

# **ISSA Proceedings 2006 - An Analysis Of Argument In George Washington's Newburgh Address: "Address To The Officers Of The Army," March 15, 1783**



George Washington's "Newburgh Address" ranks among the most consequential speeches given during the Revolutionary War and it is certainly one of the most famous addresses delivered by America's first president. The speech often receives passing mention in rhetorical histories of the early nation, but scant attention has been paid to it by scholars of communication. My interest in the address is based both on its rhetorical-historical import and on the location in which it was given. Newburgh, New York is the city in which I live, so I hope to explicate the argumentative dimensions of this famous speech that was conceived and delivered in my own back yard.

Newburgh is the location of Washington's Winter Headquarters, of the Last Encampment of the Continental Army, and of the New Windsor Cantonment. It is located on the Hudson River, about 15 miles north of West Point and 55 miles north of New York City. Because of its unique geographic properties, it was a heavily fortified area during the Revolutionary War. Washington spent the last years of the war in Newburgh, composed this address at his headquarters there, and delivered it just a few miles down the road at the Army cantonment.

The address effectively forestalled a mutiny that might have ended all hope for American independence just as the peace treaty with Great Britain was being negotiated and signed.

Examination of the conspiracy and Washington's address allows for a better understanding of just how fragile the notion of effective American self-governance really was and how tenuous were principles of nationalism that we take almost for granted today.

## 1. *Background to the Speech*

In the fall of 1782, peace talks were underway in Paris and, with the Revolutionary war nearly ended, there was a fair amount of apprehension that Congress would disband the Continental Army without adequately compensating either officers or common soldiers. (Some had not been paid for years.) The soldiers had been disaffected for some time, and, by the time the Army cantoned near Newburgh for the winter, there were widespread desertions, hangings in effigy, and other symptoms of discontent. Regular soldiers had heretofore been the trouble-makers, but now Army officers, upon whom Washington counted to keep order among the troops, had also become restive. On at least seven occasions the Commander in Chief warned civilian authorities that his officers were disgruntled, writing that the patience of these men was "soured by penury and... the ingratitude of the Public" (in Ferling, p. 309). Just after Christmas, the officers acted. They sent a memorial to Congress, written by General John Knox, which detailed their grievances over pay and suggested that they wished to renegotiate the terms of their future compensation. "We have borne all that men can bear - our property is expended - our private resources are at an end, and our friends are wearied out and disgusted with our incessant applications," they pleaded (in Worthington, pp. 291-293). The officers had in 1780 been promised pensions - half-pay for life - but now, realizing that they stood little chance of ever collecting, they pressed Congress for a commutation that would afford them an equivalent lump-sum payment at the conclusion of the war (Kohn, 1970, p. 189).

The nationalists in Congress led chiefly by Alexander Hamilton and the Morris - Robert and Gouverneur - realized that they might use the threat of unrest within the Army to augment the powers of the national government. Congress debated and rejected payment plans for the Army in the first two months of 1783 and, by late February, the nationalists had devised a plan to further pressure the government. The Newburgh conspiracy was hatched. They would encourage, if not incite, further discontent and even disorder among Army officers, use evidence of that unrest to manipulate Congress, and forewarn Washington of at least a part of their scheme, counting on his ability to control his men.

Hamilton wrote to Washington in late February, telling him that the country would be bankrupt by June. There would be no more money to fight the British or to pay officers' pensions, if peace had been achieved by then. Hamilton decried

the lack of “wisdom and decision” in Congress and suggested that if the Army again petitioned about payment, such an action might sway “those weak minds which are influenced by their apprehensions more than their judgments.” Hamilton cautioned Washington that the danger in such a maneuver was “to keep a complaining and suffering army within the bounds of moderation.” Washington should see that “prudent persons” handled the petitioning and could, if things turned ugly, “bring order perhaps even good, out of confusion” (in Syrett, 3: pp. 253-255). Washington did not rise to the bait, but only affirmed the right of his officers to just compensation and continued to pressure Congress himself on their behalf. He warned those meeting in Philadelphia that he would remain in Newburgh and “Try like a careful physician to prevent if possible the disorders getting to an incurable height” (in Fitzpatrick, 25: p. 270).

The conspirators contacted several high-ranking officers who were headquartered in Newburgh with Washington, among them General Knox (to whom they anticipated that the Commander would turn for counsel), and General Gates, second in command after Washington and one of his few antagonists. Gates was highly popular with young, middle-grade officers and it was within the ranks of these men that the conspiracy gained a life of its own. Major John Armstrong, a former aide to Gates, wrote the words that nearly caused the officers to mutiny (Wright, p. 178).

On the morning of March 10, 1783, Armstrong’s anonymous “address” circulated throughout the cantonment. The document, from a “fellow soldier,” urged all general and field officers to attend a meeting the next day to formally demand a redress of their grievances. The leaflet angrily addressed the officer corps’ predicament over pay: “If this, then, be your treatment while the swords you wear are necessary for the defense of America, what have you to expect from peace, when your voice shall sink and your strength dissipate by division?” (in Brookhiser, p. 42). Even more alarming, the call drew a blueprint for rebellion that would blackmail Congress into action. The Address suggested that the officers resolve to resign the Army *en masse* if the war continued (leaving the country - especially the coast unprotected), or, if peace were achieved, that they refuse to lay down their weapons and move against Congress. In either case, mutiny would bring about the fall of the government, something that the British had not been able to accomplish in eight years of fighting. If the officers at Newburgh rebelled, then the entire Army encamped here, numbering over 8,000 strong, could not be controlled.

News of the document was leaked to Washington and he forbade the meeting, issuing General Orders on March 11th that urged the officers to “pay very little attention to [the] irregular invitation” and to denounce such “disorderly proceedings.” Instead, he called a meeting of all officers for four days later, on March 15th, where representatives of all regiments would decide what steps should be taken “to attain the just and important object in view” (in Harwell, p. 500). A second anonymous letter, dated March 12, also circulated throughout the cantonment, implying in emotional language that Washington secretly sided with the disgruntled officers and might countenance mutiny. The signs of upheaval, were in the Commander-in-Chief’s word, “ominous.”

The day Washington had set for the meeting arrived. The officers crowded into their new wooden meeting hall, called alternately the Temple of Virtue or the New Building, and saw General Gates presiding at the front of the room, surrounded by some of Washington’s most trusted men. Washington himself was nowhere in sight. Just as the meeting began, Washington strode into the hall and requested from Gates that he be allowed to speak. The General began to read his “Address to the Officers,” haltingly at first, according to eyewitness accounts, and then more fluently.

## *2. Organization of the Text*

Washington’s text was organized around the contrast in ethos between himself and the anonymous author of the summons. He began his address by directly referencing the first letter that had been circulated throughout the cantonment, stating flatly that the attempt to convene the officers was “inconsistent with the rules of propriety,” that it was “unmilitary,” and “subversive of all good order and discipline” (in Padover, p. 253). The General briefly mentioned the second treasonous missive that had circulated throughout the camp, as well. This “anonymous production,” he claimed, was “addressed more to the feelings and passions, than to the reason and judgment of the army” (p. 253). He buttressed his confrontational opening by suggesting that “his fellow soldier” should “have had more charity” than to cast doubt on Washington’s character; than “to mark for suspicion the man, who should recommend moderation and longer forbearance” in the name of “justice” and “love of country” (p. 253).

Washington persuasively assumed the support of his audience, suggesting that the assembled officers understood his known record of good will toward them and of his sound judgment in the conduct of the war. This record scarcely required

explanation, he asserted: "If my conduct heretofore has not evinced to you, that I have been a faithful friend to the army, my declaration of it at this time would be... unavailing and improper" (p. 254). Yet declare it he did. The Commander-in-Chief portrayed himself as open, candid, moderate, practical, and prudent. By contrast, the officer who penned the summons, who intended to take "advantage of the passions, while they were warmed by the recollection of past distresses, without giving time for cool, deliberative thinking" was lacking in candor, intemperate, imprudent, disrespectful of the army's honor, and, notably, anonymous (p. 253). Washington appealed to the officers' nearly filial sense of devotion to him by recalling his own actions on behalf of their mutual cause. He established common ground with his listeners, using a classic periodic sentence that linked his fate with theirs: "... as I was among the first who embarked in the cause of our common country (*he was the first soldier commissioned by the Congress*); as I have never left your side one moment, but when called from you on public duty (*he had not furloughed himself in eight years*); as I have been the constant companion and witness of your distresses, and not among the last to feel, and acknowledge your merits (*he had written Congress tirelessly on their behalf*); as I have ever considered my own military reputation as inseparably connected with that of the army (*he had served without pay and had rebuffed every suggestion of future reward*); as my heart has ever expanded with joy, when I have heard its praises, and my indignation has arisen, when the mouth of detraction has been opened against it; it can *scarcely* be supposed, at this late stage of the war, that I am indifferent to its interests" (as quoted in Brookhiser, p. 43). Washington forcefully reminded his audience that he had labored as long and as hard as any of them, and that he had served them well, frequently advancing their interests at the expense of his own. Mutiny would be an assault on his ethos, character, and integrity (Ellis, p. 142).

### 3. Analysis of the Text

While ethos was the main issue around which Washington's address coalesced, the question at hand was clearly deliberative: what should be done about a seemingly recalcitrant Congress and the demonstrable need of the army for pay. Correspondingly, Washington's speech dealt with the two main topics of deliberative rhetoric - the honorable and the advantageous (Kennedy, p. 49).

Washington argued that the actions urged in the summons were inexpedient (or disadvantageous) because they would not promote the object of securing payment

for the officers and because they would produce great harm to the revolutionary cause. He reviewed the recommendations of the “anonymous addresser,” deriding the proposals as “in either alternative, impracticable in their nature” (pp. 254-255). Regarding the first suggestion, that if the war continued, the troops would move into the wilderness and leave “an ungrateful country” to defend itself, Washington queried, “But whom are they to defend? What would become of “Our wives, our children, our farms and other property, which we leave behind us,” he asked. “Or, in the state of hostile separation, are we to take the two first (the latter cannot be removed) to perish in a wilderness with hunger, cold, and nakedness?” (p. 254). The second suggestion was far worse, Washington asserted. “If peace takes place,” the army would contemplate “something so shocking” as the action of turning their swords against Congress until they had “obtained full and ample justice.” This second choice amounted to “plotting the ruin of both [the Army and the Congress], by sowing the seeds of discord and separation” between military and civil authority (p. 255). These were two “dreadful alternative[s],” the Commander-in-Chief argued: there was no advantage in either “deserting our country in the extremest hour of distress, or turning our arms against it” (p. 254). Washington exclaimed, “My God! What can this writer have in view, by recommending such measures? Can he be a friend to the army? Can he be a friend to this country? Rather is he not an insidious foe?” (pp. 254-255).

Washington pressed the point even further, employing the Aristotelian concept of the possible (Kennedy, pp. 174-175): not only were the recommended measures “in either alternative impracticable,” they were also impossible (p. 255). The Commander argued that “A moment’s reflection will convince every dispassionate mind of the physical impossibility of carrying either proposal into execution (p. 255). Thus, going into the wilderness or turning their swords against Congress represented options that were simultaneously disadvantageous and impossible. Instead, Washington counseled patience. The expedient course of action involved embracing the principle of consistency and continuing to press Congress for adequate pay. The General urged his officers not to repudiate Congress, as it was his “decided opinion, that that honorable body entertain exalted sentiments of the services of the army, and, from a full conviction of its merits and sufferings, will do it complete justice” (p. 255). Washington’s rhetorical strategy combined flattery with pretense: he had written privately that full compensation for the officers was unlikely, at best. The Commander argued publicly that the soldiers must realize that Congress faced a “variety of different interests to reconcile” and

that “their deliberations are slow;” but that the members “would not cease, till they [had] succeeded” in providing just compensation for the officers (p. 255). To distrust Congress would itself be inexpedient, particularly if that distrust might precipitate actions that would, in Washington’s words, “cast a shade over that glory, which has been so justly acquired, and tarnish the reputation of an army, which is celebrated through all Europe for its fortitude and patriotism” (p. 255). To take such a tack would surely imperil a positive congressional response and, in all probability, prove counterproductive to the officers’ cause, “cast[ing] it at a greater distance” (p. 255).

Turning from a consideration of the expedient to a discussion of the honorable, Washington further appealed to his officers, arguing that to reject the anonymous summons would constitute “one more distinguished proof of unexampled patriotism and patient virtue” (p. 256). Quite obviously, in the Commander’s view, the anonymous appeal, as well as the actions it portended, were dishonorable in the extreme and should be denied vehemently. In essence, Washington shamed his officers into embracing patriotism and further patriotic action (Wills, p. 104). Again employing a classic periodic sentence, he pleaded: “... let me conjure you in the name of our common country, as you value your sacred honor, as you respect the rights of humanity, and as you regard the military and national character of America, to express your utmost horror and destation of the man, who wishes... to overturn the liberties of our country, and who wickedly attempts to open the flood gates of civil discord, and deluge our rising empire in blood.” The army officers had consistently displayed “faithful and meritorious services” to their nation and their sacrifices should not be dishonored by rash action (p. 256).

This argument from service or sacrifice played back to Washington’s opening remarks regarding his own sacrifices on behalf of his country and linked his fate once more with that of his officers. Even as he called for further honorable service from them, as their Commander, he inverted the concept of service, inviting his soldiers to command him. He said: “I feel for an army I have so long had the honor to command, oblige me to declare in this public and solemn manner, that, in the attainment of complete justice for all your toils and dangers... you may freely command my services to the utmost extent of my abilities” (p. 256).

These three extended references to service formed the foundation of the final paragraph of Washington’s formal remarks. They addressed what the Commander termed the officers’ “opinion of right,” that is, what their honor obliged them to do: namely, to embrace a calm, patriotic and political heroism that would mirror

their courage on the battlefield (Wills, p. 104; Rhodehamel, p. 83). These were virtues with which Washington had clearly associated himself throughout his address, thus linking his deliberative advice to the officers to the character he had constructed for himself.

#### 4. *A Famous Post-Script*

Arguably the most compelling part of this speech are the words that were not written in Washington's text, but were delivered extemporaneously. Virtually all accounts of the address and its reception mention a post-script, although some historians debate whether these words were uttered before or after the main speech. To support his claim that the officers should be patient with Congress, Washington had brought with him a letter from Joseph Jones, a member of Congress from Virginia. The General apparently began to read the letter and stumbled over Jone's handwriting. He is reported to have paused and reached for his new spectacles (new just that January and never before worn in public), saying: "Gentlemen, you must pardon me. I have grown gray in your service and now find myself growing blind, as well" (in Harwell, p. 501). Officers who wrote about their impressions of the speech indicated that this remark completed the rally to Washington's side. Some of the men were said to have wept openly (Kohn, 1975, p. 32).

Washington left the Temple as soon as he had finished reading the letter. For his efforts, the officers voted a unanimous resolution of thanks to the Commander in Chief, noting that they "reciprocated his affectionate expressions with the greatest sincerity of which the human heart is capable" (in Schwartz, p. 45). They expressed confidence in the justice of Congress, asked Washington to act in their behalf, and sent a deputation to Congress to represent their case. They also repudiated the anonymous "fellow soldier" who had penned the proposals of mutiny. Washington's rhetorical genius had permanently averted the officers' uprising and the disastrous consequences it would likely have engendered. Three days later, word of the final peace with Great Britain reached Newburgh.

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# **ISSA Proceedings 2006 - Fallacies And Context-Dependence:**

# Considering The Strategic Maneuvering Approach

## ✘ 1. Introduction

Context considerations are germane to the evaluation of argumentative discourse: 'fallacies' are not something one is able to identify in vacuo. In order to determine whether the performance of a speech act is fallacious or not, much more has to be taken into account than simply the pragmatic meanings that the speech act generally communicates. For a fallacy to be detected, the argumentative force of the utterance has to be specified, and this is only possible if the move is situated in its surrounding dialectical setting. In performing the speech act of a question, for example, a fallacy will be committed when this question presupposes information that has not been established in the relevant context (fallacy of many questions), or when it contradicts propositions previously agreed upon (problem of inconsistency). For the analyst then, this means that the starting points pertinent to the argumentation need to be clarified before an evaluation is carried out. Whether a particular question counts as a fallacious move or not depends, crucially, on what the arguers can be assumed to have previously accepted. A question will not be fallacious just by itself.

Examples like the one above can be used to support the following general case: fallacies are context-dependent in that they are relative to the context at hand. Starting from this observation, the present paper sets out to investigate what context-dependence entails for dialectical theories of argumentation, that is, theories aimed first and foremost at evaluating argumentative discourse in light of well-defined dialectical standards. As it provides a unified perspective of the treatment of fallacies, the pragma-dialectical theory of argumentation has been chosen as the theoretical framework (van Eemeren & Grootendorst 1984, 1992a, 2004). This is explained further in the first section of the paper, where some of the difficulties that the analyst is confronted with in identifying fallacies are brought to the fore. The following section discusses in what sense context-dependence poses a theoretical challenge for dialectical theories of argumentation. This discussion is a necessary preliminary step before any suggestions are made as to how this challenge can be overcome. In the final section, the recently developed pragma-dialectical concept of strategic

maneuvering is considered as a promising possibility to overcome this challenge (van Eemeren & Houtlosser 2002a, 2002b, 2003). It is argued that the promise of this approach lies in its interesting theoretical proposal to accommodate context-dependence by proposing an alternative account of what it means for fallacies to be relative to the context at hand.

## *2. Context-dependence and fallacy theory: pragma-dialectics*

Dialectical theories of argumentation differ from rhetorical theories in that they assume ideal and absolute standards against which they aim to evaluate argumentative discourse. Because these standards of evaluation are usually motivated by rational considerations about what constitutes reasonable argumentation, the application of theory to practice is always a puzzling problem for the analyst to solve: how should argumentative practice, on the one hand, and dialectical norms, on the other, be understood and interpreted so that argumentation can render itself open to the evaluation according to the dialectical standards?

For anybody who has been working with examples from real-life argumentation it is clear that fallacy identification is not a simple and straightforward task. Adding context-considerations does not make things any easier: variations in the context might have a drastic influence on the reasonableness or validity of the argumentation. Then, the following question naturally arises: when is it exactly that a particular argumentative move breaches the dialectical norms and a fallacy is committed? In some cases it is fairly obvious that a particular type of fallacy occurs, while in other cases it is particularly difficult to make an absolute assessment because all kinds of preliminary considerations need first be addressed. Take circular reasoning as an example: whether additional information is brought in by the argument might depend on how particular concepts are defined, although exactly how to define these concepts might not be obvious at all. Assuming a dialectical perspective on argumentation means that the argumentation is deemed to be either fallacious or not. Yet, even if one has a good grasp of the concept of fallacies, it appears a particularly difficult task to draw a firm line at exactly the point where an argumentative move loses its reasonableness and relegates itself to fallacious conduct.

Interesting as it may be to study what context-dependence means with respect to particular types of fallacies, in order to clarify some of the theoretical questions discussed in this paper it is rather a general and unified theoretical approach on

fallacies that is required. To this aim the pragma-dialectical theory can serve as a paradigmatic theoretical framework. This is because pragma-dialectics is a theory of argumentation that both assumes ideal standards of evaluation and provides a comprehensive and systematic account of fallacies. According to the pragma-dialectical approach, a move is fallacious when it is 'unreasonable', with reasonableness defined as the rules for conducting a critical discussion in accordance with what has been developed as an ideal model of critical discussion aimed at the resolution of the dispute. Following this view, fallacies constitute possible obstructive moves of the resolution process, seen from the perspective of how a resolution should be pursued in an ideal manner by the parties (van Eemeren & Grootendorst, 1987).

