilitates comprehension, and this, in turn, serves to promote acquisition.

The main point in this argument focuses on the adaptation of the teacher's input to enhance comprehension instead of on the way in which learners process the input. In this way, by drawing the attention on the teacher, the learners' conscious processes are overlooked as well as their use of learning strategies for comprehending, processing, learning and retaining concepts in academic settings. If the goal of learning strategies is to affect the learners' motivational or affective state, or the way in which students select, organize, acquire, or integrate new knowledge (O'Malley JM, Chamot 1990), then, by providing students with the tools to self-regulate their own learning (Dörnyei Z, Skehan 2002), students will be able to develop autonomy by exerting control over their own learning operations, and thus have the possibility of managing their own achievements through specific beliefs and procedures aiming at the enhancement of their own learning processes.

Research on training second language learners to use learning strategies has been restricted almost exclusively to vocabulary tasks reporting interesting improvements in vocabulary learning. Paradoxically and quite polemically, Zimmerman (1997, p. 6) has pointed out that “the teaching and learning of vocabulary has been undervalued in the field of second language acquisition throughout its varying stages and up to the present day.” In fact, a number of other linguists and theorists who advocate her position also contend that the field of vocabulary acquisition has been neglected from L2 instruction in favor of syntactic development ignoring the crucial role that lexis plays in SLA. On the same grounds, Coady (1997) argues that language teaching methods have paid limited attention to vocabulary since it is very difficult to teach an organized syllabus of both grammar and lexis simultaneously.

Indeed, some researchers and language theorists have emphasized aspects of language learning such as syntax far more than vocabulary learning. Yet, towards the end of the 80s, Lewis (1997), Willis (1990), Sinclair and Renouf (1988) and Nattinger and DeCarrico (1992) began to focus their attention on the importance and implications of the inclusion of lexis in language teaching. In fact, research on vocabulary teaching reports that explicit teaching of vocabulary results in better retention than incidental learning from natural text-based input (Folse 2006).

At this point, it is worthwhile mentioning that lexis is often misinterpreted in language teaching because there is a false assumption that grammar is the basis of language and that proficiency of the grammatical system is a precondition for effective communication. Back in 1997, Lewis coined the term lexical approach and suggested that lexis is the basis of language. One of the central organizing principles of his proposal is that language consists of grammaticalized lexis, not lexicalized grammar; thus, lexis should be the focus of any meaning-centered syllabus. The main distinction between the vocabulary (traditionally understood as a group of individual words with fixed meanings) and lexis is that the latter includes not only single words but also word combinations that are easily stored in the mental lexicon (Lewis 1997). In this way, language is seen as a set of combined meaningful chunks that produce continuous coherent text, and just a few spoken sentences that are entirely new creations.

This perspective to language teaching challenges traditional views of word boundaries, emphasizing the language learners’ need to perceive and use patterns of lexis such as polywords, collocations, institutionalized utterances, sentence frames and heads. That is, rather than trying to break language into small units, the idea is to make a conscious effort to see things in a larger, more holistic perspective. More significant is the underlying claim that language production is not a syntactic rule-governed process, but is instead the retrieval of larger phrasal units from memory (Zimmerman 1997).

Memory training can contribute to retaining vocabulary studied in English lessons through the implementation of a set of strategies (Martin and Ellis 2012). Channell (1988) makes a distinction between acquiring and learning vocabulary and states that learning is a process, while acquisition is the end result. She also presents a difference between productive and receptive use of vocabulary, explaining that learners gain access to new words before they can actually use

them. On these same grounds, Jordan (1997) reported that the learners' L1 and L2 vocabulary knowledge is linked together in their mental lexicon phonologically and semantically. This researcher also claimed that learners can make conscious the connections among them and concluded by providing a set of implications for classroom practice:

1. Since the lexicon appears to be an independent entity in processing, there is justification for teaching approaches which make vocabulary work as a separate learning activity. It is not essential to always integrate vocabulary with general communication.
2. Presentation of vocabulary should pay specific attention to pronunciation, in particular word stress. So visual presentation and reading may not be the best ways to introduce new vocabulary.
3. Learners should be encouraged to make their own lexical associations when they are actively learning new vocabulary. However, at present we do not know which kinds of associations are the most useful in aiding retention.
4. Semantic links play an important role in production. This suggests the use of semantic fields based presentation methods on the lines of that exemplified (Jordan 1997, p. 154).

Channell asserts that the vocabulary of a language is made up of an array of interconnecting networks of words, which creates a semantic field. Worded differently, words belonging to the same groupings share the same semantic aspects and constitute a systematic structure. The mind employs semantic similarity in categorizing words, and this, she explains, is beneficial for vocabulary acquisition. As a result of this, some researchers advocate the use of semantic groupings, though others such as Tinkham (1993) believe that new lexical items are learned most effortlessly if they are not clustered together for presentation in prefabricated semantic chunks. This researcher claims that learners may find a number of similar or semantically related words confusing, especially when they are introduced together and at once.

Up to date, in the area of second language acquisition, a widely varying number of approaches, methods, and techniques dealing with vocabulary instruction and/or acquisition have been presented. In fact, Coady (1997) proposes four main positions on a continuum of methods for teaching vocabulary that should be born to mind:

- a) Context alone: It proposes that there is no need for direct vocabulary instruction since learners will learn all the vocabulary they need from the context by reading extensively, provided it is presented in the form of comprehensible input.
- b) Strategy instruction: This position sustains that context is the major source of vocabulary learning, however, there is considerable emphasis on teaching specific learning strategies to students so that they can successfully learn

from context; for instance, summarizing a text, finding the main idea, identifying rhetorical structures, all of them require some sort of instruction.

- c) Development plus explicit instruction: It argues for explicit teaching of certain types of vocabulary using a variety of techniques and methods including direct memorization of some high-frequency words. This position upholds the idea that contextualized learning through reading is effective but contextualized reading plus instruction is superior; that is, reading plus interactive vocabulary instruction.
- d) Classroom activities: It advocates the teaching of vocabulary words without following a particular methodological approach. Coady (1997) suggests that vocabulary is best learned in classroom situations when learners simply need to use it. To cater for learners' linguistic needs, Skehan (1996) suggests that students should be engaged in interactional tasks in which meaning is crucial, there is some kind of relationship with real-life like situations, task completion is the primary goal, and the assessment of task performance is related to task outcome. Students' linguistic needs, then, could be created by hiding the linguistic focus of the task from the learners. Within a task-based pedagogical framework, tasks of the type meaning-form-meaning progression provide an ideal semantic space in which learners may be pushed by operations carried out on the task input data to notice holes in their current interlanguage repertoire (Samuda 2001). Thus, by "noticing" or "noticing-the-gap", according to Schmidt (Ellis 2001, p. 56) learners are able to identify how the input to which they are exposed differs from the output they are able to produce, which are essential processes for second language vocabulary acquisition to occur.

Hairrell et al. (2011) established that vocabulary instruction promotes increased word knowledge at early stages and listed the most frequently used strategies to build vocabulary. The three strategies mostly reported in experimental studies were: contextual analysis, semantic strategies (e.g., dictionaries, discussions, etc.), and repeated exposure (Moody et al. 2018). Similarly, Awaludin (2013) investigated vocabulary teaching in young EFL learners, and reported that translation, real objects, meaning definition, presentation through context and learners' active involvement seem to be the techniques frequently chosen when presenting word meaning. Regarding older students, who often struggle with vocabulary, research suggests that middle- and high-school learners should be given multifaceted instruction on the use of context hints, and morphology, in addition to opportunities for frequent use of new words (Moran and Moir 2018). It is important to note that Moir and Nation (2008), in their study of metacognitive strategies, found that metacognition and autonomy play an important role in learning vocabulary. Muhaimin et al. (2018) expressed that to learn vocabulary effectively, students must not only have the ability to do the learning, but they also must be able to reflect on their own ways of learning. All in all, and despite other

techniques, new trends in vocabulary learning lay considerable emphasis on strategic vocabulary learning as passport to develop more active and autonomous language learners (Ahmad et al. 2018, Lou and Xu 2016)

In analyzing the different standpoints as regards the formal teaching of vocabulary, it could be true to say that the most effective way for learners to enhance their active vocabulary repertoire is for them to be centrally involved in their own learning process. Initially, this will involve some kind of learner training under the direction of a teacher, working in groups with other students, or on a self-access basis, in a systematic way rather than by incidental learning. Through a direct approach to vocabulary teaching, students will be able to pay explicit attention to vocabulary, and this, in turn, will eventually help them develop their own strategies, thus, becoming more independent learners.

The proposals considered in this section will be partly used throughout this study as the foundation to analyze and interpret the data collected. In the next section, we will set out to conduct the action research, present the puzzle area, briefly describe the participants and analyze and interpret the information gathered. Finally, some recommendations will be given.

Action Research

Burns (1999) defines AR as the use of fact finding to practical problem solving in a given social situation with the aim to improve the quality of action within it, including the collaboration and cooperation of researchers, practitioners and laymen. Burns states that “AR involves taking a self-reflective, critical, and systematic approach to exploring your own teaching contexts” (Burns 2010, p. 13). Although collaboration is desirable, Nunan (1992) does not consider it as a restrictive characteristic of AR. A feature that also applies to this paper concerns its being situational, that is concerned with the identification and solution of problems in specific contexts (Cohen and Manion 1985). AR relies on exploratory and interpretative methods which are often appealing to the classroom teacher. These methods enable teachers to explore the realities of practical situations without the need of controlling the variables of their classroom contexts. The flexible and eclectic nature of AR implies that teachers are able to modify the questions or issues guiding their research, to take on different research methods or to take their interpretations in new directions as the need arises, a variant that would not be suitable in quantitative research.

However flexible and eclectic, this research method requires systematic and rigorous data collection and analysis. In fact, it fulfills essential research requirements in that it comprises a researchable question or the identification of a puzzled area, planning, collecting data, information analysis, reflection and interpretation, hypothesizing, intervening, observing, reporting, writing and presenting. These features do not necessarily need to be clearly delineated and separate points in the research. The crucial aspect of AR lies in the participants’ collaborative discussions that occur regularly throughout the process.

This research method enables researchers to take on interpretations that are

motivated by data derived from the actual social situations - in this case the teachers' own classroom settings - rather than by theoretical concepts alone. It is a highly flexible research process which can respond rapidly to emerging political, social and educational questions as they impact on practice (Burns 1999).

Method

Context and Participants

The context where the experiment was conducted was a private secondary school in Mar del Plata, Argentina. In this school, the students are organized into ten different groups according to their English proficiency level. Each level is equivalent to the proficiency scale provided by the Common European Framework of Reference for Languages (CEFR, see <https://www.coe.int/en/web/common-european-framework-reference-languages>). In each group, there are approximately 25 students and their ages range from 13 to 17. They receive six hours of instruction of English a week. As one of the institutional requirements, the students have to take and pass three term tests (written and oral) which are administered after each academic quarter (May, September and November) in order to get access to subsequent courses. The written test consists of a reading comprehension section, a grammar part and a written production task. For the oral test, the students are interviewed in pairs where they have to answer a set of questions relating to a set of stories or novels dealt with in class. Besides, using the content of these stories as a trigger to give their opinions, the students are often made to complete a spontaneous speech task. From the group of ten teachers, only three were randomly selected to conduct this experiment (Teacher A, B & C). The decision to cut down the number of participants was made given the amount of data available to analyze and interpret coming from each teacher.

On Identifying the Problem

By the end of June 2019 and after the first term test was administered and rated, the three selected teachers held an evaluation meeting with their supervisor (one of the authors of this paper) whereby they analyzed, in particular, the oral test results in relation to their students' speaking skills and the instructional objectives set at the beginning of the academic term. At the meeting, they became conscious that the students' current level of oral language proficiency and the instructional objectives set for their courses had not been well-matched. While their course objectives aimed at enabling the students -at each corresponding level of proficiency- to become trained competent speakers in English, it was agreed that their oral productions, at that stage, revealed not enough vocabulary knowledge to express their ideas clearly in English, a fact that repeatedly hindered their intelligibility and comprehensibility. Several researchers agree on the fact that fairly large vocabulary sizes are essential to operate effectively in English (Nation 2006, Schmitt and Schmitt 2014, Gyllstad et al. 2015). In an attempt to overcome

that problem, after that meeting, the three teachers, along with their supervisor, decided to embark on an AR to explore in depth that particular instance with the intention of increasing their understanding of it and providing a description, explanation and, above all, some judgment about their existing assumptions.

On Finding a Solution to the Problem

Once the problem was identified, these teachers decided to embark on the implementation of the AR project. The first step consisted in becoming acquainted with some updated literature related to the teaching and learning of L2 vocabulary. After having read and explored this material, they held another meeting with their supervisor where they discussed some possible ways of implementing some fresh ideas with each group. At that meeting, it was agreed that based on the thematic unit and contents covered for the upcoming term, they would design a battery of comprehensible tasks aiming at teaching vocabulary explicitly.

After the intervention period, teachers and supervisor got together again to evaluate results. They all agreed to write a semi-structured self-assessment report after the instruction period whereby they should include the topic taught, aims of tasks implemented, a brief description of them and their perceptions regarding the results obtained.

Implementation of the Action Research Project

In this section, the self-assessment reports presented by the three teachers in charge (A, B & C) will be described:

Teacher A

Students' language proficiency level: A2 (Common European Framework (CEFR), see: <https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions>)

Topic: Anecdotes in the past

Materials used: Oral input in the form of an oral account of a personal anecdote & a reading text about someone's weekend.

Aim of task/s: To elicit and provide lexical chunks including past tense forms.

Description of the sequence of tasks: The teacher opened the class asking her students about their weekend (*Did you have a good time last weekend? What did you do?*). The aim of these questions was to elicit from the students what they had done during their last weekend, and in so doing have them use the simple past tense. As the students had never been introduced to this tense, they answered the questions using their L1 and/or L2 verbs in the present form. Then, the teacher

wrote down a list of phrases on the board in which she included past forms. Next, she told the class what she had done during her weekend. In her account, she included some of the chunks she had written on the board and one piece of false information which the students had to guess. Although some students claimed that they could not understand everything that the teacher said, they managed to complete the task successfully. After her anecdote, the teacher gave the students a reading task. The students were asked to read the description of the weekend spent by a famous person and complete a chart using past forms. Later, the students were made to work in pairs to complete another chart, similar to the one employed before, but this time, she challenged them to use their own information. They also had to include one piece of false information for their partners to find out. Finally, they were arranged in two groups to play TIC-TAC-TOE. They took turns to provide the past form of a chosen verb and use it in a meaningful sentence.

Results of implementation of the task sequence: The students were exposed to the past tense of various verbs (both regular and irregular forms) in a range of ways, through different channels, and focusing on form as well as on meaning. At all times, the tense presented was taught in the context of a lexical phrase; that is, the teacher put lexis, not grammar, at the center of the classroom in order to help learners develop their ability to use English for real communication. Both comprehension and production were required during the sequence of tasks. In the following classes, the teacher checked the extent to which the objective of the class –that the students could retrieve and use the past form of some verbs– had been achieved.

Teacher's beliefs: Most of the students were quite enthusiastic throughout the two classes spent on the above sequence of tasks, especially, when they talked about their weekends and they had to guess the odd bit of information in their teacher's or their partners' accounts. They also looked interested when completing their own chart for the guessing activity; even some of the weakest students who had presumably failed to understand some of the instructions given by their teacher seemed to be highly motivated. They appeared to be interested in the TIC– TAC– TOE game because they said they had enjoyed it and had been able to use some of the phrases and chunks, containing the verb forms they had been exposed to, to convey genuine communication. Appendix I includes Teacher A's lesson plan as a sample of the activities done with that group of learners.

Teacher B

Students' language proficiency level: B1 (Common European Framework (CEFR), see: <https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions>)

Topic: Multi-part verbs

Materials used: Classroom handout (designed by the teacher in charge)

Aim of task/s: To recognize and use multi-part verbs in different contexts

Description of tasks or sequence of tasks: Task 1- After having introduced the different patterns of multi-part verbs, the teacher asked the students to read a short paragraph in their handouts in which they had to recognize and underline the multi-part verbs. Later, students tried to infer their meanings from the context provided.

Task 2- The teacher wrote a list of meanings and collocations on the blackboard. Students wrote the multi-part verbs from the text next to what they thought were their definitions.

Task 3- Students went back to the short paragraph, took turns to read the sentences that contained the multi-part verbs aloud and confirmed or dismissed their previous guesses paying special attention to the context in which they were used.

Task 4- Students completed new sentences using multi-part verbs.

Task 5- Students chose three multi-part verbs and wrote real or imaginary sentences about themselves. Then, in pairs, they exchanged information with their partner who had to guess if the statements were true or false.

Task 6- Students – once again in pairs – made up the dialogues for a comic strip (the teacher gave them a comic strip with empty speech bubbles), using two multi-part verbs.

Results of implementation of task/task sequence: Students could infer the meanings of the multi-part verbs from the text and relate them to their previous knowledge and personal experiences. The controlled practice stage helped them to see the multi-part verbs used in several contexts and to receive more input. Finally, they were able to use the new lexical phrases in different situations. The following class, most students were able to remember distinctly the multi-part verbs and the contexts in which they had been previously used.

Teacher's beliefs: This group of learners willingly accepted being challenged to use these vocabulary items in different contexts. The gradual complexity of the tasks and constant teacher's assistance facilitated the understanding and completion of the tasks. A week after the students were given a quiz and 16 out of 20 got passing grades with satisfactory results.

Teacher C

Students' language proficiency level: B2 (Common European Framework (CEFR), see: <https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions>)

Topic: Enhancing vocabulary acquisition

Materials used: A short story

Aim of the task/s: To identify unknown words in the text given, match them to their definitions and select those words that would help them summarize the

portion of the story given.

Description of sequence of tasks: Students were asked to read two pages from a short story (material included in the course syllabus), and underline those words that were unknown to them. Then they were given a long list of possible definitions and asked to match them to the words they had selected. After checking the results with the group as a whole, students were challenged to choose only three to five words that would explain the main ideas and summarize that part of the story.

Results of implementation of task sequence: These tasks took longer than expected as some students selected words with definitions that were not in the list and the teacher had to refer them to the text again. The choice of key words at the end did not pose much difficulty for them and students gave positive feedback about the activities done.

Teacher's beliefs: In spite of the students' positive feedback and the fact that the aim of the task was fulfilled, the teacher felt that working with the list of definitions was too time consuming. She admitted she would have profited from getting more acquainted with updated and specific techniques to embark on teaching vocabulary. Regarding the task, she admitted that if she were asked to repeat the experience, she would encourage students to use dictionaries instead of providing them with definitions. This would contribute to the overall organization and flow of the task.

Table 1 shows a brief summary of some of the teachers' perceptions regarding their students' attitudes in class, the tasks and activities done and some considerations about their practice.

Table 1. A Recap of Teachers' Perceptions

Teacher A	Teacher B	Teacher C
*most students expressed enthusiasm mainly when: -sharing personal information -guessing the odd bit of information in their teacher's and partners' accounts -completing their own chart for the guessing activity -playing the TIC-TAC-TOE game	*students showed willingness to participate *despite the effect of gradual task difficulty, teacher's assistance facilitated students' understanding and task completion *a follow-up task after 7 days revealed that 80% of the class could remember key concepts	*students' feedback: positive *aim of the task: fulfilled *teacher's afterthoughts: -the list of definitions: not practical nor effective -in case of repeating the task in the future, the use of dictionaries will replace the list used -the importance of being acquainted with updated techniques on vocabulary teaching

There are various ways in which vocabulary can be dealt with in the classroom. An approach which combines frequent and contextualized exposure with a focus

on awareness- raising tasks proves to work well for L2 vocabulary acquisition. Presenting memorable lexicalized chunks, in the context of meaningful situations, through pedagogical tasks, and devising ways to generate a need for students to learn a given word can also be beneficial for L2 vocabulary learning.

Discussion and Results

On looking at Teacher A's self-assessment report, we observe that she engaged her students in tasks in which meaning was essential. By making her students talk about their weekends, she pushed them to share more personal information and in so doing use the linguistic resources they had at hand (L1 and present tenses). She made her students notice gaps in their interlanguage storage and, immediately afterwards, she filled in those linguistic gaps using lexical chunks, containing the tense forms she intended to teach. The design and implementation of tasks of this type might have served to make a particular L2 word combination (a lexical pattern containing a grammatical item) more salient by drawing attention to phrasal units, resulting in the student noticing the target word. The combination of a contextualized oral account and a reading text with formal instruction might have helped the students complete successfully the tasks set as they were able to retrieve and later use properly the new lexical patterns presented. In this class, it may be assumed that grammar is given higher priority over lexis. However, this teacher puts vocabulary, not grammar, at the forefront of her class by lexicalizing grammar. Lexis is essential in the creation of meaning and grammar should be subjected to it and not vice versa. So, teachers should begin with lexical units and show how they need to be grammatically modified to be communicatively effective.

The Teacher B's self-assessment report and the selection of tasks disclosed that this teacher gave due attention to the context and did not disregard explicit instruction. This array of tasks revealed that form and meaning were equally important and the meaning-form- meaning progression offered variety and reassured students' performance along the different tasks.

The teacher C's dissatisfaction with the overall organization and development of the tasks set was easily perceived in her self-assessment report. After a study carried out on problems of vocabulary teaching techniques, Oljira (2017) found out that instructors often face trouble in adjusting their teaching techniques and style to specific classroom situations and there are those who fail at applying effective and varied techniques in their English classes simply because they lack continuous professional training of teaching methodology. Unfortunately, the variety and scope of unknown words for this group of learners proved to be unforeseen, never taken into consideration during the planning stage and, consequently, the original time set for the development of the tasks proved to be not enough forcing the teacher to modify it. Although results were checked in groups, it should not be overlooked that the first part of the task was done individually. It would have helped to have arranged the students in groups from scratch. It is well known that students tend to help one another when they are

asked to work in groups; having taken this aspect into account would have most probably reduced not only the number of unknown words but also the time spent on the task.

Limitations and Future Directions

This study poses limitations that point to several directions for future research. To begin with, data were gathered by the end of October, not a good idea considering it was close to the end of the academic term when teachers have to assess their students' performance and decide on their promotion to subsequent courses. That final assessment period left no chance for teachers to think of new interventions and thus make possible adjustments.

This research clearly depicts instances whereby vocabulary is taught explicitly, with some hints of learner training under the direction of the teacher in a systematic way. Yet, incidental learning –referred to above– seems to be catching more and more attention in vocabulary acquisition. Indeed, incidental vocabulary learning through different input, such as audio support, listening to songs, viewing L2 television together with frequency of occurrence and prior vocabulary knowledge is being highly encouraged by researchers due to the significant benefits it seems to offer (Tang 2020, Zhou and Day 2020, Webb and Chang 2015, Peters and Webb 2018, Pavia et al. 2019). Thus, in the future it would be interesting to carry out a longitudinal study with two groups of students: treatment and control, to compare and contrast the effects of both explicit and incidental vocabulary learning.

Conclusion

This study sought to describe an action research conducted by three teachers along with their students in a private secondary school in Argentina. These teachers, assisted by their supervisor, explored the importance of vocabulary teaching/learning as a vital linguistic aspect for L2 acquisition. In view of the results obtained, a number of assumptions can be made.

For some teachers, grammar should be given more importance than vocabulary in their classrooms. Nonetheless, an L2 program should not be simply based on a linear syllabus planned around grammatical items and some associated vocabulary but on lexis, specifically, on word combinations or lexical phrases, which may include some grammatical items. Ideally, the approach should be communicative whereby intentional vocabulary instruction through pedagogical tasks, with a focus on lexical chunks, function as a pivot for language learning. These tasks should be contextualized and thus display that form and meaning are by the same token important for SLA to occur.

Another assumption is based on the notion that selected collaborative techniques for L2 vocabulary acquisition are essential. Collaborative learning, that is, learners working in pairs or small groups to achieve shared learning goals, offers many advantages. It increases self-esteem and motivation among students,

improves complex and cognitive learning, develops interpersonal skills and promotes students' responsibility.

Despite some of the limitations addressed before, the study offers valuable insight into L2 vocabulary teaching and has some implications for L2 education. First, regarding L2 education, it provides support for the view that vocabulary instruction should not be underestimated. Teachers should be made aware of the importance of word building and the battery of vocabulary learning strategies conducive to SLA. Second, the data analyzed show that there is some tension between teachers' beliefs about teaching vocabulary and their reported practice, generating the need for teachers to be acquainted with the latest trends on vocabulary teaching/learning and reflect about their practice. These findings also suggest that in-service teacher development focused on both incidental and intentional vocabulary development is necessary.

We hope the present action research serves to provide a better understanding of the teaching and learning of L2 vocabulary. Indeed, this linguistic aspect is vital for SLA, and as such it should be regarded as central to foster communicative competence. Based on our findings, we encourage other teachers and researchers alike to continue exploring future directions in this field.

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Appendix I

Stage I

Warm-up sample questions:

Did you enjoy the weekend? What did you do last weekend? Did you sleep till late last Sunday? Did you play video games with friends on the weekend? Where did you go last Saturday afternoon? Did you visit your friends last Sunday?

Note: The word “last” is stressed while using nonverbal cues, such as hand signals and gestures. The teacher elicits contributions from students.

Stage II

Teacher’s own previous weekend:

My last weekend was great! I got up at 9AM. on Saturday and went to the beach with my two daughters and my son. In the evening, I watched my favorite Netflix series and I cooked pizza. On Sunday, I didn't wake up early, I slept till late. I got up at 10:30AM. and I had my breakfast at 11:00AM. Then, I visited my parents and I stayed with them the rest of the day.

Note: The word “last” is stressed while using nonverbal cues, such as hand signals and gestures. The verbs in past tense are also stressed while speaking. The piece of false information added is the second sentence (students know their teacher is single and does not have children).

Stage III

Reading Task

Instructions: Read the text about Selena Gomez’ last weekend and complete the chart using the past forms of the infinitive verbs.

Last Saturday morning Selena took her Pilates class. In the afternoon, she practiced her Spanish and learned phrases, such as: “...Es complicado para explicar.” In the evening, she had a romantic dinner on a rooftop. Finally, on Sunday she cooked a chocolate cake. At 6PM. Selena watched her favorite film “The Wizard of Oz” and she listened to some royalty free elevator music before going to bed. That was an exciting weekend in Selena's life!

Infinitive Verbs	Past Tenses
Take	
Practice	
Learn	
Have	

Cook	
Watch	
Listen	
Is	

Note: Passage written by the teacher after retrieving information from: https://www.youtube.com/watch?v=_GFkHA5EZdE 73 Questions With Selena Gomez (Vogue). It is about Selena Gomez – popular actress and singer among students – who takes a shot at answering 73 unexpected questions.

Stage IV

Writing Task:

In pairs elaborate your own last weekend chart. Be ready to use your chosen past forms in sentences and include one piece of false information for your partners to find out!

Stage V

Game: TIC- TAC- TOE

COOKED	HAD	LEARNED
WATCHED	LISTEN TO	WAS
PRACTICED	TOOK	GOT

Exploring Nominalization in Academic Writing: A Comparative Study of Shipbuilding and Oceanography Engineering and Linguistics

By Miao Tian^{*} & Yuxin Zhang[±]

Nominalization, as a universal linguistic phenomenon, is widely used in academic discourse in various fields. In recent years, corpus-based approaches to nominalization have become increasingly prevalent, but nominalization involving academic discourse of Marine-related majors receives little attention. Therefore, this paper selects 108 academic discourse abstracts of Shipbuilding and Oceanography Engineering and 50 abstracts of Linguistics academic discourses, based on the definition of nominalization, the common form of ideational grammatical metaphor from Halliday and Zhu Yongsheng's classification to achieve the analysis of nominalization. It explores the cross-disciplinary differences and frequency of different types of nominalizations and their functions in the selected abstracts. The results show that the common use of nominalizations and the most frequent type is "take process as thing" which shows a significant difference across the two disciplines, signifying disciplinary differences in academic writing. Besides, this paper finds the three most commonly used nominal patterns of each corpus. It provides a couple of possible reasons and elaborate explanations for the particular consequence, expecting that it can contribute to future research in this field and abstract writing in academic discourse.

Keywords: *nominalization, grammatical metaphor, academic writing, disciplinary differences and similarities*

Introduction

Under the framework of Systemic Functional Linguistics (SFL), nominalization is emphasized as the single most powerful resource for creating a grammatical metaphor (Halliday 2004), which has made a great contribution to the development of nominalization studies. Nominalization is one of the most prevalent, special,

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and recognizable linguistic features which is widely used in the scientific and technical registers (Halliday and Matthiessen 1999, Biber and Grey 2013), and it is an efficient means for information packaging and a typical technique to increase information density (Halliday and Matthiessen 2004). It has been purposefully employed in formal and scientific languages. Academic writing, which serves as a prototypical example of scientific language, possesses a high degree of formality and objectivity. Lexical density, nominal structure, and impersonal style are preferable ways to communicate these features (Hyland 2006). As a special case of scientific writing, Halliday and Martin (1993, p. 124) noted that “it seems there are certain features of the way meaning are organized and the way they are worded”. The development of academic writing studies concerning language use has been promoted by the high degree of nominalization and formal discourse.

It has garnered a great amount of attention and interest for decades, which has encouraged researchers to explore nominalization in different genres. Numerous studies, comparing literary and editorial language with scientific language, have been conducted, demonstrating that nominalization is used in scientific language more frequently than in literary language. It plays a crucial role in constituting technicality in the latter (Ahmad 2012, Prasithrathsint 2020, Wang 2003, Wang and Yang 2016). These comparative studies aim to reflect the traits and purposes of nominalization used in the scientific language.

Although academic writing in different disciplines generally has the same structure and purpose, there is the important distinction in lexis and morphology in terms of vocabulary use and phrase collocation. It varies in disciplines in response to the disciplinary conventions and communities (Hyland 2009). Discipline construction in academic writing is largely influenced by personal ideas and experiences, institutional features, and social culture, which results in disciplinary distinctions (Hyland 2006). Previous studies of nominalization on the disciplinary differences of academic discourse have primarily focused on Linguistics (Zhou and Liu 2017), Physics (Liu and Cheng 2019), textbooks of Biology (Hao and Humphrey 2019), Plain English and Legal Writing (Hartig and Lu 2013). All of them either study the typical features in language use between English as a first language and English as a second or foreign language or explore the function of nominalization in academic texts of a certain discipline.

