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ABSTRACT: In the context of cornerstone ideas of Western Culture, this paper focuses on the issue of why emotional arguments are studied and evaluated from the perspective of logic. Two other issues are briefly considered: whether logical and emotional arguments could/should be examined from the perspective of emotions.

KEYWORDS: bi-logic, emotion, emotional arguments, logical mode, multi-modal argumentation, Platonic Argument, principle of symmetry, symmetrical logic.

> I am referring to the growing split of cerebral-intellectual function from affective-emotional experience; the split between thought from feeling, mind from the heart, truth from passion. (Eric Fromm, 1968)

1. INTRODUCTION

I conceived of writing this paper in the summer of 2008 when I attended a class by a colleague at York University in order to evaluate her teaching, as she was applying for promotion to Full Professor. The course my colleague was teaching involved highly sensitive and controversial material, such that she started the class by discussing some basic ground rules for argumentation of the many difficult subjects. She said that since the material was expected to be the source of deep emotional reactions, and especially anger, it was fundamental to control such emotions and concentrate on the nature of the logical argument instead, moreover this should be done with respect for the positions of the students involved in the arguments. Immediately, and truly with some fascination about this ground rule, I thought of a passage in Plato's *Gorgias* which is almost identical to the ground rule my colleague was discussing with her students. Plato (1952) says in Part One of the *Gorgias* that

> people do not find it easy by an exchange of views to arrive at a mutually satisfactory definition for the subjects under discussion, and in this way bring the argument to an agreeable end. Rather, when they disagree on any point, and one declares the other to be guilty of incorrect or vague statement, they grow angry and imagine that everything that is said proceeds from ill will, not

from any concern about the matters under discussion. Some of these arguments end most disgracefully, breaking up in mutual vituperation to such an extent that the bystanders are annoyed at themselves for having become auditors of such people.

After the class was over I asked my colleague whether she knew of Plato's views on the matter that she has raised in class, and she replied that she did not know about it, but that she was not surprised. I thought then that the Platonic ground rule had transferred into our culture and civilization such that now we take it for granted.

2. THE PLATONIC ARGUMENT

It seems clear that for a very long time in Western history, conceptions of social order are based on a rather strict understanding of human beings as logical/rational beings. It is possible to trace back this view to the works of Plato and Aristotle. Indeed their remarkable influence upon the early setting of values of Western civilization is well acknowledged. I will proceed to characterize what I term the "Platonic Argument."

In several of his key dialogues, especially in the *Gorgias* (1952) and *The Republic* (1972), Plato assumes that a society that is orderly needs to be based on individuals who are logical. If individuals function rationally they are able to develop science and technology. All of them together, in their turn, are necessary conditions for the development of a society that will function in an orderly way. Now, at the same time, Plato, and this becomes clear in his dialogue *Gorgias*, asserts that emotions must be kept at bay. Emotions are dangerous and corruptive, and their emergence in individual and social life must be impeded. Western civilization adopted this argument, and at the same time coined the term 'irrational' in order to characterize what was not in line with the principles of logic. Of course, these principles were ascertained by Aristotle in a remarkably clear way. From this perspective, emotions were conceived to be irrational, for they could not be connected to the sequences that are characteristic of logical reasoning. In essence, they should be controlled and hopefully repressed.

Eric Fromm (1969) says that our civilization has done outstanding progress in the logical/scientific/technological sense, but has remained emotionally at the times of the Stone Age. It is, of course, very difficult to determine the emotional level of people in given historical times, however Fromm's point may be taken as a metaphorical statement concerning the Platonic Argument: we have advanced logically, scientifically and technologically, but emotionally we are primitive.

The principles of logic are usually taken for granted, as if they were themselves a sort of ontological basis of our individual and social order. Our civilization owes so much of its development and progress to logic, that we have grown accustomed to consider them in that way. I posit here that logic has achieved its remarkable stance because of its success in scientific and technological achievements. Indeed these achievements are a fundamental basis for the development of industry and thus of economic well-being. Any understanding of social order takes all of them as essential.

Another look at Fromm's statement may tell us that historical and present realities are far removed from an acceptable level of social order. Crises, wars, poverty, crimes, corruption, prejudices, and structures of domination of all kinds do not seem to justify any sense of pride in the achievements of our civilization. We must hold to them, but we should not be complacent.