In their recent discussion of the strategic maneuvering analysis of *tu quoque*, van Eemeren and Houtlosser argue that a unified theoretical treatment of fallacies is preferable to a discrete analysis in which different fallacies are assigned their own treatment (van Eemeren & Houtlosser 2003, pp. 2-4). According to Van Eemeren and Houtlosser, a unified treatment is preferable because, first, it is bound to generate less confusion by avoiding mixing up different perspectives, and second, it is likely to be less ad hoc in that a common rationale is there to capture different fallacies under the umbrella term of fallacious argumentative moves.

Drawing a firm line at the exact point where a reasonable move turns into a fallacious one is not the only difficulty that the argumentation analyst is confronted with when working with ordinary argumentation; drawing a firm line between fallacies themselves might also prove to be not such a trivial affair. One often observes that when something goes wrong with one aspect of the argumentation, other aspects are very easily affected; for example, personal attacks might easily result in irrelevant argumentation, or invalid argumentation might lead to a straw man. Even when argumentation theorists themselves do agree that something is indeed not right, they often disagree about what it is that has gone wrong. This might not be only due to different understandings of what fallacies really are. It often happens that the deeper one gets into the study of a particular type of fallacy the more likely one sees this fallacy realized in practice (reducing all fallacies to problems of relevance would be a good example of this). To be able to distinguish between different types of fallacious argumentation, the analyst is not only in need of isolated definitions; the analyst also needs a clear

understanding of those essential properties that differentiate one type of fallacy from the other, and for this a unifying theoretical account needs to be assumed that puts the various types of fallacies side by side. All this makes sense, of course, as long as one wants to distinguish between various types of fallacies and does not want to reduce all fallacies to subtypes of one main type.

### *3. How does context-dependence challenge a dialectical theory of argumentation?*

That fallacies are context-dependent constitutes a challenge for a dialectical theory of argumentation in at least two respects. First, context-dependence renders any assessment of the reasonableness of argumentation provisional. More information about the context might not just complement the initial assessment but, more drastically, prove it to be wrong. Second, the evaluative process projected by a dialectical theory of argumentation could be judged as not flexible enough to deal with the peculiarities and complexities of ordinary argument responsible for the fact that a particular utterance counts as fallacious in one context and as reasonable in another. I will briefly discuss these points in order.

The conditional character that any evaluation has due to the context-dependence of fallacies should not be seen as a problem for a dialectical theory of argumentation. After all, it makes sense to say that one evaluative assessment can overwrite another in view of a more informed analysis only if the standards of evaluation remain the same. That any assessment of the reasonableness of the argumentation is in principle provisional should only be taken to stress the fact that determining what is relevant to the argumentation at hand is as a crucial task for the theorist as the evaluation itself.

In pragma-dialectics, the provisional character of the evaluative process, and the openness to revision in view of better-informed analysis, is motivated by one of the most fundamental philosophical conceptions that underlie the theory. Argumentation is approached by pragma-dialectics from an ideal of critical rationality, according to which the resolution of the difference of opinion is pursued by critically testing the tenability of the standpoint. That critical testing is an ideal in the pragma-dialectical model of critical discussion is evident, among other things, from the fact that a difference of opinion is not always resolved in actual practice; the resolution of the dispute serves as the ultimate goal of the model of critical discussion, and as such it is instrumental in determining what is acceptable in the practice of argumentation and what is not (i.e. what constitutes a fallacy). As long as the antagonists in the dispute come up with ways to

challenge the argumentation of their opponents -e.g. forwarding critical questions to the argument schemes, doubting the truth or acceptability of individual statements, and so on- the critical discussion, theoretically speaking, can continue. In other words, there is nothing in the ideal model of critical discussion itself to prevent the discussion from moving forward, by saying, for example, that the amount of criticism expressed so far is enough. Obviously, any real argumentative exchange will eventually come to an end, but besides a fair resolution, what might terminate the discussion could be any contingency coming from the real world, such as time limits, the pressure to make a decision, or even boredom.

Since the analyst should, in principle, provide justification for any evaluative assessments, the analysis and the evaluation themselves can also be seen as instances of argumentative discourse. It follows then from what has just been said that no analysis or evaluation need be the last word. In other words, the analyst can also critically test the analysis itself. When different interpretations and analyses of the argumentation are proposed, it is a matter open to a critical discussion to come to an agreement about which of them is to be preferred. The pragma-dialectical theory of argumentation can be seen to embody critical rationalism in that the model of critical discussion is designed not to hold back critical assessment, even if directed towards the analysis itself.

The second critical challenge confronting a dialectical theory is to counter the common criticism that dialectical approaches are not flexible enough to deal with the peculiarities and complexities of ordinary argument. This criticism is motivated by the fact that dialectical theories typically determine the standards of evaluation prior to context considerations. The question then arises: what if argumentative practice itself is not susceptible to such a normative evaluation? After all, context-dependence could be seen as evidence of some normative relativism operative in actual practice, and this poses a real problem to any systematic normative theory of argumentation of matching the theory -i.e. a fixed set of norms- to practice.

It is mainly because of their identification with normative relativism that descriptively oriented scholars are inclined to argue against an a priori determination of evaluative norms. In most cases such criticism will give rise to the additional conclusion that it is only from observing practice itself that a theory of argumentation can derive or extract the norms that really matter. **[i]** Whether

to start from practice in order to determine the normative standards for argumentation or opt for rational considerations instead is a serious question for argumentation theory. However, this question is not addressed in the present paper. The main concern here is to explore the possibility for a dialectical theory such as pragma-dialectics to deal with context-dependence and to overcome the criticism that it can't bring the normative aspects of the theory to bear in practice.

Without going any deeper into the conflict between normative and descriptive theories of argumentation, the following remark should be added. In fallacy identification, a well-defined and fixed set of norms, that is, a set of norms that cuts across different contexts, can serve as a powerful analytical tool. Having a fixed set of norms in mind, the analyst has a good idea of where exactly to look and what to look for in the argumentation in order to decide whether a fallacy has been committed or not. Some conception, in other words, of what can go wrong with a particular move must be there to precede the analytic and evaluative processes. And this is theoretically desirable for yet another reason: evaluative standards can serve as a point of reference among evaluative assessments of different pieces of argumentative discourse. Having a point of reference will enable the analyst to illustrate, for example, how, with respect to a particular type of fallacy, varying the context influences the reasonableness of the argumentation. Consider, as an example, different arguments that are said to be cases of abuse of authority. One cannot comparatively assess these cases if one is not clear about what would qualify as good argumentation from authority in the first place. It is actually difficult to see how comparative assessments of the reasonableness of argumentation can have any theoretical strength if reasonableness is not measured against a fixed set of standards.

#### *4. Considering the strategic maneuvering approach: an alternative understanding of what it means for fallacies to be context-dependent*

In accordance with the above, the pressing question for a dialectical theory of argumentation is how to deal with the pragmatic phenomenon of context-dependence while at the same time retain its normative character. It is clear that redefining the norms for reasonable argumentation for every different piece of argumentative discourse would not be an answer. How, then, should one go about reconciling theory and practice?

The claim of this paper is that the concept of strategic maneuvering constitutes

an answer to this question by creating a semantic shift in how context-dependence is itself conceptualized. Following the strategic maneuvering treatment of fallacies, it is possible for a theory to maintain its dialectical norms across different contexts if the phenomenon of context-dependence is taken to reflect the various manifestations of the types of fallacies in the reality of argumentative discourse, rather than to suggest the inadequacy of fixed sets of norms across different contexts. There are, in principle, no limits to the ways in which arguers can commit an *ad ignorantiam*, a hasty generalization, a slippery slope, a *post hoc ergo propter hoc*, or any other type of fallacy. It is not the definition of what constitutes a hasty generalization that is relative to the context, but the various manifestations of the fallacy of hasty generalization are.

Norms have different implications for different argumentative contexts. Consider, for example, a rule that prevents the parties from limiting the scope of the topical potential in the critical discussion. It is easy to think of real-life situations where excluding some topics from being raised would not be an unjustified attitude to pursue; situations, for example, when there is not enough time available for all the issues that interest the two parties to be treated and a choice of discussion topics needs to be made. The point here is that in dealing with such cases, the analyst should work on interpreting instead of adjusting the norms to fit the particularities of the argumentative situation at hand. This means for a dialectical theory that context-dependence will have to be accounted for in the process of reconstruction as opposed to the evaluation of argumentative discourse.

To see how pragma-dialectics proposes to account for context-dependence in the reconstruction of argumentative discourse, one should look closer into what the strategic maneuvering analysis of argumentation entails. Strategic maneuvering suggests a way to analyze argumentative discourse that provides a comprehensive account of the argumentative goals -both dialectical and rhetorical- pursued by the arguers engaging in argumentative discourse (van Eemeren & Houtlosser 2002b, pp.134-135). It is important to note that strategic maneuvering is not something that the arguers can choose to do. It would make no sense to say, for instance, that party A strategically maneuvers in this particular move; or that in those stages of the critical discussion strategic maneuvering takes place. By making an argumentative move, it is inevitable that arguers strategically maneuver in that they naturally seek to strike a balance between maintaining their image of rational discussants while at the same time



getting their point through (van Eemeren & Houtlosser 2003, pp. 4-5). An argumentative move necessitates a choice by the arguer among the available options at hand regarding the topical potential -or the shaping of the disagreement space-, the use of presentational devices, and the possibilities of adjustment with respect to audience demand (van Eemeren & Houtlosser 2002b, pp.138-141). Naturally, some will be better than others in making these choices.

In line with the above, the concept of strategic maneuvering provides an explanatory account of what it means for an arguer to perform a fallacious move. A fallacy is defined as the derailment of the arguer's strategic maneuvering, that is, as the outcome of an unsuccessful attempt to maintain the balance between the dialectical and rhetorical goals that pertain to the argumentative situation at hand (ibid, pp.141-143). It follows from this that in order to identify fallacious moves the analyst should first specify what these moves set out to do. Situating the strategic maneuvering within the stages of the critical discussion becomes instrumental to the evaluation, because only then can the dialectical and rhetorical goals undertaken be brought to the fore. A context-sensitive analysis and reconstruction of argumentation depends on the following: first, a specification of the various types of strategic maneuvering in line with the argumentative situations that emerge within the dialectical stages of the ideal model of critical discussion; and second, a specification of both the conditions that need to be met in order for the maneuvering to stay on track and the criteria in order to decide when it derails.

The strength of this approach lies in the fact that context considerations are already incorporated in the analysis and reconstruction of the argumentation, and as such they do not relativize the dialectical norms against which argumentation is evaluated. In order to assess the reasonableness of a particular argumentative move, one first needs to identify the type of strategic maneuvering that is in play, and by doing so specify the normative standards that pertain to this move. Thus, characterizing fallacies as context-dependent does not mean that in some contexts *ad hominem*s, for example, do not count as fallacious moves: if they are not fallacious, they cannot be identified as *ad hominem*s in the first place.

An additional advantage of the strategic maneuvering theoretical treatment of fallacies is that it poses no limitations to the various ways in which particular types of fallacies can be manifested in the reality of argumentative discourse. This is because derailments of strategic maneuvering are characteristically

determined with respect to what their 'sound counterparts' are taken to be (van Eemeren & Houtlosser 2003, pp. 5-7). This means that the theory does not need to predict all the pragmatic situations that can give rise to possible violations of a rule; however, the theory should be expected to supply the analytic tools to identify such a violation when it takes place. Thus, by providing a context-sensitive analysis of argumentative discourse, while at the same time not restricting the pragmatics underlying the various manifestations of violations of the dialectical rules, the concept of strategic maneuvering proposes a dialectical evaluation of argumentation that is flexible enough to accommodate the pragmatic phenomenon of context-dependence.

### 5. Conclusion

It has been argued in this paper that strategic maneuvering constitutes an interesting theoretical approach to circumvent the perceived problem that context-dependence poses for a dialectical theory of argumentation such as pragma-dialectics. Strategic maneuvering is an interesting concept precisely because it holds the promise of accommodating the pragmatic phenomenon of context-dependence without relativising the dialectical norms that the theory postulates. Following the strategic maneuvering analysis of argumentative discourse, the fact that fallacies are context-dependent should already be accounted for in the reconstruction of argumentative discourse. This means that from the perspective of strategic maneuvering, a move in argumentation cannot, strictly speaking, be fallacious in one context and non-fallacious in another. A move that is fallacious here and non-fallacious there cannot in fact be the same move. To think of an example, it is wrong to claim that ad hominem are non-fallacious moves in some context or other. The point is that if a move is not fallacious, an ad hominem would never have been detected since it is only relative to context that ad hominem can occur.

### NOTES

**[i]** One is, of course, not committed to normative relativism when adopting a descriptive point of view. Even under the assumption that there is ultimately a unique set of norms that people strive to follow in argumentative practice, it is still an open question whether these norms should be defined primarily in an a priori manner or through empirical observation.

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# **ISSA Proceedings 2006 - Classes Of Moral Agent And The Art Of Persuasion In The Pali Nikayas**

- ☒ Not doing any evil (paapa)
- ☒ Cultivating what is good (kusala)

Purifying the mind

This the teaching of the Buddhas

*(Dhammapada 183)*

### *Introduction*

This paper is divided into two parts. The first part is a philosophical argument, based upon Buddhist principles, about the nature of early Buddhist moral thinking. I do not pretend that the arguments in this part of the paper were ever given by, or even occurred to, the Buddha or any Buddhist thinker. Rather, what I hope to show is that the arguments presented here are implicit in the teachings of the Pali Canon and serve to clarify the underlying principles in terms of which early Buddhists appear to have thought. Although my formulation is new, most of the points I make have made been before. I view this work as one of connecting the dots. I don't believe my arguments would strike thinkers of the Theravada tradition as particularly controversial, but I do hope that they would be regarded as useful clarification. The second part of this paper concerns the extent to which the theoretical conclusions established in the first part are supported by solid textual evidence. One might well ask whether the shapes I discern are actually present, or are rather more like constellations in the night sky. This must always be a concern.

In the end, the arguments presented here will lead us to address the question of audience in the Pali Suttas asking whether it is possible to identify different modes of moral exhortation corresponding to different classes of moral agent. By "classes of moral agent" I have in mind the fundamental threefold distinction of ordinary person, noble disciple, and the liberated being. By "modes of moral exhortation" I mean both the vocabulary and the forms of persuasion employed in enjoining individuals to act in manner considered "good" and praiseworthy by the tradition. Thus the question concerns moral rhetoric in Buddhism.

That there are distinctions to be made among the various audiences entertained by the Buddha and his immediate circle is clear enough. One has only to think of the division between bhikkhus and bhikkhunis on the one hand and members of the laity on the other, as well as the many wanderers and ascetics who the Buddha engages in dialogue.

But in this paper we are particularly concerned with the classification of persons according to their proximity to nirvaana. As is well known, aside from the Tathaagata himself, there are the three basic classes of person listed at numerous

points in the Pali Canon. There is, first of all, the ordinary person (puthujjana), one who has not experienced the life-transforming insight into selflessness that alone guarantees liberation. Secondly, there is the noble disciple (sekha), who has had this experience - this first intimation of nirvaa.na, and who is, as a consequence assured of final liberation in a maximum of seven lives. He is one who has entered the supramundane path. **[i]** Finally there is the liberated being (arahat), who has not only eliminated the wrong view of “self” but also entirely eradicated even the subtlest traces of the inclinations towards craving and conceit to which a lingering sense of self may be attached, and upon the basis of which rebirth occurs. **[ii]** It is my view that to properly understand Buddhist moral thinking, and therefore Buddhist moral discourse, moral conduct (siila) in early Buddhism must be analyzed in relation to these different classes of person. Why?

The prima facie response is that just as persons can be distinguished on the basis of their proximity to nirvaa.na, spiritual purity and insight, so too there must be theoretical differences in connection with their inner moral lives. If their subjective worlds differ, it is only natural that their respective experiences of moral conduct will also differ. The central idea, then, is that differences in spiritual development affect the phenomenology, and therefore the correct description, of the moral conduct associated with each kind of agent. Although this suggestion seems reasonable, it requires further justification.

### *Part 1: Theoretical considerations*

In an earlier paper (Adam 2005) I have gone some way towards providing such a justification in the context of an ongoing debate in the field of Buddhist ethics (Keown 1992, Harvey 2000, Velez de Cea 2004). The discussion concerns the language of “goodness” employed in the Pali Canon. There exist two distinct yet related vocabularies used in describing good action, namely, those of merit (puñña) and wholesomeness (kusala). Meritorious actions are actions that cause pleasant, enjoyable future experiences; in the Indian worldview they are particularly associated with favorable rebirths in sa.msaara. Wholesome actions, on the other hand, are characterized by naturally positive, healthy qualities (dhammas) conducive to the attainment of nirvaa.na. Hence kusala is also translated as “skilful” - such conduct arises from wisdom and leads to awakening. Indeed, the Buddha himself — the very embodiment of skill — is sometimes characterized as possessing kusala qualities:

“The Tathaagata. . . has abandoned all unwholesome states (akusaladhamma) and

is possessed of states that are wholesome (kusala)” **[iii]**

Because of the association of the term kusala with awakening and nirvaana, such actions have been called “nirvanic” by some scholars working in the field of Buddhist ethics (Keown 1992).

Now various analyses have been given of the relationship obtaining between kusala and puñña, but none have proven very satisfactory. Clearly there is a conceptual tension here: on the one hand we have a term for “good” whose principal association is with the result of favorable rebirths in sa.msaara; on the other we have a term for “good” associated with the result which is the end of rebirths, nirvaana. On the surface then, the two terms seem to be diametrically opposed.

This twin ethical structure has been the topic of anthropological research in Buddhist societies. Winston L. King (1964: 89-90) appears to have been among the first to clearly articulate this notion of a radical split between two parallel value systems in Buddhist societies - one lay, one monastic. **[iv]** Spiro (1971) followed suit - explicitly connecting the ontological division between sa.msaara and nirvaana to two distinct value systems (66-70). Although Spiro grounds many of his arguments on empirical observations of actual behavior in the social context, he also identifies the discourses of kusala and puñña as the terminological basis for this theoretical division (Spiro 97-98). I will have more to say about the so-called King-Spiro hypothesis towards the close of this paper.

From a logical point of view the relationship between these two terms could take one of five forms, which are easily depicted with Venn diagrams.

1. Puñña and kusala could each refer to entirely different sets of phenomena.
2. Puñña and kusala could refer to exactly the same set of phenomena.
3. Puñña could be a subset of kusala.
4. Kusala could be a subset of puñña.
- 5 While sharing some common members, both kusala and puñña could each encompass some members not included in the other.

So how do we decide?

The first logical consideration that appears germane is the fact that puñña and kusala are both positive moral terms and each has its negative opposite:

- A. puñña and apuñña (paapa): meritorious and detrimental (merit and demerit)
- B. kusala and akusala: wholesome and unwholesome (the skillful and unskillful)

In order to clarify the relationship between these two pairs of antonyms it is

helpful to introduce a third, neutral pair, which can serve as a kind of heuristic device. In fact this tool was first introduced by the Buddha himself in order to explain the nature of action in general; it is, therefore, highly relevant to any attempt at framing a theory of Buddhist ethics in Buddhist rather than western philosophical terms.

C. sukka and ka.nha: bright and dark (white and black, positive and negative, pure and impure, good and evil)

In the Kukkuravatika Sutta the Buddha describes human action as divisible into four logical categories based on this pair **[v]**. Actions may be:

- (1) dark with dark result;
- (2) bright with bright result;
- (3) both dark and bright and with dark and bright result;
- (4) neither dark nor bright, neither dark nor bright in result, the action that leads to the destruction of actions.