Besides, a large number of comparative researches keep appearing on the use of nominalizations to expose disciplinary differences and variations in academic discourses, for example, Jalilifar et al. (2014, 2017), Gonzalez and Valeska (2019), Marr and Mahmood (2021), Ahmad (2012), He and Yang (2018), etc. There is a demonstration that nominalizations in academic discourses are not sensitive across disciplines, and some of the above studies indeed verified that there is no significant variation across disciplines on nominalization in scientific language (Jalilifar et al. 2014, 2017, He and Yang 2018), and other studies revealed

nominalization was designed with the universality and technicality without mentioning any disciplinary differences nominalization used (Ahmad 2012).

Above all, as for exploring nominalization in academic writing, there is still some room for research on Shipbuilding and Oceanography Engineering and Linguistics to discover the inherent linguistic features of each discipline. This is especially important for Shipbuilding and Oceanography Engineering, which has received less attention. Therefore, it is worth exploring the frequency and distribution of nominalization in the different two disciplines to find the similarities and differences. The comparative analysis of Shipbuilding and Oceanography Engineering and Linguistics has not been undertaken in the Linguistics field. The majority of the studies on nominalization that were cited above compare Linguistics with many other fields. This paper selected the two, one that is commonly studied, and the other is rarely studied, which can provide a new direction for studies on nominalization as well as proceed a thorough exploration of linguistic characteristics of the two disciplines. A need for research on nominalization inspires scholars to pay closer attention to it in academic writing across disciplines to present more inherent cross-disciplinary features through the usage of nominalizations.

Nominalization in SFL

Nominalization is studied from a variety of linguistic schools, including structural linguistics represented by Jespersen, transformational generative linguistics, and systemic functional linguistics (Fan and Wang 2003, Liu and Lu 2004). However, Halliday's investigation into nominalization is the most thorough and systematic of these three schools.

Nominalization in SFL is a fundamental element of grammatical metaphor and was initially discussed in the book *An Introduction to Functional Grammar* (Halliday 1985). In an elaboration on metaphor (Ravelli 2003), Halliday argued that metaphor is not only simply a variation in the use of words that refer to cognitive metaphor but also their uses and meanings (Taverniers 2003). According to Halliday (1985, cited in Taverniers 2003, p. 7), metaphor is a variation of a given meaning instead of a variation in the meaning of a given expression. This claim is regarded as the origin of grammatical metaphor.

Lexis, uses, and meaning are all metaphorical terms that relate to the two separate forms. Both of them have parallel two domains, but different names and meanings. According to Halliday (1994 p. 342), grammatical metaphor refers to "for any given semantic configuration there will be some realization in the lexicogrammar—some wording—that can be considered CONGRUENT; there may also be various other that are in some respect 'transferred', or METAPHORICAL". Although there are various techniques to transform metaphorical construction

from congruent construction, the fundamental step is to rewrite and reconstruct the clausal patterns into nominal groups (Halliday and Matthiessen 2004). Ascribing to this, nominalization is acknowledged as one of the most indispensable components of grammatical metaphor.

The significance of nominalization in constructing academic writing has always been a topic of discussion among researches. Baratta (2010) addressed that it is unnecessary to use nominalization instead of a personal subject within an academic program. However, further evidence supports the notion that nominalization is crucial for obtaining lexical density, cohesiveness, formality, and conciseness (e.g., Halliday 1998, Schleppegrell 2001, Liardet 2016, Liardet and Black 2020, Liardet 2019). For instance, Liardet (2016) examined the function of grammatical metaphor and found that it is important for a learner's performance in an academic setting. All of them illustrated that nominalization under the SFL framework is more in line with the linguistic characteristics of academic writing.

The authors here share the latter view and support it with examples by highlighting how crucial nominalization is when constructing academic discourse. Besides, as only a few numbers of researches have indicated that nominalization is discipline-sensitive, this paper desires to explore nominalization under the framework of SFL across disciplines and seeks to identify disciplinary variances and similarities in it. In light of the foregoing research and inquiry, the study is intended to address the following two concerns.

1. Is there a difference in the distribution of nominalization across disciplines? And to what degree do the two corpora differ from each other in the distribution of nominalization?
2. How does nominalization reflect the differences in academic writings across disciplines?
3. Are there any similarities of the nominalization which distribute differently across corpora? And what are the similarities?

Methodology

Both quantitative and qualitative research methods were adopted in this corpus-based investigation. Typical examples and precise data are extended to study the linguistic properties of the two self-built corpora, Shipbuilding and Oceanography Engineering Academic English Corpus (SOEAE Corpus) and Linguistics Academic English Corpus (LAE Corpus). The following section aims to provide a thorough overview of corpora, research methods, and the research process.

Corpus

This study is proceeded by two corpora, one is SOEAE Corpus, and another is LAE Corpus. The former contains 108 journal paper abstracts written in English referring to Shipbuilding and Oceanography Engineering, all of which were published within the last five years (from 2016 to 2020). After text cleaning and sorting, a small corpus was built with a total number of 21,451 words and an average word count of 199 for each abstract.

The authors built another corpus used as the comparable one. It is composed of Linguistics abstracts of 50 pieces of journal papers written in English. Additionally, the fundamental ideas of the selected journal papers are essentially the same as those of SOEAE Corpus, for example, in the same time range (from 2016 to 2020). The download abstracts are used to build LAE Corpus. It is capable of 8470 words in total number and an average of 169 words per abstract.

Procedure

To determine the various properties of nominalization using, nominalization collocation, and nominalization function in corpora of the two distinct fields, identifying, classifying, and quantifying are implemented after the corpora's construction.

Identifying and Quantifying

Nominalization defining is always a challenging issue, and academics continue to hold differing views on the subject. Derewianka (2003) argued that the principles of grammatical metaphor identification follow derivational morphology, agnition, and rank shifting. This paper retrieved nominalizations depending on the above principles. Halliday and Matthiessen (1999), as well as Matthiessen (1995), made a clear distinction between transcategorization and grammatical metaphor as well as rankshifted embeddings and grammatical metaphor. The author retrieved all the nouns first, and manually labeled the nominalizations among these nouns because not all the nouns are nominalizations. For example, some verbs are converted into nouns rather than nominalization (e.g., writer, container), the gerund form (e.g., writing, operating), and proper nouns (e.g., International Regulations for Preventing Collisions at Sea).

Classifying

Thirteen different types of grammatical metaphors, including those relating to ideational and interpersonal grammatical metaphors, are described in detail by Halliday and Matthiessen (1999). They thought that nominalization is one part of the ideational grammatical metaphor that can be outlined into five types. This

viewpoint is a little abstract to comprehend.

As studies on the topic proliferate, on the backs of Halliday and Matthiessen, Zhu (2006) put forward a new classification of nominalization, classifying nominalization as three types, “take process as thing”, “take quality as thing” and “take assessment as thing”. In comparison to the taxonomy of Halliday and Matthiessen (1999), it is more specific and precise and has the potential to operate flexibly with distinct classifying criteria. Zhu’s (2006) classification of nominalization is detailed in Table 1.

Table 1. *Zhu (2006) Taxonomy of Nominalization*

Type	Conversion		Example	
Take process as thing	verb	thing	investigate	investigation
Take Quality as thing	adjective	thing	hungry	hunger
Take assessment as thing	modal verb/ modal adverb	thing	could	potential

Several words in the classification process fell into ambiguous nominalization categories, such as VARIABLE, DIFFERENCE. They were concluded as two outcomes: first, the boundary ambiguous words can be traced directly to the verb or adjective forms, for example, VARIABLE, which was placed in the classification of “take process as thing”. Secondly, and the other is that they can be traced to both adjective and verb forms, such as DIFFERENCE, for which the authors use the word root as the principle of division, DIFFERENCE classified into “take process as thing”.

Results and Discussion

Comparison Results of Nominalization Distribution

The authors counted all the nominalizations in the two corpora to answer the first question: Is there a difference in the distribution of nominalization across disciplines? And to what degree do the two corpora differ from each other in the distribution of nominalization?

Table 2. *Frequency of Nominalization in Two Corpora*

Corpora	Word number/ (word)	Nominalization/ (word)	Frequency/ (thousand words)
LAE Corpus	8470	539	63.6
SOEAE Corpus	21307	1922	90.2

Table 2 shows that the SOEAE Corpus and LAE Corpus both have

nominalization frequencies of roughly 90.2 and 63.6, respectively.

Further, the retrieved nominalizations are divided into three categories based on Zhu's (2006) taxonomy of nominalization: "take process as thing" (Type 1), "take quality as thing" (Type 2), and "take assessment as thing" (Type 3). Table 3 presents the frequency of nominalization types used and the difference in the particular type in the two corpora.

Table 3. *Frequency of Types of Nominalizations*

corpora nominalization types	LAE Corpus		SOEAE Corpus		Significance (p-value)
	Raw frequency	Frequency/ Percent	Raw frequency	Frequency/ Percent	
Type 1	409	75.9	1527	79.4	0.0266
Type 2	128	23.7	389	20.2	0.4091
Type 3	2	0.4	6	0.4	0.5579
total	539	100	1922	100	0.5672

In terms of the total amount of nominalization, no differences in the number of nominalizations are reflected in the two corpora.

Table 3 provides the raw number, standard frequency of each type and the significance of the differences between the individual types in the two corpora, the frequencies of the three types in LAE Corpus are 75.9%, 23.7%, and 0.4%, while in SOEAE Corpus are 79.4%, 20.2%, and 0.4% respectively. Longitudinally, both disciplines prefer to use Type 1 nominalization in academic discourse. In terms of the significance of difference, the p-values for the three types are, respectively, 0.0266 ($p < 0.05$), 0.4091 ($p > 0.05$), 0.5579 ($p > 0.05$), and 0.5672 ($P > 0.05$). There is a significant difference in the frequency of Type 1 (take process as thing), meaning that it occurs more frequently in Shipbuilding and Oceanography Engineering than it does in Linguistics. However, there is no discernible difference in the frequency of Type 2 and Type 3 between the two disciplines.

Nominalizations and Nominal Groups

This section is created for the second research question: How does nominalization reflect the differences in academic writings across disciplines? Nominalizations were set into nominal groups to ascertain the difference.

A nominal group refers to a variety of other items that precede and follow a noun and all of which characterize the noun in some ways (Halliday 2004). Halliday (2004) proposed the experiential structure of nominal groups and explained in detail the specific meaning of each component. Take *those two splendid old electric trains with pantographs* as an example (example from

Halliday 2004, p.312), the nominal group consists of *deictic*, *numerative*, *epithet*, *classifier*, *thing*, and *qualifier*. Nominalization as the subclass of nouns can be in line with what has been described above about nominal group. Therefore, we apply Halliday's definition of components to the testification of disciplinary differences identified by nominalization. Besides, deictic words cannot affect results of the paper, such as *a*, *an*, *the*, *this*, *that*, etc. nominal groups described here without much emphasis. Table 4 specifies the components of the nominal group by giving concrete examples.

Table 4. *Explanation for Components of Nominal Groups*

Example: <i>Those two splendid old electric trains with pantographs</i> (Halliday 2004, p. 312).						
those	two	splendid	old	electric	trains	With pantographs
deictic	Numerative	epithet	epithet	Classifier	Thing	qualifier

In light of the definition and components mentioned above, the authors concluded 11 common patterns of two corpora and 1 pattern, especially for Linguistics. Patterns and examples are listed in Table 5.

Table 5. *Nominal Patterns and Examples of Type 1*

Pattern number	Patterns and Examples	Raw Frequency/%	
		SOEAE Corpus	LAE Corpus
#1	Thing+ Qualifier <u>The investigation</u> of language acquisition in related languages reveals how children's attention to the adult language limits the operation of both universal and individual processes (LAE Corpus, Pye et al. 2017).	236 15.46	99 24.24
#2	Epithet...+ Thing Expansion of real-time operating data from limited measurements to obtain full-field displacement data has been performed for structures in air. This approach has shown great success, ... (SOEAE Corpus, Chen et al. 2018)	36 2.36	20 4.89
#3	Epithet...+ Thing...+ Qualifier ..., constraining the <u>possible lexicalization</u> of object concepts. (LAE Corpus, Ursini and Acquaviva 2019)	21 1.38	29 7.09
#4	Epithet...+ Classifier...+ Thing The goal of this research is to discover the potentials to design multi-objective optimal elastic structures for <u>better acoustic performance</u> . (SOEAE Corpus, He and Sun. 2018)	51 3.34	13 3.18
#5	Epithet...+ Classifier...+ Thing+ Qualifier The analysis provides a comprehensive functional description of the N1 of N2 pattern in the context of disciplinary academic writing. (LAE Corpus, Liu and Lu 2020)	52 3.41	6 1.47
#6	Classifier...+ Thing We have found that geometrical and <u>dynamic constraints</u> can substantially reduce the volume fraction of feasible solutions in the design space, ... (SOEAE Corpus, He and Sun 2018)	626 40.86	118 28.85
#7	Classifier...+ Thing+ Qualifier We have found that geometrical and dynamic constraints can substantially reduce the <u>volume fraction</u> of feasible solutions in the design space, ... (SOEAE Corpus, He and Sun 2018)	339 22.20	50 12.22
#8	Thing On the other hand, constructional prior knowledge regulates the <u>innovations</u> . (LAE Corpus, Peng 2016)	128 8.38	59 14.43
#9	Numerative+ Thing+ Qualifier ... pressure integration method that integrated the <u>second-order pressure</u> on a	3 0.20	3 0.73

	body surface. (SOEAE Corpus, Park and Kim 2019)		
#10	Numerative+ Thing Neither of the two observations has been convincingly addressed in previous studies, ... (LAE Corpus, Peng 2016)	0 0	5 1.22
#11	Numerative+ Classifier...+ Thing ... double layer pressure measurements are used to replace the measurements of the pressure and normal velocity which uses costly p-u probes. (SOEAE, He et al. 2017)	9 0.59	3 0.73
#12	Numerative+ Classifier...+ Thing+ Qualifier We identify three institutional motivations working to over-ride the normal communicative contract... (LAE Corpus, Antaki and Stokoe 2017)	28 1.83	4 0.98

Two decimal places are retained here as the frequency of nominal groups cannot be rounded off, which does not influence the result of the study. In addition, ellipses in pattern #2, pattern #3, pattern #4, pattern #5, pattern #7, pattern #8, pattern #12, and pattern #13 denote the presence of several classifiers or epithets in those patterns. An explanation is given in Table 6.

Table 6. *Explanation for Ellipse*

Example: ... double layer pressure measurements are used to replace the measurements of the pressure and normal velocity which uses costly p-u probes. (SOEAE Corpus, He and Sun 2018)			
double	layer	pressure	measurement
Numerative	Classifier 1	Classifier 2	Thing

Nominalizations operate at distinct frequencies in the different corpora. What causes this to occur? According to Table 5, pattern #7, pattern #8, and pattern #1 are the three which are most prevalent used in Shipbuilding and Oceanography Engineering, and pattern #7, pattern #1, and #9 are most frequently used in Linguistics. There are similarities, indicating that pattern #7 is present in both corpora in significant numbers, however, focusing on the variations in patterns usage demand greater consideration. To examine the differences, pattern #4, Pattern #5, pattern #6, and pattern #7 are placed in Group 1, and pattern #1, pattern #2, pattern #3, and pattern #8 are in Group 2. By the way, this study does not take patterns #9, #10, #11, and #12 into account due to their extremely low frequency and insignificant influence on the result.

Nominal Patterns with Classifier

Here pattern #4, pattern #5, pattern #6, and pattern #7 are grouped as Group 1 for analysis, for one reason that they all contain a classifier, for another is that it is more straightforward to make a comparison between two different types of a classifier.

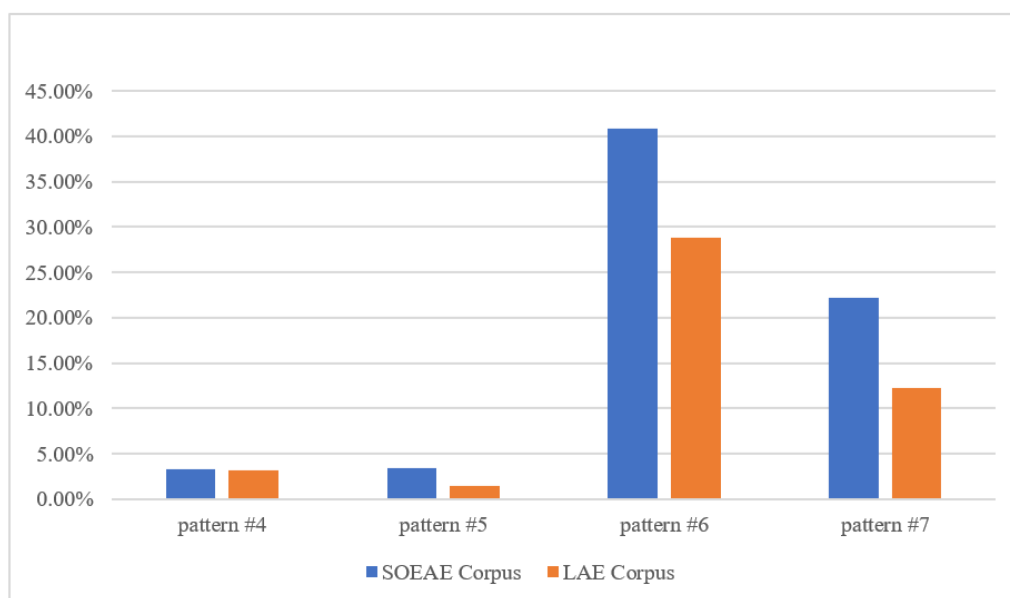
In light of Halliday (1994, 2004), a classifier can be expressed using an adjective or a noun as demonstrated by the examples in pattern #5 [Epithet...+ Classifier...+ Thing+ Qualifier] and pattern #6 [Classifier+ Thing]. It always refers to a subclass of *thing*. The following language traits are present in both

disciplines.

Patterns #4, #5, #6, and #7 are examples of patterns with classifiers that appear more frequently in the SOEAE Corpus than in the LAE Corpus, whereas patterns #1, #2, #3, and #8 are examples of patterns without classifiers that appear more frequently in the LAE Corpus than in the SOEAE Corpus. In the next two figures, the specifics are displayed (Figures 1-2).

The number of patterns is clearly illustrated in Figure 1. Pattern #4[Epithet...+ Classifier...+ Thing] is 3.34% in SOEAE Corpus and 3.18% in LAE Corpus. Pattern #5[Epithet...+ Classifier...+ Thing+ Qualifier] is 3.41% in SOEAE Corpus and 1.41% in LAE Corpus. Pattern 6[Classifier...+ Thing] is 40.86% in SOEAE Corpus, and 28.85% in LAE Corpus. Pattern #7[Classifier...+ Thing+ Qualifier] is 20.2% in SOEAE Corpus and 12.22% in LAE Corpus. Comparing the two columns in Figure 1 which shows that in the SOEAE Corpus, patterns including classifiers occur more frequently.

Figure 1. *Patterns with Classifier in Two Corpora*



Additionally, Shipbuilding and Oceanography Engineering outperforms Linguistics in terms of the four nominalization patterns in Group 1 with a percentage of 45.72% compared to Linguistics' overall percentage of 69.81%. Pattern #6 [Classifier+ Thing] dominates these two corpora, occurring 118 (28.85%) times in linguistics, 626 (40.86%) times in shipbuilding and oceanography engineering, and over half of all nominalization patterns. It means that more nouns, including nominalizations, are used as classifiers in the SOEAE Corpus. Table 7 provides classifier incidence information.

Table 7. *Frequency of Type 1 Nominalization as a Classifier*

Corpus Name	Raw Frequency	Frequency/%
SOEAE Corpus	467	30.58
LAE Corpus	47	11.49

Table 7 displays the number of Type 1 nominalizations used as a classifier in the two corpora. They are manually located and selected from each corpus's nominal patterns as classifiers to ascertain whether or not the number of nominalizations used is significantly influenced by classifiers. The nominal patterns of the SOEAE Corpus can be recognized to use 467 nominalizations as classifiers, and roughly 30 out of every 100 nominalizations are used as classifiers to modify the head of a nominal group. The nominal groups in the LAE corpus contain 47 instances of nominalization as a classifier. Roughly 11 nouns out of every 100 words serve as classifiers. Because of this, more nominalizations are used as classifiers in the SOEAE corpus, suggesting that this may be one of the reasons why nominalizations are used more frequently in the SOEAE corpus than the LAE corpus.

A great number of patterns, like classifier (nominalization) + thing (nominalization) in Shipbuilding and Oceanography Engineering tends to express the semantic meaning involving model (e.g., propagation model, equal weight stochastic model) method (e.g., parameter estimation method, identification method), structure (bow appendage), etc. These modes of expression highlight the particularities of a given discipline and differences between disciplines.

Table 8. *Patterns and Examples*

Example of pattern #4 [Epithet...+ Classifier...+ Thing] in SOEAE Corpus
From the experimental investigation, it emerged that increase in backpressure, along with <u>greater injection pressure</u> , minimizes the spray non-uniformity (Shipbuilding and Oceanography Engineering, Coratella et al. 2020).
Example of pattern #5 [Epithet...+ Classifier...+ Thing+ Qualifier] in LAE Corpus
Metaphorical construction: The analysis provides a <u>comprehensive functional description</u> of the N1 of N2 pattern in the context of disciplinary academic writing. (Linguistics, Liu and Lu 2020)
Congruent construction: The analysis <u>describes the N1 of N2 pattern in the context of disciplinary academic writing in function, which is comprehensive.</u>
Example of pattern #6 [Classifier+ Thing] in SOEAE Corpus
We have found that <u>geometrical and dynamic constraints</u> can substantially reduce the volume fraction of feasible solutions in the design space, ... (Shipbuilding and Oceanography Engineering, He and Sun 2018)
Example of pattern #7 [Classifier...+ Thing+ Qualifier] in SOEAE Corpus
This may be attributed to the boosting action exerted by <u>cylinder backpressure on the needle</u> , ... (Shipbuilding and Oceanography Engineering, Coratella et al. 2020)

*The examples not noted specially are metaphorical form.

Besides, nouns and adjectives behave very differently when it comes to the transformations of congruent and metaphorical construction. Table 8 shows the congruent and metaphorical construction, specifically for pattern 5, as well as the metaphorical construction, which is shown just for patterns #4, #6, and #7. Comparing examples from patterns #4 [Epithet...+ Classifier...+ Thing], #6 [Classifier...+ Thing], and #7 [Classifier...+ Thing+ Qualifier] with pattern #5 [Epithet...+ Classifier...+ Thing+ Qualifier] reveals that adjectives used as classifiers can be transformed from metaphorical constructions into congruent constructions, such as the conversion from a brief and formal declaration to a more complex one in pattern #5 [Epithet...+ Classifier...+ Thing+ Qualifier]. However, nouns cannot be transformed into congruent construction when they are used as classifiers. The noun is often co-selected with the *head* when employed as a classifier to indicate a particular meaning in the specific language context. For instance, terms often used in Shipbuilding and Oceanography Engineering, such as injection pressure, fuel consumption, cylinder backpressure, etc. cannot be traced back to their congruent construction. It is consistent with Halliday's assertion that a nominalization can be traced back to a congruent construction because a nominalization without context can be linked to a congruent construction. However, in a specific context, usage restrictions limit the metaphorical construction in a collocation, making it impossible to change without altering the meaning.

Nominal Patterns without Classifier

Group 2 is made up of the remaining four nominal patterns, which are patterns #1, #2, #3, and #8. They include adjectives, things, and qualifiers, all of which are frequently devoid of classifiers. Between the SOEAE Corpus and the LAE Corpus, the frequency of nominal patterns without a classifier is compared in Figure 2.

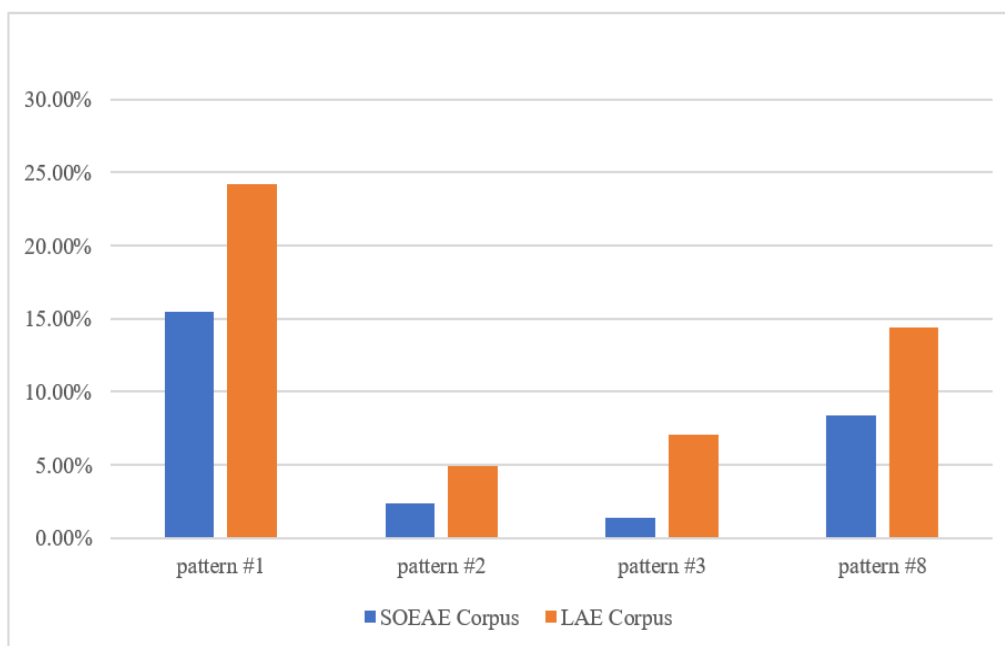
Figure 2. *Patterns without Classifier in Two Corpora*

Figure 2 compares the frequencies of the four nominal patterns in the two corpora with regard to Group 2, clearly signifying that more patterns without classifiers are used in LAE Corpus than those in SOEAE Corpus. Pattern #1[Thing+Qualifier] is 24.24% in LAE Corpus and 15.46% in SOEAE Corpus. Pattern #2 [epithet+ Thing] is 4.89% in LAE Corpus and 2.36% in SOEAE Corpus. Pattern #3 [epithet...t+ Thing+ Qualifier] is 7.09% in LAE Corpus and 1.38% in SOEAE Corpus. Pattern #8[Thing] is 14.43% in LAE Corpus and 8.38% in SOEAE Corpus. It implies that all four patterns in Group 1 share that the frequency of occurrence of any one of the patterns in the LAE Corpus is more than that in the SOEAE Corpus.

Patterns #1 and #8, which lack any modifiers, are the two simplest nominal groups. As seen in Figure 2, linguistics, as opposed to Shipbuilding and Oceanography Engineering, prefers to utilize nominalization alone or when it is modified by postpositions. Thus, the authors speculate that it may be one of the reasons that there are fewer nominalizations in the LAE corpus than in the SOEAE corpus.

Additionally, epithets are used as modifiers in patterns #2 and #3. It highlights how adjectives are frequently used in Linguistics to modify nouns in a nominal group. According to Halliday (1994, 2004), adjectives are always employed as epithets in the experiential structure. That is to say, compared to the other, adjectives are used as adjective nominal modifiers more frequently in academic English.

Similarities Reflected Through Nominalization

Although the corpora of the two disciplines reflect differences in the number of uses of Type 1 nominalization, they are similar in function. In this section, in order to answer the third question, the authors conducted a thorough investigation of the functions of nominalization using concrete examples to address the third question.

Table 9. *Nominalization Function of Objectiveness*

<p>Example 1</p> <p>Metaphorical construction: The investigation of language acquisition in related languages reveals how children's attention to the adult language limits the operation of both universal and individual processes (Linguistics, Pye et al. 2017).</p> <p>Congruent construction: We/ I/It investigate (s) language acquisition in related languages reveals how children's attention to the adult language limits the operation of both universal and individual processes.</p>
<p>Example 2</p> <p>Metaphorical construction: Predictions of independent operation were also promising (Shipbuilding and Oceanography Engineering, Kuuliala et al. 2017).</p> <p>Congruent construction: we predicted independent operation, which is also promising.</p>

The two examples from each corpus presented in table 9 involve an expression of metaphorical and congruent construction. In example 1 the writers of this passage used THE INVESTIGATION OF instead of SUBJECT+ INVESTIGATE. PREDICTION instead of PREDICT in example 2 achieves the same function. Both of them have the same function, which makes the explanation and results expressed more objective and convincing by omitting the subject using. Hyland and Jiang (2017) claimed that objectiveness can be achieved by omitting the subject.

Table 10. *Nominalization Function of Integrity*

<p>Example 1</p> <p>Metaphorical construction: The analysis provides a <u>comprehensive functional description of the N1 of N2 pattern in the context of disciplinary academic writing.</u> (Linguistics, Liu and Lu 2020).</p> <p>Congruent construction: The analysis <u>describes the N1 of N2 pattern in the context of disciplinary academic writing in function, which is comprehensive.</u></p>
<p>Example 2</p> <p>Metaphorical construction: It enables decision makers to choose optimal repair option with respect to different service life extension needs (Shipbuilding and Oceanography Engineering, Liu et al. 2019).</p> <p>Congruent construction: It enables decision makers to choose for optimal repair with respect to different service life extension needs.</p>

In the metaphorical construction of example 1, the word "DESCRIPTION" is modified by three premodifiers. While in the congruent form, the modifiers of the

word are broken up and scattered throughout the sentence. Compared to the metaphorical construction, the sentence structure of the congruent construction is not sufficiently integrated. By enclosing the head word in a number of modifiers in these examples, nominalization serves the purpose of maintaining the integrity of the language. The majority of nouns are modified by other words, which can be realized in the patterns of Table 5, such as pattern #2, pattern #3, pattern #4, pattern #5, pattern #6, pattern #7, pattern #11 and pattern #12, which all frequently include an epithet or a classifier to modify *thing*.

It is well known that nominalization is more effective at expressing the function of increasing the information in a sentence by superimposing modifiers to increase sentence density (Halliday 1994, Zhu 2006), which is best shown in the above examples. No significant differences in the function of nominalization used are reflected in the two corpora, which may be due to the consistent genre of the selected texts. Academic discourse has its own writing rules, language norms, and target audience.

