ISSA Proceedings 2010 – Assuring Cooperation: From Prisoner's Dilemmas To Assurance Games To Mutual Cooperation

1. Introduction

How humans should collectively provide for public (and near public) goods – such as, national defense, environmental protection, infectious disease control, and shared moral values – and common pool resources is a topic to which argumentation theorists have paid little attention. Game theorists have usually modeled the problems of providing such goods as a multi-person prisoner's dilemma. Here I will argue that argumentation theorists need to contribute to the understanding of how to deal with both apparent prisoner's dilemmas and with assurance games. I will use classic hypothetical accounts of Thomas Hobbes and Jean Jacques Rousseau to illustrate the problems and the areas to which argumentation theorists should contribute.

2. Prisoner's dilemmas and assurance games

The prisoner's dilemma derives its name from the following story. Row and Column have been accused of some crime. They have agreed with each other not to confess to the crime. But the prosecuting attorney tells Row that if she confesses to the crime and Column remains silent, Row will not be punished. If both confess, both will go to jail for a medium length of time. If both remain silent, both will go to jail for a short time. Of course, since the prosecutor is offering the same deal to Column as she is offering to Row, if Row remains silent and Column confesses, then Row will go to jail for a long time and Column will not be punished. Row must decide whether she should cooperate with Column and remain silent, or defect and confess to the prosecutor. Column also faces this choice.

It would seem that it is most rational for Row to defect from her arrangement with Column and confess to the prosecutor, for if Row defects, she is better off no matter what Column does. That is, if Column defects, Row is better off defecting

(she'll get a medium-length sentence) than she is cooperating (she'll get a long sentence). And if Column cooperates, Row is still better off defecting (she'll receive no time in jail) than she is cooperating (she'll get a short time in jail). The same is true for Column. So if each wants to minimize her jail time, both should defect. But if both defect, both will get a medium-length sentence in jail. If, instead, both had cooperated, both would have had to spend only a short time in jail. The dilemma is simply that by doing what appears to be the rational thing for each to do, both will spend more time in jail than if both had acted irrationally.

		Column	
		cooperate	defect
Row	cooperate	*1*,1	*3*,0
	defect	*0*,3	*2*,2

The prisoner's dilemma in terms of years in jail

If Row wants to stay out of jail, she will defect. If Column wants to avoid jail, she will defect. But if both defect, each will spend two years in jail and collectively they will spend four years. If they both cooperate, they will each spend only one year in jail and collectively only two years. So, if each does that which would appear to keep her out of jail, they (collectively) will actually end up in jail for the longest period of time. (Call such prisoner's dilemmas productive prisoner's dilemmas. The contrast is with destructive prisoner's dilemmas where either cooperate/defect or defect/cooperate outcome is the collectively worst.)

The prisoner's dilemma in terms of the players' preferences:

		Column	
		cooperate	defect
Row	cooperate	*2*,2	*4*,1
	defect	*1*,4	*3*,3

A prisoner's dilemma is any situation in which defect/cooperate, cooperate/cooperate, defect/defect, and cooperate/defect are, in descending order, each player's preference ranking of the outcomes.

The collective action problem of providing for many public goods takes the form of a prisoner's dilemma. Thus peace, either within a society or between societies, refraining from polluting the environment, and having one's children get vaccinated against a potential epidemic all take the form of prisoner's dilemmas. (My refraining from polluting will not, by itself, save the environment and will only cost me extra effort. And my polluting if most others make the extra effort to avoid polluting will not ruin the environment. But that is true for you and for everyone else. So we all pollute and are worse off than if none of us had polluted.)

Game theorists have offered a variety of solutions to prisoner's dilemmas. Hobbes held (in effect) that, without fear of punishment to ensure the existence of devices for creating social cooperation, life for humans would be intolerable. Accordingly, he advanced an authority solution; we should collectively hire someone to institute a system of rules and measures (punishments, primarily) to change the payoffs so that we avoid the undesirable outcome of mutual defection. David Gauthier, the most eloquent and sophisticated of contemporary neo-Hobbesians, has argued that rational individuals seeing that instrumental rationality will lead them to sub-optimal outcomes whenever they face a prisoner's dilemma should change their conception of rationality and become constrained maximizers. Others have offered alternative solutions to the problems posed by prisoner's dilemmas; see, for example, the works of Cave, Danielson, MacIntosh, and Mintoff. But in the real world all the standard solutions to prisoner's dilemmas lead to assurance games. And, in the real world (as opposed to decision theory textbooks), coordinating in assurance games is difficult.

Assurance games are games in which both parties' best outcome is mutual cooperation (cooperate/cooperate). The second-best outcome is lone defection (defect/cooperate). Mutual defection (defect/defect) is ranked third, and lone cooperation (cooperate/defect) is the least-preferred outcome. Thus we get the following matrix.

An assurance game in terms of the players' preferences:

		Column	
		cooperate	defect
Row	cooperate	*1*,1	*4*,2
	defect	*2*,4	*3*,3

Again, the numbers represent the preferences for Row and Column. If we think of

mutual cooperation (cooperate/cooperate) as representing going along with the proposed solution to the prisoner's dilemma being faced by our group, universal cooperation (or as near universal cooperation as is practicable for human beings) is the best outcome for each. But being the only person to go along with the proposed solution is the worst outcome for each. While, in prisoner's dilemmas, individual instrumental rationality argues for defection, in an assurance game it argues both for cooperation (that way may yield the best outcome) and against it (that way may yield the worst outcome).

3. Hobbes's account of the foundation of civil society
In Leviathan, Hobbes tells us of the interaction of a group of individuals, roughly equal in their powers and degrees of vulnerability, who find themselves in circumstances where there is neither law nor morality, circumstances which have come to be called the state of nature. Being thrown together, the individuals are forced to interact, although they are by nature not inclined to cooperate. Hobbes argues that in such circumstances each person will be concerned primarily with his or her own survival. He further argues that, given this concern and the nature of the circumstances and certain general facts about human vulnerability to being harmed by others, each person will find it prudent to attack others before being attacked by them. The unhappy result is that their interaction leads to a condition Hobbes called war, and consequently life for each of them is "solitary, poor, nasty, brutish, and short" (*Leviathan*, Book I, Chapter 13). Hobbes then argues that it would be most rational for each to contract with every other to give his or her allegiance to an authoritarian sovereign in order to end the warfare of the state of nature and improve his or her life.

The circumstances in which Hobbes's contractors find themselves is a prisoner's dilemma, and Hobbes advocates that they adopt an authority solution to that dilemma. In this case it is best for each person individually to defect from paying the costs of a joint project to construct a peaceful civil society and to let others cooperate in paying for that project. This is because the defecting individual gains the benefits of a peaceful civil society without bearing any of the costs. Her second-best outcome is one where she and the others cooperate. In such a case, each person gets the benefits of social cooperation but has to pay some of the costs. The third-best outcome is for each and every one to defect from the project of social cooperation. In this case the defector gets no social benefits, since social cooperation does not occur, but at least she does not pay any costs. Finally, her

worst outcome is to be the lone contributor in trying to produce the benefits which social cooperation can bring and to do so while everyone else defects. In this case, no social cooperation comes into existence because only our lone co-operator has contributed in the attempt to bring it about and one person's cooperation is insufficient to create a cooperative civil society. So she bears the costs of this failed venture and gets no benefits. Since it is the case for every individual that she will be better off not contributing whether the others contribute or not, everyone rationally will choose not to contribute (or, in game-theoretic terms, to defect), and consequently no social cooperation will occur.

An authority solution to a prisoner's dilemma changes the payoff structure so that it becomes more rational to cooperate than to defect. As we have seen in a prisoner's dilemma, each agent realizes that she will be better off defecting than cooperating, no matter what the others do, and this fact leads to universal defection and the state of nature. To achieve the benefits of social cooperation, Hobbes proposes a Sovereign who has the nearly absolute power to alter the circumstances of each member of society so that it is in each person's interest to cooperate with the Hobbesian state. Hobbes's Sovereign, through threats of severe punishment for any defection from the cooperative project to build and maintain a peaceful civil society, changes the payoff structure so that it becomes most rational to cooperate in doing one's part to bring about and maintain civil society.

4. David Gauthier's account
The best neo-Hobbesian account of the rational foundations for morality and civil society is the one provided by David Gauthier in *Morals by Agreement*. Gauthier revises Hobbes's account in two ways. First he holds, in effect, that Hobbes was mistaken in characterizing his contractors as having an overriding concern with ensuring their own survival. Obviously, in order for the contractarian justification for our political arrangements to apply to all rational agents, it must take people as they are, regardless of their preferences. Hobbes's contractors, being primarily concerned with their own survival, are inordinately risk-averse. One can put a smaller premium on personal survival than Hobbes did and still be perfectly rational. Second, Gauthier holds that no external solution to the prisoner's dilemma is adequate. For the contractarian theorist to show that it is rational to accept the constraints of morality, it must be shown not just that it would be rational, in effect, to appoint or hire someone to make the world such that it

would be in our interest to cooperate; rather, the contractarian must show that it actually *is* in our rational self-interest to be moral. That is to say, Gauthier holds that any legitimate solution to the problem posed by the prisoner's dilemma-like structure of human interaction in the state of nature must be an *internal* solution, one that shows that it is rational to be, or to become, moral. Hobbes's solution is *external*, showing only that it is rational to create circumstances where, out of fear of the Sovereign, it is rational to behave *as though* one were a moral person.

Gauthier begins by arguing that instrumentally rational individuals will always defect in prisoner's dilemma situations. He calls such individuals straightforward maximizers. He notes that if individuals could jointly cooperate in prisoner's dilemmas, it would be in the individual interest of each to do so, but that this course of action is not going to be chosen because, for each actor, defecting when others cooperate is still better. Gauthier then argues – and this is his most important contribution to decision theory – that fully rational individuals who foresee that they will be in prisoner's dilemmas with others will change their conception of rationality. Seeing that they are frequently going to be in prisoner's dilemmas and seeing that they will continually get the third-best (second-worst) outcome if they remain straightforward maximizers, they rationally ought to change their conception of rationality and adopt the principle of constrained maximization. A constrained maximizer, as Gauthier calls those who adopt this conception of rationality, is one who maximizes expected utility when in individual choice situations and who, when in prisoner's dilemma games, defects unless she is playing with another constrained maximizer, in which case she cooperates. Thus, a group of constrained maximizers will cooperate to produce socially beneficial outcomes for themselves and they will do so entirely because of considerations internal to instrumental rationality. Consequently, the need for a Hobbesian Sovereign is removed.

From the point of view of game theory, perhaps the most important aspect of Gauthier's argument is that it reveals that the instrumental conception of rationality is far richer than had initially been thought. It may be that the conception of rationality which, on the surface, only tells one how to get what one wants also tells one what the limits of what one can rationally want actually are. This is a Hobbesian result which Hobbes himself never realized.

5. *Hobbesian contractarianism*
We can sum up neo-Hobbesian contractarianism as follows.

(1) We should not presume that morality exists prior to human interaction.

(2) The function of morality is to constrain human interaction to make that interaction more likely to further the interests of those involved.

(3) Individuals in a state of nature are in a prisoner's dilemma.

(4) Such individuals take no interest in the interests of others but seek only to further their own interests (they measure their well-being solely in terms of their own utility).

(5) Such individuals are able to follow long and complex arguments about what to do in the state of nature. In Hobbes's case, the arguments show them that they should pre-emptively attack others and, realizing that this is true for everyone, that they should appoint an authority to impose law and morality upon them. In Gauthier's case, the arguments lead them to change their conception of rationality to make themselves into more cooperative individuals. (6) The chosen social arrangements favour bourgeois stability. (For a more developed statement of these characteristics, see Wein 1986.)

6. Rousseau's critique

In Part II of his *Discourse on Inequality*, Rousseau mounts an insightful critique of bourgeois society. He tries to show that bourgeois social arrangements are attractive, stable, and nevertheless the principal sources of our misery. In the midst of this critique, Rousseau tells what has come to be known as the stag hunt story, a story of a group of hunters who go out into the forest to hunt for game. If each hunts on his own, he will be able to catch a few rabbits and survive. Alternatively, the hunters can cooperate and together hunt for a stag, surround it, kill it, and then eat very well. But if even one hunter abandons the cooperative stag hunt to catch rabbits, the stag will escape through the "hole" that the hunter who has gone after a rabbit has left in the "fence". It is rational for each to continue to cooperate in the stag hunt rather than to defect to hunt for rabbits if, and only if, each hunter has adequate assurance that all others will also continue to cooperate. If any hunter lacks the assurance that all the others will continue to cooperate in the stag hunt, then she should abandon the stage hunt and go chase rabbits. This assurance that the other hunters will hunt the stag rather than chasing a rabbit is something every hunter needs and something that every hunter knows every other hunter needs.

The hunters are in an assurance game. The best outcome for each is for joint cooperation resulting in lots of venison for everyone. The next-best outcome is to

hunt rabbits on one's own. The worst outcome is to continue the stag hunt when even one other hunter has abandoned it to chase rabbits.

So far as the circumstances of the state of nature, and the character of individuals in it, go, Rousseau is actually more hard-nosed than either Hobbes or Gauthier is. About the individual hunter who goes after a passing rabbit, Rousseau says, "there can be no doubt that he pursued it without scruple, and that having obtained his prey, he cared very little about having caused his Companions to miss theirs". So Rousseau's noble savages are completely free of scruples and of guilt or remorse for knowingly doing things that harm others. (The others are harmed in one of two ways. Those who continue the now-futile stag hunt miss their chance to eat. Those who go rabbit hunting are also harmed in that a successful stag hunt is not a real option for them, so their negative liberty is decreased.) Hobbes utilizes emotions (especially fear) to motivate his contractors. Rousseau avoids reliance on this crutch.

In addition, Rousseau thinks that, by nature, humans in such a situation will not cooperate. This is because, unlike Hobbes's and Gauthier's contractors, they are unwilling to follow long trains of reasoning about what is in their individual best interest and thus are such utter strangers to foresight that "far from being concerned about a distant future, they did not even think of the next day". By contrast, Hobbes's natural humans do so much thinking about the future that they work themselves through difficult chains of reasoning to conclude that each should launch a pre-emptive strike against others, a conclusion which leads them collectively into a "war of all against all" in which each of them lives a life that is "solitary, poor, nasty, brutish, and short".

Furthermore, unlike Hobbes's contractors, Rousseau's hunters have no strong emotions to motivate them: "having obtained his prey, he cared very little about having caused his fellows to miss their opportunity". Thus, even though Rousseau's hunters are in a situation in which the cooperative outcome would seem to be easier to attain than it is for either Hobbes's or Gauthier's rational maximizers, Rousseau's hunters do not cooperate. Given this, the common portrayal of Hobbes as tough-minded and Rousseau as soft-minded simply does not wash. We cannot dismiss Rousseau as not being realistic enough – or as being overly optimistic – about the nature of pre-social humans.

From the hard-nosed perspective of contemporary neo-Hobbesian contractarian

theory, there is much to admire in Rousseau's argument. If it is correct, it shows that accounts like Hobbes's and Gauthier's (which are frequently criticized for portraying human nature in an unkind light) are, if anything, overly optimistic. They succeed in showing that cooperation is rational *only if* they imbue their contractors either with strong emotions (as Hobbes does with fear of death) or with a level of prudence which is far beyond our natural capacities. Scholars who have studied the arguments are still divided over what Hobbes's and Gauthier's arguments actually are and whether they succeed. Yet Hobbes's and Gauthier's contractors have to have the ability to follow long trains of reasoning and see that somewhere – perhaps far down the road – it is in their interest to cooperate with each other (whether by appointing a Sovereign to make them afraid not to cooperate, as Hobbes suggests, or by changing their conception of rationality to come to develop commitments to cooperation, as Gauthier suggests). Rousseau shows that, given how humans *actually are*, rationality conceived of as maximization of one's self-interest will not lead to mutually beneficial cooperation even in simple assurance games, let alone in prisoner's dilemmas. So, Rousseau's simple stag hunt story provides the basis for a devastating critique of the entire Hobbesian contractarian project.

7. *Rousseau's assurance*

There is at least one respect in which Rousseau's way of looking at the problem of how to characterize our collective-action problems is deeper than the Hobbesian approach is. Of course, both thinkers set up the state of nature in such a way that there is good reason both for us all to cooperate and for each of us not to cooperate with others. Thus, both capture the core issue confronting those who would offer a rigorous account of human sociability. But Rousseau's account goes deeper in just this respect: every solution to a prisoner's dilemma really just moves one from a prisoner's dilemma into an assurance game. (Of course, no theoretical *solution* turns a prisoner's dilemma into an assurance game, since the term "solution" is a success term, and something that moves people from one game where they will reach a sub-optimal outcome to another where they will also reach a sub-optimal outcome is not a success and hence not a "solution".) But, in practical terms, all the real-life practices that would most closely mimic the various theoretical solutions to the problem of ending up with a sub-optimal outcome in a prisoner's dilemma do lead to problems that are, in effect, best modeled as assurance games. Thus, in practical terms, one always needs to know whether, as a matter of fact (rather than of rational decision theory) enough other

people (or nations, religious groups, organizations, *et cetera*) are swayed by the alleged solution to the problem of the prisoner's dilemma to actually act on that solution and avoid the sub-optimal outcome which occurs when people are ignorant of the solution.