How does this schema relate to Pairs A and B?

Initially, the first three of these four categories seem to correspond to the “samsaric” pair, A: puñña and apuñña. This seems to fit the context: the Kukkuravatika Sutta is the Buddha’s reply to two ascetics concerned with their fate in the afterlife. (One has chosen to undertake a practice of imitating the behavior of a dog, the other is copying the conduct of an ox). The fourth category, on the other hand, seems to be referring to actions that lead to the “destruction of actions” or nirvaa.na, and hence to be especially linked to the term kusala of Pair B.

Thus for categories 1 through 3: dark actions cause dark, unpleasant results in one’s future experience; bright actions produce bright, pleasant results in one’s future experience. Those with a mixed nature lead to a mixed result. **[vi]** Thus:

Category 1 is apuñña

Category 2 is puñña

Category 3 is both puñña and apuñña

If we follow this analysis and exclusively identify categories 1 through 3 with Pair A, is it possible to maintain that Category 4 exclusively refers to kusala actions? Its description as action that leads to “the destruction of actions” does seem to be a clear allusion to the attainment of nirvaa.na. On this basis, the suggestion seems plausible.

On second glance, however, it does not appear satisfactory. For on this reading

the term akusala seems to lack a referent. It might be suggested that that Categories 1-3 are all akusala, but this leads to the absurdity, in Buddhist terms, that meritorious actions (Category 2) are unwholesome. Obviously we need to back up in our analysis; somewhere we have gone astray.

Clearly there is something to the intuition that would associate the first three categories with Pair A. Given their clear formulation in terms of precedent and matching consequence it seems natural that they be associated with the notion of merit, and more generally, karma. Perhaps the problem lies in suggesting that that they do so exclusively. Is it possible that these three categories also refer to Pair B? This would resolve the issue of finding a referent for the term akusala (i.e. Category 1). Here I will argue that this is in fact the case, framing my argument in terms of an ongoing debate in the field of Buddhist ethics.

A number of scholars have convincingly argued that early Buddhism does not teach a form of consequentialism (e.g. Harvey 49) – this in spite of the regular appeal made to the consideration of consequences in assessing good and bad conduct. I think this is correct: the Buddha appears to have taught that morally positive actions (i.e. those that are good or right, etc) have positive results because they are positive; they are not considered positive because they have positive results. Morally negative actions have negative results because they are negative; they are not considered “negative” because that they have negative results.

Or in the terms of the Kukkuravattika Sutta, bright actions have bright experiential results because they are bright; they are not considered “bright” simply because they have bright experiential results. Dark actions have dark results in experience because they are dark; they are not considered “dark” in virtue of the fact that they have dark experiential results.

Actions have natures. Darkness and brightness are qualities of actions in and of themselves.

If this is so, it leads to the inevitable question as to what kind of quality is being referred to. In their most abstract sense sukka and ka.nha can be seen as mutually exclusive “positive” and “negative” poles of value. In the specific realm of moral discourse they thus refer to the “good” and the “bad,” or even the “pure” and the “impure.” But in point of fact, these terms are first and foremost “colour” terms related to the sense of sight: “bright and dark” or “white and black.” Thus to label an action sukka or ka.nha is not simply to indicate its moral quality, it is to indicate the epistemic quality of the action in relation to the agent’s mind vis-à-



vis spiritual vision and Awakening. In fact, it is the underlying state of mind characterizing one's intention that is the key factor determining the brightness or darkness of an action. Afflictive, unwholesome mental formations (i.e. those conditioned by greed, hatred, and delusion) are dark. They block insight. Wholesome mental formations (those based on generosity, love, and wisdom) are bright. They do not block insight. **[vii]**

In this context we need to recall that in Buddhist thinking the concept of "action" is understood in terms of the underlying volition or mental intention (cetanaa) of the agent. In one of the more commonly quoted passages of the Pali Canon (AN iii 415), the Buddha states: "It is intention, O Monks, that I call action; having formed the intention one performs acts by body, speech and mind." Thus every action, whether it be of body, speech or mind is defined in terms of its underlying intentional state.

With these considerations in mind Pair C can be seen as simultaneously referring to two aspects of a single underlying mental state, namely, the moral and the epistemic. These two aspects correspond to pairs A and B. A and B refer to exactly the same extensional set, but with diametrically opposed intensions, namely, the samsaric and the nirvanic. Pair A alludes to the experiential results of the action in sa.msara. Pair B signifies the quality of the action with respect to insight and the possibility of nirvaa.na. Pair C brings sa.msara and nirvaa.na together, simultaneously indicating the moral quality and the epistemic character of the action. **[viii]** The apparent conceptual gulf between the discourses of puñña and kusala is thereby eliminated. This analysis provides a strong theoretical basis for questioning the King-Spiro hypothesis. For the first three categories of action at least, these two terms turn out to be co-extensional. All kusala action is puñña and vice versa. The concept of sukka provides the missing link.

In spite of this felicitous result, we have not yet addressed the riddle of the fourth category. Thus far we have only indicated that as a description of the path leading to nirvaa.na, it seems to be especially connected to the term kusala. Indeed, the language of kusala does predominate in accounts of the moral practices that lead to the final goal. Indeed the standard account of the path factor of right effort (samma-vaayaama) is that it is fourfold: the cultivation of wholesome mental states not present in the mind, the maintenance of wholesome states already present, the discouragement of unwholesome states present, and the resolution to keep in abeyance unwholesome states that are not present. Here, for example, is

a brief description of a noble disciple who is practicing correctly: “[H]e is energetic in abandoning unwholesome states and in undertaking wholesome states; he is steadfast, firm in striving, not remiss in developing wholesome states.” (MN 53 i 357)

This passage is taken from the Sekha Sutta a discourse specifically devoted to the portrayal of the disciple in higher training (sekha), the practitioner who is bound for nirvaana. It is clear that the term kusala is deeply implicated in the theoretical understanding of this particular class of spiritual actor. If we wish to maintain that there is also a special association between the term kusala and Category 4 action, then this would suggest that this fourth category is intended as a description of the conduct of the sekha. The action of a normal person (puthujjana) clearly does not fit the description of the fourth category, for it does not lead to “the destruction of actions”.

As far as other possible agents for Category 4 actions go, at the other end of the spiritual spectrum is the Arahant. But he too would appear to be ruled out. For, by definition, an Arahant is one who has already achieved the destruction of actions. His conduct has no karmic effects whatsoever; he will not be reborn.

Thus it seems reasonable to suggest that the agent of Category 4 actions be someone in an intermediate position, a person who has entered the Noble Eightfold Path, who has had an initial intimation of the freedom of nirvaana, but who has not yet achieved it. The sekha fits that bill. This is indeed how the tradition itself understands the situation (Ñānamoli and Bodhi 1258, Payutto 76). The noble disciple’s action is kusala.

But because our earlier analysis led us to conclude that kusala and puñña are coextensive terms in the realm of action, Category 2 actions, which are puñña and belong to the ordinary person, must also be kusala. This suggests that there must be two usages of kusala as an adjective describing actions:

Wholesome actions of Ordinary persons: bright and not dark (Category 2)

Wholesome actions of Noble Disciples: not bright and not dark (Category 4)

Actions of both classes of agent are kusala, but only those of the ordinary person are “bright” (sukka).

Given this understanding it becomes possible and necessary to ask whether the Category 4 actions of the sekha are also puñña. The fact that they are actions (karma) suggests as much. Here I will argue that the actions of the noble disciple are in fact puñña, but in a manner that is rather different than those of the

ordinary person.

To understand the peculiar status of the noble disciple's action qua puñña we can make use of a distinction recently suggested by Abraham Velez de Cea — between what he calls the “instrumental” and “teleological”:

By instrumental actions I mean actions leading to favorable conditions for cultivating nirvanic virtues and by teleological I mean actions actually displaying nirvanic virtues or virtues characteristic of the Buddhist ideal of sainthood. (2004:128)

Now the notion that among actions there exists some such theoretical distinction to be made relative to the final goal of nirvaana is not original to Velez de Cea. We find a similar idea in the writing of King:

[T]here are some values, states of consciousness, and related modes of conduct that can be called intrinsically good because they themselves partake of the nature of Nibbana. Naturally such consciousness and conduct characterize the higher ranges of saintly attainment. But there are also what we may call instrumental and analogical goods, or those deeds and attitudes that lead to Nibbana, or are more like Nibbana than their opposites. (1964: 89)

Although these two writers differ on practically everything else, they nevertheless seem to be agreed that Buddhist ethical thinking rests upon a distinction between two basic kinds of actions, one which is merely instrumental to the attainment of the final goal and the other of which displays or “participates in” this goal. **[ix]** I agree that some such distinction should be made. But where I differ from these writers is in their assertion that the instrumental and the non-instrumental refer to two distinct sets of actions. All action is both teleological and instrumental.

The noble disciple's good actions are teleologically nirvanic (kusala), but they are also correctly viewed as instrumentally samsaric (puñña). The notion of “instrumentality” is here being understood as referring to the unintended effects of the action. Category 4 actions participate in nirvaana; but unless the noble disciple reaches this goal he or she will be reborn in sa.msaara. Such actions will have had the inevitable effect of leading to a higher rebirth, even though this result will have been gained inadvertently. This beneficial result for the person did not inform his or her intention.

The description of the good actions of the ordinary person displays an interesting symmetry. These actions have the unintended effect of leading the agent closer to nirvaana. (See King 54-59). They are, therefore, only instrumentally nirvanic

(kusala). They are not informed by the final goal, but undertaken for the projected benefit of oneself. The agent's actions therefore lead only to pleasant future experiences, such as a better rebirth. It is precisely a higher rebirth that many ordinary Buddhist lay-people consciously aspire towards. And such they will attain through the performance of their bright category 2 good deeds. There is directionality inherent in the natural order of things. We can therefore speak of such actions as teleologically samsaric (puñña).

The category 4 actions of the noble disciple are both kusala and puñña, but they are also neither bright nor dark. This is to say that while they are not sukka, but also not not sukka (i.e. not ka.nha). The category 2 actions of the ordinary person, on the other hand are sukka and not not sukka (i.e. not ka.nha).

In general then we can conclude that kusala and puñña action is action that is not dark. This account allows us to see the deeper logical structure of Buddhist moral thinking. For disciples in higher training the association between kusala and puñña on the one hand, and sukka on the other, breaks down.

As long as an action is not dark it is both wholesome and meritorious. If it is not dark and is bright then it is instrumentally wholesome (and teleologically meritorious: it has the effect of situating one in a better circumstance to attain nirvaa.na, but this was not the intention). It belongs to the ordinary person. If it is not dark and not bright then it is teleologically wholesome (and instrumentally meritorious: it has positive karmic effects, but these were not intended). Such actions belong to the noble disciple.

The key determinant of an action's being either Category 2 or 4 is the awareness that marks the intention of the agent. Ordinary persons are motivated by a concern informed by the delusion of self; one's moral conduct is motivated by the desire to benefit oneself (e.g., with a higher rebirth, the prospect of pleasure, etc.). The agent's mentality is samsaric.

But upon entering the Noble Eightfold Path, the agent's actions are marked by nirvaa.na; the efforts made are undertaken in the context of an underlying recognition of this final goal. The deluded view of "self" has been penetrated by certain insight, even if the other unwholesome roots have not been entirely eradicated. Selfless, altruistic conduct becomes possible. The agent's mentality is nirvanic.

What does this mean in concrete terms? The experiential quality of moral action of the two classes of agent-subject is entirely different. They display radically

different intentional structures in relation to the twin poles of self and selflessness, or, put another way, *sa.msaara* and *nirvaa.na*. For a person with a samsaric orientation actions are positively and negatively charged in experience, they are undertaken with positive or negative results for oneself in mind, i.e. with attachment. For a person with a nirvanic orientation actions are neither positively nor negatively charged in experience. They are emptied of charge in virtue of the absence of a view of self in which to inhere. They are not undertaken or experienced in terms of the results for oneself. The agent feels inevitably drawn towards *nirvaa.na*, but, paradoxically, not motivated by the goal of attaining it for him or herself. While her actions continue to have unintended effects on the psychophysical organism in *sa.msaara*, in terms of motive they are unattached.

To sum up: The description of a “good” or “moral” action in early Buddhist thought depends on the agent’s spiritual status. We can distinguish two classes of agent and the descriptions of their respective actions:

(1) Ordinary persons (*puthujjana*): good action is bright, teleologically meritorious and instrumentally wholesome; it is principally describable as *puñña*, and secondarily as *kusala*.

(2) Disciples in higher training (*sekha*): a good action is neither bright nor dark, teleologically *kusala* and instrumentally *puñña*; it is accurately described as principally *kusala*, and secondarily *puñña*.

If we assume that it is more common for members of the monastic community to have had the experience of transformative insight than it is for members of the laity, then this would allow the same distinction to be drawn along social lines, as opposed to phenomenological and soteriological ones. In so far as Buddhist societies accept this line of thinking, in certain instances the account we have outlined here could be reflected in the social sphere. It could thus lend support to a revised King-Spiro hypothesis. Some Buddhist societies may indeed embody the general notion that there exists two distinct levels of morality, one worldly and one other-worldly (Spiro 68) — and that these two are associated with the laity and monastics respectively. While the ordinary person’s conduct is worldly, the conduct of the monastic/noble disciple appears to be both worldly and other worldly at the same time. It occurs in the world, but is not of it, as it were.

In the next section we will investigate the degree to which this account finds support in the scriptures. Before turning our attention in this it would be prudent to carefully distinguish this descriptive account, which is based on a phenomenological distinction, from any account that would suggest that different

moral prescriptions apply to different categories of agent. This is an entirely different claim - one that will not be investigated here.

## *Part 2*

How might we test the validity of this hypothesis by analyzing the word-usages and rhetoric the Pali Canon? Here we outline three questions for future investigation:

- 1) Is there a predominance of kusala language in theoretical descriptions of the noble disciple, and along with this a corresponding predominance of the language of puñña in descriptions of the ordinary person?
- 2) Is there a tendency for the Buddha to adopt these different vocabularies in addressing these different kinds of agent?
- 3) Finally, beyond questions of vocabulary, are different forms of moral exhortation used by the Buddha in addressing these different classes of audience?

1. Let us begin with vocabulary. Is this understanding I have outlined corroborated by the use of different moral vocabularies in the discourses themselves? Do the texts tend to prefer the language of kusala in describing the good action of noble disciples? Do they employ the language of puñña in describing the action of ordinary persons?

Initial investigations suggest that this appears to be the case for the noble disciple. Pair B appears to be used most commonly. We have already seen one instance of this above, in the Sekha Sutta. Pair A tends not to be commonly used in describing the virtuous conduct of the noble disciple.

As for the ordinary person, our conclusion has to be somewhat more tentative. It is clear that Pair A is used in describing the virtuous conduct of members of the laity. In most cases we can assume that the individuals discussed are meant to be viewed as ordinary persons (e.g. MN i 371). However, Pair B also appears to be commonly used in describing the good conduct of lay people.

2. The vocabulary employed in the Buddha's addresses to these different classes of agent could vary as well.

This suggestion is also difficult to conclusively support. The reason for this is clear. The Buddha's audiences in different discourses are often only specified in terms that do not map neatly onto the division of different classes of agent. Bhikkhus can be ordinary persons (MN i 34). And lay-people can be sekhas (MN ii 262). Although we can often learn the tradition's own understanding of the spiritual status of a particular audience on the basis of a commentary, this isn't

always possible. And indeed there is good reason for this. Almost certainly, the Buddha's audiences were often a mixed bag. On any particular occasion a group uniformly addressed "Bhikkhus" could be composed of everyone from newly ordained novices right up to full-fledged arahats. Nor is the spiritual status of the lay-people addressed always clear. To complicate matters further, it is often the case that both lay-people and bhikkhus are in attendance.

In addition, we often see the Buddha in dialogue with one of a variety of samanas such as Niganthas and Ajivakas. The spiritual insight of these individuals is not uniform — some are almost arahats (MN i 489-497), others (such as Aajiivakas) are regarded as spiritually inferior to many lay-people (MN i 483). Because non-bhikkhus can be sekhas, and bhikkhus can be puthujjanas, it becomes difficult to corroborate the hypothesis that the language of puñña tends to be used in addressing the ordinary person while that of kusala is more closely associated with his addresses to noble disciples. In point of fact, we commonly find the language of puñña used in the Buddha's addresses to bhikkhus (e.g. MN i 133) And, often enough, we find the language of kusala used in addresses to non-bhikkhus, including lay-people (MN i 402).

Now we may want to suggest that in these cases the Buddha was addressing spiritually advanced lay-people and non-spiritually advanced bhikkhus, as the case may be. But this isn't always clear. To assert it would be to assume that which we are trying to determine. Our investigation therefore remains inconclusive on this point.

3. A further suggestion would be that the Buddha adopted different forms of moral exhortation in addressing different classes of agent. For example, it might be thought that the Buddha would tend to employ the carrot and stick approach of reward and punishment in lives to come when exhorting the ordinary person to act virtuously, while appealing to the self-evident wholesomeness of virtuous conduct when encouraging the disciple in higher training. Certain forms of address would be more fitting for one who has had their basic orientation reversed by a glimpse of nirvaa.na. Presumably such a person would need less convincing and more encouraging. A worldly minded person on the other hand might need convincing through argument or through promises of reward and punishment in future lives.

But the same considerations just mentioned apply here. If anything the situation is even more vague. There are clear cases where bhikkhus are disciplined or

advised with the carrot and stick approach, with considerations of heaven and hell (MN i 142; Also see MN 40, 45, 46). Are these individuals necessarily to be regarded as ordinary persons? In some cases they most certainly are not (e.g. MN 86).

At present the results are inconclusive. In general the texts are not inconsistent with the understanding outlined here. The theoretical grid presented in this paper can be used to as a framework for understanding the contents of a collection of texts that inevitably contains a large number of irresolvable ambiguities.

## NOTES

**[i]** Throughout this paper I shall employ the Sanskrit “nirvaa.na” and “karma” in place of the Pali, nibbaana and kamma.

**[ii]** See Bodhi 1992, 14-15. Although I will not go into such details in this paper it should be noted that the term sekha is a general term covering seven out of eight categories of noble person (ariyapuggala) who have not yet reached the fruit of arahathood. This group includes those who have attained the path and the fruit of the stages of Stream-Enterer (sotaapanna), Once-Returner (sakadaagaamin), and Never-Returner (anaagaamin), as well as those who have attained the path but not the fruit of the stage of the arahat. Each of these stages is distinguished on the basis of the progressive elimination of different kinds of defilement. The eighth class of noble person, no longer a disciple, is the individual who has attained the fruit of arahathood - one who has completely purified his or her mind. Such are termed aseka.

**[iii]** Sabbaakusaladhammapahiino... Tathaagato kusaladhamma samannaagato ti / (MN ii 116). Quoted in Keown (1992:118).

**[iv]** King’s research was centred in Burma, but he appears to regard his findings as applicable to Theravada societies in general. Spiro’s fieldwork was also in Burma, but his is a more nuanced account - providing for differences among Buddhist countries (see e.g. Spiro: 97).

