A case for Aristotelian ontology of relationships

Aryan Phadke*

Abstract

The Aristotelian notion of friendship is a relatively under-discussed aspect of Aristotle's body of work. This particular concept involves the classification of the types of friendships, which carries some ethical implications. The aim of this article is to meticulously and appropriately expand upon the classification system proposed by Aristotle in order to include all other kinds of relationships. Thus, the Aristotelian concept of friendship will be thoroughly examined and expanded upon in this paper.

The present discourse initiates with a discussion on the necessary and sufficient conditions required to qualify a social state as a relation. Aristotle's initial categories of friendship are clarified and validated onto relationships. The classification of a relation is established upon the foundational emotion, thereby enabling the identification of three distinct classes of relations. The amalgamation of each class with each type of relation culminates in a total of nine feasible relations. Ergo, a relationship can be ascribed as a composite of these nine relations.

We shall delve into the substantiating argument for the assertion that any relationship can be exhaustively described as a composite of the nine relations. The discourse thoroughly examines and explicates the levels of relations and levels of its subjects, which significantly facilitate the identification and classification of the nature of any given relationship. Thus, this paper is a case for an Aristotelian ontology of relationships.

1 Introduction

1.1 Aristotle and Friendship

Aristotle wrote one of the most influential works on Ethics in *Nicomachean Ethics*. It is quite a surprise for the first time readers of *Nicomachean Ethics* to learn that *Book 8* begins with Aristotle questioning the nature of friendship. I shall try to examine and summarize the relevant portions of Aristotle's views on the nature of friendship here.

On how to characterize a friendship, Aristotle focuses on goodwill: "To be friends, men must feel goodwill for each other, that is, wish each other's good, and be aware of each other's goodwill." (Aristotle, 157a). The three requirements can be summarized as feeling, reciprocation and awareness of goodwill.

---
*E-mail: aryanphadke7@gmail.com

On the nature of friendship, Aristotle believed friendships are neither equal nor similar. He describes three types of friendships: *of utility*, *of pleasure* and *of virtue*. The salient difference being their motive: "In a friendship based on utility or on pleasure men love their friend for their own good or their own pleasure." (Aristotle, 156a). In friendships of virtue, one cares for their friend simply because of their character, for it is a bond formed between two good people. Aristotle also firmly states that friendships of virtue are better than those of utility or pleasure.

1.2   Aim and Justification

Aim: The aim of this paper is to extend the concept of Aristotelian friendship to other relationships.

In this paper, I shall argue that Aristotle's views on friendship can be naturally extended to other relationships. My objective is to construct a comprehensive ontological framework that draws from this notion, which may be implemented universally across all relationships.

The two questions that need to be answered in order to justify the aim are:

Can relationships be categorized?

Is Aristotelian friendship extendable?

The answer to the first question, for many, seems intuitively negative. In considering the various relationships that one maintains with a diverse group of individuals, it becomes clear that these connections are too multifaceted to be easily categorized. The range of personalities amongst individuals appears to be too extensive for any pair of people to be classified within the same category as another pair. The primary argument, in this case, is that the distinctions between individuals are too vast for their interactions to be classified.

This conclusion, however, proves to be deceptive. The presence of a non-sequitur can be attributed to the cognitive bias of selectively noticing minor distinctions and overlooking significant similarities. These similarities are often so extensive or ubiquitous that they assume an implicit role in the observer's perception.

A straightforward exercise that illustrates this concept involves visualizing the facial features of a family member and attempting to compare them with those of another member. A typical portrayal might be: "My sister has long hair, and I have shorter ; My sister's eyes are round, mine sharper ; My sister's nose is straight, mine slightly crooked." The describer's evaluation is undoubtedly accurate, and there are indeed numerous distinctions between the two individuals. However, they have neglected to recognize the more significant and shared similarities.

For instance, both the describer and his sister possess black hair, brown eyes, and a lengthy nose. We can take this a step further by asserting that both the describer and his sister possess hair, two eyes, and a nose. In this case, the resemblances are exceedingly trivial and become an implicit assumption for the observer.

The crux of the matter is that while disparities exist between the two faces, we can indeed classify them into a larger group. The contention that variations in components must necessarily lead to variation in composition is fallacious.

The second question can be construed as a simple possibility proposition. The assertion that Aristotelian friendship could potentially be extended to other relationships does not encounter any opposition. The grounds for this are that Aristotle's classification is not fundamentally predicated on friendship. Consequently, no supplementary validation is necessary for this possibility proposition.