Discussion

In terms of function, Hasan (1977) claimed that genre is related to the field which largely determines the choice of language in communication and the grammatical features of the lexis. Although the two corpora cover different disciplines, they are of the same genre, therefore it may be the reason that no discrepancies were identified when the nominalization functions in the two corpora were analyzed with particular instances in this article. Although no functional differences were found, nominalization occurs heavily in both corpora, and the authors believe that there are several main reasons for this. Nominalization transforms processes into things, and as objects are static and objective rather than subjective, they cannot be simply refuted (Song 2008). In addition, the degree of formality of the discourse is correlated with the frequency of nominalization (Wang 2003). Academic discourse is more formal when compared to other genres. Besides, the target group for academic discourses has a high requirement of language proficiency which can be achieved by nominalizations. Regarding the frequency of nominalization and nominal groups, it discovered that patterns #6, #7, and pattern #1 in the SOEAE Corpus, and patterns #6, pattern #1, and pattern #9 in the LAE Corpus, were the three most commonly used nominal patterns of each corpus. The common two patterns, pattern #6, pattern #1 as well as pattern #7 in SOEAE Corpus can be concluded as a noun phrase. Lan et al. (2022) mentioned that academic writing is full of compressed noun phrases whose heads are usually modified. In recent centuries, studies have shown that compressed noun phrases are increasingly employed in academic writing (Biber and Gray 2011). Therefore,

this paper also convincingly demonstrates the widely used noun phrases taking over 78.52% of SOEAE Corpus and 52.5% of LAE Corpus.

Although pattern #6 is the most frequently used of the two corpora, the significant distinction in the frequency can be explained by the divided two groups. Any patterns in Group 2, particularly, pattern #2 and pattern #3 with epithets as the only modifier in SOEAE Corpus occur less than in LAE Corpus, while the frequency of any of the four nominal patterns in Group 1 in SOEAE Corpus occurs more than those in LAE Corpus. That is to say, the discipline of Shipbuilding and Oceanography Engineering is more inclined to deploy classifiers (including more nominalizations) as modifiers, while Linguistics tends to regard epithets (adjectives) as modifiers or without any modifiers. Classifiers used as modifiers as mentioned by Halliday (1994, 2004) are often expressed as a subclass of something. A majority of Classifier (nominalization) + Thing used in SOEAE Corpus to realize sets of generally perceived concepts (e.g., ice resistance test, energy storage device, simulation model, combustion chamber, etc.), methods (e.g., simulation method, resistance method, energy management strategy, etc.) or procedures in certain experiments (e.g., optimization procedure, emission constraints, echolocation click, etc.). These kinds of expressions can be summarized as [Nominalization+ Noun/Nominalization] which signifies a very high density of nominalization widely existing in SOEAE Corpus, being directly responsible for the more nominalization used in the discipline of Shipbuilding and Oceanography Engineering.

Regarding the claim that there are more adjectives used as modifiers in the LAE Corpus, on the one hand, some adjectives are used as classifiers expressed as concepts or procedures (e.g., bilingual education, multilingual education, pragmatic modulation, etc.), while others are chosen as epithets to modify nouns or nominalizations, such as “high occurrence of”, “better performance”, “significant professional realignment”, etc., such expressions always appearing in the LAE Corpus. The modifiers in the nominal groups serve to evaluate the noun as well as just supply a piece of information. Biber (2006) claimed that adjectives are used as attributives to express evaluations of head nouns, for example, good, bad, great, terrible, and so on, such adjectives are used to express a positive or negative effect. There are great differences in the expression and quantity of evaluation among different disciplines. Compared with hard science, soft science has more engagement with readers (Zou and Hyland 2020). Thus, fewer nominalizations are employed in LAE Corpus.

Since the LAE Corpus increasingly aims to use adjectives as modifiers rather than nouns, whereas the SOEAE Corpus is more likely to use nouns (including nominalization) as modifiers (including nominalization). This influences how differently Type 1 nominalizations are utilized in the corpora of the two disciplines; in other words, Shipbuilding and Oceanography Engineering uses

more Type 1 than Linguistics.

Conclusion

The current study explores disparities in the frequency of nominalization and compares the functions of nominalization in abstracts of academic discourses from two distinct fields, Shipbuilding and Oceanography Engineering and Linguistics. Results show that in neither of the two corpora did the nominalization function accounts for the distinction. Nominal groups are the most appropriate explanation for the significant difference in Type 1 nominalization, which relates to the fact that Type 1 nominalization is more prevalent in the former than in the latter. Additionally, this paper identifies patterns that are often employed in these two disciplines, with patterns #7, #8, and #1 in the SOEAE Corpus and patterns #7, #9, and #1 in the LAE Corpus accounting for more than half of each corpus. In the research of nominalization, the discipline of shipbuilding and oceanography engineering has not been well examined. Thus, this paper serves as a reference for its future growth and advancement. Besides, Type 1 nominalization (take process as thing) signifies a substantial variation between the two fields, which can point to additional investigations on nominalization among disciplines. The appropriate use of nominalization can also assist academic writers in structuring language more coherently and in keeping with the characteristics of academic writing.

Clearly, this paper is limited to the inconsistent number of texts in two corpora, which may slightly have an impact on the result. Besides, it was limited to the already-existing functions, and no functional distinction between the two corpora was discovered. Therefore, further research is needed to investigate the across-disciplinary differences concerning the nominalization involving Shipbuilding and Oceanography Engineering.

Acknowledgments

This research is a phased achievement of “The Construction and Studies of Shipbuilding and Oceanography Engineering Academic English Corpus”, supported by Philosophy and Social Science Research Planning Project of Heilongjiang Province (No. 22YYE479). [黑龙江省哲学社会科学研究规划项目 “‘船舶与海洋工程’ 学科学术英语语料库的建设与研究” (编号: 22YYE479) 的阶段性成果]

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***Ōlim* in the the Tacitean Corpora**

By Tikva Zadok*

In studies on Latin adverbs the discussion of a specific temporal adverb in a certain corpus is rare. Moreover, an adverb peculiar to the treatises of Tacitus has not yet been analyzed in the studies concerning his language and style. Our study fills a gap, to a certain extent, on the adverbs' researches in Latin prose and in the Tacitean corpora by examining the characteristic and unique usages of ōlim in his treatises. We surveyed selected studies dealing with general and specific adverbs, as well as with the language and style of Tacitus. Our grammatical approach adopted here is descriptive. It offers a thorough analysis of a specific adverb in a prose opus of one author, which is a restricted and homogeneous corpus. This enables us to present the full documentation of ōlim in the selected corpus of Tacitus. Our main results are: ōlim is documented in all the books with two meanings "formerly" and "long ago". It occurs in proximity to posterior adverbs for emphasis, contrast, etc. The modified part of speech is mostly explicit: finite verbs in the past, participia, adjectives, infinitives or more than one element. Its prevalent position is before the modified part of speech, sometimes after it or it has two positions regarding the modified element. A comparison of ōlim between the treatises yielded identical and different features.

Keywords: *chiasmus, explicit, finite verb, multiple clause, ōlim, parallelism, posterior, syntactic position*

Introduction

The Purpose and Innovation of this Research

This research exemplifies by means of a detailed linguistic analysis the characteristic and unique usages, including content and style, of *ōlim* in the Tacitean corpora. This kind of research arises from a paucity of comprehensive researches on a specific adverb in a certain corpus in Latin prose and in the Tacitean corpora. The studies mentioned in §§0.1-0.1.2 below are based mainly on Cicero's works and to a lesser extent on comedy and poetry without quoting from Tacitus' treatises. The lexical denotations of *ōlim*, which concern historical events by various linguistic means, is frequent in Tacitus' treatises. Our innovation is an exhaustive analysis of *ōlim* in the pertinent corpus of Tacitus, which is a restricted and homogeneous one. This study fills a gap, to a certain extent, and contributes to the adverbs' studies of Latin prose in general and of the Tacitean corpora in particular. It enhances our understanding of the relationship between contents of various works of Tacitus and the usage of adverb in question.

Selected Studies on Latin Adverbs

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Studies on Adverbs in General

1) Devine and Stephens (2006) on “*Latin Word Order*” deals at length with word order in a clause/sentence in general without a detailed analysis of a specific adverb in a certain corpus; 2) Löfstedt (1967) discusses the frequency of the adverbs’ morphemes, nouns and adjectives in m./n. sg., which are used in certain contexts as an adverb; 3) Menge (1961, §§461–498) concerns the adverb’ meanings; phrases with similar meanings to an adverb and adverbial suffixes; 4) The monumental study of Pinkster (1972) “*On Latin Adverbs*” contains a critical discussion of the adverbs’ treatment in Latin studies, a description of their functions and syntactic characteristics, classificatory problems and adverbs used for several descriptions. Pinkster emphasizes the need for further studies on adverbs; 5) Schafner-Rimann (1958) discusses the adverbial suffix *-tim*.

Studies Dealing with Specific Adverbs

1) Bertocchi (2001, pp. 87–111) discusses the restrictive adverb *modo*; 2) Booth (1923) deals with the position of measure adverbs in Roman comedy and in *de Agri Cultura* by Cato; 3) An exhaustive discussion on *prae* and *pro* as adverbs, prepositions and prefixes is offered by Francis (1973, pp. 1–59); 4) Huitink (2005, pp. 561–570) analyzes *iam* in negated utterances; 5) Lundström (1961) discusses *abhinc* and *ante* with measure adverbs in abl./acc.; 6) Ripoll (2009/2010, pp. 305–316) deals with the measure adverb *multum*; 7) Risselada (1996, pp. 105–125) discusses the functions of *nunc* as a discourse marker and as a temporal complement as compared to *now* in English; 8) Solodow (1978) concerns the functions and position of *quidem*; 9) The syntax of *adhuc* with verbal predicates is analyzed by Torrego (1991, pp. 345–355).

Selected Studies on the Language and Style of Tacitus

1) Draeger (1882) concerns the syntax and style of Tacitus with a brief discussion on the adverbs’ usages; 2) Fanetti (1978-1979, pp. 389–400) analyzes the chiasmus only in Agricola; 3) An exhaustive study on sentence types and their functions in Tacitus’ treatises is discussed by Kirchner (2001); 4) Mendell (1911) analyzes in detail the sentence connection in Tacitus’ treatises; 5) Voss (1963) deals with the emphatic style employed by Tacitus.

Methodology

The grammatical approach adopted here is descriptive. It offers a thorough analysis of a specific adv. in a prose opus of one author. Quotations are made from the corpora¹ in order to illustrate the phenomena with a literal translation, wherever applicable. Maximum use of statistics is made by comparative tables concerning

¹Our quotations are according to the editions of Delz (1983), Heubner (1978, 1983, 1994) and Önnersfors (1983). Slight changes are from Fisher (1906, 1911), Koestermann (1969, 1970, 1971), Römer (1976), Schinzel (1971), Weiskopf (1973), Winterbottom and Ogilvie (1975). Bibliographical abbreviations follow Lewis-Short (1879; henceforth: L.-Sh.), p. XII; and Glare *et al.* (eds.) (1982; henceforth: *OLD*), pp. XXI–XXIII.

the following points: the distribution of *ōlim* and variants in each book; its lexical meanings; its proximity to posterior advs.; the parts of speech modified by *ōlim*; its syntactic position concerning the modified element. It was examined by linguistic/stylistic means. The interval between the adv. and the modified element was calculated, *inter alia*, by number of words ranges from one to three words with exceptions consisting of more words; a concluding comparison of *ōlim* between the treatises in the points indicated above due to different contents and stylistic characteristics in each book; conclusions.

The Distribution of *Ōlim* and its Variants

Ōlim occurs in 86x (with five variants):² *Ann.*-47x, *Hist.*-22x, *Ger.*-10x, *Ag.*-4x, *Dial.*-3x.³

Table 1. *The Distribution of Ōlim*

Book	References	Cases
<i>Ann.</i>	1,16,3; 26,2; 53,1; 2,45,2; 61,2; 62,2; 3,33,2; 34,2; 40,1; 54,3; 55,2; 58,3; 4,16,2; 33,2; 64,3; 67,3; 6,4,1; 16,1; 24,3; 26,3; 39,2; 11,23,1-2; 12,18,1; 43,2; 49,1; 54,2; 60,2; 60,3; 66,1; 13,15,3; 18,3; 32,2; 34,2; 14,12,3; 15,3; 27,3; 43,1; 63,2; 64,3; 15,15,2; 17,3; 21,1; 51,2; 55,2; 16, 21,1; 22,1; 28,3	47
<i>Hist.</i>	1,5,2 (twice); 51,3; 60,1; 67,1 (twice); 2,6,1; 7,2; 86,3; 92,1; 3,11,2; 47,1; 47,2; 4,14,2; 54,2; 57,2; 64,3; 65,2; 70,2; 84,4; 5,4,3; 7,1	22
<i>Ger.</i>	2,1; 3,2; 8,2; 28,1; 28,3; 28,4; 33,1; 36,1; 41,2; 42,1	10
<i>Ag.</i>	3,1; 11,4; 12,1; 15,2	4
<i>Dial.</i>	16,5; 32,4; 38,2	3
General Total		86

The Meanings of *Ōlim*

A Defined Length of Time and Non-Continuous One “Formerly”

Validiores ōlim Gallorum res fuisse ... divus Iulius tradit

“The deified Julius reports ... that the Gauls’ power was once more vigorous (than the Germans)” (*Ger.* 28,1).

²*Solim*: *Hist.* 1,67,1; *capitolia*: 4,54,2; *ut licuit ōlim*: 4,64,3; *enim*: *Ann.* 11,23,2; *enim ōlim*: 12,43,2; *solitum*: 13,18,3.

³Blackman and Betts (1986) 2, pp. 1196–1197, Gerber and Greef (1877-1890) 2, pp. 1017–1018, s.v. *ōlim*; Table 1.

Ut Ōlim “As Before”

Nec socios, ut ōlim, sed hostes et victos vocabant

“(The legions) called (the Gauls) not ‘allies’, as before, but ‘enemies’ and ‘vanquished’” (*Hist.* 1,51,3).

A Non-Defined Length of Time but a Long-Continuous One “Long Ago/Before”

Cf. *iam prīdem/dūdum/diū*; Menge (1961, §§464, 483, n. 3).

Ut proximus quisque Britannico neque fas neque fidem pensi haberet, ōlim provisum erat

“There had long ago been provided that every one closest to Britannicus should hold neither law nor loyalty as being of any weight” (*Ann.* 13,15,3).

Sic Ōlim “Thus Long Ago”

Sic ōlim Sacrovirum et Aeduos, nuper Vindicem Galliasque singulis proeliis concidisse

“(Vocula said) thus long ago Sacrovir and the Aeduans were crushed in a single battle, recently Vindex and the Gallic (provinces)” (*Hist.* 4,57,2).

Table 2. *The Meanings of ōlim*

Meaning	References	Cases	Total
“Formerly”	<i>Ag.</i> 12,1; 15,2; <i>Ger.</i> 2,1; 28,1; 28,3; 33,1; 36,1; <i>Dial.</i> 32,4; 38,2; <i>Hist.</i> 1,5,2 (twice); 67,1; 2,6,1; 3,47,1; 47,2; 4,65,2; 70,2; 84,4; 5,4,3; 7,1; <i>Ann.</i> 1,16,3; 26,2; 53,1; 2,61,2; 3,33,2; 40,1; 54,3; 55,2; 58,3; 4,67,3; 6,4,1; 24,3; 26,3; 12,18,1; 43,2; 49,1; 60,2; 13,18,3; 32,2; 14,12,3; 43,1; 63,2; 64,3; 15,15,2; 21,1; 16,22,1	46	57
<i>Ut ōlim</i>	<i>Hist.</i> 1,51,3; 3,11,2; 4,14,2; 64,3; <i>Ann.</i> 2,45,2; 3,34,2; 4,16,2; 33,2; 6,39,2; 14,27,3; 15,17,3	11	
“Long ago”	<i>Ag.</i> 3,1; 11,4; <i>Ger.</i> 3,2; 8,2; 28,4; 41,2; 42,1; <i>Dial.</i> 16,5; <i>Hist.</i> 1,60,1; 67,1; 2,7,2; 86,3; 92,1; 4,54,2; <i>Ann.</i> 2,62,2; 4,64,3; 6,16,1; 11,23,1-2; 12,54,2; 60,3; 66,1; 13,15,3; 34,2; 14,15,3; 15,51,2; 55,2; 16,21,1; 28,3	28	29
<i>Sic ōlim</i>	<i>Hist.</i> 4,57,2	1	
General Total			86

Proximity to Posterior Adverbs or Without Them*Proximity to Posterior Adverbs*Mox

(1) *Helvetii, Gallica gens ōlim armis virisque, mox memoria nominis clara*

“The Helvetii, a Gallic people formerly famous for (their) arms and heroes, later for the memory of (their) name” (*Hist.* 1,67,1).

(2) *Iulia supremum diem obiit, ob impudicitiam ōlim a patre Augusto Pandateria insula, mox oppido Reginorum ... clausa*

“Julia died, who for her immorality had formerly been confined by her father Augustus on Pandateria island, then in the Regini’s town ...” (*Ann.* 1,53,1).

The change from island to town is emphasized: formerly Augustus imprisoned Julia on Pandateria island (*ōlim ... insula*), later in the Regini’s town (*mox ... accolunt*). Without *mox*, *ōlim* will refer to both geographical names, as though Pandateria island is in the Regini’s town.

(3) *Deductis ōlim et nobiscum per conubium sociatis quisque mox provenerunt haec patria est*

“For those who in former days settled and have been united with us by marriage, (and) later for their offspring, this is their native land” (*Hist.* 4,65,2).

(4) *Caesa ibi cohors, regium auxilium ōlim; mox ... desidiam licentiamque Graecorum retinebant*

“There was massacred a cohort, which (was) formerly a royal contingent; later ... (its members) retained the indolence and licence of the Greeks” (*Hist.* 3,47,2).

Nuper

Arma in occasionem distulere, Vespasianus Mucianusque nuper, ceteri ōlim mixtis consiliis

“They postponed the war until a fitting opportunity, while Vespasian and Mucianus had recently agreed (on it), the others had long before decided (to act in concert)” (*Hist.* 2,7,2).

Tum/tunc

(1) *Ut ōlim virtutis modestiaeque, tunc procacitatis et petulantiae certamen erat*

“As formerly (the legions had competed with each other) in valour and discipline, (so) later there was a rivalry in insolence and insubordination” (*Hist.* 3,11,2).

(2) *Catualda, profugus ōlim vi Marobodui et tunc dubiis rebus eius ultionem ausus*

“Catualda, once a refugee by the might of Maroboduus, and later, when the king’s fortunes waned, daring his revenge” (*Ann.* 2,62,2).

(3) *Praecipuus ōlim circumveniendi Titii Sabini et tunc luendae poenae primus fuit*

“(Latiaris was) formerly the principal in entrapping Titius Sabinus and was then the first to pay the penalty” (*Ann.* 6,4,1).

Ōlim ... tum ... nuper: Ann. 13,18,3, §5.1.3, ex. 14 below.

Dein/deinde

(1) *Accessit ala Singularium, excita ōlim a Vitellio, deinde in partes Vespasiani transgressa*

“(The Twenty-First Legion and Sextilius Felix) were joined by the ‘Select’ cavalry, which had formerly been mobilized by Vitellius (and) had later gone over to Vespasian’s side” (Hist. 4,70,2).

Excita ... Vitellio ≠ deinde ... transgressa: the ‘Select’ cavalry changed parties from Vitellius to Vespasian.

(2) *Cotys, proditor ōlim, deinde hostis, metuebatur*

“Cotys, once a traitor (to Mithridates and) then (his) enemy, inspired fear (to Mithridates)” (Ann. 12,18,1).

Recens

Is mulieri ōlim cognitus, seu recens orta amicitia ...

“Whether (Proculus was) long before known to the woman (Epicharis) or recently their friendship arisen ...” (Ann. 15,51,2).

Prīdem: Ann. 11,23,1-2, §5.2.1, ex. 6 below.

Nunc

Ōlim quidem non modo praetor aut consul, sed privati etiam mittebantur, qui provincias viserent ... trepidabantque gentes de aestimatione singulorum: at nunc colimus externos et adulamur

“Once, indeed, not merely a praetor or consul, but even private individuals were sent to visit the provinces ... and nations trembled for the evaluation of individuals. But now we cultivate foreigners and flatter them” (Ann. 15,21,1).

Lack of Posterior Adverbs

A Contrast Regarding Time/Content

(1) *Haud procul inde campi, quos ferunt, ōlim uberes magnisque urbibus habitatos, fulminum jactu arsisse ... terramque ipsam ... vim frugiferam perdidisse*

“Not far from (the Dead Sea are) plains which, they say, were once fertile and populated with great cities, (but) were (later) burned by lightnings ... and the soil itself ... lost its productive power” (Hist. 5,7,1).

Multiple contrasting parts *ōlim uberes ... habitatos ≠ fulminum ... arsisse* refer to the S *campi* but indicate non-simultaneous situations. Consequently, we would expect in the second multiple part a posterior adv. (*mox*) modifying *arsisse* + *perdidisse*.

(2) *Ut ōlim ... noscenda vulgi natura ... senatusque et optimatum ingenia qui maxime perdidicerant, callidi temporum et sapientes credebantur, sic ... haec conquiri tradique in rem fuerit*

“Just as formerly ... the nature of the mass was needed to be understood ... and those who had acquired the most exact knowledge of the spirit of the senate and the aristocracy, were accounted shrewd in their generation and wise, so (now) ... there is some point in the inquiry and report” (*Ann.* 4,33,2).

Lack of a Contrast

(1) *Ego enim cum audio antiquos, quosdam veteres et ōlim natos intellego*

“For when I hear of ‘the ancients’, I understand that (they refer to) certain (men) of old and who were born long ago” (*Dial.* 16,5).

Ōlim means “long ago”, since it refers to heroes, who lived 1,300 years before Tacitus. Hence, there is a semantic relationship between *veteres* and *ōlim natos* without an additional temporal adv.

(2) *Munia imperii Caecina ac Valens obibant, ōlim anxii odiis*

“The duties of the empire were performed by Caecina and Valens, long time being anxious because of mutual hatred” (*Hist.* 2,92,1).

For more references see Table 3.

Table 3. Proximity to Posterior Adverbs or Without Them

Posterior adv.	References	Cases	Total
<i>Dein</i>	<i>Hist.</i> 4,70,2; <i>Ann.</i> 1,16,3; 12,18,1	3	34
<i>Mox</i>	<i>Hist.</i> 1,67,1; 3,47,2; 4,65,2; <i>Ann.</i> 1,53,1; 12,60,2	5	
<i>Nunc</i>	<i>Ag.</i> 12,1; 15,2; <i>Ger.</i> 33,1; 36,1; 41,2; <i>Dial.</i> 32,4; 38,2; <i>Hist.</i> 4,54,2; <i>Ann.</i> 2,61,2; 3,58,3; 12,43,2; 15,21,1; 16,28,3	13	
<i>Nuper/nuperrime</i>	<i>Hist.</i> 2,7,2; 4,57,2; <i>Ann.</i> 16,22,1	3	
<i>Prīdem</i>	<i>Ann.</i> 11,23,1-2	1	
<i>Recēns</i>	<i>Ann.</i> 15,51,2	1	34
<i>Tum/tunc</i>	<i>Hist.</i> 3,11,2; <i>Ann.</i> 2,62,2; 6,4,1; 12,54,2; 60,3; 66,1; 14,64,3	7	
<i>Ōlim...tum...nuper</i>	<i>Ann.</i> 13,18,3	1	
Lack of an adv. With a contrast	<i>Hist.</i> 1,5,2; 51,3; 3,47,1; 4,14,2; 64,3; 5,7,1; <i>Ann.</i> 1,26,2; 2,45,2; 3,34,2; 4,16,2; 33,2; 67,3; 6,39,2; 14,27,3; 43,1; 63,2	16	52
Lack of a contrast	<i>Ag.</i> 3,1; 11,4; <i>Ger.</i> 2,1; 3,2; 8,2; 28,1; 28,3; 28,4; 42,1; <i>Dial.</i> 16,5; <i>Hist.</i> 1,5,2; 60,1; 67,1; 2,6,1; 86,3; 92,1; 4,84,4; 5,4,3; <i>Ann.</i> 3,33,2; 40,1; 54,3; 55,2; 4,64,3; 6,16,1; 24,3; 26,3; 12,49,1; 13,15,3; 32,2; 34,2; 14,12,3; 15,3; 15,15,2; 17,3; 55,2; 16,21,1	36	

The Part of Speech Modified by *Ōlim*⁴*Explicit*Finite Verb: Imperfect

(1) *Cur ergo ōlim parsimonia pollebat?*

“Why, then, was frugality prevalent in the past”? (*Ann.* 3,54,3).

(2) *Ōlim Italia legionibus longinquas in provincias commeatus portabat, nec nunc infecunditate laboratur, sed Africam potius et Aegyptum exercemus*

“In the past Italy used to transport supplies for the legions in remote provinces, (and even) now it does not suffer from infertility, but we rather cultivate Africa and Egypt” (*Ann.* 12,43,2).⁵

4.1.1.1.1 + Gerundive (without *esse*): *Ann.* 4,33,2, §3.2.1, ex. 2 above.

4.1.1.1.2 In the Following Cl.

(1) *Nec terra ōlim, sed classibus advehebantur qui mutare sedes quaerebant*

“In time past, those who wished to change their abodes did not travel by land but by ships” (*Ger.* 2,1).

(2) *Haec Tiberius non mari, ut ōlim, divisus neque per longinquos nuntios accipiebat, sed urbem iuxta*

“Tiberius (then) received these (tidings), not separated by the sea, as formerly, nor by messengers from afar, but near Rome” (*Ann.* 6,39,2).

In the comparison cl. (*ut ōlim*) *ōlim* modifies *accipiebat* in affirm. in contrast to the same verb in neg. of the main cl. (*haec ... mari + divisus ... iuxta*).⁶

Perfect

Et ōlim Auriniam et compluris alias venerati sunt

“Even long ago they venerated Aurinia and many other (women)” (*Ger.* 8,2).

Et (modifies *ōlim*) + *ōlim* modify *venerati sunt*. See *Dial.* 38,2, §5.1.2, ex. 3 below.

4.1.1.2.1 In the Following Cl.: *Ger.* 36,1, §5.1.3, ex. 12

4.1.1.2.2 In the Preceding Cl.

⁴See Table 5. In the quotations of this section, the part of speech modified by *ōlim*, is underlined.

⁵See *Ger.* 33,1, §5.1.1, ex. 3; *Ag.* 12,1 & *Hist.* 1,5,2, §5.1.2, exx. 1, 6; *Dial.* 32,4 & *Hist.* 1,67,1 & *Ann.* 3,55,2 & 58,3 & 12,60,2 & 60,3, §5.1.3, exx. 1, 5, 7, 9-11 below.

⁶*Hist.* 1,51,3, §2.1.1; 3,11,2, §3.1.3, ex. 1; *Ann.* 15,21,1, §3.1.7 above; 13,18,3 & 14,27,3, §5.1.3, exx. 6, 14 below.

Liceat nobis vobisque utramque ripam colere, ut ōlim maioribus nostris
 “Both we and you will have the right to settle on both banks (of the Rhine), as our ancestors (did) in the past” (*Hist.* 4,64,3).

4.1.1.3 Pluperfect: *Ann.* 13,15,3, §2.2 above.

4.1.1.3.1 In the Following Cl.

Absumperet vitam ab ea civitate, cuius caritatem ōlim, nunc et adspectum exuisset
 “Let (Thrasea) sever his life from this city, which he (had) long ago (cast aside) his affection (for it and) now casts aside even his gaze!” (*Ann.* 16,28,3).

See *Ann.* 15,17,3, §5.1.2, ex. 2 below (*ōlim* modifies *fecerat*).

4.1.2 Participia

4.1.2.1 P.P.P.

4.1.2.1.1 Perfect Passive (without *esse*)

(1) *Ōlim validissima inter se civium arma in Italia Galliave viribus Occidentis coepta*
 “In the past the fiercest civil wars had started in Italy or Gaul among the forces of the West” (*Hist.* 2,6,1).

(2) *Nobilitas ambobus et maiorum bona facta, eoque Romana civitas ōlim data*
 “Both (Julius Florus and Julius Sacrovir had the advantages of) nobility and their ancestors’ good services, and for that reason Roman citizenship had formerly been granted (them)” (*Ann.* 3,40,1).⁷

4.1.2.1.2 Pluperfect Passive (without *esse*)

Transgressi ōlim⁸ et experimento fidei super ipsam Rheni ripam collocati
 “(The Ubii) crossed (the river) long ago and, as their loyalty was proved, they were settled on the Rhine bank itself” (*Ger.* 28,4).

4.1.2.1.3 Replaces a Relative Clause

Redditur ordini Lurii Varus consularis, avaritiae criminibus ōlim percussus
 “Lurii Varus, the ex-consular, formerly struck down on charges of extortion, was restored to his rank” (*Ann.* 13,32,2).⁹

⁷See *Ann.* 15,51,2, §3.1.5 above; 4,67,3 & 6,26,3, §5.2.1, exx. 7, 9 below.

⁸*Ōlim* means “long ago”, since the Ubii crossed the river in 39-38 B.C., when M. Agrippa permitted them to settle on the west bank of the Rhine. Consequently, there are two consecutive actions: the modified *transgressi* (*erant*) in p.q.p. preceded the second action *collocati* (*sunt*) in perfect.

4.1.2.1.3.1 In the Following Cl: *Ann.* 1,53,1, §3.1.1, ex. 2 above.

4.1.2.1.3.2 Subst. P.P.P.

Corbulo dignum magnitudine populi Romani rebatur parta ōlim a Lucullo Pompeioque recipere

“Corbulo considered it worthy to the dignity of the Roman people to recover (the territory) long ago acquired by Lucullus and Pompeius” (*Ann.* 13,34,2).

See *Hist.* 4,65,2, §3.1.1, ex. 3 above; 2,86,3 & *Ag.* 11,4, §5.1.1, exx. 4, 7 below.