In essence, I contend here that the Platonic Argument has played a negative role in our development at the same time that it has been so important for technological advances. The exclusion of emotions is one of the problems. Indeed, it is inconceivable that a conception of human beings that assumes them to be essentially logical could accommodate a social order that can effectively function. Leaving emotions aside, let alone repressing them, could never guarantee an acceptable order in the society.

If emotions are seen as irrational then they are liable to be excluded and repressed, but they do not need to be understood in that way. It is in this sense that I introduce the Bi-Logical interpretation. So far, our culture has viewed what is not pliable to logic as 'irrational,' and then irrational is perceived as something that we should bury or throw away as waste. What is deemed irrational, nevertheless, has not only meaning but substance. This is what the theory of Bi-Logic allows us to understand, for this theory introduces a way of conceiving another 'logic' that operates in the mind. This theory is introduced below.

3. RECENT VIEWS ON EMOTION AND EMOTIONAL ARGUMENTS

The first work that helped me substantially to understand the relation between logic and emotions was Ronald de Sousa's book *The Rationality of Emotions* (1987). In this work, De Sousa remarks that there ought not be a natural antagonism between reason and emotion, a crucial idea that I had been pursuing since my days as an undergraduate Philosophy student at Universidad de Chile. More recently, De Sousa has written a paper that attempts to show a deep relation between cognitive truth and emotional truth. I believe that his work on the philosophy of emotions has contributed to the growing awareness of the relevance of emotions in philosophical and academic undertakings. However, as we will see happening with other positions on the same matter, his work is still grounded on the logical tradition. Indeed his book could have been entitled the "Logicality of Emotions," and the paper mentioned above is a very interesting approach to the conception of an emotional sense of truth, but based on a fundamental logical understanding of truth. I will come back to this important topic below. Moreover, De Sousa's work, while being a broad philosophical perspective, is not specifically about emotions in argumentation, although it does have significance in this area.

It is the work of Michael Gilbert that has been mostly influential in my own development in argumentation theory on the topic of the relation between logic and emotion. His theory is entitled Multi-Modal Argumentation, and has been published in his book *Coalescent Argumentation* (1997). I came across his theory, however, in 1988 when I attended a paper that he presented in the Philosophy Graduate Program at York University. Ever since then, I reoriented my own research and teaching on the basis of Multi-Modal Argumentation. My main approach to philosophical, social scientific, and argumentation studies relies on the psychoanalytic theory of bi-logic. This theory is little known outside psychoanalytic circles, and certainly not known in Argumentation Theory. I read a paper on the relation between Argumentation Theory and Bi-Logic in the OSSA Conference of 2007, but I have not got any feedback on it. Thus, I am going to dwell again on this same topic, quoting extensively from that paper: I hope that this time there will be some feedback on this complex topic. I will begin by summarizing the main tenets

of Bi-Logic, followed by a presentation of some main ideas of Multi-Modal Argumentation.

In introducing the theory of Bi-Logic, it is necessary to relate it to Freud's concept of the unconscious as Matte-Blanco, the author of this theory, relates his main ideas to the Freudian concept. In several of his most important writings, Freud (1973, 1983, 1984) mentions a few characteristics of the unconscious, which do relate closely to a certain degree of logical elaboration. Such is the case with his view that in the unconscious there is no traditional logical elaboration, there is acceptance of contradictions, similarities are treated as identities, items are displaced to one another, logical connections are treated in dreams as simultaneity in time, etc. However, Freud never conceived of the possibility that those features of the unconscious could be the expression of another 'logic' operating in the mind. Matte-Blanco undertook this task very early on in his work as a psychoanalyst. He dedicated a good deal of his time to the study of logic and mathematics in order to be able to develop such alternative logic.

Matte-Blanco introduced his ideas on Bi-Logic in a systematic and developed way with the publication of his book (Matte-Blanco, 1975) *The Unconscious as Infinite Sets. An Essay in Bi-Logic*. There are two main issues that are needed in order to characterize the core of his ideas on the existence of another logic in the mind: one is set theory and the other is the concept of relation, and specifically one of the properties of relations called symmetrical/asymmetrical. As is well known, a relation is called symmetrical when the relation can be reversed, and asymmetrical when it cannot. Thus, a=b is a symmetrical relation for the relation is maintained if we reverse it and say b=a; whereas a relation is called asymmetrical if it cannot be reversed, such as in the case of a>b. In essence, Matte-Blanco believes that, based on those two issues, it is possible to systematize Freud's proto-logical ideas on the unconscious. For, according to Matte-Blanco, in the unconscious there is no respect for asymmetrical relations, and then all relations tend to be treated as symmetrical. In this sense, he says that the unconscious is rather regulated by what he calls the Principle of Symmetry (PS).