**[v]** “O Pu.n.na, there are four kinds of action taught by me after realizing them directly myself. What are the four? There is, O Pu.n.na, dark action with dark result. There is, O Pu.n.na, bright action with bright result. There is, O Pu.n.na, action which is dark and bright, with dark and bright result. There is, O Pu.n.na, action which is neither dark nor bright, with neither dark nor bright result, action that leads to the destruction of actions.” Cattaar’ imani, pu.n.na, kammaani mayaa saya.m abhiñña sacchikatvaa paveditaani, katamaani cattaari: atthi, pu.n.na, kamma.m ka.nha.m ka.nhavipaaka.m; atthi, pu.n.na, kamma.m sukka.m



sukkavipaaka.m; atthi, pu.n.na, kamma.m ka.nhasukka.m ka.nhasukkavipaaka.m; atthi, pu.n.na, kamma.m aka.nha.m asukka.m aka.nhaasukkavipaaka.m, kamma.m kammakkhayaaya sa.mvattati / (MN i 389)

**[vi]** The idea behind the third category is that we are beings of mixed motive: our intentions are a confusion of the positive and the negative. But there are conceptual problems here; strictly speaking, there can be no shades of grey. The description of a “single” action as “mixed” must be understood as indicating a rapid fluctuation in underlying motive (Harvey 2000:44).

**[vii]** The unwholesome consists in killing, taking what is not given, sensual misconduct, malicious speech, harsh speech, gossip, covetousness, ill-will, and wrong view. The wholesome is listed as the negation of the unwholesome (MN i 47).

**[viii]** In a previous paper (2005) I referred to the two value domains as the karmatic and the soteriological or nirvanic. Here, on the other hand, for pairs A and B I prefer samsaric and nirvanic respectively. The reason for this is threefold. First of all, the notion of merit is a soteriological notion, in the most general sense. Second, the terms kusala and akusala are in the Pali canon regularly applied as adjectives qualifying action (karma). Third, by employing the starkly opposed terminology of sa.msaara and nirvaa.na, greater logical clarity is achieved in analysis – and in terms originating within the Buddhist tradition itself.

**[ix]** Their label for the latter differs of course; for a variety of reasons, which I won't argue here, I prefer Velez de Cea's “teleological” over King's “intrinsic”. The important point is the twofold structure. By ‘teleological’ I mean to convey the intentional aspect of the action. Another way of saying this would be to say that an action is teleological in that it is directed by the agent towards a goal. It has an aim. An action's telos then, is that for the sake of which it is undertaken. By ‘instrumental’ I mean to convey the secondary, non-intended results and side-effects of the action; in some cases these may be known by the agent and indeed deliberately aimed for as subsidiary steps towards the attainment of the overarching goal.

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# ISSA Proceedings 2006 - Visual Arguments In Film

## ✘ 1. Introduction

New developments in the study of the argumentation have been addressed to extend to contexts beyond those with which it was initially preoccupied. One significant point has been the recognition that important realms of argument exist outside the verbal and written arguments. One of these is found in the visual argumentation. In this context, Birdsell and Groarke (1996) defend that some visual images are arguments, but of a non-propositional kind. Blair (1996) maintains that images can have propositional content and qualify as propositional arguments, since the propositions and their argumentative functions are expressed visually. The controversy affects to the paradigm of arguments as verbal entities, a paradigm which is centred on arguments understood as products that people do when argue. This is the logical dimension of argument. But we may consider the rhetorical dimension that allows us to understand the process of arguing as a natural process in the persuasive communication.

In our opinion, that controversy is unnecessary. We assume that some images function as arguments intended to persuade viewers. As our concern is cinema, we think that the contextual factors, the filmmaker's aims and characters' emotions are crucial for determining the meaning of visual arguments in film and eventually for persuading audience to accept the thesis the filmmaker wanted to establish. We know that rational argument is not omnipotent. The power of persuasion which this argument possesses might be impressive, but inferior to the direct force of images. Vision and images go together in allowing this driving force. According to Gorgias, our spirit is moulded even in its character through vision, "for the things we see do not have the nature which we wish them to have, but the nature which each happens to have; through sight the soul is impressed

even to its core” (2003, p. 82). As Carl Theodor Dreyer (1999, pp. 60 and 90) used to say, cinema is a visual art and images reach viewer’s consciousness easier than words. Images have a great influence on our state of mind, and filmmakers cause emotions and passions with the intention of touching us.

As orators, filmmakers try to promote their intentions and to get the adherence of spectators to their standpoints using images with the eventual support of characters’ dialectical interchanges. But in cinema *éthos* and *páthos* seem to be more important than *lógos*. Visual images impact on spectators’ emotions through the emotions experienced by characters which are part of filmmaker’s strategies. However, we are neither compelled to share the point of view of the camera or of a character, nor entirely free to supply inferences or judgments of our own. Obviously the viewer is free to supply value judgments based on previous experience. But freedom is submitted to complex process of reading/viewing the film. Thus, by adding an element of rhetorical analysis, cinema allows that criticism carries forward into a domain where questions of the viewer’s activity become necessary.

## *2. Verbal arguments and visual arguments*

Visual arguments can be understood as propositional arguments in which the propositions and their argumentative function are expressed visually. This is due to the fact that the argument definition has always carried with it the idea that an argument is something that can be made explicit. This point brings up what Tarnay has called the requirement of propositionality. Although some scholars consider that there is continuity between verbal and visual forms of argument (cf. Groarke 1996), it is not difficult to see with Tarnay that, when one clarifies an argument transmitted by a succession of images, one has carried out a hermeneutic reconstruction. That is, an argument is built starting from the hierarchy of meanings associated with, or transmitted for, the images (*lógos*); the rhetorical context in what they are taking place or the intention (*éthos*); and from the emotional effect produced (*páthos*) (Tarnay 2003, p. 1001).

Now, when asking himself for the possibility of the visual argument, and trying to answer affirmatively, Blair (1996) seems to say that it is necessary to communicate visually the functions of the propositions. But this must be done in a way that can be communicated that some visual propositions are proposed as theses (conclusions) and others as reasons in favour of those theses, with independence that some of them have not been expressed explicitly (not even

visually). In other words, in principle it doesn't seem to be impossible to express visually the illative function or the function of being "a reason in favour of." As a last resort, images can only be understood as arguments if their (manifest and latent) content is reconstructed in propositional terms, repeating the subordination of aesthetics, literature and rhetoric to the perspective of the logic as a unique critical method in the argumentative field.

Blair also assumes that the topic requires of the adoption of certain visual conventions, but this is not less certain with the verbal communication. Cinema, for example, is full of visual conventions. The greatness of some movies proceeds, however, of the capacity shown by some filmmakers to subvert the conventional meanings, leaving the way open to multiple interpretations and to the critical polemic. But this, once again, is not less certain of the problems posed by large arguments in academic contexts that are not exclusively visual, as it is the case in philosophy and the way of interpreting the arguments of great philosophers (See, for instance, Santas 1979).

Blair points out an important difference between the verbal expression and the visual expression. A verbal or written sentence transmits or gives an idea of its propositional content, if there is no indication against it. But it doesn't happen this way with all visual expression. In this line, he mentions *Batman* (Tim Burton, 1989) as a merely entertaining movie, while *Dancing with Wolves* (Kevin Costner, 1990) or *JFK* (Oliver Stone, 1991) would aim to the existence of "thesis" movies—an idea so old as cinema—or "intellectuals"—I. Bergman's or A. Tarkovsky's cinema come to our mind—that could be dramatically structured with the purpose of expressing a certain point of view and, in this way, to show up as candidates to visual arguments.

Nevertheless, Blair concludes that there is a much bigger indetermination in the visual expression than in the verbal one. This conclusion is quite trivial so far as propositional contents are concerned. Somehow, visual images are arbitrary, vague, and ambiguous, but this also happens to words and propositions. This is the reason that, for example, historians discuss about the interpretation of historical documents or that personal antagonism will turn around what one said and what sought to say. While the verbal expression so understood enjoys a bigger precision than the visual expression, it may enjoy a smaller force of persuasion.

The meaning of a visual argument depends on a complex set of internal relations

between (successions of) images and a set of interpreters, but it should be recognized that the (visual) meaning is not necessarily arbitrary and it usually depends, also, of the context. This involves a wide variety of cultural suppositions, ideas related with the situation, information that can change as time goes by, the knowledge of the interpreters, and the dialectic developed among them. So in the case of visual expressions, a range of interpretive possibilities can open up to be inferred from the external or internal contextual clues. This is what endows visual arguments with a bigger force and versatility. They are arguments in whose interpretation, analysis and evaluation, the (meta)-argumentative idea of “discussing matters” (Eemeren & Grootendorst 2004, p. 14) makes more sense as something typical of the argumentative processes. Here resides, in our view, a very important difference between verbal arguments and visual arguments.

For his part, Tarnay seems to sustain that most of the images belong to a special mode —to be named mixed because “it makes use of both verbal or textual and visual capacities” (2003, p. 1004)— up to the point that it is possible to affirm that “image is thought and thought is image” (p. 1005). However, we find the statement a bit exaggerated at least with regard to moving images in general, because it would be only applicable to films of an “intellectual” kind. This is made clear when Tarnay mentions in this context to the Soviet filmmaker S. Eisenstein. But it is obvious that there are movies that continue producing concrete emotions in the spectators without enjoying that label. They make use of a determinate form of montage of images. We think, for instance, in the peculiar form of altering the temporary order of narration in *Pulp Fiction* (Q. Tarantino, 1994), a film that is far from being classified as intellectual, no matter how much it argues in a plausible way against the gratuitous violence of the visual American world, either in films or in comics, making exclusively use of images (and music) no less violent, but that possess concrete and perfectly recognizable meanings.

Finally, Tarnay points out, rightly in our view, that the explanation of a visual argument should highlight how the images can be articulated. He points to two forms of articulation. According to the first one, it would be necessary to trace a lineal order inside the structure of the image on a par with the way of understanding the narration, and then to describe the result again, an operation possibly connected with ambiguities or important changes. According to the second form —and interpreting Tarnay—, articulation will take place making connections based on the perceptive similarity, connections that could give place

to arguments, but that for themselves they would not constitute arguments, due to the mediation of a perception that would be direct and non-inferential. It is not difficult to agree with these two forms of articulation of the images, but not with the problems that Tarnay sees in them. We believe that *Pulp Fiction*, with its peculiar narrative structure —changeable in an easy way after recognizing trivially the causal and inferential connections—, could remove his worries. By the way, it would be hardly surprising that Aristotle had been happy with the structure of this film. It is enough to remember that for him, “it is necessary for demonstrative understanding in particular to depend on things which are true and primitive and immediate and more familiar than and prior to and explanatory of the conclusion” (1991, p. 115). The axiomatic skeletal nature of Tarantino’s film is “protected” by the appropriate colour and music.

On the other hand, in movies, viewers have to interpret what was said starting from the explicit elements, reconstructing with a lot of frequency the original message for their own means and with their own words, and connecting the meaning constituted in this way with their own experiences, beliefs and values. In this sense, and by way of example, it could be said that the most intellectual films, as visual arguments, leave the way open to different interpretations. Interpreters will endow arguments with a meaning that it will not necessarily coincide with the meaning that the filmmaker had originally in mind. In this sense, we can speak of the formal or open character of the visual arguments. The visual arguments already interpreted will be a motive of controversy among the critical interpreters, because there will always be discrepancies on the correctness or on the incorrectness of the interpretation, and thus we find ourselves in a new argumentative, or better meta-argumentative, situation.

Now, it could be thought that, to some extent, all that we have are psychological processes of reasoning and interpretation, and rhetorical processes of expression. As an instrument, logic has not still come on stage. As a critical method or instrument, logic is better understood as a dimension that comes on stage after an argument has been expressed (Toulmin 2003, pp. 3-8). Although argument crosscuts the distinction between fiction and non-fiction, it relies on logic, at least in the informal sense. It may employ not the strict demonstrative logic but rather the softer of the rhetorical enthymeme. The logic may be also inductive, or perhaps analogous. But unlike narrative (chrono-)logic, argumentative logic is not temporal. Arguments rest not on continuity but on some intellectually stronger,

usually more abstract ground such as that of the relation of logical consequence. Generally, arguments presuppose differences of opinion. Arguers presume the audience already to have a certain attitude, which they try to alter or sometimes reinforce (cf. Perelman & Olbrechts-Tyteca, 1969, p. 14).

Since the arguments do not always appear in the form required by logic, it is a retrospective point of view that is activated when somebody adopts a critical position and “lays out” an argument ready for analysis and evaluation. When carrying out the logical evaluation, the critics should also deploy their rhetorical and dialectical perceptiveness. Rhetoric intervenes in the analysis of the arguments in order to understand what is happening. Given that the symbolic resources by means of which we can make arguments are virtually infinite, the arguments can be knitted in the subtlest and dark way. So rhetorical analysis is useful when unwrapping the subtle movements inside the argumentative texts and, hence, the rhetorical analysis transforms itself into a necessary instrument of the logical reconstruction. In other words, rhetoric allows us to see what arguments are being knitted and by means of what symbolic elements.

### *3. Story and argument*

In film all the elements serve the purpose of telling a story. What makes stylistic elements particularly special is their function to involve the viewers in the storytelling process as active, intelligent partners. They stir their imagination and make them realize that there is only a fine line between comedy and tragedy, while entertaining them and letting them have fun. But visual argument works in films in other different way. As it is involved with questions of interpretation and intention, interpreters may offer different interpretations and here is where the pragma-dialectics comes in. That is, the interpretation of visual argument may entail a certain position in a dispute about which was the filmmaker’s intentions in making that film or filming such a sequence.

The idea that there is a connection between the beliefs of the filmmaker and what is true in the story gains support from certain structural similarities between a person’s system of belief and what is true in a story. In fact, as Currie says (1990, p. 74), “the logical structure of fictional truth is very like the logical structure of belief”. This is one of the reasons why is so important to make clear the nature of visual arguments in film. And one of the most important and difficult questions in this field, is the question of recognition: when can we say that a sequence in a film (or a whole film) provides us with an argument? It is not enough to guess



about, or point to, the conclusion and premises of the argument. The problem here is to understand how (visual) rhetoric provides the filmmaker with ways of constructing meaning and the spectator with ways of interpreting and knowing.

In a variable degree, filmmakers have the heuristic capacity to conceive ideas and to generate alternative in order to take a creative decision. But this decision can be done through visual arguments, which have the power of reasoning and discourse. Filmmakers have also the associative capacity to propose meanings to the spectators, and to articulate the images in a way that viewers will be able through interpretation to make the relevant inferences. We may discover here the originality of the filmmaker through two capacities: (1) the capacity to complete to a certain point, and to set against each other, the images generating argumentative structures, which are possibly identified by the spectators; and (2) the capacity to conceive a narrative program in order to make it acceptable by the spectator, setting its elements in a way that the audience could participate (their complicity), and making it entertaining. But film is at its most powerful when it leaves things to the viewer's imagination. Notice that spectators give consistency and verisimilitude to the story, and they contribute to the structural articulation offered by the filmmaker. In this way, the spectators may unveil fundamental positions in the story and explain the validity and coherence of the arguments put forward by the filmmaker.

In film, the story is narrated in action, developing the theme and the points that confer aesthetical value to it. With respect to the story, the whole argument is an element that exhibits these functions: (1) arranges the referential plane, (2) transforms the story in an abstract and discursive operation of the mind (logical and philosophical plane), (3) shapes it in order to be content of (persuasive) communication, (4) articulates it as a dialectics of human actions, committing characters with scenarios and all of them with strategies and goals, and leaving arguments as central elements in the speeches made by characters, and (5) allows legibility. It is not difficult to find all these functions illustrated in *Der Name der Rose* (*The Name of the Rose*, Jean-Jacques Annaud, 1986).

When the idea and the theme have been exhibited through the argument, we reach the claim that has been argued. In some way, the argument has been the dialectics of action and the claim is gathered from it. At the end of *Metropolis* (Fritz Lang, 1927), Maria says to Freder: "Head and hands want to join together but they don't have the heart to do it... Oh mediator, show them the way to each

other..." The whole film has served to argue the validity of the assertion that heart must be the mediator between head and hands. Notice that in this film, as in other silent films, the claim is the result of the didactic function (traditionally) assigned to the image. It is not (only) the result of a rational argument, but the result of the evidence provided by images. The claim not only is connected to a rhetorical dimension in the image, but, above all, to a pragmatic dimension. It links (argumentative) discourse with the ideology and with the universe of values, and it constitutes an assertion that refers to a determinate world view.

The quality of the audiovisual story lies not in the theme but above all in the discourse, i.e., in the way it is dealt with and developed till the moment it is converted in an argument. So the argument is the rhetoric and pragmatic effect of the audiovisual discourse. It reveals in action the consistency of the rational argument, and the efficiency of the persuasive force (i.e., verisimilitude of the content of the story and the constructive involvement of the spectator). The proclivity of some filmmakers to associate the iconic story with the argumentative discourse gives way to the films of thesis. In some way, the thesis is the theme that is rationally, but visually, argued. The theme is the abstract formulation and the thesis is the visually argued proposition. But when the argument hypertrophies and breaks with the aesthetical equilibrium of the film, we face a literary story and not an argument. The literary contamination of the supposed argument may be detected when the film arrives to its end. For instance, the final shaking hands between boss and worker at cathedral door in *Metropolis* ruins the whole argument, because a social film like this cannot finish in this way: it looks more like a fairytale than an argument.

#### *4. Rhetoric, argument and imposition of images*

In film, visuality is not merely a language or a representation of the real. Visuality functions as an appeal. There is then a rhetoric that elaborates and exploits visual ambiguity to promote identification and that rhetoric will function whether a filmmaker self-consciously directs spectators' attention to that process or not. In *North by Northwest* (1959), Hitchcock takes spectators as victims that suffer with the protagonist the incomprehension of the people that surround him. This is a mechanism of identification that manipulates spectators playing with their emotions. However, Hitchcock does not care about speeches, but about images. He is not interested in saying, but in showing. He is a creator of visual forms in order to express emotions in his characters and transmit them to the audience.

Emotions can affect perception, though not systematically. Conversely, perceptions can affect emotion —hence, powers of cinema. Emotions are also associated with meaning, and beyond visual information we may create hypotheses in order to interpret what was seen. But to serve this function, rhetoric must be a means of discovery and communicating good reasons. It must be the process by which the filmmaker tries to achieve justified consensus with spectators on questions of action and belief. In this way, rhetoric may generate knowledge, the kind of knowledge that helps us to judge when we should change our minds, especially about value questions. If it is constitutive of good reasons, rhetoric may tell us when we are in the presence of truths worthy of collective assent. Obviously the process operates in the realm of contingent judgment, and involves not the imposition of the views of the filmmaker on a passive audience but the active participation of spectators, which must interpret the film's proposal.

Here we are understanding "argument" in the first sense of Daniel J. O'Keefe (1982, pp. 3-4) as "a kind of utterance or a sort of communicative act." It is a kind of argument that we can make in the absence of an interlocutor, that may have a relatively implicit message, and that may require considerable interpretation. In this case, it tends to require the greatest degree of interpretation from the critic who would appreciate fully what it means. We know that this is a bit different from O'Keefe's view, because making an argument in this sense involves the communication of "a linguistically explicable claim" and "one or more overtly expressed reasons which are linguistically explicit" (1982, p. 14). It is obvious that we can find the second meaning that O'Keefe assigns to argument, "to have an argument," inside the filmed story. But on the whole it is most important the first sort of argument, because it will be the argument the filmmaker wants to present to the audience. In this case, it is more satisfactory to say that the formulation of the argument avoids any reference to the way in which an argument of the first sense was actually communicated.