1.3   Characterizing a relation

We have seen the three requirements based around goodwill to characterize a social state[1] as friendship: *feeling*, *reciprocation* and *awareness*. All three of these are necessary conditions to categorize a social state between two subjects as friendship.

The feeling of goodwill is intuitively understandable. I shall provide an explanation for the other two here.

Imagine the social state between a child and its doll. There is no question here that the child indeed possesses goodwill for their companion, but we would not classify this as a relation or as friendship. This is because an inanimate object cannot reciprocate nor is aware of the feeling of goodwill.

Similarly, the social state of a fan and a celebrity cannot be deemed as a friendship. The rationale behind this assertion is that the celebrity neither reciprocates nor is aware of the goodwill of the fan. This assertion would remain unaltered even if one of the two lacking conditions were fulfilled. To illustrate, if the celebrity were to become aware of the fan's goodwill and yet chose not to reciprocate, it would still not qualify as a relationship or friendship.

To extend the domain of the necessary conditions to other relations one change has to be implemented. The characterization of a relation would require one subject to possess a feeling, not necessarily of goodwill. The other subject must also reciprocate a feeling, albeit not necessarily congruent with the first subject's feeling. Lastly, both the subjects must be aware that they possess some feelings for one another. The awareness of these subjects does not need to be in line with reality i.e. the epistemic value is not of relevance.

With all this in mind, we can attest to the necessity of these conditions to characterize a social state as a relation. However, these conditions are not sufficient to do so. This is demonstrable by the example of the stranger in the train.

Imagine whilst traveling by train, you encounter a friendly and charming individual, with whom you engage in an affable exchange. It is reasonable to expect that a positive interaction takes place under such circumstances. In the course of your conversation, he discloses his destination as being the city, where he is scheduled to undergo a medical procedure. Reciprocally, you reveal that your own purpose in traveling to the city is to undertake an examination. After conversing amicably for an hour, the journey ends. With customary salutations and well wishes, you wish him good luck for his forthcoming medical procedure, whilst he similarly extends his good wishes for your examination. Subsequently, without further exchange of contact details, you part company, and exhibit no intention to connect in the future.

---

[1] Social state is the description of the collection of interactions between two individuals.

This social state cannot be characterized as a friendship or any other relationship for that matter. This conclusion is quite strange, because this interaction has met all the three necessary conditions mentioned earlier. You certainly truly feel goodwill for the fellow-traveller, and he reciprocates that feeling. Additionally, both of you are aware of these feelings by explicitly stating so, yet neither of you would consider other a friend.

The missing condition here is the expectation of future interaction. It is obvious that a social state that is active[2] granted that the three necessary conditions are met, can be classified as a relationship. However, it is also obvious that the contrary proposition is not true. A social state that is inactive with the necessary conditions met, can still be classified as a relationship. Activeness alone therefore, cannot be the missing condition we are searching for. In the cases where the interaction is infrequent or absent i.e. social state is inactive, it is the expectation of a future interaction that decides if the social state can be considered a relation.

In our example of the stranger in the train, the social state cannot be considered a friendship because there doesn't exist any expectation of a future interaction. However, the social state can become a relationship if there were an expectation of future interaction. Simply, if any contact information had been swapped with the intention of future interaction, one would be free to characterize this social state as a relation.

Thus, the expectation of future interaction is a necessary condition to characterize a social state as a relationship, and we can conclude that the four necessary conditions are: *feeling*, *reciprocation*, *awareness* and *expectation of future interaction*. Together these four conditions are sufficient to do the same.

2 Thesis

Before we proceed, it is imperative that we establish a clear distinction between the terms "relations" and "relationships". While these terms are often used interchangeably in formal and informal contexts respectively, for the purposes of this discourse, we shall adopt a more precise definition. Specifically, we shall conceptualize a relation as a discrete and singular connection between two individuals, and a relationship as a composite of one or more relations.

Because friendship implies kind of relationship, to avoid confusion, I shall refer to relations of good-will as *friends* of pleasure, of utility or of virtue.

The first step is to examine whether Aristotelian types of friends are extendable to other relations.

2.1 Relation Types

I shall begin by asserting that Aristotle's types of friendships are asymmetrical. Friendships of virtue according to Aristotle encompass pleasure and utility, because two good men derive pleasure and benefit from each other's company. (Aristotle, 157b) A symmetrical categorization would be to divorce relation of virtue from pleasure and utility.