4.1.2.1.4 Predicate of Abl. Absol.: *Ger.* 42,1, §5.2.1, ex. 8 below.

4.1.2.1.4.1 Idiom: *Hist.* 2,7,2, §3.1.2 above (*ōlim* + *nuper* modify *mixtis consiliis*).

4.1.2.2 P.P.A.: Attribute

Praepotens ōlim, et postquam regnum in formam provinciae verterat, mutationis impatiens

“(Anicetus) formerly a very powerful (man) and after the kingdom was transformed into a province, he was impatient the change” (*Hist.* 3,47,1).

4.1.3 Adjective

4.1.3.1 Attribute

(1) *In Hermunduris Albis oritur, flumen inclutum et notum ōlim: nunc tantum auditur*

“The Elbe rises in (the territory) of the Hermunduri, a river famous and known long ago, (but) now (is known) only from hearsay” (*Ger.* 41,2).

(2) *Munimenta ingressi sunt ... captiva ōlim mancipia aut iumenta adgnoscentes abstrahentesque*

“(The Armenians) entered the fortifications ... recognizing and dragging off their previously captured slaves or beasts of burden (by the Romans)” (*Ann.* 15,15,2).

(3) *Praesentem saevitiam melioris ōlim fortunae recordatione adlevabant*

“(Agrippina and Julia) could alleviate their present cruelty by the recollection of better fortune in the past” (*Ann.* 14,63,2).

(4) *Accendebat odium eius Roscius Coelius ... ōlim discors*

⁹See *Dial.* 16,5, §3.2.2, ex. 1; *Hist.* 4,70,2, §3.1.4, ex. 1 above; 1,5,2, §5.1.2, ex. 1; *Ann.* 14,12,3 & 15,3, §5.1.1, exx. 5-6; 6,16,1, §5.2.1, ex. 4 below.

“The hostility (towards Trebellius Maximus) was increased by Roscius Coelius ... long at odds (with Trebellius)” (*Hist.* 1,60,1).¹⁰

4.1.3.1.1 In the Following Cl.: *Hist.* 1,67,1, §3.1.1, ex. 1 above.

4.1.3.1.2 + Apposition

Dux olim theatralium operarum, dein gregarius miles

“(Percennius) formerly leader of a clique at the theatre (and) later a common soldier” (*Ann.* 1,16,3).

4.1.3.2 Predicate Noun

4.1.3.2.1 Without *esse*

(1) *Discordes olim et tum contemptu regentium minus coërcitis odiis*

“(The Galileans and Samaritans) had long been at odds and then less restrained with their hatreds, because of their contempt for their rulers” (*Ann.* 12,54,2).

(2) *Cum privatus olim conversatione scur< r >arum iners otium oblectaret*

“When (Claudius was) once a private citizen, he amused (Paelignus’) leisure with the company of buffoons” (*Ann.* 12,49,1).

4.1.3.2.2 With *esse*: *Ann.* 6,4,1, §3.1.3, ex. 3 above.

4.1.3.3 Predicate of Abl. Absol.: *Ger.* 28,3, §5.2.1, ex. 1 below.

4.1.3.4 Praedicativum

Tum Agrippina, sceleris olim certa et oblatae occasionis propera nec ministrorum egens, de genere veneni consultavit

“Then Agrippina, long determined on her crime, eager with the opportunity offered (and) not short of servants, deliberated on the type of poison” (*Ann.* 12,66,1).

See *Hist.* 2,92,1, §3.2.2, ex. 2 above; *Ann.* 16,21,1, §5.1.2, ex. 4 below.

4.1.4 Infinitive-Predicate of AcI

4.1.4.1 Perfect Infinitive

(1) *Haud enim frustra placitum olim, ne feminae in socios aut gentes externas traherentur*

“For it was not unreasonable (Caecina said) that it had been formerly decided that women should not be dragged among the allies or foreign peoples” (*Ann.* 3,33,2).

¹⁰See *Ann.* 2,62,2, §3.1.3, ex. 2 above; *Ag.* 3,1, §5.1.1, ex. 1; *Hist.* 4,84,4 & 5,4,3, §5.2.1, exx. 2, 5; *Ann.* 16,22,1, §5.4.2; 6,24,3, §5.4.3, ex. 1 below.

(2) *Ferrum, cuius argueretur, ōlim religione patria cultum ... respondit*
 “(Scaevinus) responded that the weapon charged against him, had for a long time been reverted by his ancestors” (*Ann.* 15,55,2).¹¹

4.1.4.1.1 In the Following Cl.

Neque enim, ut ōlim, obsideri urbem bellis aut provincias hostiles esse
 “For Rome (Valerius Messalinus replied) is not (now), as formerly, beset with wars nor are the provinces hostile (to her)” (*Ann.* 3,34,2).

Ōlim modifies *obsideri* + *hostiles esse* in affirm. inf. perf.¹²

4.1.4.1.2 In the Preceding Cl.

Neque adesse, ut ōlim, eam copiam
 “(Tiberius said) that there was no longer such a quantity (of candidates), as formerly” (*Ann.* 4,16,2).

Ōlim modifies *adfuisset* in affirm. inf. perf. with a contrast to the narrator’s time.

4.1.5 Noun¹³ in Apposition: *Ann.* 12,18,1, §3.1.4, ex. 2 above.

Not Explicit

(1) *Exim ventum Elephantinen ac Syenen, claustra ōlim Romani imperii, quod nunc rubrum ad mare patescit*
 “Then (Germanicus) came to Elephantine and Syene, formerly (were) the limits of the Roman empire, which now extends to the Persian Gulf” (*Ann.* 2,61,2).

(2) *Super omnibus negotiis melius atque rectius ōlim provisum*
 “In all matters better and more correct provision (made) in the past” (*Ann.* 14,43,1).

(3) *Deriguntur acies, pari utrimque spe, nec, ut ōlim apud Germanos, vagis incursibus aut disiectas per catervas*
 “The armies were drawn up with equal hope on both sides, no roving raids or scattered companies, as once among the Germans” (*Ann.* 2,45,2)

See *Hist.* 3,47,2, §3.1.1, ex. 4 above.

¹¹See *Ger.* 28,1, §2.1; *Hist.* 5,7,1, §3.2.1, ex. 1 above; *Ger.* 3,2, §5.1.1, ex. 2; *Ag.* 15,2, §5.1.2, ex. 5; *Ann.* 1,26,2, §5.1.3, ex. 3; *Hist.* 4,54,2 & *Ann.* 11,23,1-2, §5.2.1, exx. 3, 6; 4,64,3, §5.2.2 below.

¹²See *Hist.* 4,57,2, §2.2.1 above; 14,2 & *Ann.* 14,64,3, §5.1.3, exx. 2, 13 below.

¹³An adv. modifying a noun is rare in Latin and is partially under Greek influence. See Kühner and Stegmann (1962) 2/1, §59, Leumann et al. (1963) 1, §101, b.

Table 4. *The Part of Speech Modified by Ōlim*

Part of speech	References	Cases	Total
Explicit			
Finite V: impf.	Ag. 12,1; Ger. 33,1; Dial. 32,4; Hist. 1,5,2; 67,1; Ann. 3,54,3; 55,2; 58,3; 12,43,2; 60,2; 60,3	11	26
In the following cl.	Ger. 2,1; Hist. 1,51,3; 3,11,2; Ann. 6,39,2; 13,18,3; 14,27,3; 15,21,1	7	
+ gdve.	Ann. 4,33,2	1	
Perf.	Ger. 8,2; Dial. 38,2	2	
In the following cl.	Ger. 36,1	1	
In the preceding cl.	Hist. 4,64,3	1	
P.q.p.	Ann. 13,15,3	1	21
In the following cl.	Ann. 15,17,3; 16,28,3	2	
Participia: P.P.P.			
Perf. pass.	Hist. 2,6,1; Ann. 3,40,1; 4,67,3; 6,26,3; 15,51,2	5	
P.q.p.	Ger. 28,4	1	
Replaces a rel. cl.	Dial. 16,5; Hist. 1,5,2; 4,70,2; Ann. 6,16,1; 13,32,2; 14,12,3; 15,3	7	
In the following cl.	Ann. 1,53,1	1	19
Subst. P.P.P.	Ag. 11,4; Hist. 2,86,3; 4,65,2; Ann. 13,34,2	4	
Pred. of abl. absol.	Ger. 42,1	1	
Idiom	Hist. 2,7,2	1	
P.P.A.: attribute	Hist. 3,47,1	1	
Adj.: Attribute	Ag. 3,1; Ger. 41,2; Hist. 1,60,1; 4,84,4; 5,4,3; Ann. 2,62,2; 6,24,3; 14,63,2; 15,15,2; 16,22,1	10	15
In the following cl.	Hist. 1,67,1	1	
Praedicativum	Hist. 2,92,1; Ann. 12,66,1; 16,21,1	3	
+ apposition	Ann. 1,16,3	1	
Predicate noun: with <i>esse</i>	Ann. 6,4,1	1	
Without <i>esse</i>	Ann. 12,49,1; 54,2	2	
Pred. of abl. absol.	Ger. 28,3	1	15
Inf.: predicate of Acl			
Inf. perf.	Ag. 15,2; Ger. 3,2; 28,1; Hist. 4,54,2; 5,7,1; Ann. 1,26,2; 3,33,2; 4,64,3; 11,23,1-2; 15,55,2	10	
In the following cl.	Hist. 4,14,2; 57,2; Ann. 3,34,2; 14,64,3	4	
In the preceding cl.	Ann. 4,16,2	1	
Apposition	Ann. 12,18,1	1	1
Not explicit	Hist. 3,47,2; Ann. 2,45,2; 61,2; 14,43,1	4	4

The Position of Ōlim Concerning the Modified Part of Speech

The typical order in a cl. is S-OID/OD. Temporal/neg. adv. and temporal phrases precede the modified element. However, there are exceptions, especially for variety and emphasis.¹⁴

The position of *ōlim* was examined by linguistic/stylistic means. The interval between the adv. and the modified element was calculated, *inter alia*, by number of words.

¹⁴On adv.'s position cf. Booth (1923, p. IX), Bos (1967, p. 117), Devine and Stephens (2006), Elerick (1994, pp. 99–117), Fanetti (1978–1979, pp. 389–400), Hoffmann (2010, pp. 267–279), de Jong (1991, pp. 91–101), Kühner and Stegmann (1962, 2/2, §246), Marouzeau (1948, pp. 155–161, 1949, pp. 11–33), Pinkster (1972, 1990, pp. 163–188).

From Table 5, *ōlim* precedes the modified part of speech-47x, follows it-24x or it has two positions concerning its modified elements-11x. *Ōlim* at the end of a cl. is rare.

Before the Modified Part of Speech

First Position

(1) *Quamquam ... Nerva Caesar res ōlim dissociabiles miscuerit, principatum ac libertatem ... tardiora sunt remedia quam mala*

“Although ... Nerva Caesar harmonized (two) things long ago incompatible, principate and freedom ... remedies are slower (for effect) than diseases” (Ag. 3,1).

For emphasizing the modified *dissociabiles*, *ōlim* is embedded between the OD *res* and its adj. *dissociabiles*, while the apposition *principatum ac libertatem* of the OD is postponed to the end of the concessive cl. *quamquam ... libertatem*.

(2) *Aram ... eodem loco ōlim repertam*

“An altar ... was found long ago in the same spot” (Ger. 3,2).

Ōlim between the abl. loci *eodem loco* and the modified predicate *repertam* of AcI (governed by *opinatur*) highlights the place, where the altar was found long ago.¹⁵

(3) *Iuxta Tencteros Bructeri ōlim occurrebant, nunc Chamavos et Angrivarios immigrasse narratur*

“The Bructeri came next to the Tencteri in former times, (but) now it is reported that the Chamavi and Angrivarii migrated (there)” (Ger. 33,1).

Iuxta Tencteros precedes the cl. *Bructeri ōlim occurrebant*, since the author talked about them before. *Ōlim* is embedded between the S *Bructeri* and the modified *occurrebant*. Cf. Ann. 3,40,1, §4.1.2.1.1, ex. 2; 15,51,2, §3.1.5 above.

(4) *Quod Britannorum ōlim victis evenit*

“This happened to the long since conquered among the Britons” (Ag. 11,4).

Ōlim between partitive gen. *Britannorum* and *victis* focuses attention only on the conquered among the Britons with emphasis on *victis*.

(5) *Praetura functos Valerium Capitonem et Licinium Gabolum sedibus patriis reddidit, ab Agrippina ōlim pulsos*

“(Nero) restored to their ancestral abodes the ex-praetors Valerius Capito and Licinius Gabolus, who had formerly been banished by Agrippina” (Ann. 14, 12,3).

¹⁵See Ann. 13,32,2, §4.1.2.1.3; Hist. 2,92,1, §3.2.2, ex. 2 above (an abl. causae *odiis* governed by *anxius* follows *ōlim* + its modified *anxii* and not *vice versa*).

An advl. expr. in abl. *ab Agrippina* precedes *ōlim* + the modified *pulsos*, in order to juxtapose Agrippina to the personal names, whom she had formerly banished.

(6) *Nec ulla moribus ōlim corruptis plus libidinum circumdedit quam illa conlucies*

“Nothing contributed more depravity to our morals, corrupted long before than (did) that scum” (*Ann.* 14,15,3).

Ōlim between the OID *moribus* (governed by *circumdedit*) and *corruptis* (replacing a rel. cl. of *moribus*) interscores the modified *corruptis*.

(7) *Pro certis et ōlim partis nova ambigua ancipitia malebat*

“(Cornelius Fuscus) preferred everything that was new, doubtful and dangerous rather than what was certain and long acquired possession” (*Hist.* 2,86,3).

Ōlim after *et* modifies only *partis* (cf. *Dial.* 16,5, §3.2.2, ex. 1 above). According to Ash (2007, p. 240), Tacitus avoids the polarity *certa/incerta* by employing *ambigua* in contrast to *certa*.

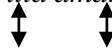
(8) *Ann.* 13,15,3, §2.2 above: since *ōlim* is rare at the end of a cl. (see §5 above), it precedes the modified *provisum erat* (its S = impers.). Cf. *Hist.* 1,60,1, §4.1.3.1, ex. 4 above.

Second Placement

(1) *Laudata ōlim et militari fama celebrata severitas eius angebat aspernantes veterem disciplinam atque ita quattuordecim annis a Nerone adsuefactos, ut haud minus vitia principum amarent quam ōlim virtutes verebantur*

“The severity (of Galba), which had once been esteemed and celebrated among the soldiers, annoyed who rejected the old discipline and who had been accustomed by fourteen years’ (service) under Nero to love the faults of their emperors no less than they had formerly respected their virtues” (*Hist.* 1,5,2).

Verebantur is made salient by a semantic parallel contrast (OD-modified V) between the multiple parts (for the order adv.-OD-V see *Dial.* 38,2, §5.1.2, ex. 3 below): *vitia amarent*



virtutes verebantur

(2) *Vologaesi ad Corbulonem missi nuntii ... amnemque, ut ōlim, medium faceret*

“Messengers of Vologaeses were sent to Corbulo, (proposing) ... that he should make the (Euphrates) river, as before, the boundary (between them)” (*Ann.* 15,17,3).

(3) *Apud quos quanto maiora negotia ōlim exerceri solita sint ... causae centumvirales, quae nunc primum obtinent locum, adeo splendore aliorum iudiciorum obruebantur*

“To what extent the more important cases were customarily in the past administrated before them ... the cases (pleaded before) the centumviral court, which now hold the first place, were so eclipsed by the glory of other courts” (*Dial.* 38,2).

The order temporal adv. *ōlim* -OD *exerceri*-V *solita sint* interscores *solita sint*.

(4) *Nero virtutem ipsam excindere concupivit interfecto Thrasea Paeto et Barea Sorano, ōlim utrisque infensus*

“Nero desired to extirpate virtue itself by killing Thrasea Paetus and Barea Soranus, being long hostile to each” (*Ann.* 16,21,1).

A separation between *ōlim* and the modified adj. *infensus*, praedicativum of Nero, by *utrisque* (dat. governed by *infensus*) emphasizes Nero’s hatred in the past to both men Paetus and Soranus.

(5) *Singulos sibi ōlim reges fuisse, nunc binos imponi, e quibus legatus ... procurator*

“(It is said that) in former times (the Britons) had single kings; now two are imposed on them, among them the legate ... (and) the procurator” (*Ag.* 15,2).

The order adv.-S of AcI-modified predicate of AcI in both AcI cls. *singulos ... fuisse* ≠ *nunc ... imponi* highlights the contrast regarding time/content, sc. formerly the Britons had only one king, now they have equivalent of two, legate and procurator. Cf. *Ann.* 3,54,3, §4.1.1.1, ex. 1 above.

(6) *Ōlim regibus parebant, nunc per principes factionibus et studiis <dis>trahuntur*

“Formerly (the Britons) obeyed kings, (but) now they are divided under chieftains into factions and parties” (*Ag.* 12,1).

The modified *parebant* is interscored with a parallel contrast (adv.-complement OID/advl. expr. in acc.-modified V) between the following multiple parts, which is pointed up by a hendiadys *factionibus et studiis* in the second multiple part:

<i>ōlim</i>	<i>regibus</i>	<i>parebant</i>
↕	↕	↕
<i>nunc</i>	<i>per principes</i>	<i>distrahuntur</i>

Third Position or Further Removed

(1) *Rapuerant pecuniam missam in stipendium castelli, quod ōlim Helvetii suis militibus ac stipendiis tuebantur*

“(The Twenty-first legion) had seized the money sent to pay (the garrison of) a fortress, which the Helvetii had long held with their own troops and at their own expense” (*Hist.* 1,67,1).

In the rel. cl. *quod ... tuebantur* the modified *tuebantur* is reinforced by hendiadys *suis ... stipendiis* before it. Accordingly, *ōlim* is in third position and further removed before *tuebantur*.

(2) *Neque enim societatem, ut ōlim, sed tamquam mancipia haberi*

“For (Civilis claimed), that (the Batavi are) no longer (regarded) allies, as before, but as slaves” (*Hist.* 4,14,2).

Ut ōlim is embedded in the main cl. *neque ... societatem + sed ... haberi*, while *ōlim* modifies affirm. inf. perf. *habuisse* referring to *societatem* in affirm., praedicativum of the Batavi.

(3) *Tiberium ōlim nomine Augusti desideria legionum frustrari solitum: easdem artes Drusum rettulisse*

“Tiberius (the assembly said) had formerly been accustomed to frustrate the legions’ requests in Augustus’ name, (and) Drusus has (later) revived that same tricks” (*Ann.* 1,26,2).

Due to an abl. instr. *nomine Augusti + OD desideria legionum* before the object complement *frustrari* of the modified *solitum (esse)* in AcI, *ōlim* is not placed near *frustrari solitum*.

Cf. *Ann.* 12,43,2, §4.1.1.1, ex. 2 above: between *ōlim* and the modified *portabat* appear the verb’s complements: OID *legionibus*, acc. direct. *longinquas in provincias*, which is preposed to the OD *commeatus*, because it refers to *legionibus*.

(4) *Ann.* 15,21,1, §3.1.7 above: *at nunc* indicates a sharp polarity with *ōlim*. Thræsea employs lexical/thematic inversions: *praetor, consul, privati, de ... singulorum* for the past; an undifferentiated 1pl. *colimus, adulamur* for the present, sc. formerly entire people were afraid of single individuals (*mittebantur + trepidabantque* modified by *ōlim*), later the Romans flatter them.

(5) *Mox alias per provincias et in urbe pleraque concessa sunt, quae ōlim a praetoribus noscebantur*

“Later, in other provinces and in Rome numerous (judicial matters), which had formerly been investigated by the praetors, were transferred (to the equestrians)” (*Ann.* 12,60,2).

The judicial matters had formerly been investigated by the praetors, later were transferred to the equestrians. *A praetoribus* between *ōlim* and the modified *noscebantur* emphasizes this contrast.

(6) *Non enim, ut ōlim, universae legiones deducebantur cum tribunis et centurionibus et sui cuiusque ordinis militibus*

“For whole legions were not, as in former days, transplanted with their tribunes, centurions and soldiers of every grade” (*Ann.* 14,27,3).

Ōlim modifies *deducere* in affirm. past contrary to *non deducere* in neg. (the *S* = *legiones*).¹⁶

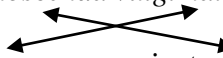
(7) *Claudius omne ius tradidit ... cum Mariusque et Sulla ōlim¹⁷ de eo vel praecipue bellarent. Sed tunc ... quae vicerant publice valebant*

“Claudius handed over (to the equestrians) the entire judicial (power) ... when Marius and Sulla long ago fought principally about this issue. But then ... those who won were universally valid” (*Ann.* 12,60,3).

A stress is laid on *bellarent*, which is modified by *ōlim* + manner adv. *vel praecipue*. An advl. expr. in abl. *de eo* appears between both advs. and not before *ōlim*, so that *de eo* is near *bellarent*.

See *Ger.* 8,2, §4.1.1.2 above, in which *et* + *ōlim* modify *venerati sunt* and introduce the cl., while both *OD Auriniam et compluris alias* are embedded between *et ōlim* and *venerati sunt*.

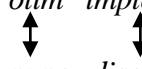
(8) *Ann.* 4,33,2, §3.2.1, ex. 2 above: both modified elements *noscenda-credebantur* are emphasized by a chiasmic order (gdve.-S/S rel. cl.-impf.):

noscenda vulgi natura

senatusque ... sapientes credebantur

(9) *Quae ōlim omnium artium domina pulcherrimo comitatu pectora implebat, nunc circumcisa et amputata, sine ... ingenuitate ... discatur*

“It once as the mistress of all the arts filled our souls with a most brilliant retinue, now curtailed and shorn, without ... freedom, is learned ...” (*Dial.* 32,4).

Ōlim modifies *implebat* but is preposed to *omnium ... comitatu*, which gives circumstances concerning *implebat*. A parallel contrast (adv.-modified V) between the rel. cl. and its main cl. emphasizes the eloquence’s personification:

ōlim implebat

nunc discatur

(10) *Privatis ōlim simultatibus effectum, ut a pontificibus maximis ire in provincias prohiberentur: nunc ... summum pontificum etiam summum hominum esse, non aemulationi ... obnoxium*

¹⁶Cf. *Ger.* 2,1 & *Ann.* 6,39,2, §4.1.1.1.2, exx. 1-2; *Hist.* 1,51,3, §2.1.1; 4,14,2, 5.1.3, ex. 2 above.

¹⁷*Ōlim* means “long ago”, since the struggles of the senatorial and equestrian orders for control of the *quaestiones perpetuae* was over half a century (122-80 B.C.).

“Formerly (Servius Maluginensis said) a ban by the supreme pontiffs (on the flamens) to go to the provinces was a result of private feuds. Now ... the supreme pontiff is also the supreme man, susceptible to neither rivalry ...” (*Ann.* 3,58,3).

Ōlim, which modifies *prohiberentur*, is embedded between abl. causae *simultātibus* and its adj. *prīvātīs* for highlighting the reasons by which the ban to go to the provinces was valid in the past, whereas later it was not valid: *prīvātīs ōlim ... prohiberentur ≠ nunc ... obnoxium*.

(11) *Dites ōlim familiae nobilium aut claritudine insignes studio magnificentiae prolabeantur*

“Formerly rich families of noble or with an illustrious reputation had been collapsing because of their fondness for splendour” (*Ann.* 3,55,2).

From the presence of *postquam* later, by which Tacitus contrasts two different periods, *ōlim* modifies *prolabeantur*. For highlighting the reason of the families’ collapsing in the past, an abl. causae *studio* + its gen. obj. *magnificentiae* precede *prolabeantur*.

See *Hist.* 2,6,1, §4.1.2.1.1, ex. 1; *Ann.* 15,55,2, §4.1.4.1, ex. 2 above.

(12) *Ita qui ōlim boni aeque Cherusci, nunc inertes ac stulti vocantur*

“Thus the Cherusci, who were once (called) good and righteous, are now called lazy and stupid” (*Ger.* 36,1).

The modified *vocare* by *ōlim* + *nunc*¹⁸ refers to the adjs., praedicativa of the S Cherusci, with a semantic parallel contrast (adv.-adj.) between the following multiple parts. This phenomenon emphasizes the affirmative characters of the Cherusci in the past as compared to their negative characters in the present:

<i>ōlim</i>	<i>boni</i>	<i>aeque</i>
↕	↕	↕
<i>nunc</i>	<i>inertes</i>	<i>ac stulti</i>

(13) *Quaeque rerum secundarum ōlim, tum publicae cladis insignia fuisse*

“What (were) formerly the signs of success, were then those of public disaster” (*Ann.* 14,64,3).

Ōlim is at the tail of the S rel. cl. *quaeque ... ōlim* (in AcI after *praesumptum*), in order to juxtapose it to the modified *fuisse* + apposition *insignia* (of *quaeque*) mentioned in its following main cl. *tum ... fuisse*. Cf. n. 17 and *Ann.* 13,18,3, §5.1.3, ex. 14 below.

¹⁸For two contrasting advs. modifying the same element see, e.g., *Hist.* 3,11,2, §3.1.3, ex. 1; 4,57,2, §2.2.1; 1,67,1 & *Ann.* 1,53,1, §3.1.1, exx. 1-2; 16,28,3, §4.1.1.3.1 above; 13,18,3 & 14,64,3, §5.1.3, exx. 13-14 below.

(14) *Excubiasque militares, quae ut coniugi imperatoris ōlim, tum ut matri servabantur, et Germanos nuper ... custodes additos digredi iubet*

“(Nero) ordered the withdrawal of the military guard, which had formerly been kept for her as the emperor’s wife (and) later as the (emperor’s) mother, along with the German guards, who had recently been added ...” (*Ann.* 13,18,3).

After the Modified Part of Speech

First Position

(1) *Pari ōlim inopia ac libertate eadem utriusque ripae bona malaque erant*

“The advantages and disadvantages on both banks (of the Danube) were identical, when in time past poverty and liberty were equal” (*Ger.* 28,3).

Ōlim between the modified predicate *pari* and its S *inopia ac libertate* in abl. absol. emphasizes by lexical means *pari* and *eadem* that poverty and liberty were formerly identical on both banks.¹⁹

(2) *Longam ōlim famem crebris adhuc jejuniis fatentur*

“By (their) frequent fasts they still bear witness to the long famine of former days” (*Hist.* 5,4,3).

The modified adj. *longam* is interscored by its introducing the cl. before its noun *famem* and before *ōlim* (as a quasi-adj.).

(3) *Captam ōlim a Gallis urbem ... fatali nunc igne signum caelestis irae datum et possessionem rerum humanarum Transalpinis gentibus portendi*

“(The Druids proclaimed) that Rome was captured by the Gauls long ago ... now by the fatal fire a sign of heavenly wrath was given and portended the passage of world sovereignty to the Transalpine tribes” (*Hist.* 4,54,2).

An abl. instr. *a Gallis* between *captam ōlim* and the S *urbem* of AcI (governed by *canebant*) focuses attention by whom the city was captured long ago.²⁰

(4) *Omissa<m> ōlim, quia privato usui bonum publicum postponitur*

“(A law) obsolete long ago, since the public good is subordinated to private interest” (*Ann.* 6,16,1).

The modified *omissam* precedes *ōlim*, so that it is near its noun *legem* mentioned before.²¹

¹⁹See *Ann.* 14,63,2 & 15,15,2, §4.1.3.1, exx. 2-3 above; *Ger.* 42,1 & *Hist.* 4,54,2 & 5,4,3, §5.2.1, ex. 2-3, 8 below.

²⁰Cf. *Ann.* 2,62,2, §3.1.3, ex. 2; 13,34,2, §4.1.2.1.3.2 above (the modified *parta* introduces an object cl. *parta ... Pompeioque* of *recipere* in AcI, while *ōlim* + abl. instr. *a Lucullo Pompeioque* follow *parta*).

²¹See *Ger.* 28,4, §4.1.2.1.2; *Hist.* 4,65,2, §3.1.1, ex. 3; 70,2 & *Ann.* 12,18,1, §3.1.4, exx. 1-2; 12,49,1 & 54,2, §4.1.3.2.1, exx. 1-2 above; 4,67,3 & 6,26,3 §5.2.1, exx. 7, 9 below.

(5) *Sedem, ex qua transierit, Memphim perhibent, inclutam ōlim et veteris Aegypti columen*

“(Others claim) that the place, from which (Ptolemy) came, (is) Memphis, a (city) once famous and the bulwark of ancient Egypt” (*Hist.* 4,84,4).

Ōlim modifies the adj. *inclutam* (*esse* om. in AcI after *perhibent*) of Memphis. The adv. before *inclutam* will modify also the apposition *veteris ... columen*. Cf. *Hist.* 3,47,1, §4.1.2.2 above.

(6) *Primoresque Galliae ... foedera et civitatem Romanam prīdem adsecuti, ius adipiscendorum in urbe honorum expeterent ... suffecisse ōlim indigenas consanguineis populis*

“The foremost (men) of Gallia ... who had long before acquired (rights) of allies and Roman citizenship, requested the right of obtaining offices in Rome ... (it was said that) in former times the native (Romans) had sufficed for their kindred peoples” (*Ann.* 11,23,1-2).

A chiasitic contrast (adv.-modified V/modified V-adv.) between the following multiple parts highlights the modified element *adsecuti-suffecisse* by *prīdem-ōlim*, viz. long ago neighboring peoples had been content that only natives of Rome were members of the senate, later they claimed the right of obtaining offices in the senate: *prīdem adsecuti*



(7) *Nupta ōlim Cn. Pisoni et palam laeta morte Germanici*

“Formerly (Plancina) wedded to Cn. Piso and openly delighted at Germanicus’ death” (*Ann.* 6,26,3).

The modified *nupta* at the top of the cl. is juxtaposed to its S Plancina mentioned before.

(8) *Ipsa etiam sedes pulsus ōlim Boi virtute parta*

“Even the abode itself (of the Marcomani) was won by their bravery, when they drove out the Boii long ago” (*Ger.* 42,1).

(9) *Quanto intentus ōlim publicas ad curas, tanto occultior<es> in luxus et malum otium resolutus*

“Just as (Tiberius) had formerly been intent on public affairs, he so (now) relaxed into private extravagances and pernicious leisure” (*Ann.* 4,67,3).

Ōlim follows the modified *intentus* (*est*) and not *vice versa*, in order to juxtapose *intentus* to its S Tiberius mentioned before this sentence.

(10) *Ann.* 3,33,2, §4.1.4.1, ex. 1 above: *ōlim* follows the modified predicate *placidum* of AcI and not *vice versa*, in order to avoid three different advs. *haud*, *frustra*, *ōlim* in succession.