This is a very important point that may fade away the reserves that some theoreticians have shown with respect to visual arguments (cf. Johnston 2003). These arguments may have elements that contribute to their persuasive force. But when interpreted in order to be reconstructed as arguments in O'Keefe's first sense those elements may be lost or cannot be expressible in (verbal) language. As O'Keefe, we think that there is nothing questionable or faulty in abstracting

the argument from its communicative vehicle. But the problem with visual arguments is the fidelity with the intentions of the filmmaker. This is why a lot of interpretation is necessary in order to make fully explicit the claim of the argument and the whole set of premises. And the most important question will be: For what sorts of objects or phenomena should one hold a theory of visual argument accountable? (Sentence adapted from O'Keefe 1982, p. 20). We feel that a theory of visual argument is not absolutely necessary. If we do not forget the role that rhetoric must play in an argumentation theory, we can talk about visual arguments that are arguments. We may transform visual arguments in verbal arguments losing part of their rhetorical force. But logic will remain if we want to recognize the argument as such, although the persuasive force will be clearly weakened. Arguing rationally is not the same as arguing persuasively.

To fix a little more what we mean, we can go to images that for their beauty can exercise, as Dreyer pointed out, a great influence on spectator's state of mind. If the image could be constituted in visual argument, the beautiful objects would intervene in the argument. Here, "intervene" can mean that the beautiful qualities are not directly implied in the argument. Beauty would be only that judgment that calls the attention on the argument, just as the style gives weight or strength to the content. Hence, the beauty of the object is virtually irrelevant for the argument (cf. Toulmin, Rieke & Janik 1979, pp. 349-367). But the qualities that are considered beautiful in an image are good enough to capture the attention and to make of the image a particularly interesting object of interpretation. In this way, beauty works in support of the eventual meaning of the image as a visual argument. In other words, beauty could be subordinate to the visual argument. But the claim that beauty raises the aesthetic interpretation—aided possibly in arguments that will be or not visual—is different from the claim of the interpretive conception in which the beauty is subordinate to the argument. In the first case, we would have what Johnson (2003) pointed out as an aesthetic interpretation that can vary from an individual to another. That is, while the interpretive conception understands beauty as a feature that gives support to the argument, the other conception would understand beauty as an arguable feature.

On the other hand, the beauty of the moving image is good enough to question the perceptions and experiences of the viewers, and it presents a new look on some facet of their existence, influencing probably their beliefs or making them

pay attention to the argument. We must remember that in some way image is imposing upon viewers. So, the argumentative function of beauty does not reside in its propositional content or in its support to a favourite interpretation of the work of art, but in the possibility of reconceptualising, for instance, some of the viewers' beliefs and attitudes. The suggestion transmitted by beauty alone is strong enough to question my way of conceptualizing, for example, the relations among the characters that appear in a moving image. We can even act with bigger understanding toward people implied in a determinate relationship. Returning to Dreyer, anybody who has seen his film *Ordet* (*The Word*, 1955) will be able to remember the way so subtle and delicate with which the Danish filmmaker argues his positions in favour of a certain form of understanding the religious faith as something alive and concrete, and against a dead and abstract faith.

##### *5. Concluding: visual arguments in the man who shot liberty valance*

Groarke (2002, p. 145, 2006) says that in order to interpret images in visual arguments three principles of visual communication are available from pragma-dialectics. In an attempt to apply them to film, we take them to be like these: (1) moving images must be in principle understandable; (2) moving images must be interpreted making sense of its internal elements; and (3) moving images must be interpreted making sense of its external connections. As we have suggested, the evaluation of visual argument in film will depend on a successful interpretation. But this does not mean that there is just one available and valid interpretation. Van Eemeren & Grootendorst (1992, p. 44) explain that "the problem is that the communicative function of speech acts often remain implicit." Needing then considerable interpretation in order to be understood, film, as an open work of art, may have more than one interpretation. *El ángel exterminador* (*The Exterminating Angel*, Luis Buñuel, 1962) may be a nice example. But for our purpose we had the fortune to find a film that may have just one interpretation and has a lot to say about communication in a non-civilized society in transition to another supposedly civilized. In our opinion, this film, *The Man Who Shot Liberty Valance* (John Ford, 1962), illustrates the three principles of visual communication. In short, everybody may understand and interpret its images in a way that does not lack of internal and external coherence.

In *The Man...*, we are faced with a society in the process of being taught to read and write, because education is the basis of law and order. Everything turns on

the birth of a new state, and so it is necessary to sacrifice a determinate way of life. The thesis defended by Ford may be translated into a question for the (American) spectators, "Are you proud of this transition with progress?" Ford's argument is centred on the comparison of these five pairs: violence / law and order; revenge / legality, state; pre-rational / rational; passion / reason; and preverbal communication / verbal communication. The first component of each pair is shown in the film through images. Words are conspicuous by their absence. The representative of the first component is Liberty Valance who establishes the conflict between the Western law and the law that comes from the East.

But while Valance is the ugly face of the West, Tom Doniphon is the man that will be self-sacrificed in order to facilitate the change to a new age. While Tom represents the strength and the natural authority, Ransom Stoddard, a representative of the second pair, will represent the word and the knowledge of law, and therefore progress. Not being a man of words, Tom will reproach Ransom precisely for this ("You talk too much, think too much!"), although unconsciously his will be the hand that drives the progress making of himself an obsolete piece of the past. Indeed, this was possible dramatically because Tom is a hero that leaves the stage deliberately and silently for loving Hallie. When Tom tells Ransom about the true man who shot Valance, exonerating him from his moral scruples, we know for sure that Tom is the man of this transition ("Hallie wanted you alive. You taught her to read; now... give her something to read about"). This is the story of *The Man...* that is narrated visually. In doing so, Ford has defended that progress is a contaminating force (cf. McBride 2004, p. 692: "There is no future in America"), and although he has consciously shot the falsity of the legend, he has proven —visually but unconsciously— a truth, namely, that there is a territory for visual argumentation in films.

As we see it, *The Man...* introduces explicit visual argumentation in an innovative way. The film both tells a story and explicitly argues a thesis. The viewer is faced with a question that never seems answered: Is this an argumentative essay serviced by a visual narrative whose story line is explicated by one of the character without never says a word about the argued thesis? The answer is positive. In fact, the visual is used to argue. Ford metaphorically characterizes the contaminated progress with the train at the beginning and at the end of the film. The smoke through the sown fields speaks thousand words about the thesis that have been sustained along the film. Narrative is at the service of argument. As

Ransom becomes very much involved in the life of Shinbone's citizens, visual images have been doing their job in an informal way and plenty of emotions, although they have not been mechanically matched. The discontinuity of sound and visual images seems to accomplish a very important thing: to stress the independent objectivity of the story and so the independent objectivity of the (dialectical) arguments exhibited by characters. It seems as if the camera has nothing to do with the story. It is like the collective eye of the audience. And it seems as if the camera were telling us, if you accept this story then you must accept that progress is a contaminating force.

The behaviour of the fictional characters illustrates the need to argue visually, but naturally, in a preverbal community. Beneath their too familiar personal ways of communication, we can see the broader ways of persuasion. The dialectic of the verbal and preverbal has been driving the story, showing the conflict between two mentalities. In fact, words will be associated to progress. But people who were born in that preverbal community will be using the same norms of behaviour to communicate and argue among them. At the end, even Ransom will adopt that behaviour —silence— as an answer to the ticket collector in the train, because the meaning of some feelings is beyond words.

Ford describes visually the limitations placed on men and women by their situation in Shinbone's society. That human culture, whose purpose is to secure the cohesion of the group, stringently controls the degree to which some of its members may fight. Because overt physical struggle will not do in "civilized" society, little by little, it will be replaced by dialectical fight through political speeches. Shots of these moments constitute a visual representation of men arguing a certain case. But precisely in those moments, filmic shots of Tom —silently, unshaven, old cowboy dressed— show that we are attending to the end of a society. The smoke from his cigarette at the moment of starting to reveal the truth about the man who shot Liberty Valance is the prelude to the train's contamination and a visual argument that tries to prove that modern society, and so democracy, is based on a lie.

The uniqueness of the film turns on the fact that we are attending to a story where visual arguments have a place in order to show a transition from a nonverbal society (where visual arguments abound as a way of communication) to a verbal society. Anyone who knows Ford's love for Western may understand his preference for that old preverbal world, which even enjoys a different morality.

Somehow this film was his last word defending it. But notice that we may divide up the discourse functions: on one hand, the inside story and, on the other, Ford's reflections and argument. One tells the events of the story, the other tells about the moral, political and social ideas of his creator. From the narrative perspective, the last one is parallel to the first, but must be reconstructed by spectators. In other words, the reconstructed argumentative discourse makes reference to the story, but the narrative discourse brings together the elements of the argument—sometimes in an emotively way. The return of Ransom and Hallie to Shinbone for Tom's funeral is a case in point.

We have gone into detail in characterizing this film because of its effective demonstration of how cinema can tell a story and explicitly argue a relatively simple case at the same time, but in a visual way. The visual elements of film foster identification and appeal to the capacity of our mind to assert its vision of the world. The experience of visualizing is quite distinct from the experience of propositional (verbal) argument. It leaves open the possibility that in some uses of visual imagination we are drawing upon past experiences of seeing as evidence, because the visual field arrives in consciousness as fully formed visual experience. But the visual field is usually tainted by ideology or desire (cf. Gregory 1998). In some way, what we see is a consequence of what we are looking for. So this is a peril we must face when trying to interpret the supposed visual argument. Besides, the medium requires the audience to do a lot of inferring. Filmmakers prefer to present information visually, through different techniques. Even unsophisticated audiences have learned to draw conclusions from relatively small bits of visual information. Our skill in doing so is especially developed for narrative films, since they are the kind that we most often see. We constantly test our interpretations against some story line. In films like *The Man...* many of its shots constitute evidence for intellectual propositions, and narrative is used to express its arguments visually.

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# **ISSA Proceedings 2006 - The Effects Of Textual And Graphical - Textual Argumentation Software As Cognitive Tools On The Development Of Argumentation Skills**

## **✘ 1. Introduction**

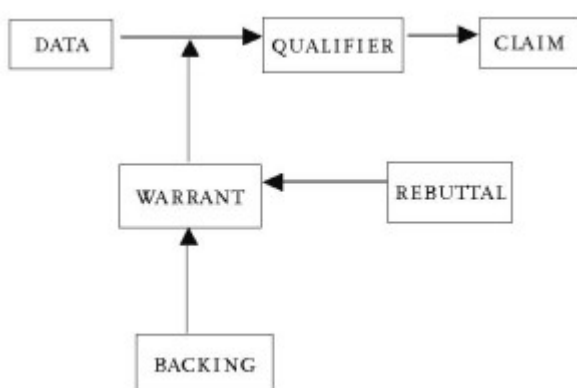
We live in a complex world full with the problems and conflicts. Whether the problem or the conflict exist for an hour, for a year or more; whether the problem at hand is a professional one or totally an individual one; people have to comprehend the complexity, solve problems, make decisions to be able to live in a society. In solving problems, making decisions, formulating opinions, people are required to have developed argumentation skills. Thus, teaching students to be rational thinkers and good problem solvers becomes an important function of school curricula in a complex society. Despite its importance, even high school or university students are not skillfull at constructing reliable, cogent arguments (Kuhn, 1991; Cerbin, 1988; Woods, 1989; Applebee, Langer, ve Mullis, 1986; Bereiter and Scardamalia, 1982; Aldağ, 2005). While Kuhn is signaling a change from learning with hands-on activities to learning with argumentation in science (Kuhn, 1991); the question of how to teach argumentation skills in educational settings is still a topic of disscussion. Until 1960's, traditional logic courses is

offered to students for mastering argumentation skills (Johnson & Blair, 1994). However, criticizing that the traditional logic is incomplete as a tool of rationality, Toulmin published “Uses of Argument” in 1958.

### 1.1 Toulmin Model of Argumentation

Toulmin suggests that Aristotelian logic with mathematical syllogisms, simply doesn't fit for the daily arguments. Claiming that the theoretical argument is irrelevant to the assessment of practical argument, he distinguishes between “practical and analytic arguments (Toulmin, 1958). In analytic arguments, arguers ground their claims on abstract, unchanging and universal principles; thus, the conclusion of an analytic argument such as “Socrates is mortal”, is limited only with the premises of “All men are mortal and Socrates is a man.”. Our interest in analyzing argument in traditional logic is to decide whether we have a valid argument or not on the basis of premises.

In practical arguments, arguers ground their claims in the context of a particular situation. A practical argument involves mostly an inference from some data to the conclusion of the argument. While arguer implicitly states warrant, audience have to consider how warrant applies to this inference. Therefore, we do not have to limit our arguments to universally acceptable knowledge, rules or conclusions; on the contrary, we even use our beliefs, opinions or the conditions of that particular situation to make a decision on how valid the argument is. Thus, in daily life we counter not with the valid or invalid arguments, but we counter with more or less reliable argument on which we could decide to some extent. Thus, Toulmin developed an explicit model of argumentation for practical purposes (Toulmin, 1958). Toulmin' model of argumentation has six interactive components: Claim, data and warrant are primary; backing, rebuttal and qualification are secondary parts of the model (Toulmin, 1958; Toulmin, Reieke & Janik, 1984). (Fig.1)



Teaching directly with the support of different medium is another method to be researched. Martunen and Laurinen (2001) compared direct instruction groups in electronic mail and face to face environment and a control group. They reported electronic environment supported the identifying and selection of data while face to face environment

stipulates counter argument use. They concluded different study environments might foster different argumentation skills and the necessity of argumentation teaching.

An alternative approach to direct teaching of argumentation skills is suggested that scaffolding students' thinking through the use of cognitive tools such as graphical argumentation tool, Belvedere, Quest-Map, Athena, Reason!Able etc. during problem solving or decision making task. Belvedere and similar graphical systems aims to manipulate students thinking to consider and use the argumentation structures while developing their arguments in various problems, subjects or conditions. These tools have the advantage of visualizing their abstract or tacit thinking as well as facilitating group discussion by providing them with the opportunity to track down each others opinions (van Gelder, 2001; Tan, 2000). Most of these software combines visual clues such as different colour, different shapes for different argumentation structures with the verbal argumentation content to ease understanding.

Veerman, Andriessen & Kanselaar (1999) compared Netmeeting chatting tool, Belvedere CSCA tool, Allaire BBS system. They reported that Belvedere is better to support an argumentation since students in this group, control and counter more frequently each others' statement than students in other groups. Carr (1999) researched Quest-Map in problem-solving context. The researcher found no significant difference between groups in developing argumentation skills. He explained the participants were law students and had already developed argumentation skills. Tan (2000) researched Quest-Map, a constraint-based CSCA conversation systems, (scaffolding by pre-structured forms of conversation systems) in problem-solving context. The researcher concluded that students in Quest-Map performed significantly better in stating grounds (data) in Toulmin's model of argumentation. Cho (2001) used BBS and Belvedere in his research about problem solving, and found that graphical group is better than textual in use of data and claim.

In Turkey, researches in critical thinking is dated mostly in last ten years. It is more difficult to find publications in argumentation or in teaching argumentation, except classical logic. No research is found related to argumentation software use.

There are many unresolved issues left by the limited amount of researches in teaching and learning argumentation.

## 2. Purpose of the study

This study is conducted to understand whether teaching an explicit model of argumentation structures will be effective on learning the structures, and how effective will be if the graphical cognitive tool is combined with the direct instruction. Thus, the purpose of this research is defined as “Covariating pre-argumentation scores, is there a significant difference between textual, textual-graphical and control groups’ scores of post-argumentation structures?”.

## 3. Method

### 3.1 Participants

The pilot study with the prospective teachers showed computer literacy can be confounding variable considering treatment results. Thus, participants are selected from Department of Computers and Instructional Technology, Faculty of Education, Çukurova University-Turkey since they have the computer literacy skills.

112 undergraduate students signed up; 102 students from Computers and Instructional Technology Department are voluntarily joined in the study. Two students participated in the beginning of study, but were absent following classes. Thus, research completed with a total of 100 students. Among the participants 63 is male and 37 is female. There was no significant difference between groups in terms of sex ( $X^2 = .328$ ,  $P > .05$ ). Table 1 shows the distribution of students in terms of sex and groups. Students of control group were 3rd and 4th year undergraduates, while students of experimental groups 2nd year undergraduates. Students of experimental group were registered for Learning Theories course. Participation was voluntary. Registered students were free to choose alternative assignments or grading other than joining to study. None registered student choose the alternative assignment. Students were assured of confidentiality.

(Table 1)

GENDER	GROUPS			TOTAL
	Textual	T-Graphical	Control	
Male	24	20	19	63
Female	12	13	12	37
Total	36	33	31	100

$X^2 = .328$        $df = 2$        $P = .849$

Table 1. Distribution of participants in terms of gender and groups

### 3.2 Research Design

Non-equivalent control-group design is the most common method used in quasi-experimental research (Gall, Borg and Gall, 1996). This research design is appropriate when researcher has no control over when or to whom they might apply treatment (Campbell and Stanley, 1963 in Cohen, Manion and Morrison, 2000). The difference between nonequivalent control group design and experimental design is that participants is not selected randomly to the groups (Borg etc., 1996). In this research there are two experimental groups and a control group. Participants in experimental groups are selected randomly from second year students of Instructional Technology Department according to their pre-argumentation scores. They were very close to each other in terms of learning background, age and sex distribution. Beside, participants from the second year students were registered for a class; therefore, they were the most appropriate participants for the experimental treatment. However, control group is chosen from the third year and fourth year voluntary students. They were not registered for the course, but they agreed to join learning theories seminars for this study. Students in the control group were direct instructed only about the learning theories. Thus, nonequivalent control-group design is selected as research design since control group is not selected randomly. Table2. shows nonequivalent control-group design for this study. (Table 2)

Groups	Random selection	Pre-Arg	Treatment	Post-Arg
E1	R	O1.1	X1	O1.2
E2	R	O2.1	X2	O2.2
C		O3.1		O3.2

Table 2. Nonequivalent design for the study

E1: Textual experimental group

E2: Textual-Graphical experimental group

C: Control group

R: Randomly assignment to the groups

O1.1, O2.1, O3.1: Pre-argumentation scores

X1: Only textual software use, arguing with word processor

X2: Textual and graphical software use, arguing by Belvedere mapping and word processor

O1.2, O2.2, O3.2: Post-argumentation scores Treatments are applied only to experimental groups while no treatment applied to the control group. Dependent variables are claim, data, data support, warrant, warrant support, probability qualifier, condition of strength, condition of constraint, rebuttal, counter-rebuttal and total score for the analytic level. Holistic argumentation level is also identified as dependent variable.

### 3.3 Teaching Instruments

First teaching instrument, argumentation courseware in Turkish is developed to support direct instruction of argumentation components to textual and textual-graphical groups. Students were able to reach to courseware through internet connection (Figure 1). Second teaching instrument, Belvedere is a graphical argumentation tool developed by Pittsburg University (<http://advlearn/Irde.pitt.edu/belvedere/>). This tool aims to provide an opportunity for arguers to establish or to examine the relationship among argumentation structures. Belvedere is selected since it is an appropriate tool for functionalizing argumentation structures of Toulmin model. Belvedere is used only in textual graphical group for organizing group argument before writing it in textual form in this study. *Figure 2* gives an example of students' argumentation in Turkish about learning theories.

Books and articles about theories are provided to each group.