We can see this if we consider the sort of solution offered by Hobbes – namely, an authority solution. If I find myself in a collection of people who are in a multi-person prisoner's dilemma and the possibility of an authority solution arises, I need to ask myself whether enough other people are going to take the authority seriously enough for it to really be an authority. Dealing with this question puts one in an assurance game. I should fear the "authority" if and only if I think enough others will fear it. Otherwise it will not be an authority and, hence, I would be foolish to be the only one to obey it in the current circumstances. Of course, everyone else faces the same question, and so we are collectively in an assurance game.

Similarly, on H.L.A. Hart's account of what it is to be a legal system, there has to be a sufficient number of officials who accept the (potential) rule of recognition as binding before it will actually become the legal system's rule of recognition. But each (potential) official needs sufficient assurance that other (potential) officials will take the (potential) rule of recognition to be binding on them in order for it (the potential rule of recognition) to, in fact, be binding and, hence, for there to be a legal system. Each official is in an assurance game with the other potential legal officials. Of course, Hart's legal theory does not claim that "authority solutions" (in the sense used in game theory) are the only solutions to assurance games. Indeed, Hart devotes much of *The Concept of Law* to showing that authority solutions such as that offered by John Austin are not the only solutions – and, indeed are not adequate solutions – to the problem of the true nature of legal authority. Hart's theory is almost universally understood (by both legal positivists and its critics) as a great legal positivist theory about the concept of law. It is better read as an account of the nature (or concept) of the rule of law. We have an authority if, and only if, enough of us take it to be the case that we have an authority. I should cooperate with others if, but only if, I think enough others will cooperate also. If there are enough others cooperating, cooperating becomes my best outcome. But if an insufficient number of others take as an authority what I think to be an authority, I will be worse off obeying the (supposed) authority and better off to simply ignore it (defect). That is, I am in an assurance game, and so

is everyone else. Similar, though, more complex considerations apply to the splendid planning-based theory of law advanced by Scott Shapiro in *Legality*. A society has a legal system if, but only if, enough members of the society engage in the shared cooperative activity needed to instantiate the complex plan that creates, sustains, and is its legal system.

Roughly the same considerations apply to Gauthier's solution to prisoner's dilemmas. Assume that I find myself in a community of straightforward maximizers who have discovered both the wisdom and the capacity to become constrained maximizers. I need to know that enough others really are constrained maximizers (or are about to become such) before it is rational for me to change my conception of rationality from straightforward maximization to constrained maximization, and I need to be sufficiently confident of being able to correctly sort constrained maximizers from straightforward maximizers. Because everyone else is in the same situation, we collectively face an assurance game.

In practice, communities which find themselves in prisoner's dilemmas where there is a game-theoretic solution to their problem, are always moved into an assurance game. Thus, if in real-life, we are going to solve prisoner's dilemmas, we need to solve the assurance problems that (partial game-theoretic) solutions to them always involve. If a group of us finds ourselves in a prisoner's dilemma where some internal solution is open to us – say, we all come to feel there is a moral duty to cooperate whenever such circumstances arise – then in the real world, where there inevitably are going to be some defectors, each reflective person who finds herself in such a situation must ask herself whether she has sufficient assurance that the number of non-defectors – the number of people who are, as a matter of fact, going to do their duty – is great enough to achieve the benefits of collective cooperation. When she lacks such assurance, she benefits both herself and her society if, like Rousseau's hunter, she refuses without scruple to waste her efforts on what she judges to be a futile collectivist project. Since this is true for all reflective persons in the wake of any internal solution to a productive prisoner's dilemma, we all face an assurance problem whenever we develop a would-be solution to a prisoner's dilemma.

As David Lewis shows in *Convention*, some assurance problems can be overcome through the natural development of appropriate conventions, usually those based on focal point solutions. The connections between Lewis's work and argumentation theory have been usefully explored in Eemeren and Grootendorst

(1984). But, as Joseph Heath suggests in *Following the Rules*, "the theory convention provides, at best, only a solution to the problem of coordination. Focal point solutions, at least of the type . . . Lewis consider[s], have absolutely no bite when it comes to resolving cooperation problems" (page, 58). While Heath's criticism is too strong, as can be seen by examining the work done by Andrei Marmor in *Social Conventions: From Language to Law*, the sorts of conventions Lewis discusses can only do limited work in helping humans avoid or overcome cooperation problems. Furthermore, whatever the role of conventions in helping us overcome some *repeated* situations where sub-optimal outcomes threaten to undermine attempts at cooperation, they play at most a secondary role in dealing with one-shot dilemma games. And, as Hobbes and Gauthier both recognize, rational individuals face quite different problems when confronting one-time prisoner's dilemma games than they do in *iterated* prisoner's dilemmas.

Rousseau both sees the problem of how to explain and justify cooperative interaction among humans more clearly than does Hobbes and starts us on the process of offering a deeper, more satisfying account of how to both explain and justify civil society. This is because, unlike Hobbes and Gauthier, whose thoughts on these matters were always put in terms of individual utility maximization, Rousseau thought about things in terms of basic goods. He pondered such issues in terms of what constraints each person would be willing to impose on herself and would want imposed on those with whom she was interacting, realizing both that it is only through self-imposed constraints that we attain full freedom and that society and civilization depend on the reciprocal acceptance of such basic goods.

8. Basic goods
Rousseau, like Kant, held that true freedom consists not simply in the liberty to do what one wants but in the power to act according to rules or principles one has given oneself. Rousseau thinks of social cooperation not (as Hobbes, Gauthier, and most decision theorists do) simply in terms of how to best further the pre-interaction interests of rational individuals but in terms of what constraints it would be rational to impose on oneself (given that others were going to impose the same constraints on themselves) in order for us all to live in civil society. Basic goods, being those characteristics one would be willing to have in oneself and would want in those one expects to be interacting with, are not discussed explicitly by Rousseau. Yet it is clear that Rousseau's approach most closely

mirrors the basic goods approach. He approaches issues about the value of civil society not by asking whether the proposed social arrangements provide more of what is valued in a state of nature but by asking what arrangements can best serve those of us destined to live among others. In so doing, he sees that civilization needs to be viewed from many angles and that its virtues and vices will not be adequately understood if we simply consider – as Hobbes and Gauthier do – whether joining such a society would be a good deal. In this, he anticipates the idea that a developed society is not simply a wealthy society; rather it is a society where each person has the best opportunity to become as fully civilized as is possible, given the resources available to that society. He wants us to evaluate civil society not by a simplistic metric but by having each of us reflect upon how it can best serve to enrich our very existence. While Hobbesians evaluate society by asking if, when living in society, one has more of what one wanted outside society, Rousseau wants us to reflect on how to arrange our mutual interaction so that it enables us to become fully rational and fully civilized.

Put in terms of the stag hunt story, Rousseau envisages a civil society which not only provides us with more meat but which also ensures that our coming to acquire that meat is – and is understood by all as being – the result of a cooperative endeavour among true natural equals. For the noble stag hunters, rumours that the rabbits are but skin and bones would act as an assurance amplifier, giving each person more reason to continue with the stag hunt than to go off hunting rabbits. By contrast, discovery that the other hunters were buying copies of *501 Ways to Stew a Rabbit* would act as an assurance damper, giving each hunter less assurance that others would continue to hunt deer rather than go off to chase rabbits. While Hobbes employs an external Sovereign to introduce a system of punishment to ensure our cooperation (employing fear *within* civil society much as he employed it in his argument that we should *form* civil society), Rousseau sees development of the capacity to cooperate as constitutive of being a fully civilized person. He also helps us see that we need to design our social arrangements so that they are themselves assurance amplifiers, structures which make us willing co-operators not because we fear what will happen if we fail to cooperate but because cooperating with others best expresses what it is to be a civilized person who is truly free.

9. Progress in social theory
Ideas from both Hobbes and Rousseau can be conjoined to help us see the way to

solving many of our increasingly more pressing global collective-action problems. The old attitude that Hobbesians are so conservative and authoritarian that they have little to contribute to contemporary problems, or that Rousseau's insights are too collectivist for contemporary problems, is both simplistic and untenable. While Hobbes held many very conservative political positions, and while many conservatives have been attracted to Hobbes's approach to grounding political obligation, there is nothing inherently conservative about economic contractarianism. (Not all Hobbes's views were conservative. He was one of the first to hold that the state has an obligation to provide welfare payments to the poor; see *Leviathan*, Part 2, Chapter 30, the section titled *Publique Charity*. For an argument for welfare-state liberalism based on neo-Hobbesian ideas, see Wein 1994.)

Furthermore, with so much of the world's economic activity now embodying the neo-liberal ideology of Hobbesian possessive individualism, those who seek to ensure that civil society retains realms where cooperative, caring enterprises are sustained and nurtured need to look to Rousseau's insights for guidance on how best to amplify the assurance each of us may properly have regarding the cooperative capacities and inclinations of her fellows. It is to our detriment that we neglect either Hobbes or Rousseau. (For an argument that, with the demise of deconstructionism and the plunge in popularity of postmodernism, those who seek to develop a rigorous feminist theory of justice should turn to a combination of the insights of Hobbes and Rousseau, see Wein 1997.)

Of course what actually is an assurance damper or an assurance amplifier is an ultimately an empirical question. But to know what data we need to answer that question, a great deal of very careful conceptual analysis – on matters like the distinction between destructive and productive prisoner's dilemmas, the forms and nature of various basic goods, and the limits of human cooperation – is needed. (How else can we in find the relevant data and ascertain how to read those data?) Just as game theorists need to do more work to figure out how best to model the various collective action problems we now face, it is incumbent upon argumentation theorists to develop the conceptual tools for dealing with that information before can we ascertain which things really are assurance dampers (and how to prevent them from arising) and which things actually serve to act as assurance amplifiers (and how we can best go about nurturing them). It is only after we better understand the nature of the parametric choices that confront us

that will we be in a position to go about dealing with these complex empirical issues**[i]**.

NOTE
[i] I benefited from extremely helpful discussion when I presented these ideas at the International Society for the Study of Argumentation conference in Amsterdam on July 1st 2010. I am grateful for helpful comments from two anonymous referees, and for discussion with Wm. Barthelemy, Duncan, MacIntosh, Malcolm Murray, and especially with Thea E. Smith.

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ISSA Proceedings 2010 – Arguing Towards Truth: The Case Of The Periodic Table

1. Preliminaries

For over a decade I have been presenting papers that include a theory of emerging truth that I feel is contribution towards understanding the relation of substantive arguments to their evaluation (Weinstein, 2009, 2007, 2006, 2006a, 2002, 1999). Substantive arguments address crucial issues of concern and so, invariably in the modern context, rely on the fruits of inquiry for their substance. This raises deep epistemological issues; for inquiry is ultimately evaluated on its epistemological adequacy and basic epistemological concepts are none to easy to exemplify in the musings of human beings. The traditional poles are knowledge and belief; in modern argumentation theory this is reflected in the distinction been acceptance and truth (Johnson, 2000). Crudely put, the rhetorical concern of acceptance is contrasted to the logical concern for truth with acceptability being a bridge between them in much of informal logic and argumentation theory.

It seems to me that the legacy of formal logic, embedded without much notice, in much of informal logic and argumentation theory creates a problem for an account of the logic of substantive inquiry and a muscular identification of acceptability with truth. The root problem is the model of argument as premise conclusion relations and argumentation seen as a series of such. In a recursive model, so natural in formal systems, evaluation works from the bottom up, in the standard case, by assigning truth to propositions. But ascertaining the truth of elements, except in relatively trivial circumstances, points away from the particulars and towards the context. This is particularly true of inquiry, and so is

essentially true of substantive arguments that rely on the fruits of inquiry. For if we take the best of the fruits of inquiry available we find that truth of elements, although frequently a pressing local issue, is rarely the issue that ultimately drives the inquiry. Truth of elements is superseded by what one might call, network concerns. And it is upon network relations that an adequate notion of truth in inquiry can be constructed. My ultimate goal is to defend a model of emerging truth as a bridge between acceptability and truth. That is, to indicate a logical structure for acceptability that, at the limit, is as true as we can ever hope for. In this paper I want to show that the model of emerging truth captures the large structure of the inquiry that supports the acceptance of the Periodic Table, about as true a thing as we can expect.

My model of emerging truth (abbreviated in the technical appendix) relies on three intuitive network principles, concilience that is the increasing adequacy of empirical description over time, breadth, the scope of a set of theoretic constructs in application to a range of empirical descriptions and depth, a measure of levels of theoretic redefinitions each one of which results in increasing breadth and higher levels of concilience.

A theory of truth that relies on the satisfaction of these three constraints creates immediate problems if we are to accept standard logical relations. The most pressing within inquiry is the relation of a generalization and its consequences to counter examples. Without going into detail here, the model of truth supports a principled description of the relation of counter-examples to warranted claims that permits a comparative evaluation to be made rather than a forced rejection of one or the other as in the standard account (technical appendix, Part II). Such a radical departure from standard logic requires strong support and although my theory of truth offers a theoretic framework, without a clear empirical model my views are easily overlooked as fanciful.

2. Why the periodic table?

If you ask any sane relatively well-educated person what the world is really made of, the response is likely to be something about atoms for molecules. Why is this so? Why is the prevailing ontology of the age based on modern physical science? What prompted this ontological revision away from ordinary objects as primary and to the exclusion of the host of alternative culturally embedded views especially those supported by religion and a variety of traditional explanatory frameworks, whether lumped together as folklore or more positively as common

sense? The obvious explanation is the growing conviction that science yields truth.

There is no doubt that the shift is a result of the amazing practical advances of the last few centuries, the entire range of scientific marvels put at our disposal, from cyclotrons, to computers, from the amazing results of material science and the creation of synthetics to the understanding of the very stuff of genetic coding in the cell. It seem equally obvious to me that the one object that anchors this enormous array of understanding and accomplishment is the Periodic Table of Elements.

The concern for truth that disputation reflected as the Periodic Table advanced dialectically in light of changing evidence and competing theoretic visions mirrors the three main considerations that form the standard accounts of truth in the philosophical literature. The over-arching consideration is the immediate pragmatic advantage in terms of the goals of inquiry, that is an increasing empirical adequacy and the depth of cogency of theoretic understanding. These pragmatic considerations, along practical effectiveness in relation to applications of inquiry in engineering and other scientific endeavors, point to the major epistemological considerations that practical success reflects, that is, higher conformity to expectations, empirical adequacy, the basic metaphor for correspondence in the standard theory of truth, and increasing inferential adequacy and computational accuracy, coherence in the standard account. The relation between these and my trio, concilience, breadth and depth, can only be hinted at in the abbreviated version. Roughly, each of my three contributes in a different way to the standard three. But I hold my account liable to these standard desiderata as well as to the demand of descriptive adequacy. So if my theory of truth in inquiry is adequate, it must be proved against the Periodic Table.

My original conviction was based on a rather informal reading of Chemistry and its history. Despite the relative superficiality of my engagement, it seemed apparent that the salient aspects of truth that my model identified were readily seen within the history of chemical advancement and its gradual uncovering of the keystone around which the explanatory framework of physical science was to be built. It was not until recently that I was able to test my intuition against an available and expert account of the development of the Periodic Table. Such an account now exists in the thoughtful and well-researched philosophical history of the table by philosopher and historian of chemistry Erik Scerri (2007). I rely

heavily on his account for specifics.

But first, a brief comment about arguments. It seems safe to say that for scientifically oriented argumentation theorists exploring the literature still available in actual records of argumentation among the Chemists involved would be fascinating. Eavesdropping on their discussions would even be more fascinating for those who see the study of argumentation as involving rhetorical details and actual argumentative exchanges between interlocutors. Such an approach is natural within conceptions of argument seen as debates and dialogue games. But in inquiry, so it seems to me the perspective needs to be broader than 'persuasion dialogues.' An alternative looks at argumentation in the large, that is, seeing how the dispute evolves around the key poles that drive the actual developing positions in response to the activities, both verbal and material, of the discussants. Such a perspective in the theory of argument permits a more logical turn, exposing the shifting epistemological structure that undergirds the dialogue in so far as it is reasonable. It enables the epistemological core to be seen. For in this larger sense the rationality of the enterprise can be seen not merely in terms of individuals and their beliefs, but in the gradual exposure of the warrants underlying the points at issue. In what follows I will indicate the participants as points of reference for those who might want to see to what extent the actual dialogues among chemists reflect the epistemological warrants. Scerri in has marvelous and detailed account presents the details of the competing positions and their shifts as the evidence and theories change. My purpose here is to identify the large epistemological structures that, in so far as I am correct, ultimately warrant the present consensus.