Second Position

Evenisse id ōlim Claudiae Quintae, eiusque statuam ... maiores ... consecravisse

“This thing (it was said) had happened long ago to Claudia Quinta and her statue ... had been consecrated by (our) ancestors ...” (*Ann.* 4,64,3).

Ōlim + the OID *Claudiae Quintae* follow the modified inf. *evenisse* + its *S id* of AcI and not *vice versa*, since *evenisse id* refers to the violent fire mentioned before.

See *Ann.* 4,16,2, §4.1.4.1.2 above.

Third Position

Hist. 4,64,3, §4.1.1.2.2 above. Due to the complements of *liceat* (dat.-acc. direct.-OD) in the main cl. *liceat ... colere*, *ōlim* follows the modified *liceat* but in perf.

First Before +

Second Before

Hist. 2,7,2, §3.1.2 above: *nuper* + *ōlim* modify the idiom *mixtis consiliis* in abl. absol. *Ōlim* before *ceteri* (i.e. *distulere ... nuper, ōlim ceteri mixtis consiliis*) will modify *mixtis consiliis*, whereas *nuper* will apparently modify *distulere*.

Third or Further Removed Before

(1) *Ann.* 12,66,1, §4.1.3.4 above: since *ōlim* modifies three praedicativa *certa, propera, nec egens* (after gen. governed by them)²² of the S Agrippina, it precedes the first praedicativum *certa*.

(2) *Hist.* 5,7,1, §3.2.1, ex. 1 above: the adv. precedes both modifies infs. *uberes + habitatos (esse)* of AcI (governed by *ferunt*). An abl. instr. *magnisque urbibus* refers only to *habitatos*. Therefore, *ōlim* is in third position before it. See *Ann.* 3,34,2, §4.1.4.1.1 above.

First After +

First Before

Ann. 1,16,3, §4.1.3.1.2 above: *ōlim* between the apposition *dux* of Percennius and its adj. in gen. *theatralium operarum*, which are modified by it, is in contrast to *gregarius miles* modified by *dein*.

Second Before

Adsiduum ōlim et indefessum ... nuperrimeque ... privatis ... negotiis vacavisse

²²OLD, p. 305a, s.v. *certus, a, um*, adj., 10.a.; p. 594b, s.v. *egere, 3.a.*; p. 1492c, s.v. *properus, a, um*, adj. 1.a.

“(Thrasea) once an assiduous and indefatigable ... and most recently ... he gave his time to the private business” (*Ann.* 16,22,1).

Both modified adjs. *assiduum* + *indefessum* (in AcI after Capito speech) are in contrast with the following description *nuperrimeque* ... *vacavisse* concerning Thrasea: formerly Thrasea cooperated with his colleagues, but most recently he refrained from participation in public life.

Third or Further Removed Before

(1) *Penetrabat pavor et admiratio callidum olim et tegendis sceleribus obscurum huc confidentiae venisse*

“(The senators) were penetrated fear and amazement that (Tiberius), formerly cunning and secretive in the concealment of his crimes, had (then) reached such a degree of confidence” (*Ann.* 6,24,3).

Ōlim modifies both adjs. *callidum* + *obscurum* (in AcI after *admiratio*), attribute of Tiberius. An abl. respectus + gdve. *tegendis sceleribus* refer to *obscurum*, while *olim* is in third place before it.

(2) *Ann.* 6,4,1, §3.1.3, ex. 3 above: a chiastic contrast concerning Latiaris’ situations is emphasized (*fruit* refers to both modified predicate nouns by *olim/tunc*; both govern gen.).²³

praecipuus olim



tunc primus

(3) *Hist.* 1,5,2, §5.1.2, ex. 1 above: on account of abl. instr. *militari fama*, which refers only to *celebrata*, *olim* appears between both modified *laudata* and *celebrata* (referring to *severitas*).

(4) *Ger.* 28,1, §2.1 above: *validiores Gallorum res*, i.e. *quam Germanorum res*. Hence, the modified *validiores* + *olim* are at the top of AcI (after *trahit*) and the modified *fuisse* is at its tail. *Ōlim* before *fuisse* will modify only *fuisse* as a predicate of *res* and *validiores* may be an adj. of *res*, while *validiores fuisse* is predicate of AcI.

Third or Further Removed After

Ger. 41,2, §4.1.3.1, ex. 1 above: *olim* follows both modified adjs. *inclutum* + *notum* of *flumen*, an apposition of Elbe. *Tantum* after *nunc* and a chiastic arrangement (modified adj.-adv./adv.-modified V) emphasize the semantic contrast between both multiple parts:

²³L.-Sh., p. 1414b, s.v. *praecipuus*, adj., II; *OLD*, p. 1425b, s.v. *praecipuus*, adj., 3.b.; p. 1457b, s.v. *primus*, adj., 3.c.

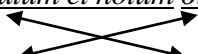
includum et notum ōlim

nunc tantum auditur

Table 5. *The Position of ōlim Concerning the Modified Part of Speech*

The position	References	Cases	Total
Before: first	<i>Ag.</i> 3,1; 11,4; <i>Ger.</i> 3,2; 33,1; <i>Dial.</i> 16,5; <i>Hist.</i> 1,60,1; 2,86,3; 92,1; <i>Ann.</i> 3,40,1; 13,15,3; 32,2; 14,12,3; 15,3; 15,51,2	14	47
Second	<i>Ag.</i> 12,1; 15,2; <i>Dial.</i> 38,2; <i>Hist.</i> 1,5,2; <i>Ann.</i> 3,54,3; 15,17,3; 16,21,1	7	
Third	<i>Ger.</i> 2,1; 8,2; 36,1; <i>Dial.</i> 32,4; <i>Hist.</i> 1,51,3; 67,1 (twice); 2,6,1; 3,11,2; 4,14,2; 57,2; <i>Ann.</i> 1,26,2; 53,1; 3,55,2; 58,3; 4,33,2; 6,39,2; 12,43,2; 60,2; 60,3; 13,18,3; 14,27,3; 64,3; 15,21,1; 55,2; 16,28,3	26	
After: first	<i>Ger.</i> 28,3; 28,4; 42,1; <i>Hist.</i> 3,47,1; 4,54,2; 65,2; 70,2; 84,4; 5,4,3; <i>Ann.</i> 2,62,2; 3,33,2; 4,67,3; 6,16,1; 26,3; 11,23,1-2; 12,18,1; 49,1; 54,2; 13,34,2; 14,63,2; 15,15,2	21	24
Second	<i>Ann.</i> 4,16,2; 64,3	2	
Third	<i>Hist.</i> 4,64,3	1	
First before + Second before	<i>Hist.</i> 2,7,2	1	4
Third before	<i>Hist.</i> 5,7,1; <i>Ann.</i> 3,34,2; 12,66,1	3	
First after + First before	<i>Ann.</i> 1,16,3	1	7
Second before	<i>Ann.</i> 16,22,1	1	
Third before	<i>Ger.</i> 28,1; <i>Hist.</i> 1,5,2; <i>Ann.</i> 6,4,1; 24,3	4	
Third after	<i>Ger.</i> 41,2	1	

A Comparison of *Ōlim* between Tacitus' Treatises

Some of our findings detailed in §§1-5 above are identical whereas some are different, since each book has features of its own, which are influenced by its content/style (see Table 6, references in Tables 1-5).

Identical Features

Ōlim appears in all the treatises and means “formerly”, “long ago”. It is next to posterior advs. or without them. *Ōlim* precedes the modified element, which is explicit, finite V or P.P.P.

Different Features

A lack of posterior advs. (with a contrast); *ōlim* modifies P.P.A., noun in apposition or the modified element is not explicit in *Hist. Ann.*

Ōlim modifies inf. or adj. in *Ag.*, *Ger.*, *Hist.*, *Ann.*

Ōlim follows the modified element or it has more than one position in *Ger.*, *Hist.*, *Ann.*

Table 6. *Ōlim*: A Comparison between Tacitus' Treatises

Identical features	Ag.	Ger.	Dial.	Hist.	Ann.	Total
Distribution	4	10	3	22	47	86
Meanings: "formerly"	2	5	2	11	26	46
"long ago"	2	5	1	6	14	28
Posterior adv.	2	3	2	8	19	34
Lack of an adv. without a contrast	2	7	1	8	18	36
The modified part of speech: is explicit	4	10	3	21	44	82
Finite verb	1	4	2	5	14	26
P.P.P.	1	2	1	6	10	20
First position before	2	2	1	3	6	14
Different features						
<i>Ut ōlim</i> "as before"	-	-	-	4	7	11
<i>Sic ōlim</i> "thus long ago"	-	-	-	1	-	1
Lack of posterior advs. (with a contrast in time/content)	-	-	-	6	10	16
The modified part of speech: P.P.A.	-	-	-	1	-	1
Adj. (+ apposition)	1	2	-	5	11	19
Inf.	1	2	-	4	8	15
Noun in apposition	-	-	-	-	1	1
Is not explicit	-	-	-	1	3	4
Its position-before: second	2	-	1	1	3	7
Third	-	3	1	7	15	26
After: first/second/third	-	3	-	7	14	24
First before + second/third before	-	-	-	2	2	4
First after + first/second/third before	-	1	-	1	4	6
Third after	-	1	-	-	-	1

Conclusions

The innovation of our research is an exhaustive discussion of a specific adv., viz. *ōlim*, in a specific corpus of Tacitus, which was not extensively quoted in the studies on Latin adverbs. Our study fills a gap on the adverbs' studies in Latin prose and in the Tacitean corpora. It points up the relationship between historical contexts and the usage of *ōlim* by linguistic/stylistic means: variety, which is favored by Tacitus, emphasis of contrast, word order, etc. Accordingly, the following typical phenomena are a result of the historical-linguistic background of the adv.'s usage:

Ōlim is documented in all the treatises with two lexical denotations: 1) A defined length of time and a non-continuous one "formerly"; 2) A non-defined length of time but a long-continuous one "long ago" like *iam prīdem/dūdum/diū* (sometimes in a concise phrase *ut/sic ōlim*).

For emphasis, contrast regarding time/content, which is highlighted by a chiasmic/parallel order, *ōlim* is in proximity to posterior advs. *dein/mox/nunc/nuper/prīdem/recēns/tum/tunc*.

The modified part of speech is mostly explicit (except for 4x) and is varied. Since *ōlim* refers to the past, it modifies mainly finite verbs in impf., perf., p.q.p. It sometimes modifies P.P.P.-perf./p.q.p., replacing a rel. cl., predicate of abl. absol.; inf.-predicate of AcI in inf. perf. and adj.- attribute, predicate noun, predicate of

abl. absol., praedicativum. *Ōlim* rarely modifies P.P.A., noun in apposition (under Greek influence) or more than one element.

The syntactic position of *ōlim* was examined by linguistic/stylistic means regarding content, emphasis and word order. However, Latin word order is not fixed in a sentence and exceptions from the typical order in Latin, especially for variety, emphasis and explication, are made by metathesis of words: the adv. follows its modified element; the V precedes its S; hyperbaton between *ōlim* and the modified part of speech (by verbs' complements or for emphasis some element); proximity of similar/opposite advs. and a chiastic/parallel arrangement, which reinforces the modified element. *Ōlim* mostly precedes the modified part of speech, sometimes *ōlim* follows it or it has more than one position: first before + second/third before; first after + a) First/second/third before, b) Third after. *Ōlim* at the end of a cl. is rare.

A concluding comparison of the adverb in question is made between the Tacitean treatises with a comparative summarizing table. Indeed, the differences in content and stylistic characteristics between the oratorical and historical books naturally create differences on the adv.'s usage and the contexts in which it occurs. However, this comparison yielded both identical and different features:

- 1) Identical features concern the occurrence of *ōlim* in all the treatises and its meanings; its proximity to posterior advs. or without them; *ōlim* precedes the modified part of speech, which is explicit, finite verbs or P.P.P.
- 2) Different features concern: a) The lack of posterior advs. (with a contrast) and the modified part of speech in *Hist.*, *Ann.*; b) The modified element and the adv.'s position in *Ger.*, *Hist.*, *Ann.*; c) The modified part of speech in *Ag.*, *Ger.*, *Hist.*, *Ann.*

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Nalayira Divya Prabandham Kaṇṇaṇ and Greek Herakles - Union of Binary Oppositions in Fighting with Animals and the Formula for Variation

By D Pugazhendhi*

It is mentioned by Greek historian Arrian that Indians worshipped Greek Herakles. The myths related with Greek Herakles like fighting against living creatures and wild animals and displaying their extra-ordinary power against natural elements are all found in the myths of Tamil God Kaṇṇaṇ. So it is asserted that the Indian Herakles worshipped by Tamil people is none other than Tamil God Kaṇṇaṇ through myths. Greek Herakles with lion head cap becomes Lion headed God in Tamil myth. Thus the binary oppositions between 'Man and Animal' and between 'Man and God' united as the God with animal headed human body. This research attempts to compare the Greek and Tamil myths with their theories of mythology.

Keywords: Greek, Herakles, Krishna, myths, Tamil Kannan

Introduction

Every society has myths. It happens that two societies resemble each other in their myths. According to the theories of mythology, the resemblances seen in the myths are said to be influential and parallel. The comparative researches highlight the influence of Greeks on Indians (Campbell 1960,²⁴ Edmunds 2002, Allen 2007, Wulff 2009^{25,26}, Adluri 2012, Allen 2014, Wulff 2017).

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²⁴The archaeology and ethnography of the past half-century have made it clear that the ancient civilizations of the old world— those of Egypt, Mesopotamia, Crete and Greece, India and China derived from a single base, and that this community of origin suffices to explain the homologous forms of their mythological and ritual structures.

²⁵The conclusions drew from my book Grecia en la India: El repertorio griego del Mahābhārata, its main argument is that the Mahābhārata was written with a great quantity (and quality) of Greek materials near at hand, specifically using the Iliad as a kind of guideline or reference point. Nevertheless, it is important to stress that the Mahābhārata's author/s use this Greek "repertoire" brilliantly, creating a new and unique work for a new political, religious, and ideological purpose.

²⁶Let us remember that the Iliad's Canto is entirely devoted to a night attack perpetrated by Diomedes and Odysseus. The Achaeans are under siege in their camp, but the two heroes escape at night to carry out a raid against the Trojans and allies, who have besieged them from the surrounding encampment. The side that had been besieging the city of Troy is now under attack and the heroes' raid is a violent rejoinder. Turning to the Mahābhārata now, we also have night attack by Aśvatthāman which occupies the entire tenth song. Following their victory, the Pāṇḍavas have occupied the Kaurava camp, but the situation now changes dramatically. Except for the five Pāṇḍavas and a Vṛṣṇi warrior, Sātyaki, whom Kṛṣṇa has led to a place of safety just before this massacre, all the sleeping Pāṇḍava forces are slain. Although the victims are protected by a god, he cannot fully avert the massacre. Apollo wakes up the Trojan allies during the raid to prevent further destruction, while Kṛṣṇa leads the Pāṇḍavas to another place to evade death. Finally, in both narratives, the main 'protagonist' is a horse; a false one in both cases. In the Iliad, it

Greek and Tamil are considered to be ancient classical languages. There is a resemblance between Herakles of Greek mythology and God Kannan of Tamil culture. The ancient Greek historian Arrian, who belonged to 86-146 AD mentions that Indians worshipped Theban Herakles, shows the influence of Greeks on Indians. This is the mythological theory of influence. On the contrary, Indians mention that the Herakles belonged to their own country. It gives the way to the theory of parallels. So there is need to compare these two myths based on these two mythological theories. This comparison leads to better understanding of these two myths (Strauss 1955)^{27,28}.

Historical Possibility of Influence

Mythological theory of parallels reveals that the resemblances between two myths are purely coincidental. But on the contrary, the mythological theory of influence emphasise the connection between these two people and the culture exchange takes place through trade. There is a mention of the relation between Greeks and Tamilians through trade in an ancient Greek work named 'Peripules of the Eritheranian Sea' (Wilfred 1912).

Βασιλείας δ' ἐστὶν ἡ μὲν Τύνδης Κηπροβότρου, κόμη παραθαλάσσιος ἔνσημος· ἡ δὲ Μουζίρις βασιλείας μὲν τῆς αὐτῆς, ἀκμάζουσα δὲ τοῖς ἀπὸ τῆς Ἀριακῆς εἰς αὐτὴν ἐρχομένοις πλοίοις καὶ τοῖς Ἑλληνικοῖς· κεῖται δὲ παρὰ ποταμὸν, ἀπέχουσα ἀπὸ μὲν Τύνδεως διὰ τοῦ ποταμοῦ καὶ διὰ θαλάσσης σταδίους πεντακοσίους, ἀπὸ δὲ τοῦ * κατ' αὐτὴν εἴκοσι. Ἡ δὲ Νέλκυνδα σταδίους μὲν ἀπὸ Μουζιρέως ἀπέχει σχεδὸν πεντακοσίους, ὁμοίως διὰ τε ποταμοῦ (καὶ πεζῇ) καὶ διὰ θαλάσσης, βασιλείας δὲ ἐστὶν Tyndis is of the Kingdom of Cerobothra; it is a village in plain sight by the sea. Muziris, of the same Kingdom, abounds in ships sent there with cargoes from Arabia, and by the Greeks; it is located on a river, distant from Tyndis by river and sea five hundred stadia, and up the river from the shore twenty stadia. Nelcynda is distant from Muziris by river and sea about five hundred stadia, and is of

is a wooden horse; in the Mahābhārata, it is a man whose name includes the word horse (asva) in it, i.e., Asvatthāman.

²⁷Mythology confronts the student with a situation which at first sight could be looked upon as contradictory. On the one hand, it would seem that in the course of a myth anything is likely to happen. There is no logic, no continuity, any characteristic can be attributed to any subject; every conceivable relation can be met. With myth, everything becomes possible. But on the other hand, this apparent arbitrariness is believed by the astounding similarity between myths collected in widely different regions.

²⁸Finally it can be understood why works on general mythology have yielded discouraging results. This arises from two reasons. First, comparative mythologists have picked up preferred versions instead of using them all. Second, we have seen that the structural analysis of one variant of one myth belonging to one tribe (in some cases, even one village) already requires two dimensions. When we use several variants of the same myth for the same tribe or village, the frame of reference becomes three dimensional and as soon as we try to enlarge the comparison the number of dimensions required increases to such an extent that it appears quite impossible to handle them intuitively. The confusions and platitudes which are the outcome of comparative mythology can be explained by the fact that multi-dimensional frames of reference cannot be ignored, or naively replaced by two or three dimensional ones.

ἐτέρας, τῆς Πανδίωνος· κεῖται δὲ καὶ αὐτὴ παρὰ ποταμὸν, ὥσει ἀπὸ σταδίων ἑκατὸν εἴκοσι τῆς θαλάσσης.

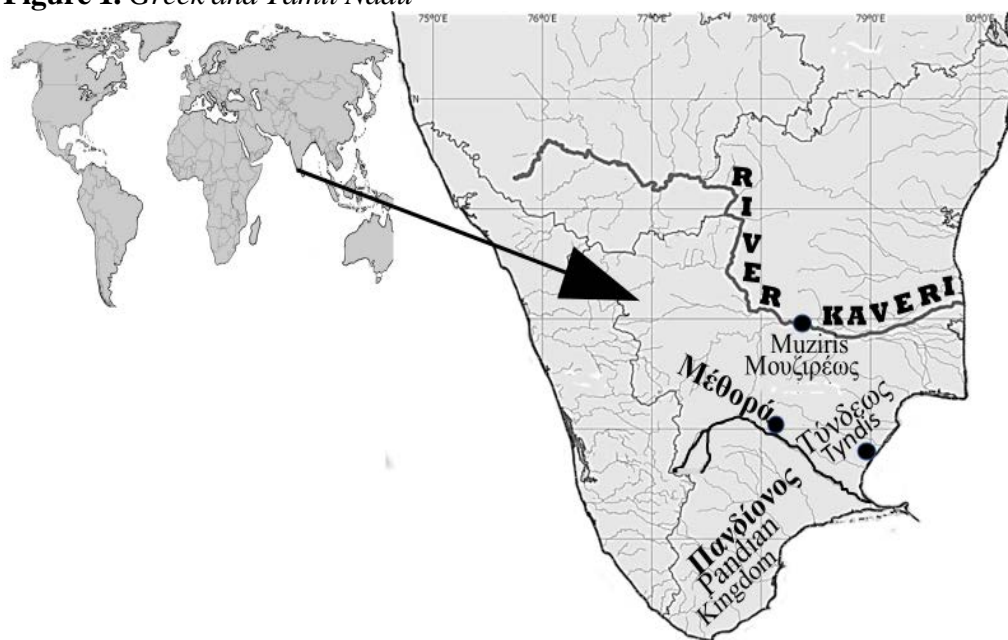
— παράγραφοι 53-54,

Περίπλους τῆς Ερυθρᾶς Θαλάσσης

another *Kingdom, the Pandian*. This place also is situated on a river, about one hundred and twenty stadia from the sea.

This is shown in Figure 1.

Figure 1. Greek and Tamil Nadu



This trade relation between Greeks and Tamils (Pugazhendhi 2020a, Pugazhendhi 2021f, Pugazhendhi 2022a, Warmington 1928²⁹, Schoff 1917)³⁰ provided way for transaction of many literary forms (Pugazhendhi 2020b, Pugazhendhi 2022a) and myths (Pugazhendhi 2021c, Pugazhendhi 2021d, Pugazhendhi 2021e, Pugazhendhi 2022b) with one another.

²⁹Literature tells us that traders in coral and pearls frequented Kaviripaddinam of the Chola Kingdom, and this town consist of resident Greek merchants; similarly, a poet who visited Uraiyur, the ancient Chola. Capital, speaks of coral and pearls together, with rare gems also, and as is shown by the passage in the “Toy cart,” jewellers’ shopsregularly sold coral.

³⁰The Tamil poem Paddinappalai gives us a vivid description of a busy port of the Chola Kingdom, Kaviripaddinam,... The goods were stamped with the royal tiger stamp after payment of customs duty and then released to the merchants. Close by were settlements of the Yavana merchants, which name included not only Ionians or Greeks, but Graeco-Bactrians and Parthians.

The Greek Historian Arrian

Theban Herakles mentioned in Greek mythology has resemblances with Indian Herakles. The place of worship of Indian Herakles is 'Methora' (Eberhard 1885).

- [4] Ἡρακλέα δέ, ὄντινα ἐς Ἰνδοῦς ἀπικέσθαι λόγος κατέχει, παρ' αὐτοῖσιν Ἰνδοῖσι γηγενέα λέγεσθαι. "The Herakles who penetrated so far, the Indians tell us, was a native of their country. He is particularly worshipped by the Suraseni, who have two great cities, Methora and Cleisoborus, and the navigable river Jobares, passes through their territories. This Herakles, as Megasthenes asserts, and the Indians themselves assure us, uses the same habit with the Theban Herakles.
- [5] τοῦτον τὸν Ἡρακλέα μάλιστα πρὸς Σουρασηνῶν γεραίρεσθαι, Ἰνδικοῦ ἔθνεος, ἵνα δύο πόλεις μεγάλαι, Μέθορά τε καὶ Κλεισόβορα: καὶ ποταμὸς Ἰωβάρης πλωτὸς διαρρέει τὴν χώραν αὐτῶν.
- [6] τὴν σκευὴν δὲ οὗτος ὁ Ἡρακλῆς ἦντινα ἐφόρει Μεγασθένης λέγει ὅτι ὁμοίην τῷ Θηβαίῳ Ἡρακλεῖ, ὡς αὐτοὶ Ἰνδοὶ ἀπηγέονται.
- Arrian, Indica, Chapter viii

The Heraklean mythology is explored among the Gods by the Tamil people of Tamil Nadu located in India. There is evidence to reveal the relation between the Greek Herakles and Tamil Gods (Pugazhendhi 2021c)³¹. So there is scope of more research to be carried out on these mythological concepts, which may arrive at new theories.

Tamil God Kaṇṇan

The ancient Tamil religious literature, highlights about Kaṇṇan (Kausalya 2018).

1172. Kaṇṇan, dark as a rain bearing cloud,
wore a thousand garlands,
ornaments of gold and pearl that shine like a waterfall.
23. Thillaichitrakuḍam,
Periya Thirumozhi,
Thirumangai Azhvar.

³¹Thus there are many resemblances seen in the myth of Herakles and Rama. The myth of Rama evolved as a great epic. So the obscure elements seen in the myth of Herakles were elaborated in the epic of Rama. The Greek Historian mentions that the Indians portrayed the Herakles as their own. The resemblances seen between Herakles and Rama prove that both are same. The same person can be seen in Greek religion, Hinduism and Buddhism. There are many sacred places called temples for Rama in Tamil Nadu and all over India. In Thailand the Temple of the Emerald Buddha or Wat Phra Kaew has the story of Phra Rama, the hero of Ramakien, as the Thai Ramayana. Further, in Sri Lanka Kelaniya is a Buddhist Temple related to Rama. Thus the Greek Herakles is worshipped in the name of Rama in many parts of the world.

‘Kaṇ’ means eye in Tamil. Since this God is dark in complexion, he is compared with the dark colour of the eye that is why his name is coined as Kaṇṇan. Other Indian languages call him as Krishna. ‘Krish’ means dark blue or black colour.^{32,33} The other name of this God is ‘Mal’ meaning strong as like in Greek³⁴. This God is also called by many more names as Raman, Vishnu and Narayanan. There are some researches about the resemblance of Herakles with Krishna (Bryant 2007)³⁵ and Rama (Pugazhendhi 2021c) who are the incarnations of Kannan. Some statement relates Herakles with Baldeva or Balarama (Tod 1873)³⁶. Tamil God Kaṇṇan always wears peacock feathers. This is shown in Figure 2.

³²And they also said, “Because this daughter is so dark in complexion, she should be called Krishna (the dark).”

Section CLXIX, Chaitraratha Parva, Book I, The Mahabharata (Kisari 1896)

³³Vedic Literature is praising and worshipping Indra as God and not mentioned about Kaṇṇan, Raman, Vishnu and Narayanan as Gods. The epic Mahabharata is praising and worshipping Krishna as Supreme God and epic Ramayana also is praising and worshipping Rama as Supreme God. Having lifted the mighty Govardhan hill by Krishna and Ahalya stone touched by Rama are degrading the Vedic God Indra. This shows the shifting of the society from the worship of Indra to the incarnations of Kaṇṇan.

³⁴

190 Ἄρεά τε τὸν *μαλέρων*, ὃς νῦν ἄχαλκος
ἀσπιδῶν
φλέγει με περιβόατον, ἀντιάζω
Soph.OT.

[190] Grant that the *fierce* god of death,
who now without the bronze of shields,
though among cries like those of battle,
(Jebb 1887)

³⁵There is a little doubt that the Sourasenoī refers to the Shurasenas, a branch of the Yadu dynasty to which Krishna belonged; Herakles to Krishna, or Hari-Krishna: Mehtora to Mathura, where Krishna was born; Kleisobora to Krishnapura, meaning “the city of Krishna”; and the Jobares to the Yamuna, the famous river in the Krishna story. Quintus Curtius also mentions that when Alexander the Great confronted Porus, Porus’s soldiers were carrying an image of Herakles in their vanguard.

³⁶How invaluable such remnants of ancient race of Harikula! How refreshing to the mind yet to discover, amidst the ruins on the Yamuna, Hercules (Baldeva or Balarama, god of strength) retaining his club and lion’s hide, standing on his pedestal at Baldeo, and yet worshipped by Suraseni! This was name given to a large tract of country round Mathura, or rather round Surapura, the ancient capital founded by Surasena, the grandfather of the Indian brother-deities, Krishna and Baldeva, Apollo and Hercules. The title would apply to either; though Baldeva has the attributes of “god of strength”. Both are es (lords) of the race (kula) of Hari (Hari-kul-es), of which the Greeks might have made the compound Hercules.

Figure 2. *Tamil God Kannaṇ with Peacock Feathers*
Tamil God Kannaṇ and Greek



These peacock feathers which were the very important article of export from Tamil Nadu to Greek and Hebrew lands (Pugazhendhi 2020c). The religious poets called Azhvvars have registered many myths that are related with Kannaṇ. There are twelve Azhvvars who have written 4000 songs (Nālāyira Divya Prabhandam) about this God. The myths mentioned in this literature can be compared with the myths of Greek Herakles.

Reason for the Birth of Herakles

The reason for the birth is mysterious, but the reason for the birth of Herakles is mentioned as follows.

τοῖς δὲ θεοῖς λόγιον ἦν ὑπὸ θεῶν μὲν
μηδένα τῶν Γιγάντων ἀπολέσθαι
δύνασθαι, συμμαχοῦντος δὲ θνητοῦ τινος
τελευτήσειν.....καὶ Διὸς κεραυνώσαντος
αὐτὸν Ἡρακλῆς τοξεύσας ἀπέκτεινε.
Apollod. 1.6.1-2.

Now the gods had an oracle that none of the giants could perish at the hand of gods, but that with the help of a mortal they would be made an end of..... The other giants Zeus smote and destroyed with thunderbolts and all of them shot with arrows by Hercules, as they were dying.

(Frazer 1921)

Thus the birth of Herakles is related with God and man. It is also related with the welfare of the world.

Reason for the Birth of Kaṇṇaṇ

The birth of Kaṇṇaṇ also has reasons and is related with the welfare of the world. His birth is related with 'avatāra' that stands equivalent to 'incarnation' or 'rebirths' (Kisari 1896).

'Lord Vishnu, God of world-wide fame, and worshipped throughout the world, was born of Devaki through Vasudeva, for the benefit of the three worlds. He has neither birth nor death, has radiant splendour, the Creator of the universe and the Lord of all! He is the cause of everything, he knows no deterioration, he is the all-pervading soul, the centre around which everything revolves, the substance in which the three attributes of Sattwa, Rajas and Tamas co-incide, the universal soul, the immutable, the material out of which this universe is created, the Creator himself, the controlling lord, the unseen dweller in every object, progenitor of this universe of five elements, who is united with the six high attributes, is the Pranava or Om of the Vedas, is infinite, incapable of being moved by any force save his own will, illustrious, the embodiment of the mode of life called Sannyasa, who floated on the waters before the creation, who is the source whence hath sprung this mighty frame, who is the great combiner, the uncreated, the invisible essence of all, the great immutable, bereft of those attributes that are knowable by the senses, who is the universe itself, without beginning, birth, and decay,--is possessed of infinite wealth, that Grandsire of all creatures, became incarnate in the race of the Andhaka-Vrishnis for the increase of virtue.'