Figure 2. Illustration of Argumentation Components Teaching Tool

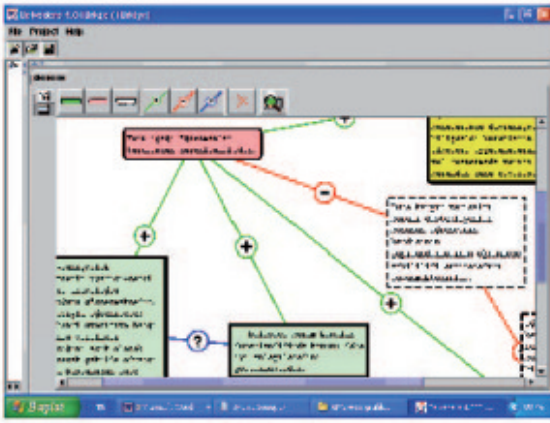


Figure 3. Illustration of Argumentation in Graphical Tool Belvedere

### 3.4 Assessment Instruments

A holistic and analytic rubric (1. and 2. appendix) developed for the analysis of argumentation based on argumentation components model shown below. Rubric defines the students' performance level or learning goals which students are accepted to attain during learning process. Rubrics designed to assess learning (McCloskey & O'Sullivan, 1993, p.41) can be classified as holistic or analytic rubrics in terms of how criteria or performance level are constructed (Luft, 1997; 1999). The performance level of learning skill is defined holistically in holistic rubrics whereas learning skill is divided into subskills and these subskills are the ones defined for the performance level in analytic rubric. Holistic and analytic argumentation rubrics are developed to measure students' use of argumentation structures before and after treatment in this study. The researcher has six years of experience in developing rubrics as an instructional designer and instructor. Argumentation rubrics are developed based on Toulmin model of argumentation structures. This model with the field independent quality is applied to many different fields of study (Crammond, 1998) for teaching argumentation skills. Toulmin model also shed light into developing rubrics to assess argumentation skills. The results of persuasive writing studies show this model is appropriate for analyzing arguments (Connor & Lauer, 1985, 1988; Knudson, 1992; McCann, 1989; Scardamalia & Paris, 1985, Lunsford, 2002). However, model is criticized for its shortcomings in analysis (for example Driver etc., 2000; van Eemeren etc., 1996; Simosi, 2003). For this reason, Toulmin model of argumentation structures is adapted based on purposes in this research. *Figure 4* shows the argumentation components model with additional structures to Toulmin model which is used for



developing rubrics in this study.

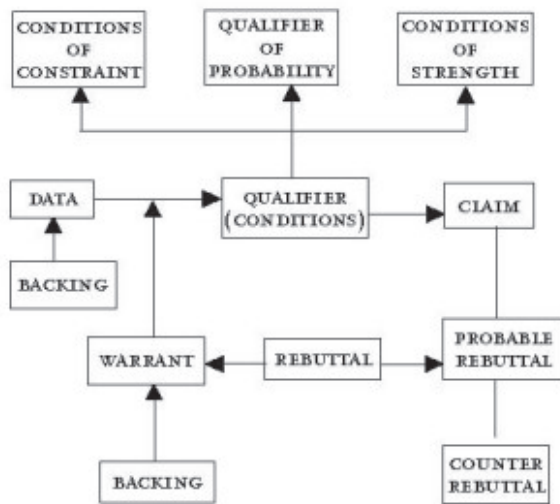


Figure 4. An Argumentation Components Model Based on Toulmin's Conceptual Model of Argumentation Structures

First draft of rubrics and argumentation components model were developed based on Toulmin model of argumentation structures, related literature and trial composition analysis. Then, first drafts is tested in a pilot study with the participants whose background similar to participants of this study. Second draft of the model and rubrics for the study was organized based on pilot study results. Then, two experts are asked for their opinions on the model and whether the rubrics were able to functionalize the structures of the model for analysis. The experts were experienced in instructional design and teaching thinking. The argumentation component model given below was the conceptual base on which argumentation structures are functionalized for assessment purposes in the final version of holistic and analytic rubrics. Definitions of argumentation structures in argumentation component model:

- Claim is the position being argued for; the conclusion of the argument.
- Warrant is defined as principles of the theory supported in the claim.
- Warrant support is defined as generalizations about the theory of the claim and not the principles.
- Data is defined as examples, event or explanations related to warrant; a connection between warrant and claim.
- Data support is additional information on the context of data.

- Rebuttal is defined as acceptance of deficiencies of the supported theory in claim.
- Counter-rebuttal is an attack of alternative theory to the claim of theory which an author of the claim ready to defense.
- Strength qualifier is about conditions of strenght about the claim. Constraint qualifier is about weakening conditions of claim.
- Probability qualifiers show the authors belief in strenght of his/her claim.
- Clarity, reliabilty, persuasiveness, validity, relevance, tone of language, consistency, importance, supportiveness, and sufficiency are the qualities to measure argumentation structures. A paper would have a score of 1 to 8 coded by holistic rubric. In analytic rubrics, there are ten argumentation structures; claim, warrant, warrant support, data, data support, rebuttal, counter-rebuttal, strength qualifier, and constraint qualifier. Thus a paper analyzed by the analytic rubric would have a score of 1 to 8 for each of these structures, plus a combined score of these structures (an example of analytic coding is given in appendix3). Coders took into consideration the qualities of clarity, reliabilty, persuasiveness, validity, relevance, tone of language, consistency, importance, supportiveness, and sufficiency during scoring level of argumentation structures use. However, papers are not scored quantitatively for these qualities. Instead, these qualities are used to define the level of argumentation structure use.

Pre-argumentation scores prior to argumentation instruction and post-argumantation scores after argumentation instructions and group studies were gathered through the persuasive writings. Open-ended questions similar in structures, asked before and after the treatment is given below.

Pre-Argumentation question is asked to define students's level in argumentation structure use on Cognitive Development Theories:

*You are invited to The Learning and Teaching Conference at the Çukurova University. You are supposed to present a persuasive article on the application of Piaget's and Vygotsky's theories on cognitive development. Explain which theory that you support in terms of the advantages and disadvantages in the application based on the problems that we have in school system.*

Post-Argumentation question for persuasive writing about Learning Theories to be scored with rubrics:

*You are invited to The Learning and Teaching Conference at the Çukurova University. You are supposed to present a persuasive article on the application of behavioral, cognitive and constructivist learning theories. Explain which theory*

that you support in terms of the advantages and disadvantages in the application based on the problems that we have in school system. All papers were coded independently by two coders. First coder was one of the researcher. Second coder was trained on rubric use prior to pilot study and after pilot study. Both coders are academicians in instructional design and they are familiar with analyzing content for instructional purposes. However, they have no official training in argumentation or informal logic.

Components	Pre-Arg	Post-Arg
Claim	.722**	.935**
Data	.657**	.824**
Data support	.752**	.815**
Warrant	.444**	.875**
Warrant support	.524**	.803**
Probability qualifier	.473**	.756**
Constraint conditions	.280**	.906**
Strength conditions	.351**	.861**
Rebuttal	.380**	.597**
Counter-rebuttal	.161	.803**
Analytic Total	.751**	.913**
Holistic	.701**	.935**

\*\* P ≤ 0.05

Table 3. Reliability between I. and II. coders on pre-argumentation level and post-argumentation level

Inter-rater reliability between I. and II. coders on holistic pre-argumentation level was .70. Inter-rater reliability between I. and II. coders on holistic post-argumentation level was .94. Students were not provided with the rubrics during instruction since the effect of direct teaching of argumentation and use of graphical argumentation software were to be researched. The structure of claim in holistic rubric and analytic rubrics and an example of analysis is given in appendix.3.5 *Procedure*

After, students were taught on the alternative theories of cognitive development by direct instruction; they were asked to write a persuasive writing about the appropriateness of theory that they choose for application considering educational problems and applications in an exam condition. Data about level of the participants' use of argumentation structures were gathered prior to argumentation instruction by analyzing these papers. Papers were coded by two

independent coders with the analytic and holistic scoring rubric. Experimental groups were selected randomly. Students in experimental groups were classified into A, B and C classes based on their holistic scores of pre-argumentation. A symbolizes the participants with the highest level of pre-argumentation structures use, while C symbolizes the lowest level of pre-argumentation structures use. Then students from the each classification group are assigned into a study group. Each study group consisted of three students from A, B and C classification. An example of students selection is given at the Table4. Teaching process of experimental and control group on weekly basis is given in Table 5.

There were 12 study groups in textual, 11 group in textual-graphical group. Except two groups, there were one female and two male in each experimental group. Experimental groups were homogenous in terms of pre-argumentation level as well as sex. There were no study groups in control group.

Group No	1st member			2nd member			3rd member			Cumulative Score
	Sex	Code	Score	Sex	Code	Score	Sex	Code	Score	
1	F	A	0	M	B	20	M	C	25	45
2	M	A	5	F	B	20	F	C	50	75
3	M	A	10	F	B	20	M	C	30	60
4	M	A	10	F	B	20	M	B	15	45
5	M	A	10	F	B	20	M	A	10	40
6	M	A	10	F	B	20	M	C	30	50
7	M	A	10	F	B	20	M	C	25	55
8	M	A	10	M	B	20	F	C	50	80
9	M	A	10	M	B	20	F	C	20	60
10	M	A	10	M	B	20	F	C	50	80
11	F	A	10	M	B	20	F	C	34	60

Table 4. Textual-graphical experimental groups based on level of pre-argumentation structures use  
Code: Student's score of pre-argumentation structure based on persuasive writing paper prior to argumentation instruction; Sex: F: Female, M: Male; Score: A: The lowest score, B: Avarage score, C: The highest score

Week	Experimental groups	Control group
1	Introduction and invitation to research	Invitation to research
2	Cognitive development : Piaget and Vigotsky, Lecturing, question-answer, whole class discussion	Cognitive development : Piaget and Vigotsky, Lecturing, question-answer, whole class discussion
3	Multiple-choice test and writing pre-argumentation persuasive papers on Piaget and Vigotsky in class	Multiple-choice test and writing pre-argumentation persuasive papers on class conditions
4	Tracking argumentation structures and introducing argumentation tool, Defining study groups	--
5	Arguing on a selected educational problem in groups	--
6	Presenting group argumentation to the class	--
7.1	Direct teaching of behavioral learning theory	Direct teaching of behavioral learning theory
7.2	Group study: Structuring argumentation on behavioral learning theory	--
8	Presenting group argumentation to the class	--
8.1	Feedback on previous class and direct teaching of cognitive learning theory	Direct teaching of cognitive learning theory
8.2	Group study: Structuring argumentation on cognitive learning theory	--
10	Presenting group argumentation to the class	--
11.1	Feedback on previous class and direct teaching of constructivist learning theory	Direct teaching of constructivist learning theory
11.2	Group study: Structuring argumentation on behavioral learning theory	--
12	Presenting group argumentation to the class	--
FINAL	Multiple-choice test and writing pre-argumentation persuasive papers on learning theories in class conditions	Multiple-choice test and writing pre-argumentation persuasive papers on learning theories in class conditions

Table 5. Teaching Process

After defining the experimental groups, students are taught in argumentation components, utilizing the courseware. In addition T-graphical group learned how to use Belvedere software in developing argumentation. Control group did not have any treatment. Then, groups in textual treatment are asked to develop an argumentation paper, considering educational problems. The groups in T-Graphical treatment were asked to develop their argumentation first in Belvedere, then to organize as a paper. After being sure that the students understood what they were expected to do, they were taught directly on the theory; then they were asked to study in their fixed group to write the paper about the theory considering educational applications. Teachers met with each group to guide students in selecting a problem, thinking alternatives or overcoming obstacles such as disagreements or finding resources. However, teacher did not interfere with the direct decisions of study groups. Following 9 weeks experimental groups submitted three persuasive writing. T-Graphical groups also submitted three Belvedere map of their argumentation. No treatment applied to the control group. They were only taught about learning theories. They did not submit any assignment.

#### 4. Analysis

Pre-argumentation and post-argumentation questions are given to the all groups. The responses given to the pre-argumentation and post-argumentation questions analyzed to have the scores on argumentation structures. However, statistical differences found between experimental and control groups in some argumentation structures even in the pre-argumentation scores.

Basic limitation of nonequivalent control-group design is that there is a possibility the meaningful difference found in post-test might be the result of pre-test differences and not the result of treatment. To overcome this limitation statistically covariance analysis is suggested (Borg and Gall, 1989). Following this suggestion, covariance analysis is selected as analysis technique to overcome the limitation of the research design. Covariating pre-argumentation scores for the

post argumentation scores, researchers looked for the meaningful differences which might be a result of experimental treatment. *5. Results*

After holistic scoring, each paper was coded again for each component in analytic rubrics by two coders. Covariating the pre-argumentation structures, meaningful differences are found among the post-argumentation level of experimental groups and a control group. Results of ANCOVA and Bonferroni test analysis on claim is given in *Table 6*.

Group	Groups	N	Pre-Arg		Post-Arg		Covariance		Bonferroni
			s	s	s <sub>adj</sub>	F	P		
Claim	Textual	36	5.3194	7.3829	7.371	17.210	.000	T<C C<T CRAE<+TRAE CRAE<+GDAE	
	TGraphical	31	5.8194	7.0980	7.367				
	Control	31	5.5484	5.1652	5.167				

Table 6. Results of ANCOVA and Bonferroni test analysis on claim

Table 6. shows that covariating the pre-argumentation claim structure, meaningful differences favouring experimental groups are found among the post-argumentation claim level of experimental groups and a control group ( $F(2-96) = 17.210, p = .000$ ). The mean of control group ( $\text{Adj.} = 5.16$ ) is lower than both experimental groups. There is no significant differences found between the textual ( $T_{\text{Adj}} = 7.37$ ) and textual-graphical ( $G_{\text{Adj}} = 7.37$ ) groups on claim. Results of ANCOVA and Bonferroni test analysis on data is given in *Table 7*.

Group	Groups	N	Pre-Arg		Post-Arg		Covariance		Bonferroni
			s	s	s <sub>adj</sub>	F	P		
Data	Textual	36	4.9972	4.8631	4.728	17.431	.000	T<G<C C<T<C C<T<G	
	TGraphical	33	4.7121	5.9091	5.741			CRAE<+TTRAE<+GDAE	
	Control	31	3.8484	3.0484	3.041				

Table 7. Results of ANCOVA and Bonferroni test analysis on data

Table 7. shows that covariating the level of pre-argumentation data component, meaningful differences favouring experimental groups are found among the post-argumentation data level of experimental groups and a control group ( $F(2-96) = 17.431, p = .000$ ). The mean of control group ( $\bar{x}_{\text{Adj.}} = 3.04$ ) is lower than both experimental groups. Statistically significant differences favouring textual-graphical group is also found between the experimental groups. The adjusted mean of textual-graphical ( $\bar{x}_{\text{Adj.}} = 5.74$ ) is higher than the textual group ( $\bar{x}_{\text{Adj.}} = 4.73$ ). Results of ANCOVA and Bonferroni test analysis on data support is given in *Table 8*.

Group	Groups	Pre-Arg		Post-Arg		Covariance		Bonferroni
		N	x̄	s	s <sub>adj</sub>	F	P	
Data Support	Textual	16	3.1189	2.8838	2.603	3.725	.004	G-T G-C G(A) > G(B) T(A) > G(B)
	T-Graphical	31	3.4091	3.042	3.780			
	Control	31	2.866	2.783	2.281			

Table 8. Results of ANOVA and Bonferroni test analysis on data support

Table 8. shows that covariating the pre-argumentation data support structure, meaningful differences favouring textual-graphical group against other groups are found on the post-argumentation data level  $F(2-96) = 5.725, p = .004$ . Adjusted mean of textual-graphical (Adj.=3.70) group is higher than adjusted mean of textual group ( $\bar{x}$ -Adj.=2.66) and adjusted mean of control group ( $\bar{x}$ -Adj.=2.20). Results of ANCOVA and Bonferroni test analysis on warrant structure is given in *Table 9*.

Group	Groups	Pre-Arg		Post-Arg		Covariance		Bonferroni
		N	x̄	s	s <sub>adj</sub>	F	P	
Warrant	Textual	16	3.7917	3.708	3.819	27.805	.000	T-G T-C G-C G(A) > T(B) > G(B)
	T-Graphical	31	3.9908	5.182	5.618			
	Control	31	3.1128	2.9594	2.478			

Table 9. Results of ANOVA and Bonferroni test analysis on warrant

Table 9. shows that covariating the pre-argumentation warrant structure, meaningful differences favouring experimental groups are found among the post-argumentation data level of experimental groups and a control group ( $F(2-96) = 27.805, p = .000$ ). The mean of control group ( $\bar{x}$ -Adj. = 2.48) is lower than both experimental groups. Statistically significant differences favouring textual-graphical group is also found between the experimental groups. The adjusted mean of textual-graphical ( $\bar{x}$ -Adj.=5.66) is higher than the textual group ( $\bar{x}$ -Adj.=3.82). Results of ANCOVA and Bonferroni test analysis on warrant support is given in *Table 10*.

Group	Groups	Pre-Arg		Post-Arg		Covariance		Bonferroni
		N	x̄	s	s <sub>adj</sub>	F	P	
Warrant Support	Textual	16	3.333	3.783	3.724	16.328	.001	T-C T-G C-G G(A) > T(B) > G(B)
	T-Graphical	31	3.819	3.998	3.364			
	Control	31	3.186	3.118	2.81			

Table 10. Results of ANOVA and Bonferroni test analysis on warrant support

Table 10. shows that covariating the pre-argumentation data structures, meaningful differences favouring experimental groups are found among the post-argumentation data level of experimental groups and a control group  $F(2-96) = 16.529$ ,  $p = .000$ ). The mean of control group ( $\bar{x}^{\text{Adj.}} = .836$ ) is lower than both experimental groups. Statistically significant differences favouring textual-graphical group is also found between the experimental groups. The adjusted mean of textual-graphical ( $\bar{x}^{\text{Adj.}} = 3.364$ ) is higher than the textual group ( $\bar{x}^{\text{Adj.}} = 1.724$ ). Results of ANCOVA and Bonferroni test analysis on probability qualifier is given in *Table 11*.

Comp.	Groups	Pre-Arg		Post-Arg		Constraint		Bonferroni
		N	S	S	$S_{adj}$	F	P	
Probability Qualifier	Textual	19	.4038	3.7936	3.935	11.898	.000	T < C G < T G < C G(BAG) < T(BAG) < G(BAG)
	T-Graphical	13	.3634	4.8091	5.156			
	Control	31	2.0668	2.2901	3.813			

Table 11. Results of ANOVA and Bonferroni test analysis on probability qualifier

Table 11. shows that covariating the pre-argumentation probability qualifier structure, meaningful differences favouring experimental groups are found among the post-argumentation data level of experimental groups and a control group ( $F(2-96) = 21.898$ ,  $p = .000$ ). The mean of control group is lower than both experimental groups ( $\bar{x}^{\text{Adj.}} = 1.813$ ). Statistically significant differences favouring textual-graphical group is also found between the experimental groups. The adjusted mean of textual-graphical ( $\bar{x}^{\text{Adj.}} = 5.156$ ) is higher than the textual group ( $\bar{x}^{\text{d}} = 3.935$ ). Results of ANCOVA and Bonferroni test analysis on on constraint conditions is given in *Table 12*.

Comp.	Groups	Pre-Arg		Post-Arg		Constraint		Bonferroni
		N	S	S	$S_{adj}$	F	P	
Conditions of constraint	Textual	36	.9417	3.9971	3.861	6.005	.003	T < C G(BAG) < T(BAG)
	T-Graphical	31	.8788	3.3181	3.315			
	Control	31	.8548	.3807	.363			

Table 12. Results of ANOVA and Bonferroni test analyses on constraint conditions

Table 12. shows that covariating the pre-argumentation constraint structure, meaningful difference favouring textual group is found between the textual and the control group ( $F(2-96) = 6,005$ ,  $p = .003$ ). The adjusted mean of control group



( $\bar{x}^{\text{Adj.}} = ,363$ ) is lower than textual group ( $\bar{x}^{\text{Adj.}} = 2,061$ ). Although adjusted mean of textual group is higher than the adjusted mean of textual-graphical ( $\bar{x}^{\text{Adj.}} = 1,335$ ); there is no statistically significant differences between the experimental groups. Results of ANCOVA and Bonferroni test analysis on conditions of strenght is given in *Table 13*.