3. The Periodic Table
The first realization that sets the stage for a renegotiation of the theory of truth is that there is no clear candidate for what the Periodic Table of Elements is. That is not to say that the choices are random or wide spread, but rather that even after more than a century, the debate as to the most adequate format for the Periodic Table of Elements is ongoing (among other things, the placement of the rare earths remains a point of contention, pp. 21-24). For now and for the foreseeable future both the organization and details of the Periodic Table are open to revision in light of the ends for which it is constructed. To account for this we require some details.

The work of John Dalton at the beginning of the 19th century is a convenient

starting place for the discussion of the Periodic Table since he postulated that 'the weights of atoms would serve as a kind of bridge between the realm of microscopic unobservable atoms and the world of observable properties' (p. 34). This was no purely metaphysical position, but rather reflected the revolution in Chemistry that included two key ideas. Lavoisier took weighing residual elements after chemical decomposition as the primary source of data and Dalton maintained that such decomposition resulted in identifiable atoms. This was Dalton's reconstitution of the ancient idea of elements, now transformed from ordinary substances to elements that were the result of chemical decomposition. Studies of a range of gases, by 1805, yielded a table of atomic and molecular weights that supported the 'long recognized law of constant proportions...when any two elements combine together, for example, hydrogen and oxygen, they always do so in a constant ratio of their masses (pp. 35-36). Scerri epitomizes this period, begun as early as the last decade of the 18th century by Benjamin Richter who published a table of equivalent weights, as that of finding meaningful quantitative relationships among the elements. A period that yielded both the possibility of precision and opened theoretic descriptions to all of the vagaries of empirical measurements: open to the full problematic of weakly supported theories, new and developing procedures of measurement, and the complex nature of the measurement process itself, measures that were open to change and refinement as techniques were improved and experimenters gained more experience.

In hindsight many the problems that confronted the chemists reflected a conceptual issue expressed in empirical incongruities: atomic weight is not invariably reflected in equivalent weight and so the underlying structure was not readily ascertained by finding equivalent weights, the core empirical tool. For without knowing the correct chemical formula, there is no way to coordinate the correct proportions against the observed measurements of the weight of component elements in ordinary occurring chemical compounds. And as it turns out , "the question of finding the right formula for compounds was only conclusively resolved a good deal later when the concept of valency, the combining power of particular elements was clarified by chemists in the decade that followed by Edward Frankland and Auguste Kekule working separately' (p. 37).

The initial problems, including Dalton's infamous mistaken formula for water,

were the result of empirical incongruities seen in light of a core integrating hypothesis: the law of definite proportion by volume, expressed in 1809 by Guy Lusac as: 'The volume of gases entering into a chemical reaction and the gaseous products are in a ratio of small integers' (p. 37). Held as almost a regulative principle the law was confronted with countless counterexamples, recalcitrant, yet often roughly accurate, measurements the reflected the lack of knowledge of the time. A common occurrence throughout the history of science, early chemistry reflects the competing pull of empirical adequacy and theoretic clarity. Not one to the exclusion of the other, but both in an uneasy balance. This reflected many disputes but the one that reflects the deepest thread that runs through the history of the Table is Prout's Hypothesis. Scerri identifies the key insight: the rather remarkable fact that 'many of the equivalent weights and atomic weights appeared to be approximately whole number multiples of the weights of hydrogen' (p. 38). This was based on the increasing numbers of tables of atomic weights available in the first decades of the 19th century. But it was not merely increasing data that drove the science. The two poles, not surprisingly, were the attempts to offer empirically adequate descriptions that demonstrate sufficient structural integrity in light of underlying theoretic assumptions exemplified in the law of definite proportions. Prout's hypothesis, that elements are composed of hydrogen, first indicated in an anonymous publication in 1819 offered a deeply unifying insight, if everything was composed of one element the law of definite proportions was an immediate corollary. The bold hypothesis was based on 'rounding off' empirical values of the of the comparative weights of elements as an index of the atomic weights, to whole number multiples of 1, the presumed atomic weight of hydrogen. Available data created roadblocks. In 1825, the noted chemist Jacob Berzelius 'compiled a set of improved atomic weights the disproved Prout's hypothesis (p. 40). Prout's hypothesis, however, whatever its empirical difficulties 'proved to be very fruitful because it encouraged the determination of accurate atomic weights by numerous chemists who were trying to either confirm or refute it' (p.42)

But there was more to the story. Quantitative relationships have an essential yield beyond the increased ability to offer precise descriptions that may be subjected to increasingly stringent empirical testing. That is, they open themselves to structural interpretations. Available data quickly afforded systematization as a prelude to eventual theoretic adequacy. The first effort to systematize known empirical results can be attributed to the German chemist Johann Dobreiner who

in 1817 constructed triples of elements which showed chemical similarities and most essentially showed 'an important numerical relationship, namely, that the equivalent weight, or atomic weight 'of the middle is the approximate mean of the values of the two flanking elements in the triad' (p. 42). This moved the focus from constructing tables of atomic weights to looking more closely at the relationships among known values. It led to an initial structural unification of the table of elements through the identification of more triad, triples of elements that show clear ratios between their equivalent weights and therefore their presumed atomic weights. Other chemists, notably Max Pettenkofer and Peter Kremers, worked with similar constructions, which culminated in Ernst Lensser fitting all 58 known elements into a structure of 20 triads. But the problem of ascertaining atomic weights still resulted in competing values and contrasting constructions. By 1843 a precursor to the periodic table was published by Leopold Gmelin, a system that combined some 53 elements in an array that reflected the chemical and mathematical properties, accurately organized most known elements in groups that would later be reflected the underlying principles in the periodic table.

Scerri concludes. 'It is rather surprising that both Prout's hypothesis and the notion of triads are essentially correct and appeared problematic only because the early researchers were working with the wrong data' (p. 61). Prout is, of course, correct in seeing hydrogen as the basis the elements, since hydrogen with one proton serves as the basis as we move across the Periodic Table, each element adding protons in whole number ratios based on hydrogen with one proton. The number of protons yielding the final organizational principle of the table, once atomic number, distinguished from atomic weight which includes the contribution from neutrons unknown until the mid-20th century. And similarly for earlier structural models based on triads. It was only after the famous hypothesis of Amadeo Avogadro of 1811 was championed by Stanislao Cannizzaro in the midcentury that chemists had a firm enough footing to develop increasingly adequate measurements of atomic weight and began to see the shape of the underlying relationships.

The increase in triads is an example of the most basic of the requirements for sustaining a generalization against counterexamples. The empirical evidence, its models, form a model chain, technically, there is a function that maps the hypothesis onto a set of models (or near models) and the model chain is

progressive, that is, the set of models in increasing over time (technical appendix, Part I, 1.1). The dialectical force of counterexamples, rather than requiring rejection of either pair requires an adjudication of the power of the counterexample against the weight of the model chain that it confutes. That is not to reject the counterexample, rather to moderate its dialectical force (technical appendix, Part II). This requires a number of assumptions about the models. The first is the assumption that models can be ordered, and the second that approximation relationships can be defined that support the ordering. The latter is crucial, approximation relations (technically neighborhood relations on a field of sets) enable complex relationships among evidence of all sorts to be defined. Intuitively, approximation relations are afforded indices of the goodness of fit between the evidence and the model in respect to the terms and relationships expressed in a generalization. This has a deep affinity to the notion of acceptability in argument theory, since how narrowly the acceptable approximations need to be is determined a posteriori in light of the practice in the field. This is subject to debate but is no mere sociological construct, since there is an additional requirement. The model chain must prove to be progressive, that is the chain of models must be increasing and be an increasingly better approximations over time (technical appendix, Part I, 1.2).

This is evident in the history of the Periodic Table. By the 1860's the discovery of triads had moved further into the beginnings of the periodic system. By the 1880's a number of individuals could be credited with beginning a systematization of the elements. Scerri, in addition to Dimitri Mendeleev and Julius Lothar Meyer, credits Alexendre De Chancourtois and John Newlands, William Odling and Gustavus Hinrichs.
Systematization was made possible by the improved methods for determining atomic weights by, among others, Stanislao Cannizzaro and a clear distinction between molecular and atomic weight. As Scerri puts it 'the relative weight of the known elements could be compare in a reliable manner, although a number of these values were still incorrect and would be corrected only by the discovery of the periodic system' (p. 67). Systematization was supported by the discovery of a number of new elements that fit within the preliminary organizing structures and the focus was moved towards experimental outcomes without much concern for the theoretic pressure of Prout's hypothesis which fell out of favor as an organizing principle as the idea of simple arithmetic relationships among the elements proved harder to sustain in the light of growing body of empirical

evidence.

From the point of view of my construction what was persuasive was the availability of model chains that in and of themselves were progressive (technical appendix, Part I, 1.3). That is, series of models could be connected though approximation relations despite the lack of an underlying and unifying hypotheses. And whatever the details of goodness of fit, the structure itself took precedence over both deep theory (Prout's hypothesis) in the name of network of models connected by reasonably clear if evolving, quantitative and chemical relationships.

The hasty rejection of Prout's hypothesis at this juncture, despite its role as encapsulating the fundamental intuition behind the search of quantitative relationships, offers window into what a theory of emerging truth requires. In the standard model of, for example, Karl Popper, counterexamples force the rejection of the underlying hypothesis. But as often, the counterexample is accepted, but the hypothesis persists, continuing as the basis for the search for theoretic relationships. The intuition that prompted the search for a unifying structure in terms of which the mathematical and chemical properties of the elements could be organized and displayed was sustained in the light of countervailing empirical evidence. Making sense of this requires a more flexible logic, one that permits of a temporary focus on a subset of the properties and relations within of a model while sustaining the set of models deemed adequate in the larger sense exhibited by the connections among models in a unifying theoretical structure. And as the century progressed the search for such a structure began to bear fruit.

By the turn of the century the core intuition, combining chemical affinities and mathematical measurements resulted in a number of proposals that pointed towards the Periodic Table. John Newland introduced the idea of structural level with his 'law of octaves', the geologist, Alexander De Chancourtois, and chemists William Odling and Gustavus Hinrichs offered structural accounts of know elements. All this culminated in the work of Lothar Meyer and most famously Dimitri Mendeleev who are credited as the key progenitors of the periodic table. The proliferation of structured arrays of models reflected the key epistemic property I call 'model chain progressive' (technical appendix, Part I, 1.3). That is model chains were themselves being linked in an expanding array such that the set of model chains was itself increasing both in number and in empirical adequacy. The culmination was a series of publications by Mendeleev beginning

in 1869, which codified and refined the Periodic Table in various editions of his textbook, The Principles of Chemistry, which by 1891 was available in French, German and English.

Mendeleev encapsulated his findings in eight points:
'1: The elements if arranged according to their atomic weights, exhibit *periodicity* of properties
2. Elements which are similar as regards their chemical properties have atomic weights, which are either of nearly the same values...
3. The arrangements of the elements, or of groups of elements, the order of their atomic weights corresponds to their so-called *valences*...
4. The elements which are most widely diffused have *small* atomic weights.
5. The magnitude of the atomic weight determines the character of the elements, just as the *magnitude* of the molecule determines the character of the compound body.
6. We must expect the discovery of many yet *unknown* elements, for example elements analogous to aluminium and silicon whose weights should be between 65 and 71.
7. The atomic weight of an element may be sometimes be amended by a knowledge of those contiguous elements...
8. Certain characteristic properties of the elements can be foretold from their atomic weights' (all italics original, pp. 109-110).

As is well known Mendeleev's conjectures led to a number of compelling predications of unknown elements based on gaps in the table (item 6). This is generally thought to be the most significant factor in its acceptance. Scerri maintains, and I concur, that of equal importance was the accommodations to accepted data that the system afforded (item 7). A major contribution is the correction of atomic weights due to the realization of the importance of valence (item 3). Atomic weight was not identical with equivalent weight only but rather reflected the product of equivalent weight and valence (p. 126). This was reflected by the increase in accuracy as the power of the notion of period in guiding subsequent empirical research proved invaluable (item 1) as well as in the emerging connections between chemical and mathematical properties (items 2, 5 and 8). Even more important to the development of physical chemistry was the effect of the system on later developments in the microphysics, which developed, in part, as an explanatory platform upon which the table could stand.

These are all powerful considerations in accounting for the general acceptance of the periodic table in the 20th century. The last of these, indicated almost in passing in item 4, points us back to the ultimate reinterpretation and vindication of Prout's hypotheses. For it is hydrogen with an atomic weight of 1.00794 that that moves us to the next stage in my model, the role of reduction as the harbinger of truth in science.

Beginning with the discovery of the electron by J.J. Thompson in 1897, the early decades of the 20th century showed enormous progress in the elaboration and understanding of the nature of atoms. Ernest Rutherford, Wilhelm Rontgen, Henri Poincare, Henri Becquerel, Marie Curie, Anton van den Broek, Alfred Mayer and Henry Moseley all contributed empirical and theoretical insights that led of a deeper understanding of atomic structure and its relation to the chemical and mathematical properties of the known elements as well as the discovery of additional elements all within the structure that the periodic table provided.

The availability of a micro theory that explained and predicted made the periodic table available for reduction. That is, the chemical elements could be reinterpreted in terms of a theoretic domain of objects based on the developing notions of the atom and especially of the electron (technical appendix, Part I, 2). Early accounts of the elements in terms of electron configurations where constructed by Gilbert Lewis, Irving Langmuir, Charles Bury and John Main Smith. That is to say, the micro theory became reduction progressive (technical appendix, Part I, 2.1). All of these early efforts were the objects of contention and none was adequate to available empirical evidence, but the power of the theoretic idea prevailed despite empirical difficulties and despite the lack of a firm grounding in a clear theoretic account of the underlying physics. This was to be changed by the seminal work of Neil Bohr and Max Plank along with many others including most notably Wolfgang Pauli, which led to quantum mechanics based on the matrix mathematics of Werner Heisenberg, the empirical and theoretical work of Douglass Hartree and Vladimer Fock and the essential work of Louis de Broglie, Erwin Schrodinger and Wolfgang Pauling. In my terms the periodic table had become reduction chain progressive (technical appendix, Part I, 2 .2.). That is the elaboration of the underlying theory was itself becoming in increasingly adequate both in terms of its empirical yield as reflected in better measurements and in a more comprehensive understanding of the phenomena that it reduced, that is, the chemical and mathematical properties identified in the Periodic Table.

And as always the theoretic advance was in the face of empirical difficulties. At no time in the development of quantum theory was there an easy accommodation between empirical fact and theoretic coherence. The various theories all worked against anomalous facts and theoretic inconsistencies. And although this was the subject of the ongoing debate the larger issue was driven by the coherence of the project as evidenced by the increasing availability of partially adequate models and intellectually satisfying accounts that initiated the enormous increase of chemical knowledge that characterizes the last century.

The power of the periodic table was not fully displayed until the reduction to a reasonably clear micro theory led to the enormous increase in breadth that characterized the chemical explanations for the vast array of substances and processes ranging from the electro-chemistry of the cell, to crystallography, from transistors to cosmology. This is indicated in my model by the notion of a branching reducer (technical appendix, Part I, 2.3). It is simple fact, although seemingly hyperbolic, that the entire mastery of the physical world evidenced by the breadth of practical applications in modern times rests on the periodic table. That is quantum physics through its application to the periodic table is a progressively branching reducer (technical appendix, Part I, 2.4).

But the scope of the periodic table, resting upon an increasingly elaborate microphysics is still not the whole theory. For quantum mechanics itself has been deepened with the increasingly profound theories of particle physics. This is an area of deep theoretical and even philosophical contention and so it is possible, although extremely unlikely, that the whole apparatus could collapse. But this would require that a new and more adequate microphysics be invented that could replace the total array of integrated physical science with an equally effective alternative. Such a daunting prospect is what underlies my gloss on truth seen as the very best that we can hope for.

4. Technical Appendix

Part I:

1. A scientific structure, TT = <T, FF, RR> (physical chemistry is the paradigmatic example) where T is a set of sentences that constitute the linguistic statement of TT closed under some appropriate consequence relation and where FF is a set of functions F, such that for each F in FF, there is a map f in F, such that f(T) = m, for some model or near model of T. And where RR is a field of sets of representing functions, R, such that for all R in RR and every r in R, there is

some theory T* and r represents T in T*, in respect of some subset of T.

A scientific structure is first of all, a set of nomic generalizations, the theoretic commitments of the members of the field in respect of a given body of inquiry. We then include distinguishable sets of possible models (or appropriately approximate models) and a set of reducing theories (or near reducers). What we will be interested in is a realization of TT, that is to say a triple <T, F, R> where F and R represent choices from FF and RR, respectively. What we look at is the history of realizations, that is an ordered n-tuple: <<T,F1,R1>,...,<T,Fn,Rn>> ordered in time. The claim is that the adequacy of TT as a scientific structure is a complex function of the set of realizations.