Based on this principle, Matte-Blanco attempts to reformulate the Freudian unconscious, by first explaining the several logical points of Freud that I introduced above. This is a matter of specific interest for psychoanalysts, so I am going to focus rather on the constitution of another logic. Secondly, Matte-Blanco describes the logical consequences if the Principle of Symmetry is applied:

1) If the PS is applied then the part becomes identical to the whole. The reason for this identification is that if 'p' is part of the whole 'W,' then applying the PS, 'W' is part of 'p.' This takes us to identify part 'p' and whole 'W.' Moreover, the same would happen to each part of this whole with the consequence that all the parts of a whole are identical to the whole and to each other.

2) If the PS is applied then the members of a set are identical to the set and to each other. Similarly to the above explanation, if 'm' is a member of the set 'S,' then applying the PS, 'S' is a member of 'm.' The same would happen to each member of the set and thus, they would be identical to each other and the set. The same can be said of subsets as related to sets.

3) If the PS is applied then there are no negations. For if the set of affirmative propositions is a subset of the set of propositions, and then applying the PS, the set of propositions is a subset of the set of affirmative propositions. The same would apply to the subset of negative propositions with the consequence that this set would be identical to the set of affirmative propositions.

4) If the PS is applied then there are no contradictions. The reason relates closely to the previous consequence of the application of the PS: since the affirmative and negative propositions are identical to each other there cannot be contradictions.

Now, if we take seriously the (possible) existence of a PS and its consequences as described above, then certainly we would be in the realm of another 'logic.' Consider the following argument: The body is contained within the heart because it is clear that the heart is contained within the body. This logic is called by Matte-Blanco "symmetrical" logic. It refers to the sequence of propositions that results from applying the PS to a given piece of quite acceptable traditional logic. Notice, therefore, that symmetrical logic appears in the propositional sequences of traditional logic whenever the PS makes itself present in its midst. In essence, then, this logic assumes traditional logic as operating all the time. On the other hand, it should be said that traditional logic assumes that symmetrical logic is operating all the time. Another important point about bi-logic here is that it is necessary to understand our thinking processes as being combinations of traditional logic and symmetrical logic, in different proportion, depending on the level of depth of the appearance of symmetry. Thus, in a mathematical theorem the level of traditional logic is very high and the level of symmetry very low, whereas in a psychotic piece of reasoning, such as the above example of the heart and body relation, the opposite happens. In reality, our thinking processes would be classified as happening between two polar extremes: pure traditional logic and pure symmetry, both of them, of course, impossible to achieve. It is possible to say, therefore, that there are many levels of symmetrical depth.

If we accept these assumptions, it is possible to understand perhaps the existence of what in western thinking has been characterized as 'irrational.' It would be seen as the appearance of deeper levels of symmetry in propositional sequences or discourses.

We can appreciate the significance that Matte-Blanco attributes to emotions in the following quote (Matte-Blanco 1975, page 15):

> At the same time psycho-analysis could become the link between the inevitable regimentation of modern civilization and the unforeseeable freshness of emotion. There is no other discipline which is both scientific and moves in the realm of emotion and, hence, of art and also, in part, of ethics, sociology and politics: in short, of the humanistic side of man, because it deals simultaneously with the duality unconscious-conscious or symmetrical-asymmetrical.

Matte-Blanco undertakes a bi-logical interpretation of emotions in Part VI of this book. According to Matte-Blanco, emotion is a psycho-physical phenomenon and his focus is on the psychological aspect of emotion, which, in this sense, has two components: sensation-feeling and thinking. The fundamental issue for him is here the

thinking aspect of emotion, which he characterizes as emotional thinking, and he refers to this as a type of thinking that is inherent in emotion (Matte-Blanco 1975, p. 247):

> Starting from the recognition that propositional activity (establishment of relations) is not a concomitant of feeling but an integral part of it, we have begun to see that many questions so far obscure, and in fact insoluble, could become the subject of a precise study.