Comp.	Groups	Pre-Arg		Post-Arg		Covariate		Adjusted
		N	s	s	$\bar{x}_{adj}$	F	P	
Conditions of strenght	Treated	35	1,1111	1,5139	1,988	19,823	,000	T-C
	T-Graphical	35	,87	3,5172	3,517			C-T
	Control	31	,2981	,6290	,657			C-C
								$(C_{\text{Adj.}} - T_{\text{Adj.}}) > (C_{\text{Graph.}} - T_{\text{Graph.}})$

Table 13. Results of ANOVA and Bonferroni test analysis on conditions of strenght

Table 13. shows that covariating the level of pre-argumentation component of strength condition, meaningful differences favouring experimental groups are found among the post-argumentation data level of experimental groups and a control group ( $F(2-96) = 19,823$ ,  $p = .000$ ). The adjusted mean of control group ( $\bar{x}^{\text{Adj.}} = .657$ ) is lower than both experimental groups's adjusted mean scores. Statistically significant differences favouring textual-graphical group is also found between the experimental groups. The adjusted mean of textual-graphical ( $\bar{x}^{\text{Adj.}} = 3.517$ ) is higher than the textual group ( $\bar{x}^{\text{Adj.}} = 1.988$ ). Results of ANCOVA and Bonferroni test analysis on rebuttal is given in *Table 14*.

Comp.	Groups	Pre-Arg		Post-Arg		Covariate		Adjusted
		N	s	s	$\bar{x}_{adj}$	F	P	
Rebuttal	Treated	35	,5694	,4386	,443	4,805	,010	C-C
	T-Graphical	35	,3788	,5911	,911			
	Control	31	6,452E-02	8,085E-02	6,454E-02			
								$(C_{\text{Adj.}}) > (C_{\text{Graph.}})$

Table 14. Results of ANOVA and Bonferroni test analysis on rebuttal

Table 14. shows that covariating the pre-argumentation rebuttal structure, meaningful difference favouring textual group is found between the textual-graphical and the control group ( $F(2-96) = 4,805$ ,  $p = .010$ ). The adjusted mean of control group ( $\bar{x}^{\text{Adj.}} = 6.454E-02$ ) is lower than textual group ( $\bar{x}^{\text{Adj.}} = 2,061$ ). Although adjusted mean of textual-graphical group ( $\bar{x}^{\text{Adj.}} = .911$ ) is higher than the adjusted mean of textual ( $\bar{x}^{\text{Adj.}} = .443$ ); there is no statistically significant differences between the experimental groups. Results of ANCOVA and Bonferroni test analysis on counter-rebuttal is given in *Table 15*.

Group	Groups	N	Pre-Avg		Post-Avg		Covariance		Bonferroni
			x	s	s	$s_{adj}$	F	P	
Counter-rebuttal	Textual	38	2,781	2,338	2,135	5,444	.006	T-G C-G (TGA <sub>adj</sub> )-(GTA <sub>adj</sub> ) (CGA <sub>adj</sub> )-(GTA <sub>adj</sub> )	
	T-Graphical	33	1,985	3,544	3,189				
	Control	35	2,871	3,129	2,079				

Table 15. Results of ANOVA and Bonferroni test analysis on counter-rebuttal

Table 15. shows that covariating the pre-argumentation counter-rebuttal structure, meaningful difference favouring graphical-textual group is found between the textual-graphical and other groups ( $F(2-96) = 5,444, p = .006$ ). The adjusted mean of graphical-textual group is higher than adjusted mean of control group ( $\bar{x}_{Adj.} = 2,079$  and textual group ( $\bar{x}_{Adj.} = 2,135$ ). There is no statistically significant differences between the adjusted means of textual and control group. Results of ANCOVA and Bonferroni test analysis on analytic total is given in *Table 16*.

Group	Groups	N	Pre-Avg		Post-Avg		Covariance		Bonferroni
			x	s	s	$s_{adj}$	F	P	
Analytic total	Textual	38	15,9417	39,8613	35,318	27,418	.000	T-C G-T C-G (CGA <sub>adj</sub> )-(TGA <sub>adj</sub> )-(GTA <sub>adj</sub> )	
	T-Graphical	33	17,2970	19,6304	40,174				
	Control	33	18,8161	19,4839	19,343				

Table 16. Results of ANOVA and Bonferroni test analysis on analytic total

Table 16. shows that covariating the total of analytic pre-argumentation structures, meaningful differences favouring experimental groups are found among the total of analytic post-argumentation structures of experimental groups and a control group ( $F(2-96) = 27,418, p = .000$ ). The adjusted mean of control group ( $\bar{x}_{Adj.} = 19,542$ ) is lower than both experimental groups. Statistically significant differences favouring textual-graphical group is also found between the experimental groups. The adjusted mean of textual-graphical ( $\bar{x}_{Adj.} = 40,174$ ) is also higher than the textual group ( $\bar{x}_{Adj.} = 30,318$ ). Results of ANCOVA and Bonferroni test analysis on holistic scores is given in *Table 17*.

Group	Groups	N	Pre-Avg		Post-Avg		Covariance		Bonferroni
			x	s	s	$s_{adj}$	F	P	
Holistic Score	Textual	38	2,1809	3,6306	3,411	31,294	.000	T-C G-T C-G (CGA <sub>adj</sub> )-(TGA <sub>adj</sub> )-(GTA <sub>adj</sub> )	
	T-Graphical	33	1,9607	4,87	4,085				
	Control	33	2,1774	2,9855	2,331				

Table 17. Results of ANOVA and

## Bonferroni test analysis on holistic score

Table 17. shows that covariating the pre-argumentation holistic analysis level, meaningful differences favouring experimental groups are found among the post-argumentation holistic analysis level of experimental groups and a control group ( $F(2-96)= 31,394$ ,  $p=.000$ ). The adjusted mean of control group ( $\bar{x}^{\text{Adj.}} = 2,331$ ) is lower than both experimental groups. Statistically significant differences favouring textual-graphical group is also found between the experimental groups. The adjusted mean of textual-graphical ( $\bar{x}^{\text{Adj.}} = 4,905$ ) is higher than the textual group ( $\bar{x}^{\text{Adj.}} = 3,411$ ).

### *6. Conclusion and discussion*

Significant differences are found on the component of data, data support, warrant, warrant support, probability qualifier, conditions of strength, and counter-rebuttal between textual-graphical and textual group; whereas no significant difference is observed the components of claim, conditions of constraint, and rebuttal between textual-graphical and textual group. Textual-graphical is also better than control group on the structures of claim, data, data support, warrant, warrant support, probability qualifier, conditions of strength, rebuttal, counter rebuttal. Significant differences are not observed only on conditions of constraint component between textual-graphical and control groups. Textual group also seems to produce better results than control group on claim, data, warrant, warrant support, probability qualifier, conditions of constraint, conditions of strength. However, there is no significant difference on the components of data support, rebuttal, and counter-rebuttal between textual and control groups. Caution must be taken into consideration for generalizing the research result on conditions of strength, conditions of constraint, rebuttal and counter-rebuttal since inter-rater reliability seems to be lower than expected in pre-argumentation analysis. The result on data structure seems to be consistent with the research result of Cho (2001), and Tan (2000). However, we have to take into consideration that Tan applied QUESTMAP as graphical software, and Cho compared the Belvedere group with BBS.

In sum, the research results shows that the textual-graphical group is produced better argument comparing to textual and control group based on holistic and analytic total analysis. Beside, covariating the pre-argumentation components

level, textual group also seems to produce better arguments comparing control group.

Based on the success of textual group over control group, we can advise the use of argumentation method in study groups and direct teaching about argument components. Using argumentation as an instructional method and instructing students on the argumentation structure use was successful to have students' attention to the argumentation structures in this study.

Using argumentation software also has a positive effect on learning or developing argumentation components. Considering textual-graphical group is more successful on the use of argumentation structures than only textual group, we can conclude that using Belvedere software prior to writing an argumentation to shape group thinking were a useful classroom application. Mapping effort might help students to develop or organize their thoughts before writing it down. This might help also to gain the skills of applying argument components.

Another advantage of using the graphical tools is that graphical form supports study in groups. Students in groups would not only be able to realize each others thought about the topic, but also be able to recognize the differences in them. Developing argumentation with graphical tools might have a role of advance organizer for the group study. Being able to see the argumentation in graphical form may support the holistic view of the argumentation which is being developed. Therefore, arguers might track the components easier and be able to relate components with each other easier.

This must also be related to cognitive load. First presenting the structures on a graphical form may take the cognitive load off, creating the germane load. Then, after studying with graphical form, writing group argument in textual form might be easier. The students opinions not mentioned in this study were also supportive for this explanation. Using graphical tools might have additive effect with direct instruction in argumentation in this study.

In sum, direct instruction in argumentation and use of graphical argumentation tools are advocated in addition to teaching content at the university level within the limitations of this study.

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*Appendix 1: Holistic Argumentation Rubric for 0 SCORE of 0-8*

A persuasive writing paper is scored between 0 to 8 with holistic argumentation rubric. The writing with score of 0 is not considered as argumentation paper. Author might have a claim but does not have any effort in persuading anybody. Either there is no primary structure or it is impossible to classify them. The paper is more about knowledge transfer than argumentation. Most probably there are many mistakes even in the knowledge presented. It is too difficult for the reader to understand the author. The attributes are:

- No solid claim.
- No central or supporting components.
- Explanation is not possible to be classified into any structures.
- Transferred knowledge unrelated to the argumentation.
- Undeveloped or too informal writing tone.
- No effort in persuading.

#### *Appendix 2: Analytic Argumentation Rubric for the structure of Claim*

- 8 Consistent with each other, convincing number of important main and sub-claims presented elaboratively in an organized form, easier for the reader to understand.
- 6 A couple important main claims which will support a central claim is forgotten. It resembles the writing of score 8 in terms of other attributes.
- 4 There are some important claims are presented generally in a comprehensible manner. From time to time, it is possible to have contradictions. There might be some problems in organization of claims. Some claims left to the audience to figure out.
- 2 Most of the important claims is overlooked. Presented claims are meaningless. It is very difficult for the reader to understand the connection between claims and sub-claims. There might be even contradictions between some of them.
- 0 There is no claim or unclear for the reader.

#### *Appendix 3: An Example of Written Argumentation Analysis*

First papers is analyzed for holistic scoring. Then, each paper is analyzed again for each structure. Coders asked questions to locate the structure and to define the quality of structure in writings.

#### *Primary Structures of Argument*

- Claim: Combine or choose learning theories for application based on circumstances
- Data: Why we combine or choose?



- Data D1.1. Context of learning always different. Individual differences, number of students, time, content, learning environment... etc.
- Data support: Do we have an example of different circumstances?
- Data support Ds1.1. BTE-208 ED-psychology with 30 student, OO) ED-psychology with 300 students
- Warrant: What are the circumstances of combining and choosing?
- Warrant AW.1. Choose when prior knowledge of content is high
- Warrant AW.2. Combine when prior knowledge of content is low but content is strictly sequential and challenging.
- Warrant support Do we have an example of the warrant?
- Warrant support AWs.2.1 To do personality analysis, students in BTE Psych has to know fundamental concepts and the principles of defense.
- Warrant support Why combining is appropriate when prior knowledge of content is low but content is strictly sequential and challenging?
- Warrant support AWs.2.2.: We can deal with low level of knowledge, sequential and challenging content when combining deductive and inductive approaches.

### *Secondary Structures Of Argument*

- Rebuttal A (acceptance of shortcoming of the claim): If you will choose or combine learning theory on the basis of current circumstances, you have to put more time and work into planning.
- Probable rebuttal B to A (An attack to the data: A rebuttal of attacker which the defender of claim will refute): We can't combine or choose learning theories just because context of learning is changing. Context might change but the content to be learned will be the same.
- Counter rebuttal A to B (Defender of A is refuting the attack to the data of A from B): Context is everything. You can not teach personality analysis to the prospective psychiatrist and to the prospective teachers.
- Probable rebuttal A: An attack to the warrant (A rebuttal of attacker which the defender of claim will refute):
- Constraint qualifier (Conditions): If teachers have the freedom to plan what, how, and when to teach
- Strength qualifier (Conditions): Choosing or combining the appropriate theories is especially important when the target group is heterogonous.
- Probability qualifier (Conditions): It works always.

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# ISSA Proceedings 2006 - The Risk Of Arguing From Persuasion To Dissuasion

✘ Bounded rationality theories are essentially characterized by incorporating limits of knowledge, resources and time as a central feature of the conditions in which we adopt our decisions. Connections between advanced systems of processing information and our usual manner of arguing allow us to analyze some argumentative strategies as quick mechanisms that reduce costs of information in a way that is not too different from the simple and frugal heuristics, as defended by R. Selten or G. Gigerenzer (Gigerenzer and Selten 2001; Gigerenzer, Todd, and ABC Research Group. 1999), that seem to play a salient role in the adoption of decisions in conditions of uncertainty. **[i]**

Taking part in an argumentative process, accepting it as a decision-making mechanism, implies taking some risks if you are not an omniscient agent. The possible dissuasive strength of argumentation arises as part of a procedural decision device and it can help us to show and account for some discursive strategies employed by agents in their argumentative activities.

Some of the problems that come into view when we try to understand polemics and types of polemics may be solved by attending to both participants' spaces of values and the zone where these spaces overlap. A first step, an empirical one, could be to delineate the boundaries of the space of values that participants try to occupy. Their goal is not, or not only, to optimize some singular variables (such as truth, rhetoric force or consistency), but also to satisfy a set of values that they regard as important; their own authorship or agency could even be one of these values. For example, it could make a difference whether we obtain an inaction compromise from another agent after a dissuasion process (possibly including some argumentative interactions) or reach a superficially similar result after a simple refusal due to the proper conviction of the other agent.

I hope that, with some tools from ancient rhetoric, the philosophy of economics, and computer science, we can analyse, for example, the continuum between

refutation and reputation (Dascal 2001, 2002; Dascal 2003) and some other non-traditional epistemological questions. There are two key ideas. First, some features of the context could generate rules. Usually, we are prone to ascribe these rules solely to the participants' cognitive capabilities, but these rules could also be constructed as the output of the relationships themselves. Second, we do not need to assume that participants in the dialogue are provided with absolute and common knowledge (each one knows what the others know), with all the time and all the computational capabilities possible, and both unlimited knowledge and unlimited memory store. Instead, all we need are some flesh and blood human beings in contextual interactions.

As Pierluigi Barrotta and Marcelo Dascal have said in their introduction to *Controversies and Subjectivity*.

If the subjects who carry out scientific research (...) were to follow scrupulously the rules of logic and stipulated methodological procedures, no real disagreement could ever arise between them.

This subject (uniform universal subject -a pure being of reason that embodies the correct rules of logic and methodology) is a fiction. It is a sort of ideal 'representative agent', who is supposed to provide a less ideally universal 'scientific' or 'rational' community with the hallmark of rationality that grants it its legitimacy and superiority" (Barrotta and Dascal 2005).

The real agents cannot be blurred; they must always remain at least as a parameter of the interaction. On the contrary, in the standard view of rationality, our Olympic agents, Olympic because they are similar only to gods on Olympus, could be eliminated or obviated because each agent is similar to every other one; as they are all epistemic gods, none of them are necessary.

We always need concrete agents, to understand the real cognitive process that is embedded in dialogic interactions. We even need them to arrive at some kind of objectivity, because objectivity is not a view from nowhere, but rather a shared view from somewhere (Amartya Sen 1993, p. 127). We cannot eliminate the particular agent; we always need it at least as a parametric reference. Other approaches try to write both absolute capabilities (even those obtained by learning or training) and innate abilities into our models of human beings, but they only fix these traits on abstract humanity, and that is why we cannot understand the bargaining process itself. We are rational but less than gods. "Ideal agents as traditionally conceived may not be idealizations of any actual agent, and hence *ideal agent* epistemology may give us little or no insight into

genuine rationality.” (Cummins et al. 2004, p. 296)

Our models are always idealizations, and we can have no other kind of model, but this is not necessarily a bad thing in itself. The mistake appears when we opt for reductionism. Trying to reduce all the variables to a single one, with a single unit of measure, is the main difficulty for understanding the complexity of dialogic interaction. There are several parameters that we must maintain *ab initio*.

As I have mentioned, theories about dialogic interaction usually assume a very debatable notion of rationality. This notion comes from economic studies, but today many discussions, mainly from experimental economics, show that it is a very weak notion. However, an important part of linguistic studies accepts this standard notion as a datum and without any explicit reflection - for instance, Optimality Theory and Relevance Theory. Although the attempt was made to supersede the vision of language as a code and incorporate inferential components, these views maintain a background that assumes an ideal of rationality that is absolutely attached to cost-benefit analysis; consequently, it needs some common or shared knowledge, and some common idea of incentives, as key concepts to achieve some equilibrium in communicative transmission or other linguistic interactions.

However, a simple review of the benefits and drawbacks of economic theory could show the way out of this trap. We must open our minds in order to build a pragmatic orientation that will not be reduced to some kind of sophisticated semantics. Perhaps it would be a good idea to look at the conceptions of rationality from other sides.

As I have said elsewhere, the majority of approaches to dialogic interaction have been built on a very special model of human being, i. e. the rational optimizing decision maker. This is a very special agent that has at least three unbounded capabilities: he or she has, at any time, all possible information and computational abilities, he has no limitations and so, supposedly, is able to achieve an optimal degree of effective communication, although with the corresponding constraints on his set of feasible actions[**ii**]

Herbert Simon’s idea of bounded rationality offers another, more radical, option. Simon used the metaphor of a pair of scissors, where one of the blades is the “cognitive limitations” of human beings and the other one is the “structure of the environment,” cognitive rationality and ecological rationality, as Gigerenzer calls them. The most important thing is that “minds with limited time, knowledge, and

other resources can be nevertheless successful by exploiting structures in their environments" (Gigerenzer and Selten 2001, p. 7).

Increasing the complexity of a task does not necessarily imply a corresponding complexity of individuals. Sometimes a better comprehension of the environment could help carry out the task. A system of relationships could sometimes allow some fast and frugal mechanism to produce better results than those that an optimal rationality with a high computational complexity is assumed to produce. I will say that the metaphor of a pair of scissors comes close to Marcelo Dascal's idea, when he says: "The centuries-old debate on the nature of the relationship between language and thought was mesmerized by these polar positions regarding which one of them is, in some sense, "dependent" upon the other. Under close scrutiny, however, both sides in the debate acknowledge the existence of language-thought interactions that do not fit the sweeping versions of their claims. For example, avowed "externalists" like Bacon and Locke, undertake to criticize language as a dangerous source of cognitive mistakes and suggest methods (which gave rise to the attempt to elaborate "scientific" languages) to avoid such a danger. Yet, in so doing, they in fact admit that thought is not impervious to the influence of language"(M. Dascal, 2002, p. 38).

I wonder how to go forward and override this kind of dichotomy or false dilemma, as Dascal himself has proposed. Obviously, this could be useful, but we also need some considerations on what the minimal conditions are to make that kind of mixture efficient; the bridges we try to build may come together with the worst effects of the two sides, so we need minimal conditions to counterbalance the bad effects and go ahead with some kind of converging process that enhances human performance.