1.1. Let T' be a subtheory of T in the sense that T' is the restriction of the relational symbols of T to some sub-set of these. Let f' be subset of some f in F, in some realization of TT. Let <T'1,...,T'n> be an ordered n-tuple such that for each i,j (i<j,) T'i reflects a subset of T modeled under some f' at some time earlier than T'j. We say the T is *model progressive under* f' iff:

a) T'k is identical to T for all indices k, or

b) the ordered n-tuple <T'1,...,T'n> is well ordered in time by the subset relation. That is to say, for each T'i, T'j in <T'1,...T'n> (i2), if T'i is earlier in time than T'j, T'i is a proper subset of T'j.

1. 2 We define a *model chain* C, for theory, T, as an ordered n-tuple <m1,...,mn>, such that for each mi in the chain mi = <di, fi,> for some domain di, and assignment function fi, and where for each di and dj in any mi, di = dj; and where for each i and j (i<j), mi is an earlier realization (in time) of T then mj.

Let M be an intended model of T, making sure that f(T) = M for some f in F (for some realization <T, F, R>) and T is model progressive under f. We then say that C is a *progressive model chain* iff:

a) for every mi in C, mi is isomorphic to M, or

b) there is an ordering of models in C such that for most pairs mi, mj (j > i) in C, mj is a nearer isomorph to M than mi.

This last condition is an idealization, as are all similar conditions that follow. We cannot assume that all theoretic advances are progressive. Frequently, theories

move backwards without being, thereby, rejected. We are looking for a preponderance of evidence or where possible, a statistic. Nor can we define this a priori. What counts as an advance is a judgment in respect of a particular enterprise over time best made pragmatically by members of the field (*To avoid browserproblems figure 1 shows part of the scheme 1.3 – 2.3.1*).
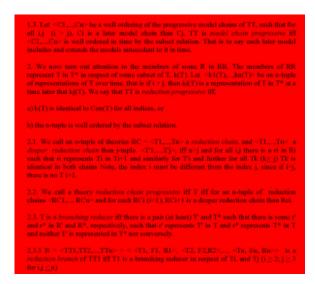
1.3. Let <C1,...,Cn> be a well ordering of the progressive model chains of TT, such that for all i,j (i > j), Ci is a later model chain than Cj. TT is *model chain progressive* iff <C1,...,Cn> is well ordered in time by the subset relation. That is to say each later model includes and extends the models antecedent to it in time.

2. We now turn out attention to the members of some R in RR. The members of RR represent T in T* in respect of some subset of T, k(T). Let <k1(T),...,kn(T)> be an n-tuple of representations of T over time, that is if i > j, then ki(T) is a representation of T in T* at a time later that kj(T). We say that TT is *reduction progressive* iff,

a) k(T) is identical to Con(T) for all indices, or

b) the n-tuple is well ordered by the subset relation.

2.1. We call an n-tuple of theories RC = <T1,...,Tn> a *reduction chain*, and <T1,...,Tn> a *deeper reduction chain than* j-tuple <T'1,...,T'j>, iff n>j and for all i,j there is a ri in Ri such that ri represents Ti in Ti+1 and similarly for T'i and further for all Tk (k ≥ j) Tk is identical in both chains Note, the index i must be different from the index j, since if i=j, there is no T i+1.

2.2. We call a theory *reduction chain progressive* iff T iff for an n-tuple of reduction chains <RC1,..., RCn> and for each RCi (i<T), RCi+1 is a deeper reduction chain than Rci.

2.3. T is a *branching reducer* iff there is a pair (at least) T' and T* such that there is some r' and r* in R' and R*, respectively, such that r' represents T' in T and r* represents T* in T and neither T' is represented in T* nor conversely.

2.3.1 B = <TT1,TT2,...,TTn> = < <T1, F1, R1>, <T2, F2,R2>,..., <Tn, Fn, Rn>> is a *reduction branch* of TT1 iff T1 is a branching reducer in respect of Ti, and Tj (i ≥ 2, j ≥ 3 for i,j ≤ n)

Figure 1

2.4. We say that a branching reducer , T is a *progressively branching reducer* iff the n-tuple of reduction branches <B1,...,Bn> is well ordered in time by the subset relation, that is, for each pair i,j (i>j) Bi is a later branch than Bj, that is, the number of branching reducers has been increasing in breadth as inquiry persists.

Part II:

The core construction is where a theory T is confronted with a counterexample, a specific model of a data set inconsistent with T. The interesting case is where T has prima facie credibility, that is, where T is at least model progressive, that is, is increasingly confirmed over time (Part I, 1).

A. The basic notion is that a model, cm, is a *confirming model* of theory T in TT, a model of data, of some experimental set-up or a set of systematic observations interpreted in light of the prevailing theory that warrants the data being used. And where

1. cm. is either a model of T or
2. cm is an approximation to a model of T and is the nth member of a sequence of

models ordered in time and T is model progressive (1.1).

B. A model interpretable in T, but not a confirming model of T is an *anomalous model*.

The definitions of warrant strength from the previous section reflect a natural hierarchy of theoretic embeddedness: model progressive, (1.1), model chain progressive (1.3) reduction progressive (2), reduction chain progressive (2.2), branching reducers (2.3) and progressively branching reducers (2.4). A/O opposition varies with the strength of the theory. So, if T is merely model progressive, an anomalous model is type-1 anomalous, if in addition, model chain progressive, type-2 anomalous etc. up to type-6 anomalous for theories that are progressively branching reducers.

P1. The strength of the anomaly is inversely proportional to dialectical resistance, that is, counter-evidence afforded by an anomaly will be considered as a refutation of T as a function of strength of T in relation to TT. In terms of dialectical obligation, a claimant is dialectically responsible to account for type 1 anomalies or reject T and less so as the type of the anomalies increases.

P2: Strength of an anomaly is directly proportional to dialectical advantage, that is, the anomalous evidence will be considered as refuting as a function of the power of the explanatory structure within which it sits.

P*: The dialectical use of refutation is rational to the extent that it is an additive function of P1 and P2

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ISSA Proceedings 2010 – The Emotions' Impact On Audience Judgments And Decision-Making In Aristotle's Rhetoric

1. Introduction: Emotions in the Rhetoric

Plato's antagonistic model of cognition and emotion was highly influential among many of his successors, as we see in the Stoic sage and Skeptics who strove for relief from emotional states (Bett 1998), and it was adopted by the Catholic church during the Middle Ages, with adherents encouraged to subdue their emotions by means of reason and acts of the will (Lazarus 2001, p. 60). This model also formed the root of modern philosophy in Descartes' strict separation of body and mind – what Damasio (1994, p. 249) has referred to as his most serious error. Aristotle corrects Plato's picture, providing the first clearly cognitive account of the emotions, insofar as the speaker arouses

emotions in the audience by cognitive means. There is also much more to Aristotle's treatment that takes it beyond the attention to cognitivism. The discussion of "intentionality" below captures one such structural feature. It is the details of that account and how the emotions are thought to figure in persuasion, along with a related notion of intentionality that interest us in this paper.

After analyzing Aristotle's theory of the emotions in a way that stresses the social nature of his account, we turn in Part 2 of the paper to show how the social emotions in the *Rhetoric* require a different model of intentionality from that which the tradition assumes. Social emotions are embedded in social interactions and thus such emotions require a structure of intentionality that is both other-directed and directed back on the agent (we illustrate the nature of this structure by modeling it on a game). This understanding of full intentionality presents the foundation for person worth to develop, and in Part 3 of the paper some aspects of person worth apparent in the *Rhetoric* are explored.

That we should find Aristotle's only detailed account of the emotions in the *Rhetoric* – or, rather, that we do not find it in the more natural settings of *De Anima* and the *Nicomachean Ethics* is something that has puzzled commentators. It may also be that a fuller account appears in some lost book, or just that it is the subject matter of the *Rhetoric*, with its concern with the persuasion of audiences, which is the most natural setting. Regardless, the account given here is largely consistent with what Aristotle has to say about the emotions elsewhere (Fortenbaugh 1975; Modrak 1987), and this is the place on which to concentrate for the most salient details of Aristotle's thinking.

Early in Book I we are told that audiences are persuaded when led by a speech to feel emotion (1.2.5). This is an empirical claim, and in support of it we are asked to reflect on our own experience. We do not give the same judgment when grieved as we do when we are rejoicing, or when being friendly as when we are hostile. These are taken to be universal statements about human nature**[i]** and the impact of emotion on judgment. The causal line here is speech to emotion, emotion to judgment. It would seem from this early statement that in the developing cognitive account of the emotions, emotion might ground judgment**[ii]**. We are then faced with the immediate question of how emotion comes to affect judgment. Aristotle never specifically addresses this issue (Leighton 1982, p. 145), but a close review of what he has to say in Book II of the *Rhetoric* provides a number of useful suggestions.

The first eleven chapters of Book II are devoted to the emotions, beginning with a general definition and proceeding to accounts of a select group. "The emotions (*pathê*) are those things through which, by undergoing change, people come to differ about their judgments and which are accompanied by pain and pleasure, for example, anger, pity, fear, and such things as their opposites (2.1.8)." Two central criteria characterize this definition: In the first case, emotions in some way cause a change in judgment. They are directly related to how we view things, what attitude we take towards them and the way we arrive at decisions about them. Secondly, they are accompanied by pain and pleasure. These may be physical or mental, and perhaps both. But it indicates already a holism that will characterize Aristotle's discussions. The whole organism is addressed when speech aims at persuasion. While not part of the opening definition, the accounts Aristotle gives of individual emotions indicate their social nature – they arise in relation to a person's perceptions of what is expected of them or due to them in specific circumstances.

These points are illustrated in the first individual emotion discussed, that of anger. Anger is defined as "desire, accompanied by distress**[iii]**, for apparent retaliation because of an apparent slight that was directed, without justification, against oneself or those near to one" (2.2.1). The distress noted corresponds to the accompanying pain of the general definition**[iv]**. Since anger arises through a thought of outrage, that thought is part of the definition.

Moreover, the emotion arises from a judgment of what is unjust since the slight was deemed unjustified. The mixture with cognitive elements is clear both in the general definition and in that of this first emotion. Pleasure is also mixed in here through the accompaniment of another emotion – hope. The angry person feels pleasure at the hope of retaliation. Thus anger involves, in its nature for Aristotle, projection and anticipation. People dwell in their minds on retaliating, creating an image (*phantasia*) of what might be involved. Aristotle ends the chapter with the advice that "it might be needful in a speech to put (the audience) in the state of mind of those who are inclined to anger and to show one's opponents as responsible for those things that are the causes of anger" (2.2.17).

Still it is clear that someone, whether Aristotle himself or an early editor**[v]**, sees the need for the discussion of the emotions in the larger consideration of persuasion. Thus, our own analyses can facilitate the relevance where it is not apparent. The account of fear (*phobos)* in chapter 5, for example, is combined

with an account of confidence (*tharsos)* and not explicitly related to rhetorical contexts. Yet its relevance is not hard to uncover. Fear is defined as "a sort of pain and agitation derived from the imagination of a future destruction or painful evil; for all evils are not feared" (2.5.1) The ability to imagine something that has not yet happened but can be judged as likely to occur supplies the cognitive element here. Confidence is defined as what is opposed to fear (2.5.16). When dreadful things have not yet happened and sources of safety are near at hand, then feelings of confidence are experienced. While the text does not go on to provide illustrations, we can appreciate that a speaker may want to create fear in an audience towards an opponent and counter it by inspiring confidence in them through his or her own example. An audience's judgments about a person are altered if that person is viewed as a source of fear or confidence.

The emotions of anger and fear are both practical in the sense of involving a goal at which one aims. Other emotions are not practical in this way (Fortenbaugh 1975, p. 81). Shame (*aiskhynê)*, for example has neither a goal nor an action involved in its definition, and the same holds for shamelessness. Shame is simply defined as "a sort of pain and agitation concerning the class of evils, whether present or past or future, that seem to bring a person into disrespect" (2.6.1). Shame is concern for – Aristotle says imagination (*phantasia)* about (2,6,14) – a loss of reputation. While lacking a clear goal, like anger or fear, it is social in import insofar as it relies on thoughts about other people. Anger is directed toward others; fear is of others. The common element here is their social nature. Indignation is another non-practical emotion in Fortenbaugh's classification (1975, p. 82). But insofar as it is tied to the thought of unmerited fortune in others (2.9.1) it shares with the other emotions this social aspect. Others are feared, pitied, envied, emulated, and so forth. These emotions all find us outside of ourselves in the world, navigating difficult interpersonal matters that can be understood and converted to sources of persuasion.

Pity might be thought of as another central Aristotelian emotion because of its importance in the *Poetics*. It is also an emotion that seemed to have an almost institutional role in courtroom situations**[vi]**, such that Kennedy (Aristotle 2007, p. 139) wonders why the *Rhetoric* account is not flavoured this way. But as his analyses of the emotions progress, Aristotle seems more and more centrally concerned to capture what is distinct about each emotion in its social setting, while distinguishing them from each other, especially where there is some natural

connection as in the case of opposites.

Pity is often cited when concerns are raised about the irrelevance of emotional appeals. But Aristotle is interested in how pity can bring us to be moved in appropriate ways to consider something that we might not have otherwise considered. The image of the hunger-ravished child or the community devastated by a natural disaster awakens sensibilities in us that might not otherwise be activated. Pity, Aristotle writes, is "a certain pain at an apparently destructive or painful event happening to one who does not deserve it and which a person might expect himself or one of his own to suffer" (2.8.2). Again, there is a judgment of what is just and fair here; as indignation is aroused by undeserved good fortune, pity arises from a judgment of undeserved misfortune. There is also the imaginative placing of oneself or those one knows into a similar scenario.

The analyses of the emotions are concluded in chapter 11 after the socially relevant discussion of emulation. Clearly, only a selection of emotions has been discussed and divisions can be seen within them, such as Fortenbaugh's distinction between practical and non-practical emotions.

As Deborah Modrak notes (1987, p. 71), Aristotle's account of the emotions reflects his commitment to psychophysicalism – all the *pathê* of the soul involve the body. As anger, for example, is the desire for retaliation, it is also a boiling of the blood or heat around the heart (*De An*. 403a30-31). In many ways, this anticipates descriptions that will arise in neuroscience centuries later. Damasio (1999, p. 67), for example, describes how emotions work in terms of two paths: one is biological through the bloodstream, where chemical molecules act on receptors in the body; the other is neurological, through the actions of electrochemical signals. Aristotle's commitment to psychophysicalism is evident in the discussions of the *Rhetoric.* But more importantly, we see in those discussions the essentially cognitive nature of the emotions. A holism emerges here that shows an interest in the entire being. Emotion, cognition and the physical body are integrated here in ways that anticipate similar holistic accounts that have emerged centuries later.

While some researchers working in the field of cognition, like Lazarus (2001), whose appraisal theory is based on the Aristotelian view that emotion depends on reason, and Leighton (1985), acknowledge Aristotle's accomplishment, most do not. And yet there are several ways in which Aristotle's discussions anticipate or are relevant to later conclusions.

With respect to the issue of where the emotions are, early disputes over whether cognition or emotion is primary lose their force in some of the more recent proposals for the kind of integration that regards neither as fundamental. At issue is a dynamic relationship in which emotions are the result of cognition and the cause of it (Lazarus 1984, p. 126). This suggests the kind of cohesiveness of experience that was apparent in Aristotle's work. In *De Sensu* (447a15-17), Aristotle explains how a strong emotion like fear can interfere with cognition such that we do not perceive what is in front of us. Such competition between cognitive and affective states suggests a complicated meshing underlying the unity of experience (Modrak 1987, p. 138). Likewise, practical decisions to choose certain actions are influenced by the emotional values we associate with different outcomes. And decisions and values must be weighed against different goals and the preferences involved with these. Thagard (2000) proposes a model of coherence that includes both beliefs and emotional responses knit so closely in interwoven patterns of influence that their distinctiveness seems possible only by means of theoretical analyses. "Emotional coherence requires not only the holistic process of determining to how best satisfy all the cognitive constraints, but also the simultaneous assessment of valences for all relevant representations" (Thagard 2006, p. 55). In part, Thagard's way to this is through the neuroscience of Damasio and others, but at root it remains an unacknowledged Aristotelian insight.

As a final point here, we might recall how in showing that emotional responses are reasonable and involve cognitive processes, Aristotle also showed that they were open to reasoned persuasion, even if he was less specific on how this could be achieved with the different emotions. Furthermore, since emotions can be assessed for their rationality, we can turn the critical stance on ourselves (aided by a speaker's argument) and appraise the appropriateness of our own emotional responses and moderating them where necessary.