Thus, it is possible to claim that (same page): "the propositional activity implicit in emotion is quite different from that to which we are accustomed in thinking."

He concludes (same page): "the type of thinking observed in emotion is what we may call symmetrical thinking."

We should be able now to say, that according to this view indeed emotion is an affective phenomenon, but it does inherently involve propositional activity. This one is not simply an added component: it is an integral part of emotion. That is to say, the thinking that appears in emotion is an inherent part of it.

The Western philosophical tradition, which has deeply influenced logic, science, education and everyday life, tends to characterize argument as part of a logical flow of argumentation. At this moment we can introduce Michael Gilbert's theory of Multi-Modal Argumentation, for his position is that the above-mentioned academic tradition has resulted in logical reductionism. In addition, not only emotions are left out but also intuitions and physicality. Gilbert says that it is necessary to extend the field of argumentation in order to recognize three other modes of argumentation (at least): the emotional mode; the visceral mode; and the physical mode. This implies that argumentation should not be reduced to the logical mode unless of course there is a logical argument going on in which case it seems much better to proceed according to logical rules. Now, first of all it seems difficult to find arguments that relate solely to one mode and thus we should be able to be aware of their real composition; and secondly, probably there is a much greater number of emotional arguments in real life than logical arguments. This issue has become also important in psychotherapy as we can read in L. Greenberg and S. Paivio's book *Working with Emotions in Psychotherapy* (1997, p. 25): "Our contention is that attempts to not receive our feelings is one of the greatest follies of the active, controlling orientation of the Western mind." In any event, Gilbert's theory assumes openness to at least the four modes such that we can be in a position to recognize all the different aspects involved in argumentation and not only the concerns of the logical mode.

I will now refer in some detail to Gilbert's view on emotional arguments. I will do this by quoting one of his examples and comments on the subject contained in his book *Coalescent Argumentation*. (Gilbert 1997, pp. 83-84)

> Consider the next example.
>
> The Grade   (6.6)
>
> Paula is sitting in Professor Tome's office. She is pleading for an 'A' in his logic course. 'Don't you see,' she explains plaintively, tears in her eyes, 'if I don't get an 'A' in your course I won't make medical school, and my life will be ruined. I won't have anything left to live for.'
>
> Example 6.6 is an example of a primarily emotional argument. Paula's appeal is essentially based on her *desire* to go to medical school and its emotional importance to her, as opposed to her

academic ability to meet the entrance requirements. The reason she provides Professor Tome with is the earnestness of her longing, the strength of her desire: '*If only he understands how important it is to me, surely he will grant my wish.*' Her argument includes as one relatively minor part the words she uses, but also involves the illustration by use of her body and human emotional communication devices just how crucial her grade is to her.

Other examples could bring forth the tantrums of children, the despair of rejected suitors, or the plaints of frustrated spouses. All the same, whatever the reader's paradigmatic case, the point remains: emotional arguments are arguments that rely more or less heavily on the use and expression of emotion. These emotions are often communicated to us without benefit of language, or where language is purely ancillary to the main thrust of the communication. Naturally, there are great questions of degree: Communications will be more or less emotional running from highly or nearly pure emotional states to ones that are hardly emotional at all.

Emotional arguments are central to human disputation. They communicate to us aspects of a dispute partner's world that logical arguments do not. These include such elements as degree of commitment, depth, and extent of feeling, sincerity, and degree of resistance. These are important, nay vital, components in communicating a position. Imagine, if you will, how unconvincing would be the words of someone standing for, say, dean, who explained that she truly wanted the job, but spoke entirely in extremely flat unemotional language. Emotion often tells us what people believe, and, more significantly, that there is more going on behind their words. In many arguments, and especially intimate relationship arguments, emotion can be essential to break a deadlock by bringing attention to one dispute partner's level of involvement. The attempts to reduce these communications to another, perhaps more academically palatable mode, must ignore the fact that what is communicated is far more than the words or even actions used in the communication. That is why we must disdain reductionism: It is like translating poetry from one language to another— some of the sense may well be there, but the very heart of the poem is likely lost.