---

[2]Active social state means that an interaction between the agents occurs frequently.

We must draw this categorization because relations of virtue do not essentially involve pleasure or utility.

For example, consider the archetypal relation of a parent and their teenage child. In this relation each has a fixed disposition (virtue) of goodwill for each other, but from the point of view of the parent there doesn't exist any utility in it. In contrast, from the point of view of the teenager there doesn't exist any pleasure in it. The point is that relations of virtue do not necessarily involve pleasure or utility.

The mistake in Aristotle's assertion is a categorical error. Aristotle compares relation of utility or relation of pleasure with a relationship (combination of relations) that includes a relation of virtue.

Aristotle described the types of friendship based on their motives, them being the fulfillment of the search for pleasure, the search for utility and a fixed disposition. This can be applied directly to other relations.

Virtue relations were thought of as superior by Aristotle. Since, we separated virtue from pleasure and utility, that should not be the case for our ontological model. Virtue relations are simply ones where one has a fixed disposition for feeling an emotion. As such, virtue relation can exist between a parent and their child or a subject and their neighbor. It can also exist because of one's admiration for other's moral character. The intensity of this relation in these cases will differ but the kind and motive of the relation is similar i.e. virtue and fixed disposition.

With this in mind, we can conclude there exists three types of relations: *pleasure*, *utility* and *virtue*. We shall see later if these are exhaustive.

2.2   Relation Classes

Friend is a subset of relations, specifically a class. Our next step is to identify other classes. I shall do this by evaluating the foundational emotion of these classes.

The foundational emotion for the class *friend* according to Aristotle is goodwill i.e. all-encompassing positive emotion. A complimentary proposition is to consider an all-encompassing negative emotion i.e. ill-will. A name for this class will naturally be *enemy*.

Thus, we have another class of relations namely *enemy*. It can be defined as a relation based on feeling, reciprocation and awareness of ill-will with the expectation of future interaction.

A natural class that comes to mind is that of *lover*, however the foundational emotion in this case is difficult to pin-point. This is the reason why Aristotle puts lovers in the same class as friends.

I shall make a case here that *lover* should be a different class altogether.

1. Lovers exhibit a unique attribute that is absent in friends, namely, physical intimacy. While friends endeavor to find commonalities in character, lovers are not inherently compelled to do so. Rather, the latter prioritize sexual attraction, a criterion that does not hold true for the former. In light of these distinctions, it is apparent that the motive underlying the formation of these two categories of relationships diverges.

2. Aristotle points out that the pleasure one obtains from one's beloved is different from the pleasure one obtains from one's platonic friend. (Aristotle, 158a) The point being that the pleasure between the two possible classes differs.

3. The utility obtained from lovers is sexual pleasure or intimacy and that cannot be obtained from friends. The point being that there is difference between utility obtained from the two possible classes.

4. Similar utility, the fixed disposition towards one's romantic partner differs from that towards one's platonic companion. Furthermore, it is possible for anyone to potentially become a virtuous friend, but not everyone is capable of becoming a virtuous lover. This underscores the distinction between the fixed dispositions of these two potential classifications.

The existence of difference between, motive, utility, pleasure and virtue is a sufficient reason to conclude that lover should be a separate class.

However, it remains a challenge that the foundational emotion defies precise description, which I shall concede. The crux of the matter is that despite the objective difficulty in pinpointing the foundational emotion, we can still do so subjectively with remarkable accuracy and consensus. While the foundational emotion is subjective in nature, this does not constitute sufficient grounds to preclude the differentiation of classes.

To generalize the foundational emotion of romantic love, one could argue that lovers are simply friends that one is sexually attracted to or that the idea of romantic love is socially constructed. Either explanation does not affect our conclusion that *Lover* should be a separate class.

The broad conclusion is that there exists three classes of relations: *Friend*, *Enemy* and *Lover*.

I must press the point of relativity in classes here. It is not difficult to see that in some cultural context, romantic love is encompassed within goodwill. That is to say that *lover* class is simply a sub-class of *friend*. Similarly, we can imagine a culture wherein some other emotion, normally encompassed in goodwill in present culture, is considered vastly different from goodwill. Within this culture, the differing emotion will give rise to a new class.