Section LXIII, Book I,

Adivansavatarana Parva, The Mahabharata.

Thus it is mentioned that the God took human form to safeguard the world. In this way both the births of Greek Herakles and Tamil God Kaṇṇaṇ are related to themetology (Penglase 1994³⁷, Strauss 1955)³⁸.

And also the numerous births (avatāra, incarnation, rebirths) of Tamil God Kaṇṇaṇ which is not visible among other Gods have resemblance with the Labours of Greek Herakles to some extent.

Twelve Labours of Herakles

Herakles strives to attain the power of immortality through the twelve labours of Herakles through the heroic myth. Taken into consideration the myth of Kannan, a religious myth in which the God came down from the upper world and took many births to protect mankind. From the above incidents it is revealed that both the myths seem to fall in a structure of reciprocal with one another.

³⁷The term 'idea' is generally used to refer to a complex concept, like that of the ascent sequence, which usually involves many motifs. However, it is sometimes employed to refer to an element that is otherwise described as a motif, but this occurs when it stresses that the motif is a concept in the myth under discussion. The context makes the relevant meaning of the term clear in the exposition of the myths.

³⁸If there is a meaning to be found in mythology, this cannot reside in the isolated elements which enter into the composition of a myth, but only in the way those elements are combined.

In the Greek myth, Herakles is a hero and a God (Eisner 1987)³⁹.

βωμοὶ δὲ εἰσιν Ἡρακλέους τε καὶ Ἥβης, ἣν Διὸς παῖδα οὔσαν συνοικεῖν Ἡρακλεῖ νομίζουσιν: Ἀλκμήνης τε βωμὸς καὶ Ἰολάου πεποιήται, ὃς τὰ πολλὰ Ἡρακλεῖ συνεπόνθησε τῶν ἔργων.
Paus.1.19.3

There are altars of Herakles and Hebe, who they think is the daughter of Zeus and wife to Herakles. An altar has been built to Alkmena and to Iolaos, who shared with Herakles most of his labours.
(Jones 1918)

Though a God, his life was full of pain and hardship which is mentioned in the 'Twelve labours of Herakles'. There are many references about these twelve labours of Herakles in Greek paintings and literatures (Oldfather 1989).

τὸν δὲ Δία καταστρατηγηθέντα βουλευθῆναι τὴν τε ὑπόσχεσιν βεβαιῶσαι καὶ τῆς Ἡρακλέους ἐπιφανείας προνοηθῆναι: διό φασιν αὐτὸν τὴν μὲν Ἥραν πεῖσαι συγχωρῆσαι βασιλέα μὲν ὑπάρξει κατὰ τὴν ἰδίαν ὑπόσχεσιν Εὐρυσθέα, τὸν δ' Ἡρακλέα τεταγμένον ὑπὸ τὸν Εὐρυσθέα τελέσαι δώδεκα ἄθλους οὓς ἂν ὁ Εὐρυσθεὺς προστάξῃ, καὶ τοῦτο πράξαντα τυχεῖν τῆς ἀθανασίας.
Diod. 4.9.5.

and to take thought for the future fame of Herakles; consequently, they say, he persuaded Hera to agree that Eurystheus should be king as he had promised, but that Herakles should serve Eurystheus and perform twelve Labours, these to be whatever Eurystheus should prescribe, and that after he had done so he should receive the gift of immortality.

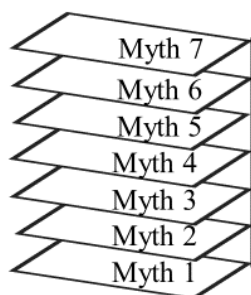
This type of naming as 'labours' is not found in any other Greek mythology. These are the characteristics that ought to be researched among the Tamil God Kaṇṇaṇ.

This is a horizontalized structure of myths which are loosely joined with one another and so are easily interchangeable (Strauss 1955).^{40,41} This structure is opposite to the vertical structure, which cannot be easily interchangeable as shown in Figure 3.

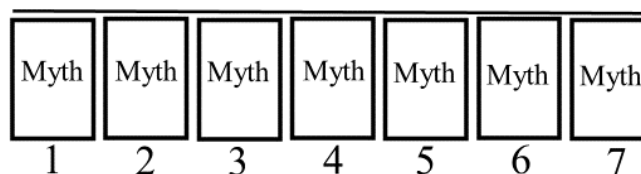
³⁹Here is that the hero cults signify that certain mortal individuals, ancestors of the Iron Age Greeks, were regarded as more than mere men. The stories told often assign them a divine and a mortal parent and even if they themselves were not semi-divine, they certainly enjoyed the favour of the gods. Their abilities, possibly due to their being related to the gods, and their achievements, bolstered by divine assistance, ensured an enduring impact on mortal society. On their death, they were worshipped – an honour normally preserved for the gods. While not immortal themselves, heroes were immortalised in the fame their deeds earned them.

⁴⁰So that three different readings become possible: left to right, top to bottom, front to back. All of these charts cannot be expected to be identical; but experiences shows that any difference to be observed may be correlated with other differences, so that a logical treatment of the whole will allow simplifications of the final outcome being the structural law of the myth.

⁴¹The technique which has been applied so far by this writer consists in analyzing each myth individually breaking down its story into the shortest possible sentences and writing each such sentences on an index card bearing a number of corresponding to the unfolding of the story..... The true constituent units of a myth are not the isolated relations but bundles of such relations and it is as bundles that these relations can be put to use and combined so as to produce a meaning. Relations pertaining to the same bundle may appear diachronically at remote intervals, but when we have succeeded in grouping them together, we have reorganized our myth.

Figure 3. *Structure of the Myths***Vertical Structure**

(Position of the myths can't be interchangeable)

Horizontal Structure

(Position of the myths can be interchangeable)

Horizontal and vertical structures are opposite to each other. The myths of Tamil God Kaṇṇaṇ and Greek Herakles have both horizontal and vertical structures. Even though these two structures are opposite to one another, they are also related. That is each segment of the horizontal is made up of a vertical structure. For example the myth of Herakles related with Iole and Deianira has a vertical structure stresses about monogamy. It is also same in the myth of Rama. In the horizontal structure both Rama (in the name of Kaṇṇaṇ or Krishna) and Herakles are related with polygamy. Thus the theme present in the vertical structure seems to be opposite to the horizontal structure. Besides, this vertical structure operates the horizontal structure. This mythological theory of binary opposition is seen in both these myths. Further, it is possible that within a vertical structure there can be binary opposition that which is seen in both of these myths. The characters of the Herakles in the play 'Herakles' by Euripides is an example for the binary opposition in a play. The main variants that are there in the myth of Herakles is transformation from hero to God where as in the myth of Tamil Kaṇṇaṇ it is from God to hero.

Occasion of the Birth of Herakles

The myth behind the birth of Herakles is mentioned by Hesoid who belongs to eighth century BC. It was elaborated by later Historians like Apollodorus, C2nd BC.

πρὸ τοῦ δὲ Ἀμφιτρύωνα παραγενέσθαι εἰς
Θήβας Ζεὺς, διὰ νυκτὸς ἔλθων καὶ τὴν μίαν
τριπλασιάσας νύκτα, ὅμοιος Ἀμφιτρώνι
γενόμενος Ἀλκμήνῃ συνευνάσθη καὶ τὰ
γενόμενα περὶ Τηλεβοῶν διηγήσατο.
Ἀμφιτρώων δὲ παραγενόμενος, ὥς οὐχ ἑώρα
φιλοφρονουμένην πρὸς αὐτὸν τὴν γυναῖκα,
ἐπυνθάνετο τὴν αἰτίαν· εἰπούσης δὲ ὅτι τῇ
προτέρᾳ νυκτὶ παραγενόμενος αὐτῇ
συγκεκοίμηται, μανθάνει παρὰ Τειρεσίου
τὴν γενομένην τοῦ Διὸς συνουσίαν.
Ἀλκμήνῃ δὲ δύο ἐγέννησε παῖδας, Διὶ μὲν

But before Amphitryon reached Thebes,
Zeus came by night and prolonging the one
night threefold he assumed the likeness of
Amphitryon and bedded with Alcmena and
related what had happened concerning the
Teleboans. But when Amphitryon arrived
and saw that he was not welcomed by his
wife, he inquired the cause; and when she
told him that he had come the night before
and slept with her, he learned from Tiresias
how Zeus had enjoyed her. And Alcmena
bore two sons, to wit, Hercules, whom she

Ἡρακλέα, μιᾷ νυκτὶ πρεσβύτερον, had by Zeus and who was the elder by one
Ἀμφιτρώωνι δὲ Ἰφικλέα. night, and Iphicles, whom she had by
Apollod. 2.4.1. Amphitryon.
(Frazer 1921)

Thus the birth of Herakles occurred by Zeus in the form of different man with the wife of that man. The same myth is also seen in Tamil.

Some say, 'This is Indiran as a cat'.
Some say, 'This is Akalikai who was desired by Indiran'.
Some say, 'This is her husband Gauthaman, the sage
who left, tricked by Indiran'. Some say, 'This rock is
the hapless Akalikai cursed by her angry husband'.
19. Paripādal, Sanga Ilakkiyam
(Tamil Virtual University 1995)

The same is also present in Sanskrit (Ralph 1874).

On a day
It chanced the saint (Husband Gautam) had gone away,
When Town-destroying Indra came,
And saw the beauty of the dame.
The sage's form the God endued,
And thus the fair Ahalyā wooed:
'Love, sweet! should brook no dull delay
But snatch the moments when he may.'
She knew him in the saint's disguise,
Lord Indra of the Thousand Eyes,
But touched by love's unholy fire,
She yielded to the God's desire.
Canto XLVIII. Indra And Ahalyā, Book I.
Rāmāyan of Vālmīki

Thus the mythical birth of Herakles mentioned in Greek is also present both in Tamil and Sanskrit. Here this myth is not related with the birth of Tamil God Kaṇṇaṇ, but in the realization of the divine power in Rama, which is one of the incarnations of Tamil God Kaṇṇaṇ. The birth of Tamil God Kaṇṇaṇ is related with another myth which is mentioned by the ancient Greek Historian Apollodorus.

Ἀκρίσιω δὲ περὶ παίδων γενέσεως ἀρρένων
χρηστηριαζομένω ὁ θεὸς ἔφη γενέσθαι
παῖδα ἐκ τῆς θυγατρὸς, ὃς αὐτὸν ἀποκτενεῖ.
δείσας δὲ ὁ Ἀκρίσιος τοῦτο, ὑπὸ γῆν
θάλαμον κατασκευάσας χάλκεον τὴν
Δανάην ἐφρούρει. ταύτην μὲν, ὡς ἔνιοι
λέγουσιν, ἔφθειρε Προῖτος, ὅθεν αὐτοῖς καὶ
ἡ στάσις ἐκινήθη: ὡς δὲ ἔνιοι φασι, Ζεὺς
μεταμορφωθείς εἰς χρυσὸν καὶ διὰ τῆς
ὀροφῆς εἰς τοὺς Δανάης εἰσρύνεις κόλπους

When Acrisius inquired of the oracle how
he should get male children, the god said
that his daughter would give birth to a son
who would kill him. Fearing that, Acrisius
built a brazen chamber underground and
there guarded Danae. However, she was
seduced, as some say, by Proetus, whence
arose the quarrel between them; but some
say that Zeus had intercourse with her in
the shape of a stream of gold which poured

συνήλθεν. αἰσθόμενος δὲ Ἀκρίσιος ὕστερον ἐξ αὐτῆς γεγεννημένον Περσέα, μὴ πιστεύσας ὑπὸ Διὸς ἐφθάρθαι, τὴν θυγατέρα μετὰ τοῦ παιδὸς εἰς λάρνακα βαλὼν ἔρριπεν εἰς θάλασσαν. προσενηχθείσης δὲ τῆς λάρνακος Σερίφῳ Δίκτυς ἄρας ἀνέτρεφε τοῦτον.
Apollod. 2.4.1.

through the roof into Danae's lap. When Acrisius afterwards learned that she had got a child Perseus, he would not believe that she had been seduced by Zeus, and putting his daughter with the child in a chest, he cast it into the sea. The chest was washed ashore on Seriphus, and Dictys took up the boy and reared him.
(Frazer 1921)

Thus ancient Greek Historian Apollodorus mentioned a myth which is also related with Zeus as a father, who is the father of Herakles. Resemblance with this Greek myth is related with the birth of Tamil God Kaṇṇaṇ.

Kamsa's sister Devaki got married to Vasudeva. Just after the wedding, when Kamsa himself was driving the newlywed couple in his chariot, an astral voice made a prophecy. This voice said from the sky, "Oh Kamsa, very happily you are driving your sister after her wedding. The eighth child born to this sister of yours will slay you. That will be your end." Kamsa arranges to kill all of Devaki's children. Kamsa kept his sister and his brother-in-law under a kind of house imprisonment so that they were constantly watched. When Kaṇṇaṇ was born, Vasudeva secretly carries the infant away across the river and exchanges with another baby. When Kamsa tries to kill the new born, the exchanged baby appears as Goddess, warning him that his death has arrived in his kingdom, and then disappears.

This is the mythological birth of Tamil God Kaṇṇaṇ. Thus both the myths is present in Sanskrit and Tamil. In Greek both the myths are related with the offspring of the Zeus. Herakles and Tamil God Kaṇṇaṇ, both were reared not by biological father, but by step farther. And the resemblance continues also in afterbirth incidents. One of the afterbirth incidents is related with breast feeding of the wicked step mothers both to Greek Herakles and Tamil God Kaṇṇaṇ.

Baby Herakles and Wicked Step Mother

The Greek Herakles was named for his robustness. He was strong from the time of his birth. This is highlighted by an incident (Oldfather 1989).

6. Ἀλκμήνη δὲ τεκοῦσα καὶ φοβηθεῖσα τὴν τῆς Ἥρας ζηλοτυπίαν, ἐξέθηκε τὸ βρέφος εἰς τὸν τόπον ὃς νῦν ἂπ' ἐκείνου καλεῖται πεδίον Ἡράκλειον. καθ' ὃν δὴ χρόνον Ἀθηνᾶ μετὰ τῆς Ἥρας προσιοῦσα, καὶ θαυμάσασα τοῦ παιδίου τὴν φύσιν, συνέπεισε τὴν Ἥραν ὑποσχεῖν τὴν θηλήν. τοῦ δὲ παιδὸς ὑπὲρ τὴν ἡλικίαν βιαίτερον ἐπισπασαμένου τὴν θηλήν, ἡ μὲν Ἥρα διαλγῆσασα τὸ βρέφος ἔρριπεν, Ἀθηνᾶ δὲ κομίσασα αὐτὸ πρὸς τὴν μητέρα τρέφειν παρεκελεύσατο.
Diod. 4.9.6

Now at this very time Athena, approaching the spot in the company of Hera and being amazed at the natural vigour of the child, persuaded Hera to offer it the breast. But when the boy tugged upon her breast with greater violence than would be expected at his age, Hera was unable to endure the pain and cast the babe from her, whereupon Athena took it to its mother and urged her to rear it.

Here Hera had enmity even before the birth of Herakles. So, with this bad intention when she approached to feed the baby Herakles, he behaved roughly towards her which scared Hera and thereby forfeit her bad intention. This peculiar myth is only attributed to Herakles in Greek. This strange characteristics need to be researched among the Tamil Gods.

Tamil Kaṇṇaṇ and Putanā

The Uncle of Kaṇṇaṇ, King Kamsa who has failed to kill the baby God at the time of his birth repeatedly tried to kill Kaṇṇaṇ on various occasions. In one of his attempt he sent a lady called Putanā to kill the baby Kaṇṇaṇ (Kausalya 2018).

993. The lord dark as a kāyām flower
drank the poisonous milk of Putanā
when she came as a mother and killed her
5. Sāḷakkirāmam, Periya Thirumozhi,
Thirumangai Azhvar.

Putanā had smeared her breast with poison and placed the infant Kaṇṇaṇ to lie on her lap to breast-feed him. But the baby killed Putanā. This is shown in Figure 4.

Figure 4. *Infant Kaṇṇaṇ and Wicked Step Mother*



Thus in Greek myth, the baby Herakles knowing the step-mother's evil intention protected himself by threatening the breast-feeding step mother. In Tamil myth the baby Kaṇṇaṇ killed the breast-feeding lady who tried to kill him. In this way both the myths of Greek Herakles and Tamil God Kaṇṇaṇ have resemblances on the basis of the mythological theory of parallel. This resemblances and the

variants in the resemblances can be researched by using the mythological theory of binary opposition (Pugazhendhi 2022b), (Asghari 2011⁴², Aimukhambet et al. 2017)^{43,44}.

Man and animal are two poles of binary opposition. In the same way man and God are two poles of another binary opposition as shown in Figure 5.

Figure 5. Binary Opposition



Sometimes these binary oppositions may unite and form a new form called 'Union of Binary Opposition'⁴⁵ (Aimukhambet et al. 2017)^{46,47} as shown in the Figure 6.

⁴²Comparison of two myths is done following mythical three indices: 1) Structure; 2) Binary Oppositions; 3) Archetypal patterns.

⁴³Any myth there is an opposition; any myth starts with a binary opposition, for example: life and death, heaven and earth, day and night, right and left, up and down, sacred and miserable, raw and ripe, black and white and etc.

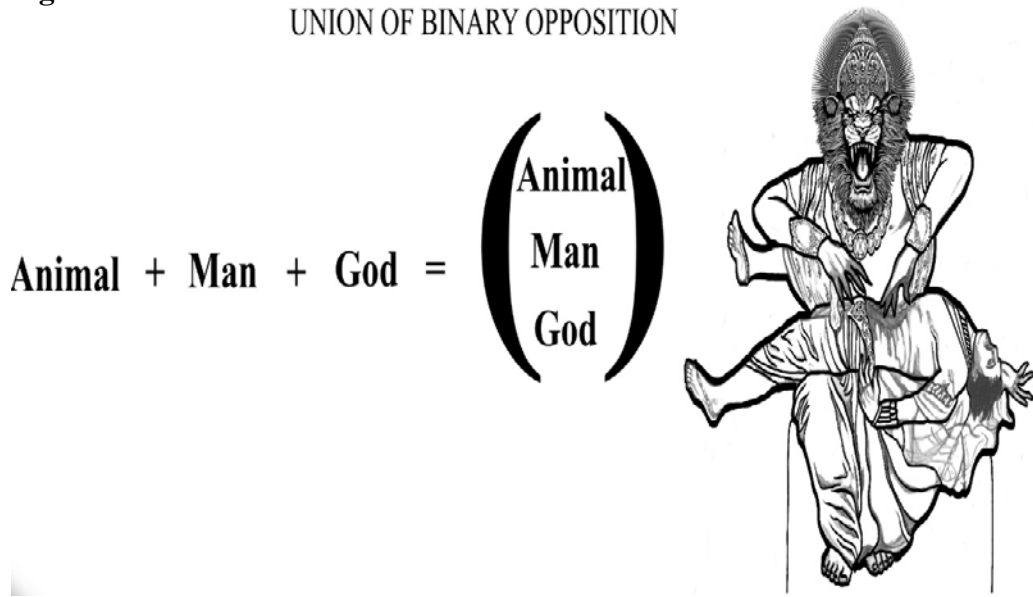
⁴⁴According to Sossyur, the language elements function in opposition system which distinguishes them from each other and connect with each other

⁴⁵Binary opposition originated in Saussurean structuralist theory.

⁴⁶German philosopher Friedrich Nietzsche proposed the concept of "Appolo" and "Dionysus". Both Apollo and Dionysus are the characters of Greek myth and Zeus, the god of lightning is considered their father. According to Nietzsche's statement western thinkers Plutarch and Thomas Mun give their views. They systematize different qualities in the nature of the sun god Apollo and Dionysus the god of wine, which are different from each other, and define their opposite way of life. Heaven and earth, black and white, darkness and light, hot and cold, day and night, height and bottom, north and south, east and west, good and evil, angel and demon in the mythical knowledge create the pairs opposed to each other, but inseparable from each other. Although they are fighting among themselves, they cannot function without each other. From a philosophical point of view, we know that one of the basic laws of dialectics is the unity and law of struggle. According to this law, it is known that there are contradictions of phenomenon and processes on the basis of development. These contradictions will become the cornerstone of development. Unity and struggle of opposites are the source of movement and the whole being.

⁴⁷Recognizing the shadow archetype as the beginning of a man's animal instinct, K. Jung explains that "the body is an animal, with the nature of the animal, which is a living system integrated with the instinct, the instinct of the beginning. To be with the shadow is to tell the instinct "yes", as well as to approve the scandalous trend in the depth of the heart". Here the problem of the struggle between mind and body, spirit and lust are taken into account. When it comes to binary opposition and artistic transformation of the notion of a dyadic unity, we can give examples from world literature. The source of metamorphosis, which has become a regular motive of fairy tales, is mythical variability. Changeability in myth, transition from one form to another indicates duality and struggle. Transformation of a person into an animal at night and into a human by day is found in the tales of Turkic and Slavic people.

Figure 6. Union



Here the animal headed God with the human body pierced the body of the enemy with his sharp nails like lion is the example for the 'Union of Binary Opposition'. The reference of this God will be discussed around Figure 14.

These types of binary oppositions are seen both in Greek Herakles and Tamil God Kaṇṇaṇ with a formula (Strauss 1955).⁴⁸

$$\underset{x}{f}^y(a) = \underset{x}{f}^y(b) + \underset{x}{f}^y(c)$$

This is a formula, in which 'f' is a function, x and y are lower and higher limits and 'a,b,c' are variables. By using this formula for these two myths the sequence of the variations can be found out.

Herakles and Kaṇṇaṇ with Animals

Man and animal are binary opposition. The fight between Herakles and four animals have an important place in myth.

1. Herakles and Snake
2. Herakles and Eagle

⁴⁸When we have succeeded in organizing a whole series of variants in a kind of permutation group, we are in a position to formulate the law of that group. Although it is not possible at the present stage to come closer than an approximate formulation which will certainly need to be made more accurate in the future, it seems that every myth (considered as the collection of all its variants) corresponds to a formula of the following type:
 $fx(a) : fy(b) = fx(b) : fa-x(y)$

3. Herakles and Horse
4. Herakles and Hart

These myths are related with Herakles and compared with Tamil God Kannan.

Herakles and Snake

The snake being a poisonous creature evokes fear amongst all. Those who are unafraid of snakes are really courageous. In Greek myth there are two instances that are related with that of the snake which highlights the courage of Herakles. In one instance, Hera sends the snake to kill Heracles (Oldfather 1989).

μετὰ δὲ ταῦτα ἡ μὲν Ἥρα δύο δράκοντας ἀπέστειλε τοὺς ἀναλώσοντας τὸ βρέφος, ὃ δὲ παῖς οὐ καταπλαγεὶς ἑκατέρᾳ τῶν χειρῶν τὸν αὐχένα σφίγγας ἀπέπνιξε τοὺς δράκοντας.
Diod. 4.10.1

After this Hera sent two serpents to destroy the babe, but the boy, instead of being terrified, gripped the neck of a serpent in each hand and strangled them both.

In another incident, Herakles needs to fight with a snake which has the special ability to shift⁴⁹ its shape (Oldfather 1989).

5. δεύτερον δ' ἔλαβεν ἄθλον ἀποκτεῖναι τὴν Λερναίαν ὕδραν, ἧς ἐξ ἑνὸς σώματος ἑκατὸν αὐχένες ἔχοντες κεφαλὰς ὄφεων διετετύπωντο. τούτων δ' εἰ μία διαφθαρεῖη, διπλάσιος ὁ τμηθεὶς ἀνίει τόπος: δι' ἣν αἰτίαν ἀήττητος ὑπάρχειν διείληπτο, καὶ κατὰ λόγον: τὸ γὰρ χειρωθὲν αὐτῆς μέρος διπλάσιον ἀπεδίδου βοήθημα.

5 The second Labour which he undertook was the slaying of the Lernaean hydra, springing from whose single body were fashioned a hundred necks, each bearing the head of a serpent. And when one head was cut off, the place where it was severed put forth two others; for this reason it was considered to be invincible, and with good reason, since the part of it which was subdued sent forth a two-fold assistance in its place.

6. πρὸς δὲ τὴν δυστραπέλειαν ταύτην ἐπινοήσας τι φιλοτέχνημα προσέταξεν Ἰολάῳ λαμπάδι καομένη τὸ ἀποτμηθὲν μέρος ἐπικάειν, ἵνα τὴν ῥύσιν ἐπίσχη τοῦ αἵματος. οὕτως οὖν χειρωσάμενος τὸ ζῷον εἰς τὴν χολὴν ἀπέβαπτε τὰς ἀκίδας, ἵνα τὸ βληθὲν βέλος ἔχῃ τὴν ἐκ τῆς ἀκίδος πληγὴν ἀνίατον.

6 Against a thing so difficult to manage as this Heracles devised an ingenious scheme and commanded Iolaüs to sear with a burning brand the part which had been severed, in order to check the flow of the blood. So when he had subdued the animal by this means he dipped the heads of his arrows in the venom, in order that when the missile should be shot the wound which the point made might be incurable.

Diod. 4.11.5,6

⁴⁹Shape shifting -- shape shifting is the ability to physically transform through an inherently superhuman ability, divine intervention, demonic manipulation, sorcery, spells or having inherited the ability.

Thus there were two myths that are related with snake which is attributed to Herakles to highlight his strength and courage. Here the formula for the variants shall be used to calculate.

$$\begin{array}{c}
 \begin{array}{c} \text{y} \\ \text{f}(\text{a}) = \text{f}(\text{b}) + \text{f}(\text{c}) \\ \text{x} \end{array} \\
 \begin{array}{c} \text{hero} \\ \text{f}(\text{Herakles}) = \text{f}(\text{Snake}) + \text{f}(\text{Action}) \\ \text{baby} \end{array} \\
 \begin{array}{c} \text{super natural} \quad \text{courage} \\ \text{f}(\text{Herakles Super baby}) = \text{f}(\text{Natural Snake}) + \text{f}(\text{Playing Courage}) \\ \text{baby} \end{array} \\
 \begin{array}{c} \text{hero} \\ \text{f}(\text{Herakles Super Hero}) = \text{f}(\text{Super Natural Snake}) + \text{f}(\text{Killing Courage}) \\ \text{baby} \end{array}
 \end{array}$$

Here based on the value of 'b' and 'c' the value of 'a' alters. Playing with the natural snake elevates the baby, but not the grown up man. The hero becomes more heroic killing the super natural snake. Depending on the power of the supernatural snake the acts of the hero goes up. Here Herakles played with the snake instead of killing it. The snake episode was exaggerated as a five headed reptile. Suppose if the snake kills the hero, the worth of the hero will decrease. Thus according to the value of the variables 'b' and 'c' in the formula, the value of 'a' is estimated. The same research can be conducted in the case of Tamil God Kaṇṇaṇ.

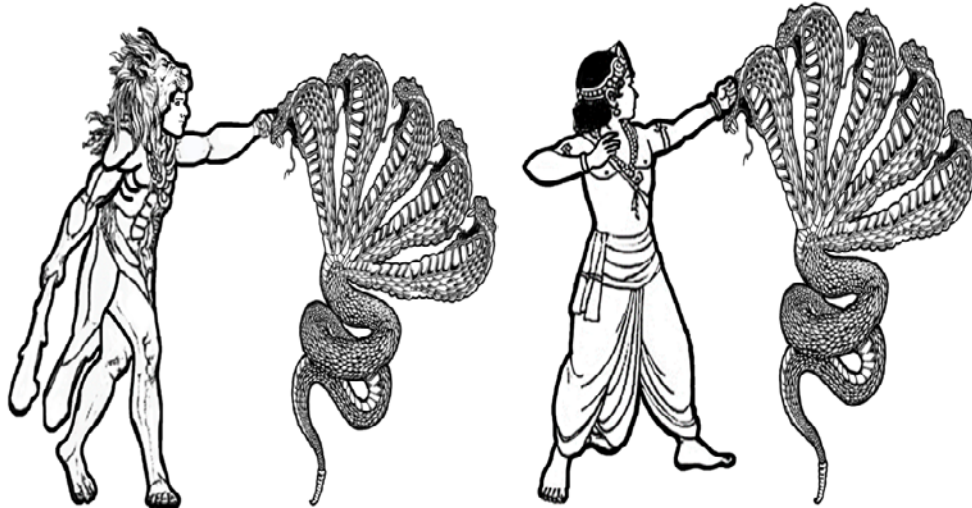
Tamil God Kaṇṇaṇ and the Snake

There are instances to attest the bravery of Tamil God Kaṇṇaṇ with snake. In one situation it occurs wild whereas in the other it is treated as a pet (Kausalya 2018).

1171. When Kaṇṇaṇ plunged into a cool pond blooming with lotus
fought and danced on the head of the sharp-toothed snake Kālingan,
the Gods in the sky, astonished, looked on
23. Thillaichitrakuḍam,
Periya Thirumozhi,
Thirumangai Azhvar.

King Kamsa sent Aghasura to kill Kaṇṇan. Aghasura assumed the form of 8-mile-long serpent⁵⁰, disguising his open mouth against a mountain. Kaṇṇan entered the serpent upon his arrival and then enlarged the size of his own body. In response, the demon too extended his own body size. Nonetheless, his breath stopped. Suffocating, his eyes rolled here and there and then popped out. The demon's, however, could not pass through any outlet, and therefore it finally burst out through a hole in the top of Aghasura's head. Thus, the demon met its end through Kaṇṇan. The above thoughts are figuratively compared in Figure 7.