2. Intentional Social Interactions: A Frame for Analysing the Social Emotions in Rhetoric Book 2

Let`s start with a mainstream view on intentionality as a structural characteristic of emotions:

Intentionality is a property of actions and mental states. It is the property of being directed at or toward something. [This property of being directed at is often called "aboutness"]. Emotions typically have this property. When one is angry or

afraid, for example, one is angry at someone or something, afraid of someone or something. This someone, this something is the emotion's intentional object, that at or toward which it is directed. By contrast, bodily sensations of pleasure and pain, [the comforting feeling of a warm bath, say, or the aching feeling of sore muscles], are not directed at or toward anyone or anything. (Deigh 1994, p. 826)

We argue that this mainstream concept of intentionality is insufficient to capture social emotions as presented by Aristotle in book 2 of his Rhetoric. There are several reasons for this position:

(1) Intentionality is a property of mental acts, not mental states, of activities, not states.

(2) There are two directions, not one: intentional acts are directed to something or someone (other-directedness, centrifugal direction) and directed back reflexively to the act issuing centre (centripetal direction).

(3) Full intentionality means: both directions together form a circular process.

(4) The structure of full intentionality provides the ground for person worth to develop.

(5) The mainstream concept draws on an individualistic frame, but an individualistic frame is insufficient to capture social emotions.

(6) Social emotions are bound to or embedded into social interactions.

(7) For social emotions to arise, the corresponding social interactions must follow an Intentionality structure (a game-like structure).

(8) Pleasure and pain are not sensations beyond the Intentionality structure, but are understood as modes of backward-directedness, as modes how the centre feels affected.

The concept of intentional act in modern times is due to Franz Brentano, a German-born Austrian philosopher of the second half of the 19th and beginning of the 20th century. According to him, an intentional act is a mental act combining a centripetal and a centrifugal direction to a circular processing: a being directed to something other as objective content (outward direction) together with a reflexive being redirected back to the issuing centre (inward direction). Intentional acts provide a structure for a subject to experience itself. But it must be stressed that this "self" is not given at the outset but develops by issuing intentional acts in different contexts. The starting point is activity, a living being insofar it is active.

Brentano`s concept of intentional act has its roots in Aristotle. One of his reported

key Aristotelian sources for conceiving intentional acts as other-directed and backward-to-centre directed acts is *Met.* 1074b35-36, where Aristotle says:
"Yet it seems that knowledge and perception and opinion and understanding are always of something else, and only incidentally (*εν παρέγωι*) of themselves."
"Incidentally of themselves" means, according to Brentano, that the acting subject is not given to itself as a primary object, but as a secondary one. We understand this secondary object status as a feeling of being back, of arriving at the origin, at the centre – as self-awareness.

Brentano (1995, 276ff) elucidates the basic idea with a nice example:
"The fact that the mentally active subject has himself as object of a secondary reference regardless of what else he refers to as his // primary object, is of great importance. As a result of this fact, there are no statements about primary objects which do not include several assertions. If I say, for example, "God exists," I am at the same time attesting to the fact that I judge that God exists."
If one goes back from Brentano to the roots of intentionality in Aristotle, one will be surprised to notice that Aristotle`s understanding of intentional acts is richer and reaches further than Brentano`s. The starting point remains the same: it is activity, or more concretely, a living being insofar it is active. And this fundamental activity unfolds within the structure of intentional acts, the structure of a circular process of crossing the inside-outside border of the living being in both directions creating self-relatedness. This self-relatedness develops in different stages.

The first stage is presented by the psychological writings. Here, self-relatedness is substantiated as self-awareness. The *De Anima* (425b12-15) and *De Somno***[vii]** (455a13-21) draw a detailed picture of reflexive self-awareness embedded into intentional acts of perception. Intentional acts are not a human privilege, animals, too, are capable of intentional acts. Humans and animals do not differ in act structure, but in levels of activity. Animals are capable of perception only, humans of perception and thinking. Both are living organisms and being alive means being active – active within the structure of intentional acts which make the organisms familiar with themselves – on different cognitive levels.

In the ethical writings, at the next step, Aristotle goes further: self-awareness is enriched by combining being active and being good. It is not the value of the objects the intentional acts are directed at, that is at stake here, but the experience of one's own worth by the agent via the backward-directedness of his

intentional acts. Aristotle again: "(I)t is the consciousness of oneself as good that makes existence desirable, and such consciousness is pleasant in itself" (*EN* 1170b8-b10).

But at this stage, the individual has a bitter experience, the experience of lacking self-sufficiency in assessing and deciding his own true worth. He cannot resolve the bias in judging his own case by domestic means. An insurmountable uncertainty remains which forces the individual to leave the individual stance: It needs judges from outside, the recognition of others, to establish his own worth with certainty.

At the level of individuality, we witness how the backward-directedness of intentional acts turns into person worth, but individual worth in a paradoxical mode of coming to mind without being really real. This gap of uncertainty forces the individual to give up his individualistic stance and, in his pursuit of certainty, to enter the social space. The transition from purely individual existence to social existence takes place.

To cope with this new situation, we introduce *intentional social interactions as games for worth.* In the realm of social space, the character of person worth changes.

Worth

– is no longer determined individually

– it becomes eye-bound, worth in the eyes of others

– its validity and reality depends on recognition. Thus, worth can be affirmed, attributed, denied, or withdrawn.

– it becomes relative worth, dependent on comparisons with others.

– relative worth manifests itself as a worth level.

– relativity + recognition-dependence account for competition and incentives for interactive worth level changes.

– relative worth is open for gains and losses, upgrading and downgrading

Starting and driven from individual uncertainty about worth, intentional social interactions take on the form of games for worth. And, as games, they can be played fairly or unfairly. Gains due to unfair moves of another player, arouse, according to Aristotle, the emotion of *righteous indignation,* for example (the usual translation of to *nemesan* in ch. II 9).

These games take place in the social space, this means in public, in visibility. Visibility affects a central motive as to why these games are played: visibility is a

source of, and grants access to, certainty. The social space becomes a space of appearances, of appearing, presenting and representing oneself to others as a player in the worth game and decoding the corresponding appearance promoting moves of competitors and co-operators. The different minds playing the worth game relate to each other in the medium of *phainesthai*. The mental capacity to deal with public *phainomena* of this kind is *phantasia*, the impression managing unit.

Intentional interactions, games for worth, take place in public. Thus, *phainesthai*, visibility to others, appearance in the sense of being visible, becomes a focus of attention in those games. Phantasia is the underlying mental capacity carrying and facilitating the required behaviour of presenting oneself to others by effective means, be it facial expression, gestures, outfit, Cartier jewels, Rolex watches, Porsche cars, medals and what have you. And why all this? The intentional structure of the interactions in the games for worth provides the answer: In intentional interaction, being is being perceived by others, it is being before the eyes of others.

In games for worth, Intentionality takes on the following structure:
I appear a certain way to others, others appear a certain way to me, and how they appear to me depends on how I appear to them and vice versa. This includes being worried how one might appear in front of a jury of significant others as in shame. Appearances and impressions take on a prominent role in intentional interactions, and, as a consequence in social emotions and Aristotle´s treatment of them. The extramental interactions between minds take place in the social space which is a public space of actors and spectators and spectator-actors, of appearance managers, of observers, of judges**[viii]**.

An example from the *Rhetoric´s* chapter on anger may illustrate the role of visibility and public for social emotions: "And further, (they are angry) with those who slight them before five classes of persons: namely, their rivals, those whom they admire, those by whom they would like to be admired, those whom they respect, or those who respect them; when anyone slights them before these, their anger is greater" (*Rhet.* II 2.22, 1379b23-27).

Pain and pleasure play a constitutive role in Aristotelian emotions (with hate as the grand exception). Where must these be located? Inside or outside the frame of intentional interactions we were developing? Cognitivist approaches to emotions

treat feelings as the nonintentional states par excellence. This view may seem cogent from the reductive *aboutness*-concept of intentionality which makes no use of the backward-directedness of intentional acts. From our point of view, feelings of pleasure and pain can be integrated into intentionality without much effort.

The feeling of pleasure or pain indicates that the whole organism, the whole person is affected. The person experiences his being in a positive or negative state via states of his body. From our intentional stance, states of the person are states of subjectivity combining states of mind with body states. In contrast, pure judgments or beliefs are only departmental, they are backward-reflexive too, but in a detached, cool way (remember Brentano`s example from above: "If I say, for example, "God exists," I am at the same time attesting to the fact that I judge that God exists"). Of course it is me who has those judgments, but they do not affect my whole being. They show a lesser degree of subjectivity with the welcome social side effect of allowing me to share this sort of judgment with others. This is not possible with states of bodily feeling: they are radically subjective and private. I can report having a toothache to others but I cannot share it with them. On the other hand, shareable judgments or beliefs, may concern my full being, my whole self, if they combine with positive or negative bodily feelings communicating the significance of those cognitive acts to me immediately, definitely and unmistakably (but not beyond error or self-deception).

Embedded into the frame of Intentionality, pleasure and pain represent a mode of experiencing subjectivity and self. In the context of social emotions, they indicate that my existence is affected – in the sense of social existence and/ or physical existence. In the case of fear as a social emotion, for example, my physical existence is threatened by an enemy or someone who hates me.
Thus, being affected reveals to me that my existence is at stake, that my whole being is affected. A criterion for this is the involvement of the body; bodily reactions communicate this seriousness unmistakably. Pleasure and pain account for the individual affectedness in social emotions with the body as carrier of individuality. (Maybe there is something like a physiological inference: if my body is affected, then I am affected.)

We understand pleasure and pain as modes of backward-directedness, backward directed on bodily channels to a centre which is not an anaemic abstraction, but an embodied reflexive existence, as a physical, individual, body-based existence and/or a social worth-based existence within the social space. Pleasure and pain

as components of emotion indicate, and make conscious, that the physical and/or the social existence is affected in a certain situation of intentional interactions (and not a certain brain department only). It is in line with this that Aristotle says of hatred: "Anger is accompanied by pain, but hatred is not; for he who is angry suffers pain, but he who hates does not. One who is angry might feel compassion in many cases, but one who hates, never; for the former wishes that the object of his anger should suffer in his turn, the latter, that he should perish" (*Rhet*. II 4.32).

3. Personal Value and Person Worth
The sense of worth introduced and discussed in the previous section may be extended to capture the personal worth of the speaker or arguer, who comes to a sense of self-value through what is reflected back from an audience.

As was noted earlier, an audience's judgments about a person are altered if that person is viewed as a source of such things as fear or confidence. Now is the time to consider the effect this has on the audience in question: what does this alteration of judgment involve? Prior to his descriptions of the emotions, Aristotle had claimed that audiences are persuaded when led by a speech to feel emotion (1.2.5). Emotions alter our judgments, but they do so rationally and thus remain open to reason. Each emotional state involves deliberation about the agent's social situations and the expectations they have of others and that others have of them. Their emotional orientation plays a role in "determining how an audience sees and understands a particular situation" (Kasterly 2006, p.225). An emotion like anger, for example, affects the way we view people and what we take to be important. Insofar as we feel anger and so desire retaliation, then what we value is crucially modified. The angry person judges that another has behaved unjustly. Of course, this may be someone who was already thought of in this way and they have simply added to a series of unjust acts. But more significant are cases where the behavior does not conform to expectations. This may affect the intensity of the emotion that is felt and expressed. People we expect to behave justly – perhaps because of their position or power over others – elicit greater anger when something they do (or that a speaker alleges they have done) breaks with that expectation. We experience something on parallel to the kind of surprise that Thagard (2006, 172ff) identifies in scientists who find something that does not cohere with their current belief-set. This is a similar kind of emotional incoherence to what Thagard describes. We no longer see that person as fair (or

as fair as we did) and they consequently receive less weight in our eyes: we value them less.

In this way, not only do we see a close connection between *pathos* and *logos*, but also a relationship to *ethos* (always implicit in Aristotle's discussion) emerges. *Ethos* concerns the way a speaker builds her or his character through their discourse. In a broader sense, it can refer to a range of argumentation that addresses the characters of others, from *ad hominem* reasoning to appeals to authority. The crucial element in the building of character is trust. People trust those they like; and like those they trust. Trust is a feeling and a judgment. The decision to trust someone is based on what we think of their proposals and their accomplishments, but it is also based on an emotional response to them (Thagard 2006, p.227). People who make us feel good are assigned greater value in our eyes, which means that it is more likely we will accept their judgments. If there is a range of choice of whom to trust (as among election candidates), then the "gut feeling" (good or bad) we have about one will facilitate the decision-making process by quickly eliminating others (or that person, if the feeling is negative).

Even "non-practical" emotions like shame can operate in this way. Shame, we recall, is "a sort of pain and agitation concerning the class of evils, whether present or past or future, that seem to bring a person into disrespect" (2.6.1). People are concerned for their own reputations and can be moved to act in different ways out of shame. Shame alters the worth we attach to ourselves and our actions and can subsequently affect the value we attach to others associated with our actions or us.

In sum, persuasion alters judgments of value. This may be its most significant power. It not only changes perceptions and incites actions; it changes what and even how a person values. And an important alteration brought about through emotional response is the worth people assign to themselves.

NOTES
[i] The validity of this claim has been brought into question by Daniel Gross (2006), who argues that emotions are related to culture and not human nature.
[ii] There is some debate, generally, about which of the pair is more fundamental. Ancient and modern arguments favour reading cognition as primary, although neither position can be definitively supported (Lazarus 1984) and modern discussion from neuropsychology favour a more integrated model (Damasio 1995). See also Meyer (2000), who argues that passion is what is beneath logos

(235).

[iii] Kennedy adds [mental and physical] here to account for both kinds of reaction that occur when someone is in a state of being angry.

[iv] In terms of Aristotle's own theory of causation, Fortenbaugh (1975, p. 12) describes thought here as the efficient cause of emotion.

[v] There is little question whether the material is Aristotelian; just whether it was originally intended for the book in which we find it.

[vi] Socrates' insistence that he will not use it in his Apology, for example, speaks of a standard expectation in such cases.

[vii] De Somno 455a13-21 gives a very good impression of Aristotle`s mature position in the psychological writings: "Now every sense has both a special function of its own and something shared with the rest. The special function, e.g., of the visual sense is seeing, that of the auditory, hearing, and similarly with the rest; but there is also a common faculty associated with them all, whereby one is conscious that one sees and hears (for it is not by sight that one is aware that one sees; and one judges and is capable of judging that sweet is different from white not by taste, nor by sight, nor by a combination of the two, but by some part which is common to all the sense organs;[…]."

[viii] "Aristotle's analyses of the emotions are extremely instructive. […] The passages I have cited suggest an emotional world that differs from our own. It is intensely confrontational, intensely competitive, and intensely public; in fact, much of it involves confrontations and competitions before a public. It is a world in which everybody knows that they are constantly being judged, nobody hides that they are acting as judges, and nobody hides that they seek to be judged positively. It is a world with very little hypocrisy, or "emotional tact."' (Elster 1999, p.75).

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ISSA Proceedings 2010 – Proto-Regress Argument Schemas

1. Two cases

Consider the following two examples of a regress argument. First example. In discussing what to do about his unreliable wife, Juvenal (1st-2nd century CE) thought hiring guardians would not be a good idea:

But who will guard the guardians? In posing the famous question, the Roman author, Juvenal, was suggesting that wives cannot be trusted, and keeping them under guard is not a solution – because the guards cannot be trusted either. (Hurwicz 2008, p. 577, cf. Juvenal, Satire 6)

Second example. Sorensen addresses the issue whether the following principle holds:

(Access) For any action x, you are obliged to do x only if you can know that you

are obliged to do x.

On first sight, this is plausible. Access does not say that we actually have to know our obligations in order to have them, but it is only required that it is possible to know them. By contraposition, Access entails that if you cannot know that you are obliged to do x, then you are not obliged to do x. Yet, a consequence of this is:
(Access*) For any action x, if you eliminate your possibility to know whether you are obliged to do x, then you eliminate your (possible) obligation do x.

Here is the example. I am obliged to donate some of my inheritance to charity only if I can know that I am obliged to donate. So, if I cannot know that I am obliged to donate, I am not obliged to donate. So, if I burn the will before reading whether I am obliged to donate, then (assuming the will was my only access) I eliminate my obligation to donate. In general, the Access principle might be used to get rid of one's obligations, namely by eliminating one's possibility to know them (Sider 1995: 277-9). To block such options, a proponent of Access might suggest:
(Block) For any action x, you are obliged not to make it impossible to know whether you are obliged to do x.

But now Sorensen generates a regress:
But now a higher order loophole opens. If I keep ignorant of whether there is an obligation to ascertain my obligations, I can use the access principle to evade those epistemic obligations even if they exist. To close this meta-loophole, the defender of access must invoke a yet higher order principle to the effect that we have an obligation to learn whether we have an obligation to learn our obligations. (1995, p. 255)

(Please note that Sorensen discusses a stronger version of Block: for any action x, you are obliged to learn whether you are obliged to do x. Yet, this stronger version is not needed to get the regress, as we shall see in Sect. 4.)
The remainder of the paper is structured as follows. In Sect. 2, I provide two arguments for the need of regress argument schemas. In Sect. 3, I present the argument schema from Gratton (2010) and my own proposal. In Sect. 4, I apply the two schemas, or proto-schemas as I will call them, to the cases from this section. In Sect. 5, I discuss what is demonstrated by the regress arguments. In Sect. 6, I finally point to a number of further issues that are not addressed in this paper.