For instance, in cultures with a strong orientation towards family, familial relations can be considered widely different from *friend* relations even though one feels goodwill in both the cases. It could be argued, like we did with *lover*, that this goodwill is different and hence *family* should be a different class.

Although the class can change, relative to culture, the primary conclusions of this discourse will still be the same. Also, *friend* and *enemy* defined as goodwill and ill-will, being logical complements, will always remain regardless of the culture considered. With all this in mind, and the modern cultural context in consideration, we shall proceed with three different classes namely: *friend*, *enemy* and *lover*.

2.3   Nine Relations

We have concluded that there exists three types of relations and three classes of relations. These will combine with each other to form nine kinds of relations.

TABLE 1
Nine Relations

Class/Type	Friend	Enemy	Lover
Utility	Friend of utility	Enemy of utility	Lover of utility
Pleasure	Friend of pleasure	Enemy of pleasure	Lover of pleasure
Virtue	Friend of virtue	Enemy of virtue	Lover of virtue

Any relation can be represented in the format: class of type. eg. *friend of pleasure*. The class indicates the foundational emotion, and the type indicates the motive.

Most of the nine relationships can be readily comprehended and are quite instinctive. The relations of *friend of pleasure* and *friend of utility* are particularly uncomplicated to envision. The comrades one cultivates for personal pleasure are precisely categorized as friends of pleasure. Conversely, those established for strategic motives are identified as those of utility, frequently for one's own benefit[3].

The Lover relations are indefinable in their foundational emotion as it is relative but with a subjective understanding of romantic love, the lover relations are similar to those of friend relations. *Lover of pleasure* is formed for one's pleasure and *lover of utility* is formed for one's benefit[4].

Assuming whatever emotion counts as romantic love, the lover of virtue is a fixed disposition of romantic love. A good phrasal description of virtue relations is "Can't help but feel". In *friends of virtue*, one can't help but feel goodwill and in *lover of virtue*, one can't help but feel romantic love for the other subject. The majority of virtue relations are *friend of virtue*. Any familial relation is most likely a friend of virtue. One cannot help but feel goodwill for their family.

Enemy relations are a rather infrequent occurrence and are not easily discernible, particularly when it comes to an *enemy of virtue*. On the other hand, an *enemy of utility* is simply a form of rivalry where one subject's downfall leads to the rise of the other. A prime example of this can be observed in professional rivalries. As for the *enemy of pleasure*, it can be characterized as a relationship in which negative interactions provide pleasure, interactions reduce pleasure, or the removal of such interactions provides pleasure. With regard to the *enemy of virtue*, the phrase remains a functional one. This type of relation is best described as one in which ill-will towards another subject is a natural response. However, finding examples of this type of relation is a challenging task, as there are very few individuals in our immediate surroundings who could be regarded as an *enemy of virtue*. One possible example that comes to mind is the ex-lover of one's current partner, in which case feelings of disdain are difficult to suppress.

We shall see in the next section how to identify a relation as one of the nine relations.

---

[3]benefit here is material gain including indirect material such as status.
[4]benefit here is sexual pleasure rooted in sex and intimacy.

2.4 Extension to relationships

As discussed earlier, we defined a relationship as a combination of one or more relations. I shall make the case for the truth of this statement here. To have sufficient reason to conclude this statement we would have to prove that

A relationship can consist of different types of relations.

A relationship can consist of different classes of relations.

The former is a direct implication of Aristotelian theory. Aristotle's original friendship of virtue is an all-encompassing relationship wherein one derives pleasure, utility and virtue from one's friend. This is simply a combination of the three kinds of friend relations.

Similarly, the archetypal villain is a combination of the three kinds of enemy relations and the archetypal lover is a combination of the three kinds of lover relations.

The latter condition is a possibility proposition. For it to be considered true, we need only prove the possibility of at least one relationship composed of two relations of different class.

A prevalent sibling dynamic that frequently arises when one sibling enters adolescence while the other has not is characterized as a "friend-enemy" relationship. Despite possessing a fixed disposition of good-will i.e. they are friends of virtue, these siblings often do not find each other either pleasing or useful. Instead, their interactions tend to result in diminished levels of pleasure, leading them to become enemies of pleasure.

Another relationship is the "Friends with benefits", a relationship wherein two friends participate in sexual activity. These relationships involve aspects of Friends of pleasure, but in addition to those there exist aspects of Lovers of utility.