Figure 7. *Herakles, Kaṇṇan and Snake*



Thus Greek Herakles and Tamil Kaṇṇan are both associated with many headed snake. Because of this commonality seen, the same mythological theory of parallels is used in both these situations. As per the theory of binary opposition Herakles fought with extraordinary snake and Tamil Kaṇṇan fought with demon which was in the form of venomous snake. The difference in the binary opposition depends upon the personality of the Hero and God. Also, Tamil Kaṇṇan had a pet snake that is used as a bed (Cook 1894).⁵¹

1510. Our lord Nambi who rests
on the shining snake Adisesha on the clear milky ocean
shot his arrow and killed Marisan
when the Raksasan came in the form of a swiftly running deer
and went to king Mahabali as a dwarf, asked for three feet of land,
and measured the world and the sky with his two feet.
57. Thirunaraiyur

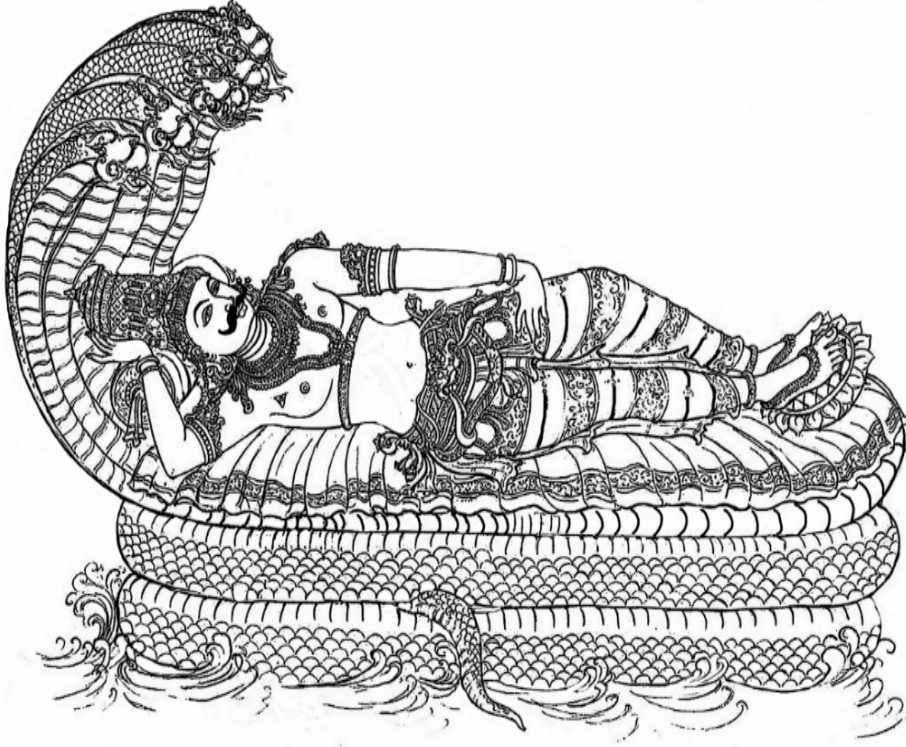
⁵⁰Therianthropy --- Therianthropy is the mythological ability of human beings to metamorphose into other animals by means of shapeshifting.

⁵¹Being nursed by an animal is another kind of recurring interaction between man and beast. The frequent exposure of illegitimate or unwanted children provided ample opportunity for adoption by animals, and this is typically told of persons who later gained special significance or who were blessed with special abilities

Periya Thirumozhi,
Thirumangai Azhvar.

This is shown in Figure 8.

Figure 8. *Kaṇṇaṇ and Snake Bed*



Fighting with the super natural reptile increases the rating of the hero. Fighting with the demon which was in the form of the super natural reptile snake the super natural qualities as that of the God. After fighting with that animal and making it as his pet further increases the power equal to that of God. And the variants shall be estimated using the formula applied for Herakles.

$$\begin{array}{c}
 \text{hero} \\
 \text{baby}
 \end{array}
 \overset{y}{\underset{x}{f}}(a) = \overset{y}{\underset{x}{f}}(b) + \overset{y}{\underset{x}{f}}(c)$$

$$\begin{array}{c}
 \text{hero} \\
 \text{baby}
 \end{array}
 \overset{\text{super natural}}{\underset{\text{natural}}{f}}(\text{Herakles}) = \overset{\text{super natural}}{\underset{\text{natural}}{f}}(\text{Snake}) + \overset{\text{courage}}{\underset{\text{fear}}{f}}(\text{Action})$$

$$\begin{array}{c}
 \text{hero} \\
 \text{baby}
 \end{array}
 \overset{\text{super natural}}{\underset{\text{natural}}{f}}(\text{Herakles}) = \overset{\text{super natural}}{\underset{\text{natural}}{f}}(\text{Natural Snake}) + \overset{\text{courage}}{\underset{\text{fear}}{f}}(\text{Playing Courage})$$

$$\begin{array}{c} \text{hero} \\ \mathbf{f}^{\text{(Herakles)}} \\ \text{baby} \end{array} \begin{array}{c} \text{Super} \\ \text{Hero} \end{array} = \begin{array}{c} \text{super natural} \\ \mathbf{f}^{\text{(Super)}} \\ \text{natural} \end{array} \begin{array}{c} \text{Natural} \\ \text{Snake} \end{array} + \begin{array}{c} \text{courage} \\ \mathbf{f}^{\text{(Killing)}} \\ \text{fear} \end{array} \begin{array}{c} \text{Courage} \end{array}$$

This formula can be applied with the myth of Tamil Kannaṇ.

$$\begin{array}{c} \text{God} \\ \mathbf{f}^{\text{(Kannaṇ)}} \\ \text{hero} \end{array} \begin{array}{c} \text{Super} \\ \text{God} \end{array} = \begin{array}{c} \text{super natural} \\ \mathbf{f}^{\text{(Super)}} \\ \text{natural} \end{array} \begin{array}{c} \text{Natural} \\ \text{Snake} \end{array} + \begin{array}{c} \text{courage} \\ \mathbf{f}^{\text{(Killing)}} \\ \text{fear} \end{array} \begin{array}{c} \text{Courage} \end{array}$$

$$\begin{array}{c} \text{God} \\ \mathbf{f}^{\text{(Kannaṇ)}} \\ \text{hero} \end{array} \begin{array}{c} \text{Super} \\ \text{God} \end{array} = \begin{array}{c} \text{super natural} \\ \mathbf{f}^{\text{(Demon)}} \\ \text{natural} \end{array} \begin{array}{c} \text{In the form of} \\ \text{Super} \\ \text{Natural} \\ \text{Snake} \end{array} + \begin{array}{c} \text{courage} \\ \mathbf{f}^{\text{(Killing)}} \\ \text{fear} \end{array} \begin{array}{c} \text{Courage} \end{array}$$

$$\begin{array}{c} \text{God} \\ \mathbf{f}^{\text{(Kannaṇ)}} \\ \text{hero} \end{array} \begin{array}{c} \text{Super} \\ \text{God} \end{array} = \begin{array}{c} \text{super natural} \\ \mathbf{f}^{\text{(Super)}} \\ \text{natural} \end{array} \begin{array}{c} \text{Natural} \\ \text{Snake} \end{array} + \begin{array}{c} \text{courage} \\ \mathbf{f}^{\text{(Using as Bed)}} \\ \text{fear} \end{array} \begin{array}{c} \text{Courage} \end{array}$$

In all these formulae the segments are same, only the components vary, due to the difference in the values that ranges from hero to God.

Herakles and Eagle

Herakles wants to free the God Prometheus who was under the custody of Zeus. At that time the eagle of the Zeus fought with Herakles and was killed (Oldfather 1989).

Zeὺς δέ, Προμηθέως παραδόντος τὸ πῦρ τοῖς ἀνθρώποις, δεσμοῖς κατελάβετο καὶ παρέστησεν ἀετὸν τὸν ἐσθίοντα τὸ ἥπαρ αὐτοῦ. Ἡρακλῆς δ' ὀρῶν τῆς τιμωρίας αὐτὸν τυγχάνοντα διὰ τὴν τῶν ἀνθρώπων εὐεργεσίαν, τὸν μὲν ἀετὸν κατετόξευσε, τὸν δὲ Δία πείσας λῆξαι τῆς ὀργῆς ἔσωσε τὸν κοινὸν εὐεργέτην.

And Zeus, when Prometheus had taken fire and given it to men, put him in chains and set an eagle at his side which devoured his liver. But when Herakles saw him suffering such punishment because of the benefit which he had conferred upon men, he killed the eagle with an arrow, and then persuading Zeus to cease from his anger he rescued him who had been the benefactor of all.

Diod. 4.15. 2

In this myth, Herakles fought with the eagle of Zeus and killed it. If it is an ordinary bird there is no credit in killing it. But the bird was that of God Zeus and so killing it was considered to be an immense task.

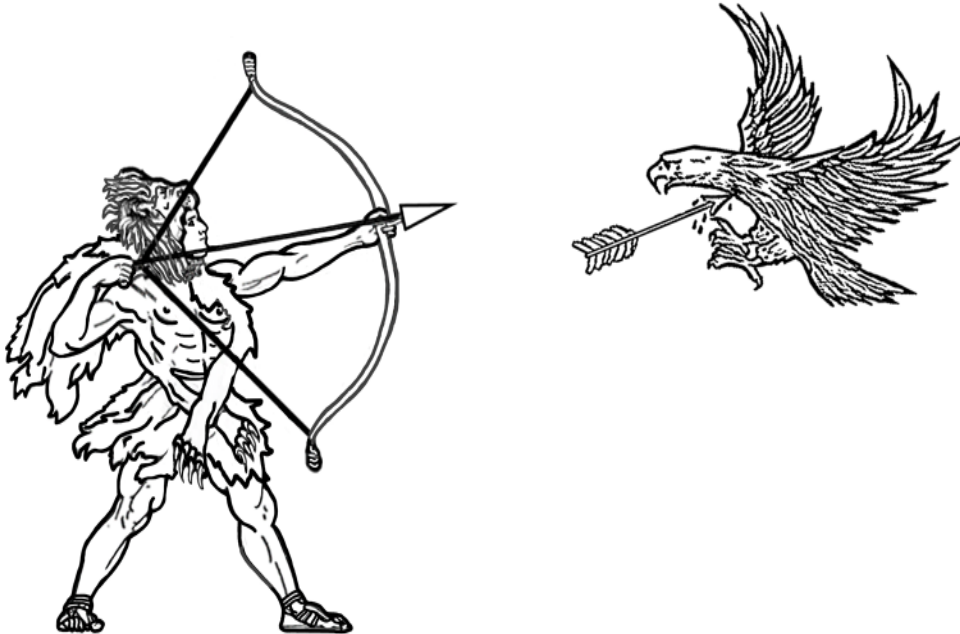
$$\begin{array}{c}
 \begin{array}{ccc}
 \overset{y}{f}(\overset{x}{a}) & = & \overset{y}{f}(\overset{x}{b}) + \overset{y}{f}(\overset{x}{c}) \\
 \text{hero} & \text{super natural} & \text{courage} \\
 \underset{\text{baby}}{f}(\text{Herakles}) & = & \underset{\text{natural}}{f}(\text{Zeus God Eagle}) + \underset{\text{fear}}{f}(\text{Killing Courage})
 \end{array}
 \end{array}$$

In this way Herakles becomes a super hero by killing the bird of the God Zeus. Likewise, the Tamil God Kaṇṇaṇ also killed a bird which was actually a demon (Kausalya 2018).

1018.and who as a cowherd split open the beak of the Asuran
that came as a bird
8. Thiruvēkaṭam, Periya Thirumozhi,
Thirumangai Azhvar

Thus the mythological theory of parallels shall be used between these two myths. The above thoughts are figuratively compared in Figure 9.

Figure 9. Herakles, Kaṇṇaṇ and Bird





Further the Tamil Kaṇṇaṇ also had a pet eagle, Garuda (Kausalya 2018).

1094. The lord who rests on the roaring ocean and rides on Garuda
crushed the mountain-like arms of the strong undefeated Rākshasas
15. Thirukkaḍalmallai, Periya Thirumozhi,
Thirumangai Azhvar

This is shown in Figure 10.

Figure 10. *Kaṇṇaṇ and Bird*



In these ways, killing the demon which was in the form of a bird, eagle and having the same species as a pet, increases the degree of power of Tamil Kaṇṇaṇ to make him a super God. Thus the mythological theory of parallels is used in

these two myths and both have variants in a determined order as that seen in a formula. Here these are the formulae used for Herakles.

$$\begin{array}{c} \text{y} \\ \text{f(a)} = \text{f(b)} + \text{f(c)} \\ \text{x} \quad \text{super natural} \quad \text{courage} \\ \text{f}^{\text{hero}}(\text{Herakles}) = \text{f}^{\text{natural}}(\text{Zeus God Eagle}) + \text{f}^{\text{fear}}(\text{Killing Courage}) \\ \text{baby} \end{array}$$

This formula can be applied with the myth of Tamil Kaṇṇaṇ.

$$\begin{array}{c} \text{God} \\ \text{f}^{\text{hero}}(\text{Kaṇṇaṇ Super God}) = \text{f}^{\text{natural}}(\text{Demon super natural In the form of Super Natural Eagle}) + \text{f}^{\text{fear}}(\text{courage Killing Courage}) \\ \text{God} \\ \text{f}^{\text{hero}}(\text{Kaṇṇaṇ Super God}) = \text{f}^{\text{natural}}(\text{Demon super natural In the form of Super Natural Eagle}) + \text{f}^{\text{fear}}(\text{courage Using as Vehicle Courage}) \end{array}$$

Here it is to be noted that the wild animals were tamed and made as vehicle for the Gods of the Tamil myth.

Herakles and Horse

The myth of Greek Herakles was related to a strange horse. This horse is not a herbivorous animal but a carnivore (Oldfather 1989).

3. μετὰ δὲ ταῦτα ἔλαβεν ἄθλον ἀγαγεῖν τὰς Διομήδους τοῦ Θρακῶς ἵππους. αὗται δὲ χαλκᾶς μὲν φάτνας εἶχον διὰ τὴν ἀγριότητα, ἀλύσεσι δὲ σιδηραῖς διὰ τὴν ἰσχὺν ἐδεσμεύοντο, τροφὴν δ' ἐλάμβανον οὐ τὴν ἐκ γῆς φυομένην, ἀλλὰ τὰ τῶν ξένων μέλη διαιρούμεναι τροφὴν εἶχον τὴν συμφορὰν τῶν ἀκληρούντων. ταύτας ὁ Ἡρακλῆς βουλόμενος χειρώσασθαι τὸν κύριον Διομήδην παρέβαλε, καὶ ταῖς τοῦ παρανομεῖν διδάξαντος σαρκὸς ἐκπληρώσας τὴν ἔνδειαν τῶν ζώων εὐπειθεῖς ἔσχεν.

Diod. 4.15.3

3. The next Labour which Herakles undertook was the bringing back of the horses of Diomedes, the Thracian. The feeding-troughs of these horses were of brass because the steeds were so savage, and they were fastened by iron chains because of their strength, and the food they ate was not the natural produce of the soil but they tore apart the limbs of strangers and so got their food from the ill lot of hapless men. Herakles, in order to control them, threw to them their master Diomedes, and when he had satisfied the hunger of the animals by means of the flesh of the man who had taught them to violate human law in this fashion, he had them under his control.

Thus the natural character of the horse was exaggerated to show its wildness nature in the myth of Herakles. Here the formula for the variants shall be applied.

$$\begin{array}{c} \text{hero} \\ \text{f(a)} = \text{f(b)} + \text{f(c)} \\ \text{baby} \quad \text{super natural} \quad \text{courage} \\ \text{f(Man)} = \text{f(Horse)} + \text{f(Normal)} \\ \text{natural} \quad \text{fear} \end{array}$$

Here horse is not dangerous and fearful like that of a snake. So playing with the horse is not considered as a heroic act as that with a poisonous snake. There are evidences which show that the horses were killed. Since killing of a horse is considered ordinary, these myths does not eliminate these incidents instead add the value of horse saying that it is carnivores and so was extraordinary. Thus the value is added to 'b' so as to increase the value for 'a' as per the formula.

$$\begin{array}{c} \text{hero} \\ \text{f(Herakles)} = \text{f(Flesh eating Super Natural horse)} + \text{f(Controlling Courage)} \\ \text{baby} \quad \text{super natural} \quad \text{courage} \\ \text{natural} \quad \text{fear} \end{array}$$

Tamil Kaṇṇaṇ and Horse

The myth of Tamil Kaṇṇaṇ was also related with a strange horse (Kausalya 2018).

1168. The lord danced on a pot,
went between two marudam trees and killed the Asurans,
wrestled with the Mallars sent by Kamsan and killed them,
killed Kesi when he came in the form of a horse,
23. Thillaichitrakuḍam,
Periya Thirumozhi,
Thirumangai Azhvar.

In the myth of Tamil Kaṇṇaṇ the horse was metaphorized as a demon. The above thoughts are figuratively compared in Figure 11.

Figure 11. *Herakles, Kaṇṇaṇ and Horse*



Thus Greek Herakles and Tamil Kaṇṇaṇ have resemblances in the myths that are related to the abnormal nature of the horse. Thus these resemblances in the myths shall form the basis to use the mythological theory of parallel. Here the following formula is used for nature of Herakles.

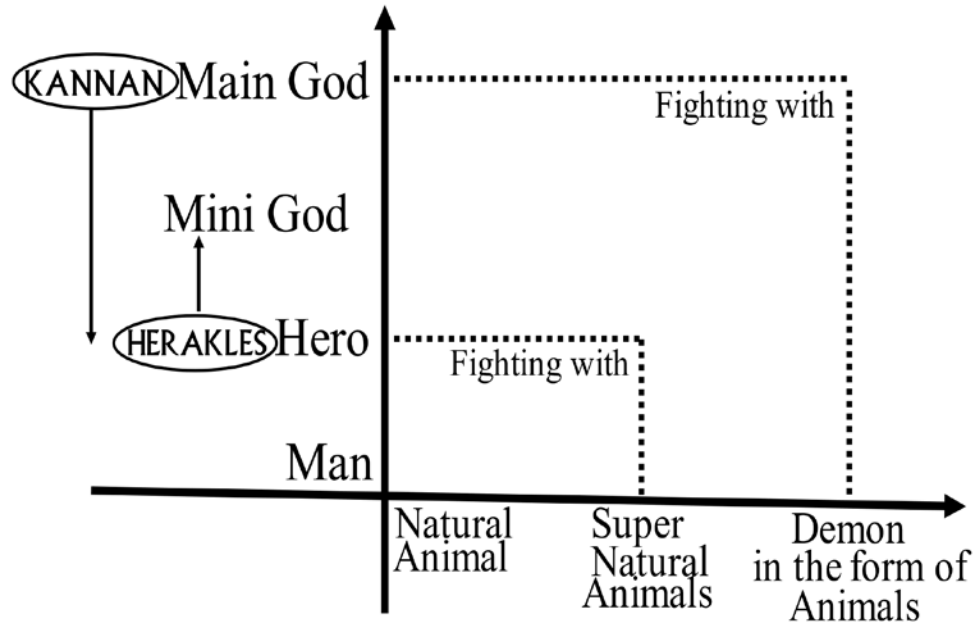
$$\begin{array}{c}
 \text{y} \\
 \text{f(a)} = \text{f(b)} + \text{f(c)} \\
 \text{x} \quad \text{x} \quad \text{x} \\
 \text{hero} \quad \text{super natural} \quad \text{courage} \\
 \text{f}^{\text{(Herakles)}} = \text{f}^{\text{(Flesh eating Super Natural horse)}} + \text{f}^{\text{(Controlling Courage)}} \\
 \text{baby} \quad \text{natural} \quad \text{fear}
 \end{array}$$

This formula can be applied with the myth of Tamil Kaṇṇaṇ.

$$\begin{array}{c} \text{God} \\ \text{f}^{\text{(Kannan)}} \\ \text{hero} \end{array} = \begin{array}{c} \text{Demon} \\ \text{super natural} \\ \text{f}^{\text{(In the form of)}} \\ \text{natural} \end{array} + \begin{array}{c} \text{courage} \\ \text{f}^{\text{(Killing)}} \\ \text{fear} \end{array} \text{(- Courage)}$$

In these ways, both the Greeks and Tamil were related with the beasts which took the form as a snake, deer, eagle, bull and horse. All of these forms are living creatures. There also exist myths in both the Greek and Tamil having resemblances with the non-living things. In all these three topics both the defendant and the opponent have more or less equal strength. Then the victory goes to defendant. It proves the strength of the defendant. Depending upon the strength of the opponent the strength of the defendant is decided whether it is a hero or God. This is shown in Figure 12.

Figure 12. Hero and God



Apart from this animals which are not known for the bravery are also found in these two myths.

Herakles and Hart

The Greek Herakles was associated with an animal called hart which had golden horns. There are different types of opinion that exist in the victory of Herakles over this animal (Oldfather 1989).

μετὰ δὲ ταῦτ' ἔλαβε πρόσταγμα τὴν χρυσόκερων μὲν οὖσαν ἔλαφον, τάχει δὲ διαφέρουσαν, ἀγαγεῖν. τοῦτον δὲ τὸν ἄθλον συντελῶν τὴν ἐπίνοιαν ἔσχεν οὐκ

The next Command which Herakles received was the bringing back of the hart which had golden horns and excelled in swiftness of foot. In the performance of

ἀχρηστοτέραν τῆς κατὰ τὸ σῶμα ῥώμης. οἱ μὲν γάρ φασιν αὐτὴν ἄρκυσιν ἐλεῖν, οἱ δὲ διὰ τῆς στιβείας χειρώσασθαι καθεύδουσιν, τινὲς δὲ συνεχεῖ διωγμῷ καταπονῆσαι: πλὴν ἄνευ βίας καὶ κινδύνων διὰ τῆς κατὰ τὴν ψυχὴν ἀγχινοίας τὸν ἄθλον τοῦτον κατειργάσατο.
Diod. 4.13.1

this Labour his sagacity stood him in not less stead than his strength of body. For some say that he captured it by the use of nets, others that he tracked it down and mastered it while it was asleep, and some that he wore it out by running it down. One thing is certain, that he accomplished this Labour by sagacity of mind, without the use of force and without running any perils.

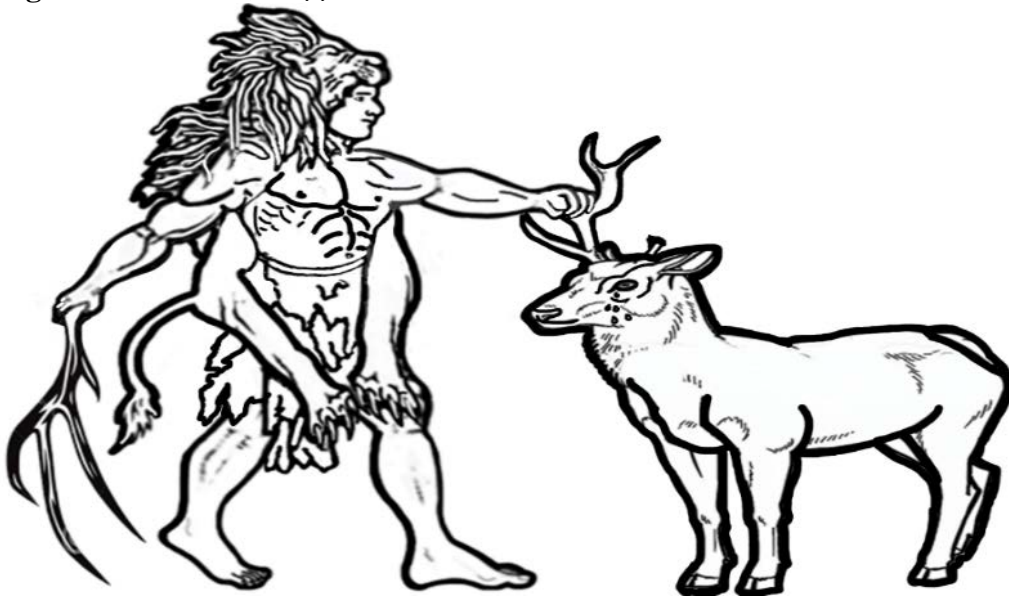
Tamil Kaṇṇaṇ and Deer

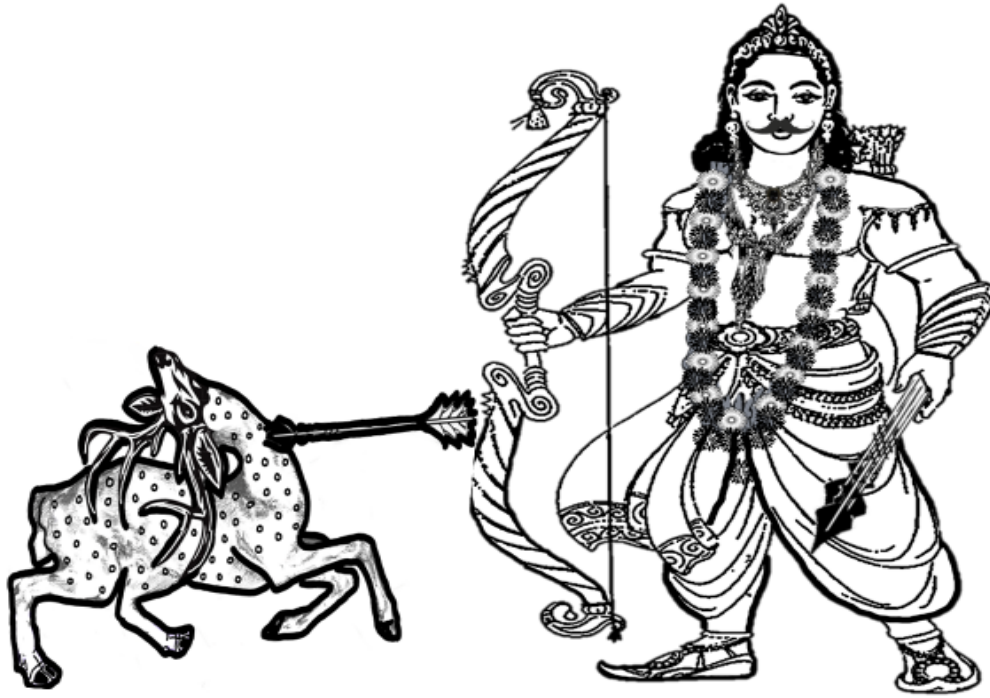
When Kaṇṇaṇ lived in the name of Raman with his wife, she saw a golden deer and asked for it. Then Kaṇṇaṇ chased the deer with the intention of catching it. But he could not succeed in his attempt of catching it alive. So he used the bow and arrow and killed the deer. The myth says that it was a demon called Mareecha in the form of a deer (Kausalya 2018).

985. Our lord who became angry, bent his curved bow and killed the Rākshasa Marisan when he came as a golden deer,
4. Thiruvadariyāchiramam,
Periya Thirumozhi,
Thirumangai Azhvar.

The above thoughts are figuratively compared in Figure 13.

Figure 13. *Herakles, Kaṇṇaṇ and Deer*





Thus the myth of Herakles with the hart has resemblance with the myth of Tamil God Kannaṇ on the basis of the mythological theory of parallel. Here this animal did not have any role in highlighting the strength of the defendant. At the same time this animal was killed in the life of both the hero and the God. As mentioned in the myth of the horse this myth also does not want to eliminate this incident, the reason being it is not a dreadful animal. So it is shown as a demon in one of the myth to add value to 'b' so as to increase the value of 'a' in the formula. In both of the myths this particular animal did not harm them, but it was being liked by their partner and based on their request it was hunted. So one more component is added to the structure.

$$\begin{array}{l}
 \text{hero} \\
 \text{baby} \\
 \text{God} \\
 \text{f}^{\text{Kannaṇ}}_{\text{Super God}} = \text{f}^{\text{Golden horns, swift foot, Super Natural hart}}_{\text{super natural Demon}} + \text{f}^{\text{Catching Skill}}_{\text{fear courage}}
 \end{array}$$

Thus all the animals killed in the myth of Tamil Kannaṇ were exaggerated as demon and the reason being to add the value of 'a' as 'Super God'. Where as in the myth of Herakles it was mentioned as super natural animal in place of 'b' to add the value to 'a' as Hero.

The Theory of Influence

1. Greek to Tamil – Wild Boar and world
2. Tamil to Greek – Bull leaping and Marriage

Greek to Tamil – Wild Boar and World

The myths related with boar and carrying the world on his shoulders is seen in the myth of Tamil God Kaṇṇaṇ⁵².

1180. The lord who took the form of a boar⁵³ with sharp horns,⁵⁴
split open the earth and brought the earth goddess from the underworld,
and cut off the thousand strong arms
of Vāṇāsuram with his sharp discus smeared with oil
24. Seerkāzi Shrirāmaviṇṇaharam,
Periya Thirumozhi,
Thirumangai Azhvar.

In the myth, the demon stole the earth and hide underneath the waters. The Tamil God Kaṇṇaṇ took an incarnation with a boar's head.⁵⁵ (Porada 1987)⁵⁶. This boar incarnation slew the demon and retrieved the earth from the ocean, lifting it on his tusks, and restored to its place in the universe.

There is no more information available regarding this myth. Stole the earth, retrieved the earth by a wild boar can be understood with the aid of Herakles myth.

⁵²Zoanthropy - A kind of delusion in which the patient believes himself transformed into one of the lower animals.

⁵³Theriocephaly - to beings which have an animal head attached to an anthropomorphic or human body as the animal-headed forms of gods depicted in ancient Egyptian religion (such as Ra, Sobek, Anubis).

⁵⁴That the difference between monster and hero is not that great at all, and that both are frequently assigned similar attributes – fearlessness, stamina, supernatural power – and that they behave in similar ways (Gilmore 2003).

⁵⁵Clinical lycanthropy is defined as a rare psychiatric syndrome that involves a delusion that the affected person can transform into, has transformed into, or is, an animal. Its name is associated with the mythical condition of lycanthropy, a supernatural affliction in which humans are said to physically shapeshift into wolves. It is purported to be a rare disorder. A patient reports in a moment of lucidity or reminiscence that they sometimes feel as an animal or have felt like one. A patient behaves in a manner that resembles animal behavior, for example howling, growling, or crawling. It also seems that lycanthropy is not specific to an experience of human-to-wolf transformation; a wide variety of creatures have been reported as part of the shape-shifting experience. A review of the medical literature from early 2004 lists over thirty published cases of lycanthropy, only the minority of which have wolf or dog themes. Canines are certainly not uncommon, although the experience of being transformed into a hyena, cat, horse, bird or tiger has been reported on more than one occasion. Transformation into frogs, and even bees, has been reported in some instances.