2. The need for schemas

In the following I argue for the need of regress argument schemas. Note that in this paper I use the term 'argument schema' in a broad sense: argument schemas are general versions of similar arguments. Take for instance: (i) A, (ii) if A, then B, so (iii) B. This well-known schema is a general version of all Modus Ponens arguments. Importantly, argument schemas are to contain letters such that if you fill them out you get specific arguments. Yet, in this paper I shall not consider schemas with such letters, but only proto-schemas, as they may be called, where the lines are only named. A full explication of the schemas will be left for further research (see Sect. 6). The question I want to address here is: why should one want such argument schemas for regress arguments in the first place?

First, just as other philosophical tools like thought experiments, analogies, intuition pumps, contradictions, horned dilemmas, and counterexamples, regress arguments occur in all branches of philosophy. If so, it would be surprising if they have nothing in common (on whatever level of generality). Hence, argument schemas are required, because they are exactly what all those different regress arguments have in common. That is, they are that of which the specific cases are an instance. This is the first argument.

Second, regresses are used to establish all sorts of conclusions. In the texts just cited we have arguments against the use of (i) guardians to guard your wife, and (ii) obligations to secure other obligations. Yet, in both cases it is unclear what the conclusion exactly is, and whether and how it is supposed to follow from the regress. For example, in the obligations case Sorensen seems to assume that the regress undermines Access, whereas Sider denies this (references will be provided in Sect. 5). Now, if there is no argument schema available which rules what premises are to be associated with what conclusions, it is hardly possible to clarify how the argument works. This is the second argument.

Given these two arguments, what is wanted from regress argument schemas is at least the following. They are to consist of lines which are such that: (i) they are what a (preferably large) group of regress arguments from the literature have in common; and (ii) among those lines are a regress and a conclusion.

3. Two schemas

Gratton (2010, p. 4) proposes the following schema (note that the number of regress formulas may vary):

Proto-Schema A

1. Regress formula 1.
2. Regress formula 2.
3. Trigger.
4. Infinite regress:
(a)   Consequence of (3). (a, 1)
(b)   Consequence of (a). (b, 2)
(c)   Consequence of (b). (c, 1)
(d)   Consequence of (c). (d, 2)
etc.
5. Result: There is an infinity of consequences. (4)
6. Further premises.
7. Contradiction. (5-6)
8. ~(1) or ~(2) or ~(3). (1-7)

There are four main inference steps.
Step 1: Regress formulas plus trigger entail a regress.
Step 2: The regress entails a result.
Step 3: The result plus further premises entail that the result is unacceptable.
Step 4: If the regress formulas and the trigger are committed to something unacceptable, then by Reductio Ad Absurdum one of them is to be rejected. (It is worth noting that Black (1996) independently developed an argument schema which is very similar to this one.)

In my dissertation (Wieland, In preparation), I also investigate a somewhat different schema.

Proto-Schema B

1. Problem.
2. Solution.
3. Extra premise: If you apply the solution, then the problem is solved only if another, similar problem is solved first.
4. Infinite regress:
(a)   Problem no. 1. (1)
(b)   Solution no. 1. (a,2)
(c)   Problem no. 2. (a,b,3)
(d)   Solution no. 2. (c,2)
etc.

5. Result: Always yet another problem is to be solved before the initial one is solved. (4)
6. The problem is never solved by the solution. (1-5)

This time there are three main inference steps. Step 1: The regress is entailed by a problem, a solution and an extra premise (which states that the problem is solved by an instance of the solution only if another problem of the same kind is solved). Step 2: The regress entails that there is always yet another problem to be solved in order for the initial problem to be solved (or any other problem of the same kind). Step 3: If there is always yet another problem to be solved first, then it follows the initial problem is never solved by the solution.

In the next section, we shall see that the two examples from Sect. 1 can be spelled out along the lines of either schema. First I will briefly compare the two schemas. The main similarities between the two Proto-Schemas are that they both fulfil the two desiderata from Sect. 2. That is, they are schemas which consist of lines which are such that (i) they are what a group of regress arguments from the literature have in common (this will at least be shown for two cases in Sect. 4); and (ii) among those lines is a regress and a conclusion (this can easily be seen from the schemas themselves). The two schemas also display some significant differences.

First, and most importantly, the rationale of Schema A is that some claims cannot hold all together because they jointly lead, via a regress, to unacceptable consequences (no matter of what kind, the only requirement is that they conflict with something else). The rationale of Schema B is more specific: a certain solution never solves the problem it is to solve because it gets stuck in a regress (namely of problems which are to be solved before the initial one is so).

Second, and related, the infinite regress in Schema A is a series of plain consequences of the trigger statement. The infinite regress in Schema B is a series of problems and solutions.

Third, in case of Schema A, there is a mediate connection between regress and conclusion: you need extra premises to obtain undesirable results and a rejection of the trigger or a regress formula. In case of Schema B, there is an immediate connection: you need no extra premise to obtain the conclusion that the problem is never solved by the considered solution (or at any rate not the kind of premise which is required by Proto-Schema A). (Important disclaimer on validity: in this article I do not discuss whether, and under what conditions, both schemas have

valid instances.)

4. Application

In the following the two cases from Sect. 1 will be restated in the format of either schema. Instances of Proto-Schema A will be marked with an 'A', and instances of Proto-Schema B with a 'B'.

Juvenal A

(1) Anyone who is unreliable is guarded by a guardian.
(2) Any guardian is itself unreliable.
(3) My girlfriend is unreliable.
(4) Infinite regress:
(a) She is guarded by a guardian no. 1. (3,1)
(b) Guardian no. 1 is unreliable. (a,2)
(c) She is guarded by a guardian no. 2. (b,1)
(d) Guardian no. 2 is unreliable. (c,2) etc.
(5) There is an infinity of guardians.(4)
(6) There are only 19 guardians in the world (say).
(7) Contradiction. (5-6)
(8) ~(1). (1-7, keeping (2) and (3) in place)

Juvenal B

(1) You should have at least someone guarded.
(2) For any person x, if you should have x guarded, you hire a guardian for x.
(3) For any person x, if you hire a guardian y for x, you do not have x guarded unless you have y itself guarded first.
(4) Infinite regress:
(a) You should have your girlfriend guarded. (1)
(b) You hire a guardian no. 1 for your girlfriend. (a, 2)
(c) You should have guardian no. 1 guarded first. (a, b, 3)
(d) You hire a guardian no. 2 for no. 1. (c, 2) etc.
(5) Each time you should have yet another person guarded first. (4)
(6) You never have anyone guarded if you hire guardians. (1-5)

Sorensen A

(1) For any action x, one is obliged to do x only if one can know that one is obliged to do x. (Access)
(2) For any action x, one can know that one is obliged to do x only if one is obliged

not to make it impossible to know whether one is obliged to do x.

(3) I am obliged to donate some of my inheritance to charity.

(4) Infinite regress:

(a) I can know that I am obliged to donate some of my inheritance. (3,1)

(b) I am obliged not to make it impossible to know whether I am obliged to donate some of my inheritance. (a,2)

(c) I can know that I am obliged not to make it impossible to know whether I am obliged to donate some of my inheritance. (b,1)

(d) I am obliged not to make it impossible to know whether I am obliged not to make it impossible to know whether I am obliged to donate some of my inheritance. (c,2)

etc.

(5) I have an infinity of obligations, and can know all of them. (4)

(6) This is beyond human capacities.

(7) Contradiction. (5-6)

(8) ~(1). (1-7, keeping (2) and (3) in place)

Sorensen B

(1) You have to secure my obligation to donate some of my inheritance, given that you are a proponent of Access.

(2) For any obligation x, if you have to secure one's x, then you appeal to one's obligation not to make it impossible to know x.

(3) For any obligation x, if you appeal to one's obligation y not to make it impossible to know x, you do not secure x unless you secure y, given Access, first.

(4) Infinite regress:

(a) You have to secure my obligation to donate some of my inheritance, given Access. (1)

(b) You appeal to my obligation not to make it impossible to know whether I am obliged to donate. (a,2)

(c) You have to secure my obligation not to make it impossible to know whether I am obliged to donate, given Access, first. (a,b,3)

(d) You appeal to my obligation not to make it impossible to know whether I am obliged not to make it impossible to know whether I   am obliged to donate. (c,2)

etc.

(5) Each time you have to secure yet another obligation first. (4)

(6) You never secure any obligation if you appeal to obligations not to make it impossible to know one's obligations. (1-5)

5. *Different conclusions*

The conclusions in the guardians case are these:

A. It is not so that anyone who is unreliable is guarded by a guardian.

B. You never have anyone guarded if you hire guardians.

The conclusions in the obligations case are these:

A. It is not so that for any action x, one is obliged to do x only if one can know that one is obliged to do x.

B. You never secure any obligation if you appeal to obligations not to make it impossible to know one's obligations.

Hence, the two schemas give rather different conclusions. In the obligations case, the A argument refutes Access, whereas the B argument demonstrates that Block is of no use to save Access. Let me briefly compare these with Sorensen's and Sider's own conclusions. After having described a version of the B argument, Sorensen writes:

One's prosecutorial enthusiasm for catching the shirker diminishes as one ascends levels. (1995, p. 255)

In other words: the strategy to save Access by appealing to higher-order obligations will not do because it leads to scenarios which are insufficiently serious. Sider is more optimistic about Access:

At best, the regress consists of an infinite sequence of cases, none of which refutes Access. (1995, p. 279)

Here, Sider seems to appeal to the A version of the regress. If so, he is right that the regress itself does not refute Access. The regress merely entails that I have an infinity of obligations, and that I am able to know all of them. Yet, if it is also assumed this is beyond our capacities (or problematic in any other way), then the regress entails something unacceptable and that something is to be rejected. The regress is a threat to Access in that case only. (Indeed, a possible way to resist the A argument is to deny that the regress entails anything unacceptable.)

In any case, neither Sorensen nor Sider draws (or attempts to resist) the B conclusion. Here is whether the regress argument schemas prove useful: they clarify what can be drawn from a regress.

6. *Further issues*

To sum up, in this paper I provided two arguments for why regress argument

schemas are wanted (Sect. 2), presented two proto-schemas which are currently available (Sect. 3), showed for two instances how they can be spelled out along the lines of either schema (Sect. 4), and pointed out that the two schemas establish rather different conclusions: Schema A concludes with rejections, and Schema B with problem solving failures (Sect. 5). It need not be said that all this deserves further attention. There are at least five further issues that I address in my dissertation (Wieland, In preparation).

First, the schemas presented in Sect. 3 are strictly speaking not full argument schemas as all lines are without schematic letters (and quantification), a number of lines are suppressed in full, and all inference rules are missing out. All this is explicit in the dissertation.

Second, Schema B has another variant, and can be presented in different ways. In the present paper, problems are taken as tasks and solutions as actions. But there are other options (i.e. it is also possible to present them as arguments and counterarguments, or as questions and answers).

Third, the examples from Sect. 1 are just an arbitrary selection. There are many more examples of regress arguments in philosophy (ranging from epistemology to ethics), and it is shown for 30 cases that all can be spelled out along the lines of both Schema A and B.

Fourth, if both schemas fulfil the two desiderata listed in Sect. 2, then which schema is the most fruitful? Or are both fruitful in their own right? In my dissertation I approach this issue by introducing extra desiderata for the schemas. For example, one of the issues is whether the instances of either schema can play the same role in a broader dialectical setting.

Last, the reconstruction of regress arguments assumes a rather revisionary take on argument reconstruction. That is, many premises and inferences are to be added and/or modified. Still, an interesting query is whether there are any limitations to revision (or charity, as it is sometimes called). Again, for this I have to refer to my dissertation.

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ISSA Proceedings 2010 – Russian National Identity As Argument Construction An Assessment Of Political Transformations In Post-Soviet Russia

Daniel Yergin and Thane Gustafson suggested in their 1994 report for Cambridge Energy Research Associates that this year, 2010, is a significant moment for assessing political transformations in post-Soviet Russia. They chose the year 2010 because, in their words, it "will have been exactly twenty-five years since Gorbachev came to power, starting the process that led to the new Russian revolution. By then, multiple transitions will be very far along and many of the uncertainties will be resolved. And, of critical importance, by then a wholly new, post-Communist generation will be active in Russian life" (Yergin and Gustafson 1995, p. 108). In this paper**[i]**, we accept Yergin and Gustafson's invitation to use 2010 as a vantage point for reflection upon the post-Soviet political transformations in Russia and the

subsequent Russian search for a new political and social identity. Consistent with their approach, we take a macro-view in our assessment of both political and identity transformations, focusing not on individual texts but rather broad trends substantiated through analysis of selected discourse examples drawn from leaders, the media, and other analysts.

1. *Political Transformations in Post-Soviet Russia*
In 1994, Young, Launer, and Fetissenko argued that the Chernobyl nuclear accident opened argumentative space that ultimately led to the downfall of the USSR. In 1993, Williams, Young, and Elliott argued that Russia needed to develop a "culture of communication" in order to effect democratic reform. That culture of communication never developed, and lies stillborn inside the Kremlin walls. The argumentative space that appeared so promising in the early 90s has nearly closed as dissent is suppressed and media outlets are closed or taken over by government agencies. One might ask, "What happened?"

Given Russia's history during the last two decades it should come as no surprise "that Russia is still struggling to conceptualize its identity" (Mijnssen 2010, p. 7). In this examination of the argument construction of the evolving Russian national identity, we will first explicate two orders of identification active in its re-constitution, one generated through definitional and associative arguments concerning the term "democracy" and the other generated through what Kenneth Burke calls a shared motivational structure, which he identifies as the scene/act ratio. Each order of identification creates a potential corresponding domain of "consubstantiality" wherein individual identities become shared identities, albeit always only partially shared and inevitably subject to divisions; it is where "I" becomes "we," "me" becomes "us," and collective action of a group or of a people becomes enabled (See Williams 1996).

Thus, through identification with "democracy," Russians might come to self-identify as "democrats," to collectively unify as "democrats," to become "a democratic people." In a similar, if less evident, manner, Russians might incorporate a scene/act motivational structure, a worldview that sees individual actions as fairly inevitable reflections of scenic forces, such as the voice of authority. This internalized motivational structure, itself a function of the process of identification with argument constructions that contain the structure, creates a worldview that can be recognized sympathetically in others, in turn creating a sympathetic alignment of our worldviews even as other orders of identification

may differ. Thus, a "democrat" might view the free market as determining both economic and social progress, and a relatively orthodox "communist" might adhere to the Marxist principle that the worker/owner dialectic drives history toward class conflict, but they might find identification in the motivational structure – the way of viewing the world – wherein forces from "on high," be they economic or authoritarian, control their fates. There is a basis for consubstantiality in this order of identification as well, a collective identity in Russian passivity.

The construction of national identity that emerges from our analysis of contemporary Russian public arguments suggests an amalgamated identity that incorporates both the new features and historical features, especially those historical elements of identity amenable with national pride in being Russian and with the motivational structure of Russian passivity. More specifically, we argue that a key ingredient in this motivational structure is the equating of the leader (or more broadly "authority") with the controlling scenic element (rather than, say, the state itself), resulting in a habitual deference to "authority" in belief and behavior. This motivational structure itself is an important component of the amalgamated new Russian identity. An important cultural, rather than explicitly political, influence on the continuity and durability of this motivational structure in Russian identity is the long-engrained "high context" intricacy of Russian culture itself.

We conclude by suggesting that this is being institutionalized in political and governmental practice in contemporary Russia.

2. *Symbols*
In 1991, the year in which the Union of Soviet Socialist Republics was disbanded by the presidents of Russia, Ukraine, and Belarus, Boris Yeltsin instituted a set of new national symbols for the Russian Federation in an attempt to expunge the Soviet past and to usher in the new political reality. Yeltsin replaced the Soviet flag, which featured the hammer and sickle, with the old Tsarist tricolor; the Tsarist double-headed eagle was resurrected as the state symbol; and the Soviet national anthem with music by Alexandrov was exchanged for Glinka's "Patriotic Song," a melody without lyrics that was composed during the first half of the 19th century. Faced with opposition from a recalcitrant, Communist Party dominated parliament, Yeltsin decided to adopt these symbols by presidential decree. What is significant in the context of our argument here is the fact that Yeltsin did not

create anything new – he just resurrected symbols from the pre-Soviet (Tsarist) era.

A decade later, in the year 2000 – Vladimir Putin's first year in office as President – this set of symbols was changed again. While retaining the Tsarist flag and the two-headed eagle, Putin resurrected the Red Army flag and the Soviet anthem (albeit with new words). Faced with opposition from a recalcitrant parliament dominated by a reformist coalition of political parties, Putin also adopted his symbols by presidential decree.