When Michael Gilbert describes what he calls emotional arguments, he seems to be referring to the utterances of each arguer: these arguments are emotional because each arguer, or at least one of them, feels emotions connected to the arguments. In this sense, if we are dealing with the interaction between arguers, then emotional arguments can be characterized as emotional if at least one of the arguers is expressing emotions. However, then, what is an emotion? Is it the 'raw' feeling, so to speak? Alternatively, is it, as Matte-Blanco defines it, a combination of physical, physiological, affective and logical expressions? The main issue for us now is that according to Matte-Blanco emotions involve propositional activity inherently, and not only as "ancillary to the main thrust of the argument," as Michael Gilbert says (Gilbert 1997, p. 84). Thus, I think that it is fruitful to examine the issue of emotional arguments a la Michael Gilbert from the perspective of Matte-Blanco: we need to be reminded that Matte-Blanco's view is that the logic inherent in emotion is rather on the side of symmetrical logic.

From a bi-logical point of view, it is possible to analyze Paula's emotional argumentation as follows: the 'A' grade in the course is perceived by her as an element of the set of elements needed to be accepted in a medical school. This may probably be true, since acceptance in competitive university places requires a high-grade standing. The issue is that given this reality, she is claiming, emotionally, that she needs the 'A' without deserving it, but as a matter of her need to be a medical doctor. Then the reasons that she provides for this claim show that she has identified the whole of her life with being a medical doctor. We may say then that this is a more symmetrical expression: her life is many things besides being a given professional, thus if she does not make medical school she could have several other choices open to her. However, she does not seem to be prepared to accept other choices, probably because she has a deep emotional identification with being a medical doctor. The depth of this identification is shown in the

fact that she sees no other options open to her. Therefore, we can understand that she feels that her life will be ruined, and that she will have noting left to live for. From a bi-logical perspective, then, we can assess her argument as highly symmetrical. Now, being this the case, it is also possible to notice that her emotional argument contains as well some significant elements of traditional logic. She is trying to persuade Professor Thome with awareness, the logical sequence is clear, there are premises and a conclusion, etc. In summary, Paula's argument is bi-logical.

It seems clear that the Multi-Modal approach to argumentation and the Bi-Logical interpretation of emotional arguments conceive of the relation of emotions and logic as much more unified that the strict logical tradition characteristic of Western Culture, and reflected in what I termed above the "Platonic Argument." Indeed, in these two conceptions, emotions and logic are seen, not only as not antagonistic, as De Sousa says, but as intimately related. However, the fact is that both conceptions, in opening the understanding of emotions and logic in such remarkable way, do still rely heavily on the strength of the logical mode. Michael Gilbert's understanding of emotional arguments seem to view them as traditional logical arguments in which emotions make a crucial appearance which must be accounted for in order to understand arguments, but these are still conceived in terms of premises and conclusion. In the case of Matte-Blanco, in his opening of the understanding of emotions as inherently bi-logical, he still relies on the logical mode in order to understand bi-logical expressions: the very notion of the Principle of Symmetry is based on traditional mathematical-logical concepts. Furthermore, Michael Gilbert wrote a very appealing paper in which he attempted to show that what is valid in the analysis of logical arguments can be applied as well to the analysis of emotional arguments: he is referring in this paper to the study of arguments in terms of relevance, adequacy or sufficiency and acceptability (Gilbert 2006). The issue remains in this treatment of emotional arguments, that they are conceived against the background of logical arguments.

Before finishing this paper with some reflections on the possible future of research of emotional arguments more in terms of emotions than logic, I would like to refer briefly to the work of Linda Carozza. She is a Philosophy Doctoral student at York University who has extensively researched the topic we are dealing with. At present she in completing her dissertation on this matter, but because it is not possible to refer to it now, I will comment on the work she did in her Master's Thesis at University of Windsor (Carozza 2002). In the thesis, she attempts to advance a view of emotional arguments, stemming from the work of Gilbert, Ben-Ze'ev, Douglas Walton, and others. I quote here a significant passage on her view of emotional arguments:

> Firstly, emotions can be used as reasons for a claim in an argument; both Gilbert and Ben-Ze'ev make this point. Secondly, arguers can make use of emotion in order to express their viewpoints, as reported by Gilbert. The emotional expression of arguments is important to the communication process involved between arguers. Thirdly, an arguer can appeal to the emotions of the audience as shown with Walton's discussion of an appeal to pity. And the last type of emotional argumentation that I referred to is a situation in which the arguer evokes emotion, specifically fear, in her audience.