With these arguments we can assert with much confidence that a combination of relations forms a relationship. We shall see in the next section if all relationships are composed of the nine relations.

3 Discussion

In this section, we will discuss the argument for why all relationships are a combination the nine relations. We will also see the symmetry of relationships, meaning the different weight of the components of a relationship. The identification of each component relation shall be covered here based on the concept of levels of social state and agent.

3.1 The Levels of social state

Before we proceed to prove the exhaustive nature of the nine relations, it is important that we understand the levels of a social state. A social state is a description of the collection of interactions between two social subjects.

Any social state exists at three levels: *existence*, *interaction* and *outcome*.

For this discussion we will only consider social states that are relations, and we will be able to say that any relation exists on the same three levels.

The most essential feature of any relation would be its existence. Even an inactive relation (infrequent or no interactions) must still exist. Thus, it follows that *existence* is the first level.

If an inactive relation were to be made active, it would be done so by interaction. The second level of any relation would therefore be *interaction*. Some of the interactions would be either beneficial or detrimental to the subjects i.e. there would be an outcome. Thus, *outcome* is the third level of a relation.

In tandem with these levels is the participation of the subjects within a social state. To participate at every level of the relation, the subjects must possess some levels as well.

The three levels of the subjects are: *essence*, *personality* and *competence*.

Essence of a subject is simply that which makes them who they are. The concept of Aristotelian essence is key here. A good way to understand essence in this context is to imagine how one subject describes another before an interaction takes place.

Personality is the parameter of a subject that determines the nature of their interaction. It is the ability of the subject to manipulate an interaction. Similarly, competence is the parameter that determines the outcome of an interaction. It is the ability of the subject to manipulate an outcome.

This is reflected in the relation types that we have discussed earlier. We can demonstrate this by attributing value to the relation types.

For a relation of virtue, value will be attributed at the first level i.e. existence and essence. eg. A child values their parent simply because they are their parent. The valuable level of the parent is their innate parent-ness. Essence can include a wide range of attributes from moral character (goodness) to location (neighbor). A neighbor, if the necessary conditions are met, is also a friend of virtue.

For a relation of pleasure, value will be attributed at the second level i.e. interaction and personality. In these relations, pleasure is the motive and pleasure can only be obtained from a successful interaction. A bad personality leads to unsuccessful interactions, hence no pleasure is obtainable.

For a relation of utility, value will be attributed at the third level i.e. outcome and competence. In this relation, utility is the motive which can only be obtained from a successful outcome. The essence and personality of an agent are irrelevant to the outcome and only their competence is considered.

3.2   Combinations of Nine relations

The question that still persists is whether all relationships are a combination of these nine relations and no other. To prove this we must prove that the classes and types of the relations are exhaustive.

The exhaustive nature of the types discussed is a direct implication of Aristotelian theory. As previously mentioned, each type can be distinguished by the particular stage at which value is produced. For instance, in the case of virtue, value is generated by mere existence, while for pleasure, it is produced by interaction, and for utility, it is the result of the interaction., would entail a regression of non-unique elements, it becomes evident that all subsequent outcomes could be regarded as a single unit, and thus, identified as the

type utility. Consequently, we can affirm that the types are exhaustive.

Regarding the classes, it can be observed that they are distinguished by their foundational emotions. Complimentary propositions are evident between friends and enemies, rendering them exhaustive. Furthermore, the emotional experience associated with romantic love is subsumed under the lover class. Nevertheless, it would be a logical fallacy to assert that these classes are entirely exhaustive. Given that goodwill and ill-will encompass a wide range of positive and negative emotions, it can be argued that the friend and enemy classes, in and of themselves, are exhaustive. However, the act of isolating the lover category reveals the possibility of sub-classes that may exist on a higher ontological level. Therefore, while these categories may be exhaustive in an ontological sense, their epistemic value may differ. It is possible that another class may be defined for a specific relation, as was the case with the lover category. However, the practical implication of such a change would only involve the reclassification of a previously identified relation, such as one that was previously classified as an enemy has to now be classified under the newer class. The crucial point remains that no relation can evade classification, even if its categorization is subject to future revision.

With all previous conclusions in mind, we can conclude that all relationships are a combination of one or more of these nine relations exclusively.

3.3   Symmetry of relationships

A question that does arise is whether relationships that are composed of same relations i.e. relationships that are similar, are symmetrical as well.