Both presidents understood the significance of these national symbols as an important component of national identity, and each leader chose the symbols that best represented his own particular vision of that identity. From an analytic perspective, these contemporary symbols of the nation function not only as representations of the current moment but also as gestures to the past, inviting memory of and identification with the historical periods invoked, inviting that history into the present. The symbols work as significant enthymemetic arguments in the construction of national identity.

By combining Tsarist and Soviet emblems, Putin might appear to have effected a compromise between the reformers and those who would restore more than the trappings of the Soviet state. After all, he chose, in effect, two from each period. Although many critics find the new set of state symbols to be a completely self-contradictory hodge-podge, we see two consistent themes that work to unify the symbols and to create reconstitutive ideals for the audience: each promotes nationalism by invoking the memory of strongly nationalistic periods within Russian history, and each also invokes an authoritarian historical era, implying that the Russian people need a strong central government, in stark contrast to their brief – and recent – experiment with "democracy."

3. *Democracy*

As the crumbling Soviet Union lurched into the 1980s, efforts to liberalize and open the political and economic system gained momentum. After Gorbachev ascended to power twenty-five years ago, his programs of reform – *perestroika* and *glasnost* – sustained and nurtured a nascent civil society and fostered a spirit of "democratic" reform. In Hedrick Smith's terms, Gorbachev "summoned a democratic spirit that aroused the slumbering giant of Russia" and "provoked the Soviet people to begin taking their destinies in their own hands" (p. xvi). During

the mid-to-late 1980s, Russians became "no longer politically passive" (p. 556). Smith (1990) cites evidence of "election campaigns, mass demonstrations, environmental protests, miners' strikes" (p. 556) and suggests that Gorbachev's reforms aimed at "a humane Leninism that to Western ears sounds like democratic socialism" (p. 557).

Gorbachev's "democratizing" of the Soviet Union produced the hard-liners' coup of August 1991, which in turn triggered the great pro-democracy demonstrations in Russia, and particularly in Moscow. Whereas the strongest and most transformational identification with "democracy" and "democrat" probably came from within the grassroots civil society forming in the years of *glasnost*, the vast "democratic movement" spearheaded by Boris Yeltsin in 1991 made millions of Russians into overnight "democrats." In context, however, the pro-democracy movement was primarily oppositional in nature: to oppose re-imposition of a Soviet hard-line, one must be a democrat. With the dissolution of the Soviet Union in December, the Russian Federation was born, and it was christened in the name of democracy. But how "democratic" was the new Russian democracy? And how democratic were the new Russian democrats?

From a Burkean perspective, to "perfect" identification with "democracy" has a concomitant effect of "perfecting" self-identification as a "democrat." Similarly, we have argued elsewhere, during the transition period for example, Yeltsin called on the Russian people to reconstitute themselves as citizens of a democracy rather than as subjects of an autocratic system (See Ishiyama et al. 1997). As people begin to think of themselves as democrats living in a democracy, democrats gain cultural or national ascendancy, and a "democratic people" are born. In nations such as Great Britain and the United States, democratic identifications are historically entrenched, and, in Burke's terms, there is consubstantiality as democrats. In this situation, democracy is motivated as agent/act:

[D]emocracy is felt to reside in us, intrinsically, because we are 'a democratic people.' Democratic acts, in this mode of thought, are derived from democratic agents, agents who would remain democratic in character even though conditions required the temporary curtailment or abrogation of basic democratic rights…. By the act-agent [agent/act] ratio, a 'democratic people' would continue to perform 'democratic acts'; and to do so they would even, if necessary, go to the extent of restoring former conditions most favorable to democracy. (Burke 1945, p. 17)

In this sense, identification as democrats brings with it the *trust* in others to also act as democrats that is requisite to a functional democratic system. Smith (1990) argues that democracy "requires responsibility, the rule of law, a sense of compromise, a sense of self-restraint coming from within the individual, whether ruler or ruled. But history has not taught Russians the habits of compromise or restraint; theirs has been a winner-take-all politics. And so they have a gut anxiety that others will use freedom against them; they find it hard to trust each other to use it responsibly" (p. 428).

After a euphoric embrace of democratic identity (and an acceptance of the promise of equally instant economic prosperity), identification with and as "democrats" began to wane, and political divisions and fragmentations of national identity waxed. In an unfortunate irony, it was during this brief period of democratic euphoria that Yeltsin began the process of democracy by decree. As Weigle (2000) observes, the "momentum of the transition… shifted from 'below' to 'above,'' a shift that "marginalized the nascent Russian Civil society" (p. 2). Democracy was no longer a movement of the people but rather a declaration from the leaders. Daniels (1998) argues that "Yeltsin's method of introducing reform is characteristically Russian – by decree of the autocrat" (p. 192). Reacting to Yeltsin's sending of the tanks against the White House in October, 1993, Daniels is even more blunt: "[W]e can see that the old Russian habits of authoritarianism, centrism, imperialism, and conformism in belief were never pushed very far below the surface" (p. 191).

Carlson (2007) argues that much of this can be attributed to the high context nature of Russian culture. She notes:

High context cultures are obsessed by their past and often make an idol of their history. In our relationship with them, *we* cannot ignore *their* history, since they themselves do not view any single event in their personal, communal, professional, or national lives as an isolated event; everything is contextualized by shared history, shared experience, shared kinship, shared friendship, shared enmities, and/or shared prejudices. [p. 5, emphasis in original]

In Carlson's view, it is Russian history that is the greatest determinant of Russia's future. "If we look at Russian history, the first thing we must be struck by is its historical lack of democratic tradition. From the beginning Russian political patterns have been consistently authoritarian. We would have to go back to the 12th century to seek even the embryo of a democratic 'populist' tradition in the

Novgorod *veche*, but that was a regionally limited, feudal institution and it disappeared" (p. 7).

Yeltsin himself ruled, in Daniels' terms, "as a sort of elected tsar" (p. 193): that is, in the name of democracy, he ruled autocratically. And he never affiliated with a political party, leaving the fledgling party structures at a far remove from the levers of power. In addition, those new "democrats" minted and unified in opposition to the Soviet hardliners now turned on each other: as Anatoly Chubais of the radical reform party Russia's Choice noted subsequently, the new Russian democrats tended to focus their efforts against "parties and blocs which are close to them" in philosophy (in *FBIS* 12 December 1993, p. 29). Similarly, Yegor Gaidar, also of Russia's Choice, chastised the "democratic camp" for "its inability to achieve unity of actions" (in *FBIS*, 14 December 1993, p. 27). In other words, despite surface commonality under the banner of "democrats," there was not consubstantial identity among democrats. Consubstantiality may be understood as a "sharing of the same essence or substance, by which humans attain states of identification sufficient to act together cooperatively" (Williams 1996, p. 140). Thus, as Russia prepared for its first free and democratic elections for the state Duma in December of 1993, "the political spectrum was hopelessly fractionalized among parties that existed, as the Russian say, mostly in the imaginations of their leader" (Daniels 1998, p. 193). The banner of "democracy" was waved by parties as disparate as the free market shock therapists of Russia's Choice, the ultra-nationalist "Liberal Democratic Party" (LDP) of Zhironovsky, the more Western, or enlightenment-based, democrats of Yabloko, or even the newly reinvented Communist Party of the Russian Federation (CPRF), whose leader, Gennady Zyuganov was dubbed "the 'Democrat' Zyuganov" by Feliks Babitskiy (*Rossiyskiye vesti* 3 Dec. 1993, p. 2; as quoted in *FBIS* 6 December 1993, p. 39; see also Williams et al. 1998).

Moreover, political democracy and free market capitalism soon became conflated in Russia, so much so that democracy itself was often conceived of as "market democracy." This conflation meant that as the promise of rapid economic prosperity faded, the glow of democracy became tarnished. By the time of Yeltin's bid for reelection in 1996, "democrat" was no longer a term of ultimate identification, in part because too close an association was "drawn between the market economy and democratization. The reformers bore the wrath of the dispossessed, and the term 'democracy' is seldom heard anymore in Russia.

Indeed, during his 1996 presidential campaign, Yeltsin seldom, if ever, used the terms 'democracy' or 'democratization'; rather, he referred to 'freedom'" (Ishiyama et al. 1997, p. 98, citing Likhachova). The 1993 CERA report *Russia 2010* notes that the "word *democrat* has become synonymous in the public mind with 'irresponsible talker' and 'thief' (*democrad*)" (Yergin and Gustafson 1995, p. 102). These associations in turn underscore an association between democracy and chaos or disorder – or that old Russian nemesis, anarchy.

The fragile identification with "democrat" never gained deep cultural traction. As an ultimate order of identification, it was shallow, generally without strong identity transformation, without embedded historical precursors, and of short historical duration. The deep identification-within required for genuine individual identity transformations and the consubstantial identification-between required for national acting-together never took firm root, with the result that neither the agent/act ratio of motivational structure that Burke equates with a democratic people nor the level of trust in the democratic allegiance, or purity, of others that is necessary for a democracy to function came to fruition. The legacy of Russian democracy now lies in the oxymoronic "managed democracy" of Vladimir Putin.

4. *Democrats and Autocrats*
From the standpoint of the individual actor, a long-engrained motivational structure among Russians is what Burke calls the scene/act orientation. Burke, in writing of "the motivations of 'democracy,'" highlighted the difference in political orientation: "But if one employed, instead, the scene-act ratio, one might hold that there are certain 'democratic situations' and certain 'situations favorable to dictatorship or requiring dictatorship'" (Burke 1945, p. 17). "By the scene-act ratio, if the 'situation' itself is no longer a 'democratic' one, even an 'essentially democratic' people will abandon democratic ways" (Burke 1945, pp. 17-18).

Although it seems doubtful that Russians were ever consubstantial as "democrats," Burke suggests simultaneous identification of "democrats" with the motivational structure scene-act would evacuate any motivational force from "democratic" identity. The prominence of the scene-act motivational structure in Russian identify formation and in the collective "we" of the Russian people is historically undeniable. From the tsars through the Soviet years, Russia was ruled autocratically, and individuals simply adapted to the political scene. Hedrick Smith (1990) reports the following description from one of his "Russian friends" in the 1970s:

Politics is like the weather – it comes from on high. There's nothing that we can do about the weather except adjust – bundle up on cold days, wear raincoats when it rains, and wear light clothing when it's warm. The same with politics. *They* make the politics…, and *we* adapt (p. 427, emphasis in original).

Individual acts are shaped by scenic elements, including of course the decrees of autocratic leaders; there has not been a historically conditioned sense that the citizen can act in accordance with his/her individual identity (agent/act) or that the citizen can, through individual action, change the political climate (agent/scene or even act/scene). Smith (1990) puts it this way:

[R]esistance to democracy, even mistrust of democracy… has been embedded in the Russian psyche by a long history of absolutism under both czars and commissars. Russians have known precious little of such essential ingredients of democracy as moderation, constitutionalism, division of powers, rule of law, or restraint either by rulers or by revolutionaries. Political tolerance is not a typical Russian trait. Their politics has been given to extremes: iron rule or bloody revolt. This experience has left them with an abiding fear of chaos, disorder, of things careening wildly out of control, and therefore a strongly felt need for Authority to maintain order and to protect the people from violence and upheaval. (pp. 427-428)

Again Carlson (2007) attributes this to Russia's past, when she observes that Western culture could not have emerged without individualism. "Russia, on the other hand, always viewed the growth of Western individualism as psychic fragmentation, a dangerous loss of the 'wholeness of being.' Such extreme individualism was, from the Russian point of view, dangerous…. The rights of the individual can be granted only at the risk of jeopardizing the rights of the collective. In high-context Russia, where collective identity meant survival, individualism as a social/political stance was not encouraged" (p. 8).

This deference to Authority created passivity among the people. To extend the analogy from Smith's friend: if you don't like the weather, the only recourse is to wait for it to change because you cannot change the weather. This scene/act motivational structure is seemingly shared among most Russians. There is, in other words, a consubstantiality with respect to this shared world-view. *Russia 2010* makes the point:

On the whole, apart from a brief surge of interest in the late 1980s, much of the Russian population shows little interest in public issues and expresses great contempt for politicians and politics, while simultaneously surrendering the initiative to them. A classic expression in Russian is *"Nachal'stvu luchshe vidno*," or roughly translated, 'The bosses know better.' Because most people's experience in actual politics is small, their political sophistication and competence and their ability to get things done are low. Most people feel powerless and exploited, but still do not imagine that it is possible to improve matters through their own political initiative. (Yergin and Gustafson 1995, p. 108)

Even in the discourse of self-professed "democrats," the scene/act motivational structure frequently emerged as central to their worldviews, creating the sort of fracturing of democratic identity Burke suggested in his contrast of agent/act and scene/act ratios in the motivational structure of democracy. Ishiyama et al. (1997) suggest that many of the new "democratic" parties in the 1993 Duma election, notably Russia's Choice, employed a language of economic determinism in which a market economy would lead to a democratic people. In Janack's 2002 analysis, Yeltsin's re-election in 1996 was in part conditioned by his reliance on the same deterministic (scene/act) formula:

Despite Yeltsin's image as a democrat and his apparent eagerness to dismantle the Soviet system, his articulation of the relationship between economics and politics was not all that far removed from that of the Marxist philosophy that served as the foundation of the system.... Yeltsin's rhetoric has associated the free market so closely with democratic freedoms that a prospering capitalist economy has become a necessary precondition for personal and political freedoms in Russia. (pp. 68-69)

Yeltsin's authoritarian actions promulgated economic reforms that were presumed to lead to a democratic people. Yet, as we have seen, the scene/act motivational structure is at tension with identification of a "democratic people," leading instead to a familiar passivity and deference to the iron-fist of Authority.

5. *Conclusion*

"Managed democracy," as articulated and practiced by Putin, resonates with the consubstantial motive structure of many Russians identified through the scene/act orientation. Even in the democratic euphoria of the early 1990s, as *Russia 2010* reported, "In poll after poll, Russians speak of their longing for order and a

leader" (Yergin and Gustafson 1995, p. 102). After the chaos of the Yeltsin years, after the demise of "democracy" as an ultimate order of identification that could create a new consubstantiality of a "democratic people" in Russia, Putin's relegation of democracy to something regulated and managed by a central authority that is capable of enforcing order and security resonated with the engrained scene/act motive structure. Putin's popularity suggests there is a consubstantiality of identity among many Russians that revives and restores a familiar and comfortable motive structure, which renders "new Russians" in many fundamental ways not dissimilar from "old Russians."

Managed democracy remains the order of the day in Russia. It preserves the scene-act mind-set, re-establishing comfortable complacency in people and promoting reliance on leaders to preserve security and order (and through order, "freedom"). "Democracy" is at best situational, and the leaders decide the domains within which democracy can function (See Williams and Marin 2010). The political transformation of post-Soviet Russia saw a flirtation with the identity of democrats (and perhaps some cross-dressing) but by 2010 the flirtation seems reduced to an occasional performance designed for consumption by the Western world, not to the consummation of the Russian Federation as a democracy or the Russian people as democrats. Echoing Burke's assessment of the motivational structure of democracy, *Russia 2010* posits:

When all is said and done, the prospects for democracy will depend on the quality of the human material, the civic values of the community, the attitudes of individuals. In the long run, there can be no democracy without democrats, without a democratic culture. (Yergin and Gustafson 1995, p. 108)

Accordingly, if it remains on its current course, it seems highly unlikely that Russia will develop into a democratic society as that concept is understood in the West. As Yergin and Gustafson (1995) observed, "the odds against the evolution of democracy in Russia are daunting.... Perhaps the greatest enemies of all [to democracy] are the masses of skeptical souls in Russia itself" (p. 102).

NOTES

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ISSA Proceedings 2010 – Building A Trustful Audience In Scam Letters

Advance fee Fraud letters or as they are also known 'Nigerian 419 Scam letters' are named after the section of the Nigerian penal code that addresses them. They usually involve a person pretending to have access to a vast sum of money that he or she needs help to get out of the country. In return for access to their bank accounts or other services, the addressee is promised huge cuts of the 'proceeds'. Often, the victim is asked to fork out send hundreds of dollars up front – and then thousands – to cover the bribes, administrative costs, and other fees that are said to be required before the money can be moved out of the country. Of course the money never materializes (Brady 2003). Whereas in the past initial contacts were made via mass-mailings, hand deliveries or fax machines, today Nigerian scam letters are sent via email.

Advance fee Fraud letters are an intriguing problem to argumentation studies. Since they appeal to the reader's empathy and infer to the character of both speaker and audience, they clearly represent a case of what Danblon dubs following Perelman "rhetorical persuasion" (Perelman 1988/1989; Danblon 2004).

And because their objective is to defraud the recipient, we can say that we deal here with rhetorical manipulation. Their interest for argumentation studies stems from the fact, that despite their obvious dubiousness, they actually seem to work. Statistics are vague, but show that out of the millions of letters sent each year by email across the world, 1-2% of the receivers actually engage in "business" with the sender and send in personal details and money (Dillon 2008). Moreover, though one is tempted regard those who fall for the letters as gullible, data shows that many of the victims are nevertheless highly educated.Moreover,those who fall prey to investment or fund fraud are often established in the business world. In the study undertaken by Corpeleijn (2008), the majority of the victims (80%) worked in academia, the corporate world, government or education (Schoenmakers et al. 2009).