I think these questions ought to be addressed from a twofold perspective. Bridges and double perspective have not had a very good reputation. They were called eclectics or irenisms and they were assumed to accept the worst of the two sides. But perhaps a good approach to doing philosophy would be to work out and solve false dilemmas. The model of agent that is behind our conceptual construction of language turns out to be decisive when it comes to rebuilding these aspects of linguistic conformation and evolution.

The need to understand language as a cognitive technology from a broad concept of distributed cognition that allows us to attend to pragmatic problems from its very specificity has been proposed by some cognitive and computer science theorists who have developed the line of distributed cognition.

A lot of work dealing with persuasion is coming from Computer Science, mainly in designing artefacts that are built as human-computer interfaces. I mean that it is noteworthy that a remarkable interest in a lot of issues about language, translatability, adequacy, truth, rhetoric tools and so on is arising from the area of Computer Science. For example, let us look at the beginning of one of these papers: "Intelligent interfaces will need to be persuasive. This means they must have the capability of reasoning on the effectiveness of the message." (Guerini, Stock, and Zancanaro 2004; Guerini, Stock, and Zancanaro 2003; Guerini et al. 2004) These authors (Guerini, Stock and others) continue offering some ideas on persuasion: "In the first place, persuasion is a "superset" of argumentation: while argumentation is concerned with the goal of making the receiver believe a certain proposition (goal to induce a belief), persuasion is concerned with the goal of making the receiver perform a certain action (goal to induce an action). The link relies on the fact that, apart from coercion, the only way to make someone do something is to change his beliefs [Castelfranchi, 96]. That is to say: if our goal is to induce an action, then we must also have the goal to induce a belief. From this perspective, argumentation is a resource for persuasion." (Guerini, Stock, and Zancanaro 2003, p. 2)

Guerini has proposed a framework that includes four key aspects (cognitive, social, emotive, and contextual) for persuasion mechanisms and has offered a schematic computational architecture. Guerini, Stock and Zancanaro have focused on the high-level planning part of this architecture, proposing a model that exploits meta-reasoning to account for the interaction between the four aspects of persuasion (Guerini, Stock, and Zancanaro 2003).

It is not necessary to attend only to present-day approaches. Specifically, in Francis Bacon's work we could find a very broad array of pragmatics and cognitive issues related to these aims. Francis Bacon, in "Of the Colours of Good and Evil," (1597) said:

*"In deliberatives, the point is, what is good, and what is evil; and of good, what is greater, and of evil, what is less. So that the persuader's labour is, to make things appear good or evil, and that in higher or lower degree: which, as it may be performed by true and solid reasons, so it may be represented also by colours, popularities, and circumstances; which are of such force, as they sway the ordinary judgment either of a weak man, or of a wise man, not fully and considerately attending and pondering the matter."*

In fact, Bacon is very clear in his opinionated considerations on rhetoric, but even

so he offers us a very nice tool. *“Lastly, to make a true and safe judgment, nothing can be of greater use and defence to the mind, than the discovering and reprehension of these colours, shewing in what cases they hold, and in what they deceive: which, as it cannot be done but out of a very universal knowledge of the nature of things, so, being performed, it so cleareth man’s judgement and election, as it is the less apt to slide into any error.”*

Bacon offers us *“A TABLE of the colours or appearances of Good an Evil, and their degrees, as places of persuasion and dissuasion, and their several fallacies, and the elenches of them.”*

In that short work, he summarized a large part of the many traits of human cognitive capabilities, which we could currently understand, relating to natural language, as a cognitive technology. Even so, a very explicit idea of risk in arguing also appears: the personal responsibility of being engaged in an argumentative process.

The large group of fallacies that are collected in this paper by Francis Bacon deserves to be distinguished, mainly because, in some approaches to rhetoric and science, these fallacies were forgotten as useful tools to open some pathway to the truth.

To note just one example, there is a mechanism related to the tertium gaudens process, signalled by Bacon:

*“Cui ceteræ partes vel sectæ secundas unanimiter deferunt, cum singulæ principatum sibi vendicent melior reliquis videtur, nam primas quæque ex zelo videtur sumere, secundas autem ex vero et merito tribuere.”*

[That which is unanimously given the second place by other factions or sects, when each gives the first place to itself, is seen to be better, since the first place is awarded out of zeal but the second out of truth and merit.]

Bacon explains this with several examples, in particular:

*“So Cicero went about to prove the Sect of Academics which suspended all asseveration, for to be the best, for, saith he, ask a Stoic which philosophy is true, he will prefer his own. Then ask him which approacheth next the truth, he will confess the Academics. So deal with the Epicure that will scarce endure the Stoic to be in sight of him, as soon as he hath placed himself, he will place the Academics next him.”*

*“So if a prince took divers competitors to a place, and examined them severally whom next themselves they would rathest commend, it were like the ablest man*

should have the most second votes.”

“The fallax of this colour happeneth oft in respect of envy, for men are accustomed after themselves and their own faction to incline to them which are softest, and are least in their way, in despite and derogation of them that hold them hardest to it. So that this colour of meliority and pre-eminence is oft a sign of enervation and weakness.”

Some of these processes are called fallacies, but we must remember that we applied this name because, in a practical process, they lead to the obtention of different kinds of results, apparently without logical reasons. But mainly with Bacon’s development of the Elenches (refutations) of them, it is very clear that we are looking at procedures that, from another point of view, appear as several simple and frugal heuristics that we use in dealing with the real world. However this may be, we have called them fallacies because they usually are not deterministic processes.

What is going on? If and only if we are able to offer a single and deterministic solution because we already know that the agent is going to do just the action that we want, without any dependence on her beliefs or wishes, we do not need to exert coercion to get the agent to do whatever we want, but to produce a change of belief. In other situations, we need to exert some kind of coercion.

But all coercive strategies are, at the least, risky strategies and sometimes processes of uncertainty. For example, those who consider that refutation is a simple logical process are reasoning from a supposed total availability of information and individuals’ capabilities that would persuade people by the simple coercive force of correct logical arguments. However, in order to accept this result, we must at least adopt a model of individual that incorporates the behavioural acceptance of the consequences of its logic and only these consequences, as a rule of procedure. If we understand, instead, that there are decisive traits of refutation that are related to images of oneself and the reputation of others, the ways of thinking about these issues take on a very different point of view.

The strategy concept used by Thomas Schelling (Schelling 1980) is both significant and useful because the presentation of increasing threats, until the objective changes its behaviour, is a key feature of the mechanism of coercion, even of logical force.



We base our decisions on incomplete and flawed information, so when we opt for argument, it must be clear that we must use some stop rule and accept the corresponding risks. Some kind of dissuasion appears in the argumentative process mainly if you use some kind of threat point within a bargaining process. The broad literature on bounded rationality offers a very useful manner of understanding this twofold process of refutation and dissuasion (Baron 1998; Barrotta and Dascal 2005; Schelling 1980).

We will sustain the consideration of language as a cognitive technology (M. Dascal) to revise the possible strategic use of arguments (J. Elster 1992) under conditions in which the same argumentative phase means accepting risks instead of other mechanisms of decision.

As Christina Bicchieri has said: "The possibility of using social norms in an explanatory or predictive role hinges upon developing a theory of how and under what circumstances people focus upon norms. Often norm compliance does not follow from intentions or plans, but is rather 'automatic'" (Bicchieri, Jeffrey, and Skyrms 1999) Bicchieri 2000).

A lot of experimental economic studies try to show some regularity in our behaviour that apparently goes beyond the rational economics model of human being. Specifically, the adoption of the norms of arguing could be the result of acting "under the control of schemata that are formed on the basis of repeated behaviour as well as other types of learning" (Bicchieri).

The schemata contain expected sequences of behaviour, telling us what to expect and how to behave in particular settings. Douglas Walton has analyzed the sunk cost fallacy, very common in economic studies, and he accounts for how this fallacy could appear as a strategic device:

"Consider the case of an electronics firm that buys equipment in order to have a strategic effect on its rivals. It makes this move to suggest that it is committed to serious efforts in a particular segment of the market, and that competing with it in this sector would not be profitable for the other firm. This tactical move could be called a strategy of 'sinking costs' for the purpose of deterring a competitor. Many other examples of using a strategy of sinking costs in negotiations are also cited by Elster (2000, p. 43). A union may make a threat by taking steps that indicate its commitment to a certain course of action to the management negotiators. These cases suggest that if you look at the argument of sunk costs in the context of a dialogue, like for example a negotiation, with more than one party

involved, the argument could be seen as a rational strategy. It begins to seem less like a fallacy and more like a reasonable argument. Context of use seems to play an important role in which way it goes.”(Walton 2002, p. 13)

What I mean is that the huge part of Francis Bacon’s work already quoted could also be understood as a group of reasonable arguments, more than simple fallacies. But the main movement is to take into account the relevance of the act of choice in choice itself. And this is relevant precisely when we understand human beings as limited agents.

Walton considers that the argumentation scheme for the sunk costs argument seems to be based on a notion of action commitment over time.

“The proponent of the argument commits herself to a certain action or a certain policy for action at time  $t1$ .

Let’s say this action or policy can be expressed in the form of a statement A. And then later, at time  $t2$ , she is confronted with the decision of whether to carry out this precommitment to A or not.

Reasons for or against either option could be given at  $t2$ . But one of these reasons would be the following argument: I am already committed to therefore given the choice between and not-A family: I should carry out A. In the case of the Ph.D. student, for example, she might reason as follows. I am already committed to the policy of working on my thesis, most especially because I have already sunk so much time and work into it. Therefore, given the choice between (a) quitting work on the thesis and going to law school, and (b) continuing to work on the thesis, the student, using the argument of sunk costs, goes for (b).” (Walton 2002, p. 17)

“Sunk cost” reasoning, precisely because it expresses an intertemporal commitment, at the same time shows a threat for the opposite agent. He knows that previous investments are demanding that the first agent remain in business, not only because of the rewards or deserved payoff, but also because this expresses the individual’s reputation, self-image and social reputation. So this procedure is better understood as an informational constraint, although it was one that caused difficulties in standard rational models. It could also be understood as a path-dependent process and one that helps convincing or dissuading strategies.

Dissuasion seems to be a non-oppositional complement, which reduces the risk of “omnipervasive-pervadent animosity” (C. Marras and Euli, 2006).

Dissuasion looks like skeptical arguments when it urges us to keep searching and not to accept the final explanation.

A big step towards pragmatics could be seen in the following sentences of Sextus Empiricus in which he quoted a very well-known epigram composed by Callimachus referring to Diodorus Cronos:

“Lo and behold how the daws on the rooftops tell us by croaking  
What things are conjoined, also how we shall live on.”

“For it belongs to the philosopher to explain that it is a tenet of Diodorus that nothing moves. For that which moves, moves either in the place where it is or in the place where it is not; but neither the first nor the second (is true); therefore nothing moves.” (Sextus Empiricus, *Against the Professors*, I. 309-310)

In formal terms:

$M \rightarrow L \vee N$

$\neg L \wedge \neg N$

Hence

$\neg M$

So, refutation has some relationship with dissuasion. First of all, there is the distinction made by Amartya Sen on several occasions between maximizing behaviour and non-volitional maximation because of the fundamental relevance of the act of choice, which has to be placed in a central position in analyzing maximizing behaviour (Sen 1997, p. 745); this becomes particularly pertinent when we consider that the user selects information, takes part in conversation and inevitably makes a decision. It is similar to saying that, however we like to interpret Grice's maxims, it seems necessary to take into account such intentional aspects.

“A person's preferences over comprehensive outcomes (including the choice process) have to be distinguished from the conditional preferences over culmination outcomes given the acts of choice.” (A. Sen 1997, p. 745)

In the natural sciences, maximization occurs without a deliberate “maximizer,” but when the choice is associated with some kind of responsibility, our ranking of outcomes can be changed. “Choice functions and preference relations may be parametrically influenced by specific features of the act of choice (including the identity of the chooser, the menu over which choice is being made, and the relation of the particular act to behavioural social norms that constrain particular social actions.” (p. 746)

Sen warns us that “Whenever the act of choice has significance,” the comprehensive analysis of outcomes can have very extensive relevance for problems of economic, political and social behaviour.

I claim that the consideration of language as a cognitive device (instrument) compels us to consider that the act of choice has a decisive significance. For instance, research related to metacognition increasingly leads us to see this self-reference more clearly; the possibility of referring to it that is at the very heart of language is an essential property of language.

The problem is not only reduced to the importance of introducing the act of choice, the process of choice, in what is chosen, but it is, moreover, necessary to consider the act of choice as an inescapable act.

*“A chooser, who may have to balance conflicting considerations to arrive at a reflected judgment, may not, in many cases, be able to converge on a complete ordering when the point of decision comes. If there is no escape from choosing, a choice decision will have to be made even with incompleteness in ranking.”* (p. 746)

The question of dependent choice, including the act of choice, is clearly related to the definability of some binary relation in our natural languages (as Rubinstein has established in the first chapter of his *Economics and Language*), mainly because it leads us to an interpretation of certain forms of sequentiality that could be useful to a rational understanding of the relevance that frugal and simple heuristics could have in decision processes.

This possible connection between argumentation theory and bounded rationality, mainly in Gigerenzer/Selten’s interpretation of Simon’s works, finds a substantial fulcrum in some methodological and epistemological elements that have appeared in Amartya Sen’s works, particularly in the following: Sen, A. (1993), Positional Objectivity,

*Philosophy & Public Affairs*, 22(2), 126-145, Sen, A. (1997), Maximization and the Act of Choice, *Econometrica: Journal of the Econometric Society*, 65(4), 745-779 and Sen, A. (1999), The Possibility of Social Choice, *American Economic Review*, 89(3), 349-378.

Again and again, Sen has explained the importance of taking into account the chooser’s dependence and menu dependence in preference relations.

If  $P_i$  is the preference relation of person  $i$  as being conditional on chooser  $j$  and

the set  $S$  from which the choice is being made:  $P_i^{j,S}$ . Chooser dependence and menu dependence relate to the parametric variability of  $P_i$  with  $j$  and  $S$  respectively.

However, even more important is the idea of the menu dependence of preference, precisely what is ruled out by such assumptions as the WARP (weak axiom of revealed preference).

Even other weaker properties, such as the well-known  $\alpha$  and  $\tau$  properties (basic contraction and expansion consistency), which are necessary and sufficient for the binariness of choice functions over finite sets, are violated by such choices (p. 752).

It is possible to wonder whether binary relations are precisely a subset of the permissible preference relations. Whatever the case may be, they must be reflexive, that is, each alternative is seen to be as good as all the others. Thus, according to Sen, it may be possible to establish some very interesting consequences. First, a best alternative must also be maximal, but a maximal alternative need not be the best. In particular, this can occur when the set of the best or optimal choices is empty but the maximal set is not, however, empty. A classic example, related by Sen, is given by one very interesting interpretation of the story of Buridan's ass. "The ass could not rank the two haystacks and had an incomplete preference over this pair. It did not, therefore, have any optimal alternative. Both  $x$  and  $y$  were maximal- neither known to be worse than any of the other alternatives. In fact, since each was also decidedly better for the donkey than dying of starvation  $z$ , the case for a maximal choice is strong. Optimization being impossible here, I suppose we could "sell" the choice act of maximization with two slogans: (i) maximization can save your life, and (ii) only an ass will wait for optimisation." (p. 765)

I mean that if we connect the binary relation explicitly with the function of choice and its binariness, we obtain the pertinence to go with the contextual dependence of menu and it seems that, in the case of language, this kind of menu dependence is precisely one of the essential elements. Therefore, this basic question arises in optimality theories if they do not take care of the importance of distinguishing between optimization and volitional maximization.

In addition, the sequential order, with its uses in solving problems, is a well-

known device in bounded rationality. So sequential selection, definability, and the “language” that a decision maker uses to verbalize his preferences restrict the sets of preferences he may hold (Rubinstein, 2000, p. 55); this is evidence that we must include the act of choice in the set of alternatives.

The philosophical interest of this issue appears when we try to study the conceptual relationship between maximization, optimization and satisfaction.

Recently, Christoph Lumer (Lumer 2005) has presented some observations on the idea of optimality that could be a nice philosophical reenactment (Lumer, C.,2005). There are also some ideas that give more support to that reconsideration, for instance (Dascal 2002).

In a commentary to Ariel Rubinstein (2000), Johan van Benthem has made a series of precisions from the fields of logic and theory of language. One of the main observations is related to what kind of binary relations can be considered nuclear in natural language. Rubinstein upholds that linear orders (completeness, asymmetry and transitivity) (CAT) and tournaments (completeness and asymmetry) have some kind of special position in language. Van Benthem expresses serious doubts about this and says: “To me, the most obvious linguistic category of binary relation are *comparatives*.”

They are so basic that language even has a systematic operation for building them: from ‘large’ to ‘larg-er’ (van Benthem 2000, 100). However, in my opinion, this question is so important that it goes beyond the first claims of Rubinstein’s book.

The issue of comparatives appears particularly interesting because of the following question: what we do when we proceed to make some kind of optimization? Accurately, we make a comparison.

The step from a comparison relation -and the use of comparatives- to a linear order relation seems a simple one for those sets where we know the cardinal, but it is related to other problems pertaining to the available information, to the presence of systematic ambiguities, to temporal limitations and to the inevitability of adopting decisions.

Simon explained this link as follows: “Because of the limits on their computing speeds and power, intelligent systems must use approximate methods. Optimality is beyond their capabilities; their rationality is bounded.” As Winograd and Flores maintain (quoted by Fiori, 2005), Simon does not contest the “rationalistic tradition”, but only the version that implies perfect knowledge, perfect foresight,

and optimizational criteria (Winograd and Flores, 1986, p. 22).

With regard to the problem of optimization as a criterion in the field of decision theory, it is convenient to remember that it has very strong similarities with problems of optimizations in science. The proposal that appears in Fermat's Principle or the Principle of Least Action could accurately be brought up here.

The path of a ray of light connecting two points is the one for which the time of transit, not the length, is a minimum. At the time that Fermat developed this principle, his justification was more mystical than scientific. The statement that nature is essentially lazy, and these rays are simply doing the least possible work can summarize his justification.

Today it is usually formulated in terms of a minimization of the time along a curve through space.

The results developed by Sen show that we must attend to maximality because it has a wider scope than optimality, and the difference between maximal choice and optimal choice could be substantial, whether or not there is a non-empty optimal set.

Possibly the most important thing to indicate here for debate could be that, although maximization can be matched by an "as if" optimization exercise, this does not reduce the importance of broadening the focus from optimization to maximization (Sen 1997, 766-777).

It can be extremely enlightening to see how Amartya Sen links the notion of maximization closely to the "important and influential concept of satisficing developed by Herbert Simon, which has often been seen as nonmaximizing behaviour."

Specifically, Sen insists, "The discussion of satisficing versus maximizing has been somewhat deflected by the tendency to identify maximization with optimisation."

With maximization, it is possible to go into the argumentative process and to incorporate the features of the participants as bounded intentional agents. Even strategic movements are suited as risky procedures in "the dynamics of deliberation."

## NOTES

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**[ii]** "Bounded Rationality in Dialogic Games" (2002, Lugano) started with a quote

from Lipman: "I don't know how we can mathematically represent vague knowledge, but I believe that this is what is called for... It is not that people have a precise view of the world but communicate it vaguely; instead, they have a vague view of the world. I know no model which formalizes this" (Lipman 2001, pp. 11-12).

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