Firstly, it is imperative to acknowledge the presence of an additional parameter that necessitates consideration when assessing various kinds of relationships. This parameter is the symmetry of said relationships, which can be construed as the magnitude of each constituent relation. In other words, it pertains to the query of which relation holds greater significance among the component relations.

Consider the relationship composed of the three types of friend relations. This relationship can be used to describe the relationship of a subject with their brother and with their very close friend. It is fairly intuitive to assert that these relationships, although fairly similar, are not symmetrical. In the case of the brother, *virtue* is heavier than *pleasure*; on the other hand, in the case of the close friend, *pleasure* is heavier than *virtue*.

Similarly, the same relationship can be ascribed to a relationship of a subject with their brother and with their father. These relationships like in the case above are not symmetrical either. Although the *virtue* has similar importance, in the case of the brother, *pleasure* outweighs *utility* and the opposite is true in the case of the father.

The final inquiry that demands our attention pertains to whether similar and symmetrical relationships are also equal. It is quite evident that this assumption cannot hold true. The intensity of a connection is not contingent upon the kind of relationship, but rather on other factors, such as preferences, experiences, and time invested, among others. Thus, it can vary irrespective of the kind of relationship. The parity of a relationship is largely an insignificant concern. The only notion that holds significance is the understanding that similar and symmetrical relationships are not necessarily equal.

3.4 Identifying the kind of relationship

We have established that a relationship is a combination of relations. To identify the kind of relationship, we need only to identify the kinds of relations it is composed of. To identify the kind of relation, we need to identify the class and the type of the relation.

The identification of class is fairly trivial, as it requires only the identification of the emotion one feels. A positive emotion leads us to *friend*, in contrast a negative emotion leads us to *enemy* and a romantic emotion leads us to *lover*.

Identification of the type is a more intricate process because it is difficult to pin-point exactly why one feels an emotion. We have already discussed the levels of a relationship: *existence, interaction and outcome*. Also, the levels of the subjects: *essence*, *personality* and *competence*.

In relations of utility, outcome is essential because of which the person's competence is important. In relations of pleasure, interaction provides pleasure or displeasure for which the person's personality is important. In relations of virtue, existence of the relation is itself a virtue or vice and is therefore dependent on the person's essence.

A simple exercise to identify the type is to substitute the three components of the person involved. Consider the emotion felt during any level of the social state. If the emotion would disappear or decrease if only the competence of the person were altered, then it is a relation of utility. If the emotion would disappear or decrease if only the personality of the person were altered, then it is a relation of pleasure. If the emotion would disappear or decrease if only the essence of the person were altered, then it is a relation of virtue.

The point I must press here is that the existence of pleasure or utility in a relationship is necessary but not a sufficient reason to identify it as a relation of pleasure or utility respectively. This is because charming personalities, and competent individuals would always be pleasurable and useful to other people but their relationships would not necessarily be affected if they weren't charming or competent. Therefore, we must always use the substitution method described above for identification.

Final step in identifying a relationship is to determine the weight of the relations in the combination. This is for the most part a subjective judgment, but we can use the chronology of relations as a guide. Chronology is merely a correlation and not the causation of the weight of the relations. Simply put, the relation that was built first has more weight. In the case of the sibling relationship, *friend of virtue* is formed first followed by *friend of pleasure*, thus the former has more weight. In the case of the close friend, although similar to that of the sibling in combination, *friend of pleasure* is formed first followed by *friend of virtue*, consequently the former has more weight.

4 Conclusion

4.1 Reasoning and Rationale

I shall now summarize the reasoning behind each argument of the paper.

To prove that relationships can be categorized, we used reductive reasoning on an

analogy. The main contention that variations in components must necessarily lead to variation in composition is fallacious.

The argument for the necessity of expectation of future interaction to qualify a social state as a relation is based in reductive and inductive reasoning. We use reduction using our example of stranger in the train to prove that the three conditions given by Aristotle are not sufficient and induction to prove the necessity of our condition.

The argument to separate the *lover* class is based in induction. We observe that relations that could be associated with *lover* class have different motive, pleasure, utility and virtue than those of *friend* class. Thus, we concluded *lover* is a different class.

The argument for the exhaustive nature of types is based on reductive reasoning. We used reduction to prove that each subsequent level of social state can be considered as the third state, and hence only three levels exist, as such only three types exist.

The argument for the exhaustive nature of the classes is based on deductive and deontic reasoning.