This passage of Carozza's thesis shows indeed an advanced view of the significance of emotions in argumentation. It is true that this conception shows the great

relevance of emotions in the expression of arguments, but it is also framed by logical argumentation or conceived against its background.

4. CONCLUSION

I would like to conclude with a few reflections on this difficult and complex topic. At the outset of the work that led into this paper, I thought that I could venture into areas that seemed promising and exciting albeit unclear. In the abstract that I submitted to the organizers of the conference, I said that the paper would involve three areas. The first one dealing with the reason why logic is so overwhelming, indeed this idea relates to the enormous strength of the Platonic Argument. Secondly, the issue was to attempt to explore logical arguments from the perspective of emotions. Finally, an even more daring task, to explore emotional arguments from the perspective of emotions. These last two tasks were conceived rather from an intuitive perspective, Gilbert would say they were 'kiscerally' envisioned. At the end of this project, I had to accept that I could only handle task number one above, while the other two parts of the overall project will have to wait for future research.

In any event, I tried my best to get hold of as much literature on emotions that I could find. The amount of work done in this area is immense, and goes well beyond the powers of any individual: indeed it should constitute a job for group projects. Just to mention a few items: some authors, from a joint project involving physiology and theatre, have developed a perspective on emotions called "alba emoting." Alba emoting attempts to produce emotions, and essentially what they call "basic emotions" (such as joy, sadness, fear, anger, etc.), on the basis of a system of breathing and introspection. There is the work done by emotional psychotherapists such as Leslie Greenberg. There is as well a very interesting development in historiography that attempts to study the history of emotions. Well known is the work done on emotional intelligence. Finally, I want to mention that while I was in Chile, in the early stage of this project, I went over some books that deal with the education of emotions. I believe that it is fair to say that most of this work, if not all of it, treats emotions from a clear and definite logical perspective.

Therefore, we seem to be back to the influence of the Platonic Argument in our culture. However, the purpose is not to make away with logic, but to try to understand the relation between logic and emotion in a way that logic does not overwhelm emotions, and such that they can work together. This perspective would assume that it is perfectly possible to advance the study of emotional arguments by concentrating on the main aspects of logical arguments as Gilbert has done (in a way, echoing De Sousa's study of emotional truth). In addition, Matte-Blanco's study of Bi-Logic seems a sound attempt to understand emotions on a traditional logical basis. We should be able to say that the logical mode, whatever its limitations vis-à-vis emotions, has taken us very far in history, and that it would be a serious mistake to do away with it. And yet, we could conceive, even if it is only at a visceral level for the time being, that we should be able to attempt to deal with emotions from the perspective of emotions. My expectation is that it could be possible to show, perhaps, that the logical mode itself can exhibit features of the emotional mode.

Link to commentary

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REFERENCES

Carozza, L. (2002). *Traditional Argumentation Broadened*. M.A. Thesis, Philosophy Department, University of Windsor.

De Sousa, R. (1987). *The Rationality of Emotion*. Cambridge, Massachusetts: The MIT Press.

De Sousa, R. (2002). Emotional truth. *Proceedings of the Aristotelian Society* Suppl. Vol. 76: 247-263.

Fromm, E. (1968). *The Revolution of Hope*. New York: Harper and Row Publishers.

Fromm, E. (I969). *Escape from Freedom*. New York: Avon Books.

Freud, S. (1983). *The Interpretation of Dreams*. Harmondsworth: Penguin Books.

Freud, S. (1984). *On Metapsychology: The theory of psychoanalysis*. Harmondsworth: Penguin Books.

Freud, S. (1973). *New Introductory Lectures on Psychoanalysis*. Harmondsworth: Penguin Books.

Gilbert, M. (1997). *Coalescent Argumentation*. New Jersey: Lawrence Erlbaum Associates, Publishers.

Gilbert, M. (2006). Emotion, argumentation and informal logic. *Informal Logic* 24: 3; 245-264.

Greenberg, L. S. and S. C.Paivio (1997). *Working with Emotions in Psychotherapy*. New York: Guilford Press.

Matte-Blanco, I. (1975). *The Unconscious as Infinite Sets. An essay in bi-logic*. London: Duckworth.

Plato (1952). *Gorgias*. New York: Macmillan Publishing Company.

Plato (1972). *The Republic*. London: Oxford University Press.