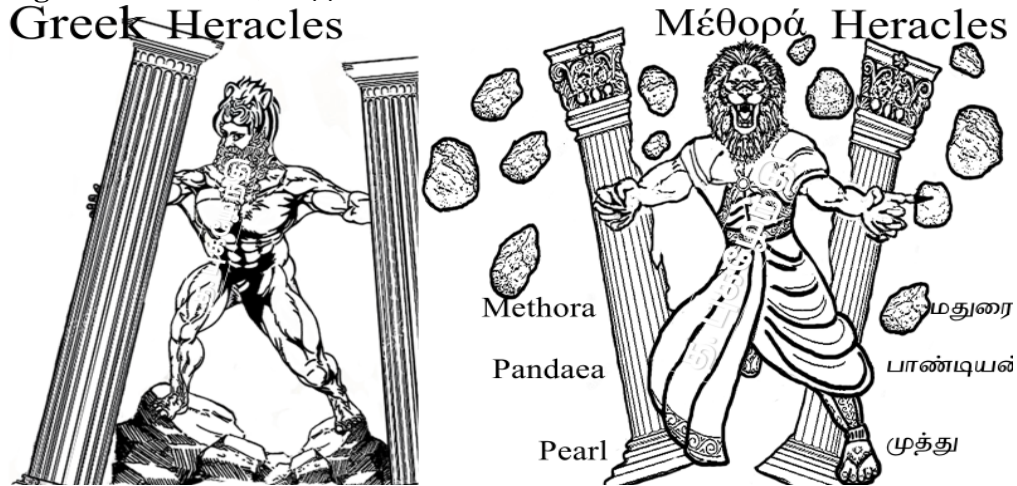
⁵⁶Those human/animal hybrids that walk upright on two legs are referred to as “Demons”, while those that walk on four and seem more animal-like are called “Monsters” – a distinction in terminology that is unique to this area.

Herakles and lion are binary opponents (Strauss Clay 2003).⁵⁷ Herakles wore the lion's head is the union of binary opposition. One more step is also there, that is Herakles became lionised man. This animalized form is seen in the myth of Tamil God Kaṇṇaṇ (Vernant 1982⁵⁸, Porada 1987)⁵⁹.

1042. You, the god of the tall majestic Thiruvēkaṭam hills,
took the form of a pillar, split it open,
emerged from it in the form of a **man-lion**
and killed the Asuran Hiranyan.
Your arrows never fail to hit their targets.
10. Thiruvēkaṭam,
Periya Thirumozhi,
Thirumangai Azhvar.

The above thoughts are figuratively compared in Figure 14.

Figure 14. *Herakles, Kaṇṇaṇ Related with Pillar*



Here the Lion cap of Greek Heracles becomes united with the head in Tamil God Kaṇṇaṇ and produce a new form as shown in the Figure 15.

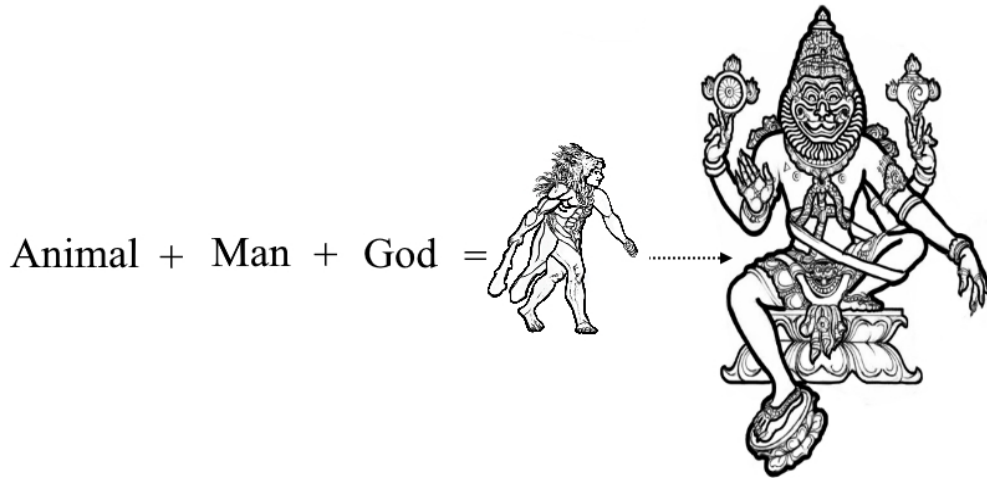
⁵⁷The Nemean lion's conduct is an "inversion of the proper relations between men and beasts through his 'ruling over' men."

⁵⁸In Greek Mythology the relationship between god, man and animal forms a linear arrangement with man positioned mid-way between god and animal.

⁵⁹But theirs is a hieroglyphic representation and according to Fischer their very elegance is "proof against them being monstrous". Fischer also points out that these depictions possess an inner logic absent in hybrid monsters: In representations of the king, various aspects of his power are displayed by placing the head of the king - a constant feature - on the bodies of various animals like the falcon, snake or lion. This basic arrangement remains regular, but there is variation in degree of human / animal proportions which implies shape-shifting. This, according to Fischer, is entirely appropriate in depicting a king who of all people stands on the edge of divinity as the link between man and god. In the same way it must not be assumed that the elements of composition necessarily carry a standard significance. The serpent for instance does not always represent that which is dangerous: in Iran and Bactria serpents were used to signify life death but also because the wave-like motion of their bodies was associated with life-giving water.

Figure 15. The Formation of Lion Headed God

Union of Binary Oppositions



This God not only has lion head, but also behave like a lion as mentioned in Figure 5.

Herakles not only fought with lion, but also with many animals including wild boar. When he carried the wild boar the king hid himself in a vessel (Oldfather 1989).

τρίτον δὲ πρόσταγμα ἔλαβεν ἐνεγκεῖν τὸν Ἑρμάνθιον κάπρον ζῶντα, ὃς διέτριβεν ἐν τῇ Λαμπεΐᾳ τῆς Ἀρκαδίας.....πλέον δὲ τοῦ δέοντος καταπολεμήσας ἀπέκτεινεν, ὥστε τὸν ἄθλον ὑπάρχειν ἀσυντέλεστον.

2 ὁμως δὲ κατὰ τὴν μάχην ταμειυσάμενος ἀκριβῶς τὴν συμμετρίαν ἀπὴνεγκε τὸν κάπρον ζῶντα πρὸς Εὐρυσθέα: ὃν ἰδὼν ὁ βασιλεὺς ἐπὶ τῶν ὤμων φέροντα, καὶ φοβηθεὶς, ἔκρυπεν ἑαυτὸν εἰς χαλκοῦν πίθον.

Diod. 4.12. 1&2






The third command which he received was the bringing back to life the Erymanthian boar which lived on Mount Lampeia in Arcadia.and should he attack it more violently than was proper, then he would have killed it and so the Labour would remain unfulfilled.

2 However, when it came to the struggle he kept so careful an eye on the proper balance that he brought back the boar alive to Eurystheus; and when the king saw him carrying the boar on his shoulders, he was terrified and hid himself in a bronze vessel.

Thus he fought with wild boar much technically and brought the boar alive by carrying it on his shoulders. On seeing this, the king got terrified and hid himself. Thus Heracles is related with the myth of boar.

This can be compared with the myth of wild boar headed Tamil God Kaṇṇaṇ based on the theory of 'Union of Binary Opposition' in Table 1.

Table 1. *Comparison*

Lion	Wild Boar	Theory of Binary Opposition
 <p>Herakles</p>	 <p>Herakles</p>	<p>Man versus animal (Binary Opposition)</p>
 <p>Herakles</p>	<p>Herakles does not wear Boar cap.</p>	<p>Man with animal (head) (Union of Binary Opposition)</p>
 <p>Tamil God Kaṇṇaṇ</p>	 <p>Tamil God Kaṇṇaṇ</p>	<p>Animalized with the body of the Man (Tamil Kaṇṇaṇ)</p>

Thus the theory of union of binary opposition gave light to the myth of boar headed Tamil God Kaṇṇaṇ. In the myth of Herakles related with boar the king was frightened and so hid himself in a closed vessel. Likewise here the world was

hidden in a sea, which is like a closed vessel. Here the myth about the world should be found out (Aimukhambet et al. 2017)⁶⁰. It sheds light on the myth.

Herakles and World

The Herakles who was related with the myth of boar is also related with the knowledge of Astronomy and the world (Oldfather 1989).

4 τοὺς δὲ ληστὰς ἐν κήπῳ τινὶ παιζούσας
τὰς κόρας συναρπάσαι, καὶ ταχὺ φυγόντας
εἰς τὰς ναῦς ἀποπλεῖν. τούτοις δ' ἐπὶ τινος
ἀκτῆς δευνοποιοιμένοις ἐπιστάντα τὸν
Ἡρακλέα, καὶ παρὰ τῶν παρθένων μαθόντα
τὸ συμβεβηκός, τοὺς μὲν ληστὰς ἅπαντας
ἀποκτείνει, τὰς δὲ κόρας ἀποκομίσει πρὸς
Ἄτλαντα τὸν πατέρα: ἀνθ' ὧν τὸν Ἄτλαντα
χάριν τῆς εὐεργεσίας ἀποδιδόντα μὴ μόνον
δοῦναι τὰ πρὸς τὸν ἄθλον καθήκοντα
προθύμως, ἀλλὰ καὶ τὰ κατὰ τὴν
ἀστρολογίαν ἀφθόνως διδάξαι

5 περιττότερον γὰρ αὐτὸν τὰ κατὰ τὴν
ἀστρολογίαν ἐκπεπονηκότα καὶ τὴν τῶν
ἄστρον σφαῖραν φιλοτέχνως εὐρόντα ἔχειν
ὑπόληψιν ὡς τὸν κόσμον ὅλον ἐπὶ τῶν
ᾠμων φοροῦντα. παραπλησίως δὲ καὶ τοῦ
Ἡρακλέους ἐξενέγκαντος εἰς τοὺς
Ἕλληνας τὸν σφαιρικὸν λόγον, δόξης
μεγάλης τυχεῖν, ὡς διαδεδεγμένον τὸν
Ἀτλαντικὸν κόσμον, αἰνιττομένων τῶν
ἀνθρώπων τὸ γεγονός.

Diod. 4.27. 4&5

4 Meanwhile the pirates had seized the girls while they were playing in a certain garden and carried them off, and fleeing swiftly to their ships had sailed away with them. Heracles came upon the pirates as they were taking their meal on a certain strand, and learning from the maidens what had taken place he slew the pirates to a man and brought the girls back to Atlas - their father; and in return Atlas was so grateful to Heracles for his kindly deed that he not only gladly gave him such assistance as his Labour called for, but he also instructed him quite freely in the knowledge of Astrology.

5 For Atlas had worked out the science of astrology to a degree surpassing others and had ingeniously discovered the spherical nature of the stars, and for that reason was generally believed to be bearing the entire firmament upon his shoulders. Similarly in the case of Heracles, when he had brought to the Greeks the doctrine of the sphere, he gained great fame, as if he had taken over the burden of the firmament which Atlas had borne, since men intimated in this enigmatic way what had actually taken place.

In the myth it is mentioned that Herakles saved the daughters of Atlas from the pirates. Atlas praised him for his kindness and as a mark of his gratitude he shared his knowledge of Astronomy with Herakles. So, Herakles gained knowledge about Astronomy that which is shown metaphorically as carrying the world on his shoulders (Strauss 1955)⁶¹. The above thoughts are figuratively compared in Figure 16.

⁶⁰Division of a character into two and becoming an antagonist/protagonist person in T. Abdikov's story "Battlefield of sanity" is compared with the image of Harry Haller in Hermann.

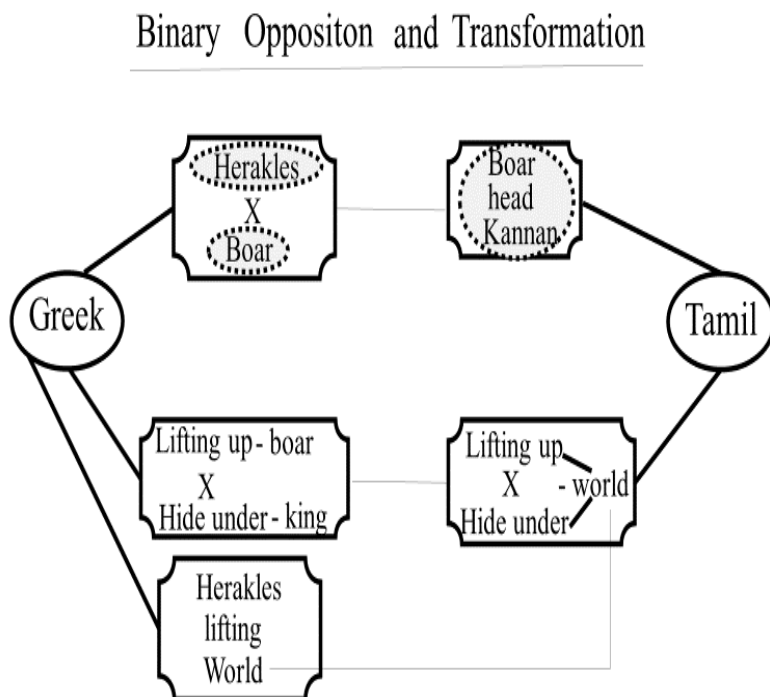
⁶¹Mythological figures are considered as personified abstractions, divinized heroes or decayed gods.

Figure 16. *Herakles, Kaṇṇan and Boar*



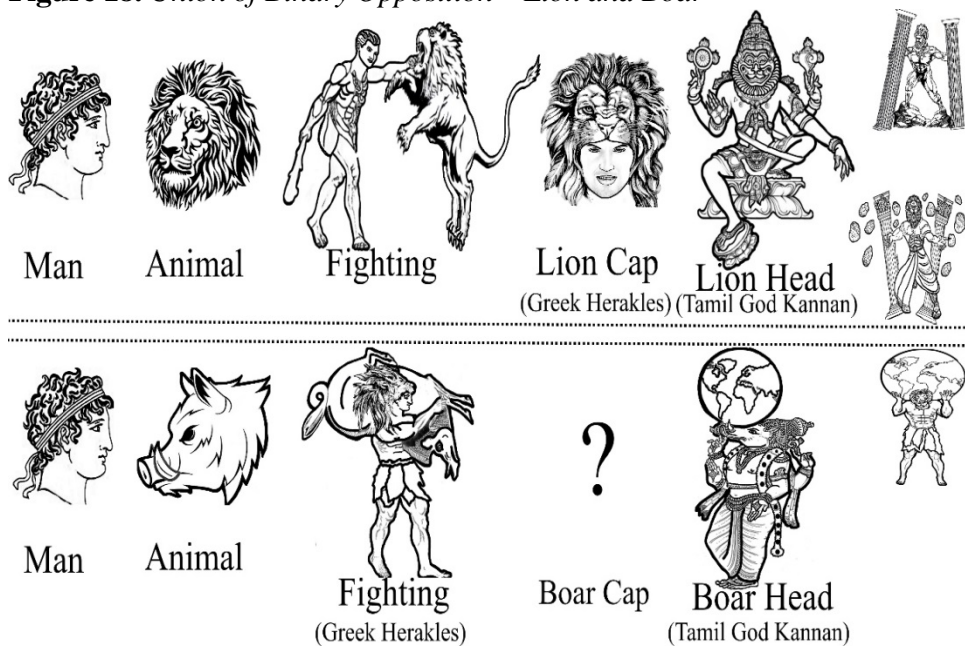
As lion head and the wild boar both belonged to Herakles, the lion head was changed in the myth of Tamil God Kaṇṇan. Thus the myth of Herakles influenced the myth of wild boar headed Tamil God Kaṇṇan. This is shown in Figure 17.

Figure 17. Hero and God with Boar



Thus the lion cap of Herakles killed the Lion that becomes lion head of Tamil God Kannan. Even though Herakles has not worn the boar cap by which he has killed, but it becomes boar head of Tamil God Kannan. Thus, some of the incarnations of Tamil God Kannan are the union of binary oppositions of ‘Animal + Man + God’ as shown in the Figure 18.

Figure 18. Union of Binary Opposition – Lion and Boar



The Theory of Influence

Tamil to Greek – Bull Leaping and Marriage

In Greek mythology, both Jason and Theseus were related with the love of women (Graf 2003)⁶² by controlling the bull monster (Cook 1894)⁶³. Herakles also is related with this type of myth. Here it is noted that the women falling in love with a person who control a bull is not seen to happen in the land of Greece (Frazer 1921).

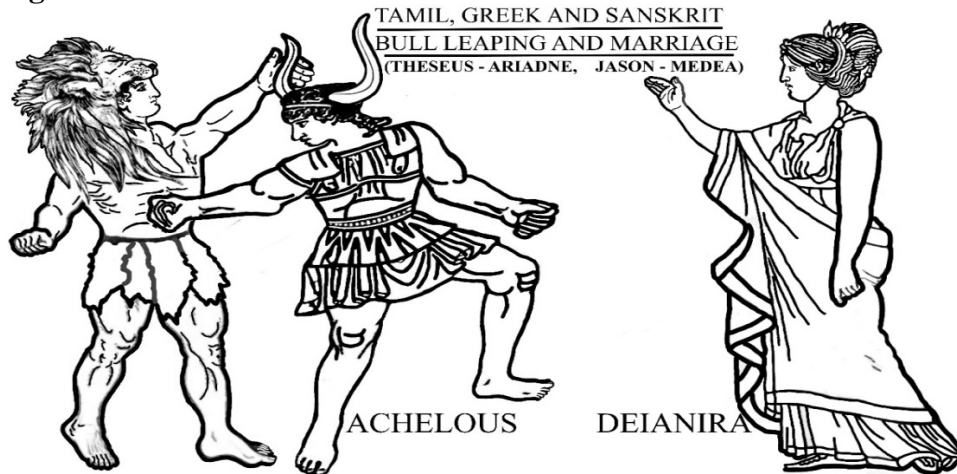
παραγενόμενος δὲ Ἡρακλῆς εἰς Καλυδῶνα
τὴν Οἰνέως θυγατέρα Δηϊάνειραν
ἐμνηστεύετο, καὶ διαπαλαίσας ὑπὲρ τῶν
γάμων αὐτῆς πρὸς Ἀχελῶν εἰκασμένον
ταύρῳ περιέκλασε τὸ ἕτερον τῶν κεράτων.
καὶ τὴν μὲν Δηϊάνειραν γαμῆι, τὸ δὲ κέρας
Ἀχελῶος λαμβάνει, δοὺς ἀντὶ τούτου τὸ τῆς
Ἀμαλθείας. Ἀμάλθεια δὲ ἦν Αἰμόνιου
θυγάτηρ, ἣ κέρας εἶχε ταύρου. τοῦτο δέ, ὡς
Φερεκύδης λέγει, δύναμιν εἶχε τοιαύτην
ὥστε βρωτὸν ἢ ποτόν, ὅπερ ἂν εὕξαιτό τις,
παρέχειν ἄφθονον.

And having come to Calydon, Hercules
wooed Deianira, daughter of Oeneus. He
wrestled for her hand with Achelous, who
assumed the likeness of a bull; but
Hercules broke off one of his horns. So
Hercules married Deianira, but Achelous
recovered the horn by giving the horn of
Amalthea in its stead. Now Amalthea was
a daughter of Haemonius, and she had a
bull's horn, which, according to
Pherecydes, had the power of supplying
meat or drink in abundance, whatever one
might wish.

Apollod. 2.7.

This is shown in Figure 19.

Figure 19. Herakles and Bull



⁶²It is also assumed, though not explicitly stated, that Theseus obtains the sword, with which a plethora of Attic vase paintings show him killing the Minotaur, from Ariadne. It is appropriate that this masculine symbol comes from Ariadne as it is her role to initiate Theseus into sexuality.

⁶³The bull was closely associated with fertility; as such it was associated with Demeter, Dionysos and Zeus.

In this myth bull horned man (Goodnick Westenholz 2004⁶⁴, Childs 2003)⁶⁵ and its relation with the marriage are obscure. In the same way the bull monster in the Greek myths of Jason and Theseus also have obscurity (Shear 1923)⁶⁶ It is because these myths didnot happen in the land of Greeks, but in a foreign land (Lenfant 1999)⁶⁷ Greeks have only heard about these myths. This makes some exaggeration in this myth (Gantz 1996⁶⁸, Goodnick Westenholz 2004⁶⁹, Bronowski 1973)⁷⁰. It can be understood only with the help of the myths of foreign land. In this way the myth of Tamil God Kaṇṇaṇ provide light.

Tamil Kaṇṇaṇ and the Bull

Tamil Kaṇṇaṇ fought with seven bulls and married a woman called Napphinai (Kausalya 2018).

983. The dark cloud-coloured God
who fought with seven humped bulls and killed them
to marry Nappinnai with beautiful fish eyes
4. Thiruvadariyāchiramam,
Periya Thirumozhi,
Thirumangai Azhvar.

There was a marriage system in Tamil culture that is to marry a girl it is mandatory that the male should show his bravery by controlling the vigorous bulls

⁶⁴As early as the beginning of 3000 BCE the bull-man of Mesopotamia was portrayed with the same general composition.

⁶⁵In the literature of the area, the bull-man's dual nature as both enemy and associate of deities is frequently called to the fore.

⁶⁶So, as with many of the hybrid monsters of ancient Greece, the Minotaur also had its roots firmly in the East. Shear contends that narrative aspects as well as the iconographical tradition associated with the Theseus-myth was transferred from Asia Minor to the Mediterranean via Lydia. In support of this theory he calls on the composition of the Minotaur which closely resembles the Mesopotamian bull-man configuration in literature and art.

⁶⁷By believing the outside world to be inhabited by beings that are physically and morally corrupted, the Greeks emphasised their own cultural identity.

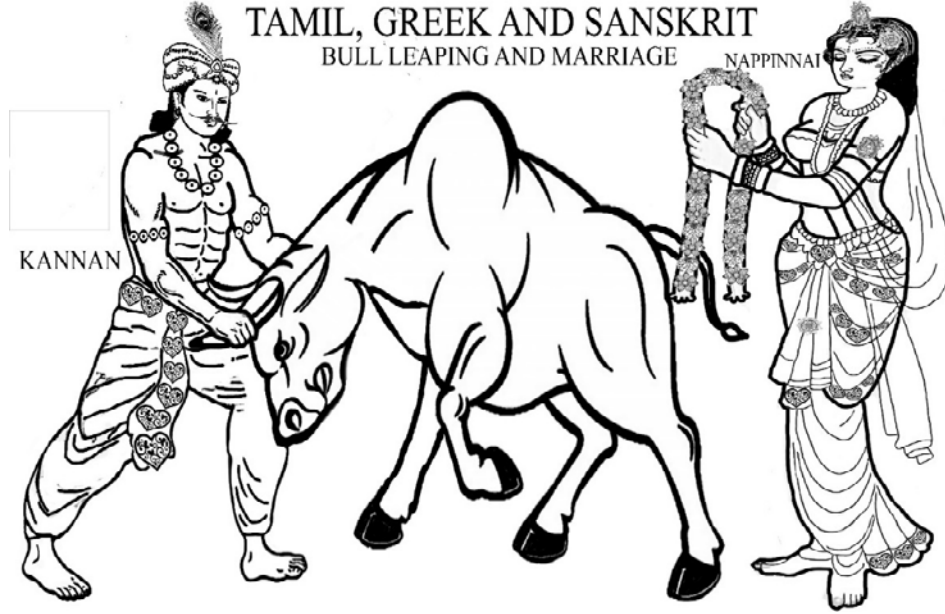
⁶⁸Minotaur's very existence is attributed either to Poseidon's punishment for Minos' snub (by not sacrificing his favourite bull) or to Aphrodite's reprimand of Pasiphae for neglecting her rites.

⁶⁹On a linguistic level this is illustrated neatly by the suhurmašû, a hybrid creature of the Ancient Near East. It is believed that the word suhurmašû originally referred to the common seal, but a literal interpretation of the composite Sumerian name (suhur: carp, maš: goat) resulted in depictions of a hybrid monster with both goat and fish attributes.

⁷⁰The same thing could happen on a conceptual level when what is seen is misinterpreted due to the limitations of the observer's frame of reference. Nash cites this as a hypothesis put forward to explain the Centaur: quoting Bronowski, he describes the impact that riders on horseback would have on people with no experience of such a practice and who did not know domesticated horses. The associated speed and noise of thundering hooves would be bewildering enough, but mounted by skilled riders with hostile intent the sight would be truly terrifying. The consummate horsemanship displayed by the Scythian riders, aided by the disorientation brought on by the fear at the sight of them, is believed to have left the Greeks with the impression that the horse and rider were a single being.

(Pugazhendhi 2021d)⁷¹. According to this custom Kannaṇ married Nappinnai by bringing the bull under his control. This is shown in Figure 20.

Figure 20. Kannaṇ and Bull



⁷¹Bull leaping is also described in Tamil Silappathikaram. Here it is a custom of the community related with cattle. So the ladies of that community proposed their love only to the brave men who were capable of taming the wild bulls.

(1). 'காரி கதன் அஞ்சான் பாய்ந்தானைக் காழறும், இவ்
வேரி மலர்க் கோதையான்; கட்டு,

The lady will love who controls the black bull

(2) நெற்றிச் செகிலை அடர்த்தாற்கு உரிய, இப்
பொன் கொடி மாதரான் தோள்.

This lady is for who will control the fore head of
a bull

(3) மல்லல் மழ விடை ஊர்த்தாற்கு உரியன், இம்
முல்லை அம் பூங் குழல்-தான்.

The lady is for who will control this strong bull

(4). நுண் பொறி வெள்ளை அடர்த்தாற்கே ஆகும், இப்
பெண் கொடி மாதர்-தன் தோள்.

The lady is for who will control the white dotted
bull

(5). பொன் பொறி வெள்ளை அடர்த்தாற்கே ஆகும்: இந்
நன் கொடி மென்முலை-தான்.

The lady is for who will control the gold dotted
bull

(6). வென்றி மழ விடை ஊர்த்தாற்கு உரியவன், இக்
கொன்றை அம் பூங் குழலான்.

This lady is for who will control the successful
bull

(7). தூ நிற வெள்ளை அடர்த்தாற்கு உரியன், இப்
பூவைப் புது மலரான்.

This flower like lady is for who will control
the pure white bull

ஆங்கு,

தொழுவிடை ஏறு குறித்து வளர்த்தார்

எழுவர் இளங் கோதையார்,-...

Thus these seven ladies were grown to be
controller of the bulls

Kolu,
Aaychiyar Kuravai,
Madhuraik Gandam,
Silappathikaram.

To exaggerate the bravery of Kaṇṇaṇ, it is mentioned that he fought with seven humped bulls and killed them to marry Nappinnai. It is also a way to mention the myth as per the formula.

$$\begin{array}{c}
 \text{God} \\
 \text{Hero}
 \end{array}
 \overset{y}{f}(\overset{x}{a}) = \overset{y}{f}(\overset{x}{b}) + \overset{y}{f}(\overset{x}{c})$$

$$\begin{array}{c}
 \text{God} \\
 \text{Hero}
 \end{array}
 \overset{y}{f}(\text{Hero}) = \overset{\text{super natural}}{\underset{\text{natural}}{f}}(\overset{\text{one Bull trained in fighting}}{b}) + \overset{\text{courage}}{\underset{\text{fear}}{f}}(\text{Control})$$

To Marry a Woman

$$\begin{array}{c}
 \text{God} \\
 \text{Hero}
 \end{array}
 \overset{y}{f}(\text{God}) = \overset{\text{super natural}}{\underset{\text{natural}}{f}}(\overset{\text{seven Bulls trained in fighting}}{b}) + \overset{\text{courage}}{\underset{\text{fear}}{f}}(\text{Control})$$

To Marry a Woman

$$\begin{array}{c}
 \text{Hero} \\
 \text{Man}
 \end{array}
 \overset{y}{f}(\overset{\text{Theseus Jason Herakles}}{a}) = \overset{\text{super natural}}{\underset{\text{natural}}{f}}(\overset{\text{Super natural Bulls}}{b}) + \overset{\text{courage}}{\underset{\text{fear}}{f}}(\overset{\text{Control - courage}}{c})$$

To Marry a Woman

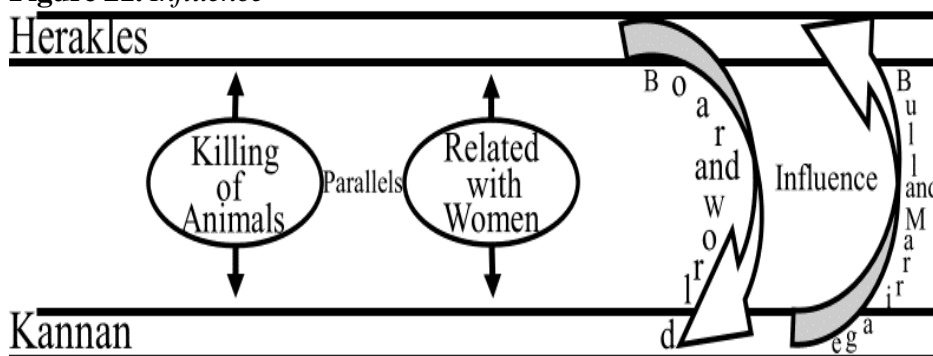
Thus, the mystery in the myth of Herakles related with controlling the horned bull and marriage can be defined with the help of the myth which is related with Tamil God Kaṇṇaṇ. And it is also clear that there is influence of the Tamil myth on Greek myth. Thus the myths belonging to both the languages have influence on one another.

Conclusion

The ancient Greek historian Arrian who belonged to 86-146 AD mentioned that Indians worshipped Theban Herakles. Many researchers identified the God in India and Tamil Nadu which was mentioned by Arrian. Tamil God Kaṇṇaṇ have resemblances with Greek Herakles in the myths related with biting the breast of

the cruel step mother, fighting against living creatures like that of snake, lion, boar, horse, bull, deer and eagle. Thus the mythological theory of parallels is seen to be applied between these two myths. More than that the Tamil myth of bull leaping and marriage had influence on the Greek myth of Herkules who wooed Deianira. In the same way the myth of wild boar headed Tamil Kannaṇ carrying the world was influenced by the Greek myth. The variants seen between these resemblances in the myths also flows in a manner like a formula. It ensures the oneness of these two myths. And it also mentions about the gradual development of the myths from the level of hero to God (Allison Scott 2017)⁷² as shown in Figure 21.

Figure 21. Influence



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⁷²Evolutionary biologists have identified two types of transformations of species: phyletic gradualism describes the slow transformation of one species into a new one, and punctuated gradualism describes sudden evolutionary shifts.

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