Premise: Logical complements are exhaustive.

Premise: Friend and enemy are logical complements.

Conclusion: Friend and enemy are exhaustive.

If the conclusion is considered as the premise, then it follows logically that the classes are exhaustive as well.

4.2   Antithesis and Objections

1. Naturalistic explanations

The Aristotelian theory of friendship operates on the fundamental implicit assumption of humans having a special nature, leading to vastly different animal relationships as compared to human relationships. Additionally, Aristotle assumes that humans form friendships for human-oriented motives rather than naturalistic motives. Aristotle disregards scientific speculations as being irrelevant, and instead, appeals to the dual approach of human and non-humanistic factors. (Aristotle, 155b) However, it can be argued that this specialization is not necessary, and its negative proposition does not contradict reality. The evolutionary worldview suggests that our desire for the survival of our genes and species is a sufficient explanation for the fixed disposition of familial and close relationships. Furthermore, the relationships based on pleasure and utility can be explained by cultural evolution in humans.

2. Cultural relativity

Classification based on the nature of relationships can only be deemed accurate if it adheres to epistemic consistency. The objectivity of relationships and their nature is largely contingent upon social and cultural constructions, rendering them subjective and, therefore, inconsistent. Consequently, it becomes challenging to classify relationships exhaustively and/or apply them across diverse cultures. As previously discussed, subclasses could potentially be classified on a higher ontological level, particularly when certain cultures overemphasize certain facets of the sub-class. Even if we concede that such classifications are precise, the Aristotelian ethical implications remain erroneous.

4.3   Summary

I shall now summarize the important ideas explored in the paper.

We began the paper with the rationale behind the objectives of the paper. The fundamental premise being that relationships, which may appear to differ, can be classified into categories. Additionally, the supposition that Aristotelian friendship is expandable, coupled with the aforementioned premise, provides the rationale for extending Aristotelian friendship to other relationships.

The necessary conditions to characterize a social state as relation as put forth by Aristotle were affirmed. Additionally, another condition was explored because the original conditions were not sufficient. The condition we found was *expectation of future interaction*. Together the four necessary conditions are: *feeling*, *reciprocation*, *awareness* and *expectation of future interaction*.

Aristotle's types of friendships were corrected to be more symmetrical. The symmetrical types were affirmed to be extendable to other relations namely: *pleasure*, *utility* and *virtue*.

We ascribed friendship as a class of relationships based on good-will as put forth by Aristotle. The complimentary proposition, i.e relations based on ill-will were classified as *enemy*. A case was made to separate the *lover* class from friend based on the difference in motive, pleasure, utility and fixed disposition. Doing so we arrived at three classes namely: *friend*, *enemy* and *lover*.

We defined relationships as a combination of one or more relations. In order to prove this possibility, we proved the possibility propositions that relationships are composed of different types of relations and different classes of relations simultaneously.

We have seen the levels of social state that are most likely behind the types of relations namely: *existence*, *interaction* and *outcome*. The subject within a social state will participate at each level of it and must have three levels as well: *essence*, *personality* and *competence*.

We proved by exhaustion that any relationship can be described as combination of the nine relations exclusively. The only leeway exists in specifying a sub-class on a higher ontological level i.e. class.

A parameter (symmetry) was added that identified the weight of each of the component relation of a relationship. The weight of the relation signifies the value of each of the relation. An important idea as that similar and symmetrical relationships are not necessarily equal.

To identify a relationship, we need only identify the relations it is composed of. The identity of a relation is its type and class. The class can be identified by the foundational emotion. To identify the type, one must substitute the level of the subject and observe if the emotion is affected, if so, then the type associated with the level is the type of the relation. An important idea is that existence of pleasure or utility is not a sufficient condition to identify a relation as relation of pleasure or utility respectively.

References

Aristotle 1155b. "Nicomachean Ethics". In Rackham, H., editor, *Book 8*, pages 7–9.

Aristotle 1156a. "Nicomachean Ethics". In Rackham, H., editor, *Book 8*, pages 15–16.

Aristotle 1157a. "Nicomachean Ethics". In Rackham, H., editor, *Book 8*, pages 3–5.

Aristotle 1157b. "Nicomachean Ethics". In Rackham, H., editor, *Book 8*, pages 6–7.

Aristotle 1158a. "Nicomachean Ethics". In Rackham, H., editor, *Book 8*.