How can scam letters be successful? What may be the cause of their effectiveness on certain people? What are the rhetorical strategies used and how do they endeavour to elicit cooperation and induce the recipient's action?

This paper's aim is to address these questions through the following points: first the characteristics of a typical scam letter will be defined and it will be shown why they are immediately suspicious to the average reader. Then an explanation will be given as to why studying scam letters as fallacies (as was done by Kienpointner 2006) is barking up the wrong tree. Finally, another possible reading of scam will be suggested, which takes into account the way trust is constructed between speaker and audience by appealing to the recipient's good will, knowledge, and credulity.

1. *The Obvious Dubiousness of Scam Letters*
Scam letters are hard to believe for both contextual and discursive reasons. You receive an email from a stranger, signed by Ms. Jane Graham, Suha Arafat, and, in the past even world famous African leaders like Mobutu Sese Seko of Zaire, Jonas Savimbi of Angola, and Kenneth Kaunda of Zambia. It is hardly ever addressed to your name or email address, and most often you are part of an undisclosed recipient list. The addresser, usually a widower or a young girl tells you an incredible story: she is the daughter or the spouse of a late prominent politician or businessman in a developing country (mostly in Africa), who died in a plane crash or was assassinated in a coup. She speaks to you in a personal manner ("Dear one","Dear Good friend", "Hello friend", "My beloved"), and pleads you to help her release the money her husband/father had left her – a

fortune, since as it is implied here, it is common knowledge that African leaders are mostly there to defraud their country – , promising you a nice cut (sometimes up to 50%) of the deal. You receive a few similar letters on a monthly or even weekly basis, each time from a different young woman and spouse (perhaps now dying herself of cancer). How many girls and spouses of prominent politicians who died in a coup and left a fortune can there possibly be, and why do they all seem to consider you as a reliable partner, a solution to their problem? Or the letter may come from an official source (a bank or a business company), announcing that you have inherited or won a large sum of money. The reception of such sudden, unsolicited and unexpected letter is in itself suspicious, for you have never opened an account in a specific bank abroad, let alone played the lottery. Yet, you receive a congratulatory message upon a huge win.

TABLE 1 and TABLE 2 resume the discrepancies and incongruities the reader may come across in the various types of scam letters. These should in principle impede belief and cooperation with the addresser:

TABLE 1 – *Discrepancies between facts and information supplied by the letter*

Information supplied by the letter	*Facts*
Money in an account abroad	You have never opened an account abroad
Lottery win	You have never played the lottery
You have been selected for your impressive profile to help someone unblock inheritance money (legal or illegal)	You have no profile on the Internet
You are being solicited by a famous person and who seems to know you	You do not know this person or if you do it is not the sort of person you think would engage in such financial dealings
You have been solicited for ethical or religious reasons, to help unblock money for charity purposes	You have never engaged in charitable activities

TABLE 2 – *Incongruity between the official status/the situation of the addresser,*

the style she is using, and the information conveyed.

Status/situation of the addresser	Style or information conveyed
An official	Broken English used
An expert in some field	Wrong arguments used
A reputable company (Microsoft or other)	A suspicious email or business seal
A person on her deathbed	Using laptop

The suspicion provoked by the letters can easily be confirmed by running a Google search on a phrase from the email, even the name of the sender. This will redirect you to the FBI's website where nearly every possible scam letter has been identified and put up for comparison and verification. So, to sum up, all evidence – contextual as well as textual – should lead the average person to conclude that the letter is a fake, designed to defraud you by an impersonator.

2. *On why fallacies and strategic maneuvering is going down the wrong alley*
In his chapter entitled "How to Present Fallacious Messages Persuasively, the Case of the 'Nigeria Spam [sic.] Letters'", Kienpointner argues that "there are emotional arguments and strategies aiming at persuasiveness which clearly cannot escape a critical judgment of being fallacious reasoning." (Kienpointner 2006, p. 162) But he also claims that scam letters contain dubious arguments that do not appear to be fallacious, and "are successful to a certain degree in convincing many persons to trust the authors of the letters. It is, therefore, interesting, he suggests, to take a look at the rhetorical strategies used in these fallacious texts, where *strategic maneuvering has gone wrong.*" (ibid., p. 163; my emphasis)

His starting point is that of *strategic maneuvering*, i.e., a "discourse which is aimed at making the strongest possible case while at the same time avoiding any moves that are clearly unreasonable." (van Eemeren & Houtlosser 2002, p. 16) "In a great many cases, continue van Eemeren & Houtlosser the maneuvering, whether it is successful or not, is in perfect agreement with the rules for critical discussion and may count as acting reasonably. As a rule, strategic maneuvering is at least aimed at avoiding an open violation of these critical standards. Even arguers who momentarily let the aim of getting their position accepted prevail, will strongly attempt to keep up the appearance of being committed to the critical

ideal of reasonableness. They will still display what Johnson (2000) calls 'manifest rationality'." (ibid.)

In other words, Kienpointner evaluates the arguments and strategies used in scam letters *within* a system of rationality, which acknowledges critical standards respected by arguers, at least on a manifest level. At the same time he admits throughout his analysis, that the reason scam letters have been successful is the usage of strategies related to ethos. They are designed to create trust by reflecting the (apparent) sincerity of the writer, and appeal to the emotions of the addressees (greed, pity, religious awe, fear and suspicion) (Kienpointner 2006, p. 171-172). For scam letters to work, then, as Kienpointner ends up stating, logical or critical standards need to be *put aside* or at least are not major determinants in appealing to the addressee. Determining whether they appear fallacious or not is not sufficient to account for what makes them persuasive and so, evaluating them within the paradigm of validity (as Kienpointner initially does) is barking up the wrong tree.

In what follows, then, I would like to show that arguments in scam letters need not indeed be appraised within a paradigm of validity and we have more to gain and to learn from the way they function if we assess them through other concepts. I propose here to focus on Perelman's notion of adhesion (1989) and the notion of trust.

Using Perelman's notion of adhesion (1989) we can introduce other factors in the process of argumentation/persuasion. Danblon (2004) argues that against recourses to formal logic, Perelman sets forth a definition of argumentation as based on the means to enhance the audience's adhesion to the thesis suggested (Perelman 1989, p. 63, quoted in Danblon 2004, p. 1). This definition introduces into argumentation the lost dimensions of rhetoric, such as its human and social implications, and thus requires an interest in the psychology of emotions (Danblon 2004, p. 1-2). "One should be able to bypass a sterilizing dichotomy between a theoretical but oppressive validity, and a dynamic but irrational persuasion." (Danblon 2004, p. 5) That is why Perelman recognizes the limits of rationality in explaining persuasion and poses the question of reasonableness also in terms of psychology, psychopathology, and philosophy (ibid.).

Thus, arguments brought forth in scam are neither fallacious nor valid, nor do they "agree" or "disagree" with a critical or rational judge/judgment. They have to

do with the strategies used by the authors of the letters in order to build trust between sender and recipient. Some of the strategies used are designed to prove the sender's "source credibility", i.e., the fact that he or she is a reliable person or business partner (the term is borrowed from Hoveland, Janis & Kelley 1953; Giffin 1967), via the display of some historical or technical knowledge This of course can be considered as an ethotic argument. But some strategies are also meant to enhance the recipient's self appreciation: they appeal to her knowledge or capacity for empathy, or shrewdness and are designed to make her "feel good" about herself, presumably to induce a suspension of disbelief even under such implausible conditions. This is achieved by appealing to the recipient's empathy, which is supposedly translated into the building of a positive image of the recipient in his/her own eyes and by transporting the burden of proof upon him/her. This will be shown in the third and final section of this paper.

3. *Building Trust under Implausible Conditions – Toward an Evaluation of the Circumstances of Persuasion in Scam Letters*
Trust in the communication process means reliance upon the communication behavior of another person, in order to achieve a desired but uncertain objective in a risky situation (Giffin 1967, p. 105). In the context of website transactions, McKnight and others (2002) have defined trust in the vendor as a multi-dimensional construct with two inter-related components – trusting beliefs (perceptions of the competence, benevolence, and integrity of the vendor), and trusting intentions – willingness to depend (that is, a decision to make oneself vulnerable to the vendor) (McKnight et al. 2002, p. 297). Thus, professing a general willingness to depend on an other means one has made a conscious choice to put aside doubts and to move forward with the relationship instead of holding back (Holmes 1991 quoted in Mcknight 2002, p. 302).

In 419 fraud, too, everything revolves around trust, gaining the trust of a potential victim and retaining and reinforcing a bond of trust between the perpetrators and the victim. With regard to gaining the trust of the recipient, Bouts (2007, quoted in Schoenmakers et al. 2009) speaks of appealing to the emotions of the victim, which can take place on different levels. The goal of this is to influence the perception of the victim so that she will start to believe in the scam on all fronts. The 419 scammers can seemingly adapt effortlessly to the world as it is experienced by their victims and cater specifically to it (Schoenmakers et al. 2009).

In the examples given below, there is an attempt on the part of the sender to construct a credible and reliable ethos (letters 2-7: "Government Accredited Lisenced (!!) (sic.)", letter 7), by projecting a certain social status (a bank manager, a businessman, a religious person involved in charitable activity), by appealing to good intentions (charity, generosity, cf. letter 9), or by providing justifications designed to outdo the doubts which may arise due to implausible details (winning a lottery you never played, inheriting money of a relative you never had, cf. letters 7,9) and incongruity and discrepancies in the letter (why no phone calls are made, why the urgency, etc., cf. letter 8).

Other rhetorical strategies involve the appeal to emotions (Kich 2005; Kienpointner 2006; Schoenenmakers et al.). By "appeal to emotions" I mean here every strategy used to call into action feelings the addressee may have towards a person, a matter, or himself. Thus, typically the persuasive effect of a scam letter is explained by a response to greed: in all letters where no victimhood is at stake, but rather an improbable or fishy business deal (cf. letter 4), the author appeals to the recipients' probable greediness. Another common mechanism designed to elicit emotions is the appeal to pity: recipient is incited to help the sender who is a victim of some kind of parental or spousal loss, or illness**[i]**. This strategy differs from the "appeal to greed" in that it may also have some secondary effects on the recipient. If the authors of the scam letter choose to appeal to pity, it is not only because they want the reader to feel sorry for them, but it is also because they infer this may have a *persuasive* effect on her, i.e. call her to action (transfer money). This, I claim, is due to a secondary effect: the reader of the letter may feel pride of being sensitive and benevolent .

The same sense of "feeling good about oneself" may be achieved through another strategy which I dub here "appeal to common world knowledge". In letter 5 for instance, the Central Bank of Nigeria informs a beneficiary of overdue inheritance funds that have "been gazzeted [sic.] to be released" upon verification of the recipient's full personal details. The inheritance money, the letter claims, has been already claimed by an apparent fraud. The recipient of the letter who is informed in current world affairs will probably identify the fraud referred to in this letter as another illustration of the corruption to be expected from African regimes. Responding to the letter is irrational (if we are to evaluate it within the validity paradigm) since his denouncing a fraud does not exculpate *per se* the author from fraudulent intentions. However, if we apply the "feeling good about

oneself" criterion, then a possible explanation for the action can be given: the person who receives the letter is familiar with scams and frauds in Africa, but as a shrewd business man, he can identify a good business opportunity, and tell a "true" offer apart from a fraudulent deal. Letter 7 makes allusion to this point: " I know there is absolutely going to be a great doubt and distrust in your heart in respect of this email, coupled with the fact that, so many miscreants have taken possession of the Internet to facilitate their nefarious deeds, thereby making it extremely difficult for genuine and legitimate business class persons to get attention and recognition." In other words, by agreeing to the appeal set forth by the letter, the recipient comes to view herself as goodhearted and/or astute business person, and in any case well informed of world affairs and this enables her to set aside doubts cast by a rational reading of the letter and by the empirical evidence showing that similar letters are reportedly fraudulent.

Finally, in some cases, the argumentation in the letter consists also of a shift in the burden of proof (*tu quoque*): though it is logical that the recipient should seek reassurance and some guarantee of the reliability and trustworthiness of the sender, the latter sometimes demands to know whether the recipient is herself a worthy partner ("Can you be trusted?", letters 3, 7, 9). The burden of proof is thus shifted from the sender to the receiver: it is now up to the recipient – in case she wants to proceed with the deal – to make an effort to prove that she is worthy of trust**[ii]**.

4. *Conclusion*
In scam letters, the construction of a reliable ethos for the sender is one of the main strategies used. But because source credibility is often fallible, other strategies such as appeal to emotion are activated. The strategies used in the letters suggest that a significant part of what is supposed to persuade has to do with producing positive feelings on the part of the recipient about herself. Whether it is greed, shrewdness, generosity, responsibility, or knowledge, which are appealed to, the authors of the scam letters use them in order to suspend the recipients' disbelief when faced initially with the negative indications (discrepancies, incongruity) indicated in the first part of the article.

*Examples***[iii]**

(1) 13/05/2010

Dearest One,
Please l know very well that this mail might come to you as a surprise, I am Mrs Dagmar a dying woman who has decided to donate what I have to the Church, Mosque or any Charity Organization around your community through your assistance since l will not be able to do this here in my community for the reason which l will explain to you later. I was diagnosed for cancer for about 3 years now after the death of my husband (Dr. Patrick Irlandese) who has left me everything he worked for. My doctors told me I will not live longer than some weeks because of my health I decided to WILL/ DONATE the sum of $ 4.5 Million to you since I don't have a child rather than allowing my late husband's relatives that compire for his death to use my late hu sband hard earned funds ungodly. For the fact no one else knows the existence of this fund in the family, As my late husband worned me not to disclose this issue to any of his brethren before his death. So Please you should contact me immediately if you accept to carry on this project with your complete contact informations Comprising your Complete Names, Address, Direct Telephone and Your Occupation so that I can put you in contact with the establishment where the money was deposited or a lawyer to enable you arrange with them on how to secure the money for the purpose mentioned above, I can't predict what will be my fate by the time you will receive the funds, But you should please ensure that the fund is used as l have described above.You should reply urgently for more explanation.

Best Regards,
Mrs Dagmar Irlandese

(2) Playing the lottery – 5/6/2010

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Attention: Email Beneficiary.

Congratulations, MICROSOFT / FIFA WORLD CUP ONLINE E-MAIL LOTTERY AWARD PROMOTION 2010.

We write to officially notify you that The Result of the MICROSOFT ONLINE EMAIL LOTTERY held on 30th of May 2010 in London, has been released..Your

email address emerged as our lucky Winner for the 1st category and therefore awarded a cash sum of £1,500.000.00 (One Million, five Hundred Thousand Great Britain Pounds Sterling).Hence we do believe with your winning prize, you will continue to be active and patronize to the Microsoft Product and be a lover of Football.

Your winning Details are as follows:
PROMOTION DATE 30th/05/2010.TIME:11:30AM.
Reference Number: No.89/394/21
BATCH NUMBER: 3251/000/10/1f
e-ticket number: 865-45256453 096
LUCKY NUMBERS: 4-13-21-27-36-38-45
[…]
NOTE: to begin your claim, please complete this below including the photocopy of your identification and contact your claim Agent MR. WILLIAMS REEALE of MORGAN SECURITIES & FINANCE COMPANY below, by e mail, fax, or telephone.
[…]
MODE OF CLAIMS
(1) Cash Pick-Up (You coming Down to Uk Personally to Pick Your Price).
(2) Courier Delivery Of your Certified Winning Cheque Name and other Winning Documents safely to you
****
MORGAN SECURITIES & FINANCE COMPANY.
TELL/+44-704-571-8749
FAX: +44-807-561-5740.
E-MAIL:claims.2010wr@hotmail.com
****

Sincerely
Mrs Judy Steele
Washington, DC 20535

(3) Can you be trusted?

—– Original Message —–
From: jane graham
Sent: Tuesday, April 27, 2010 4:03 PM
Subject: CAN YOU BE TRUSTED

From: Ms Jane Graham,
Scotland, United Kingdom

I am Ms Jane Graham, I wish to seek for your assistance in a financial transaction. however, is not mandatory nor will I in any manner compel you to honor my request against your will. Your profile pushed me to send you this mail; I'm the daughter of late Dr. and Mrs. Nerd Graham. My father was a highly reputable business man (supplier of agro allied material and general merchandise) he operated in the Middle East during his days. It is sad to say that he passed away in one of his trips to the UK. Although his death was linked or rather suspected to have been masterminded by one of our uncles who travelled with him at that time But God knows the truth My mother died when I was a little girl, and since then my father took me so special. Before his death in 2008, he told me about a safe he concealed the sum of Fourteen Million United State Dollars. ($14,000,000.00 USD) deposited with a large investment & Security Firm in Asia

The safe was disguised & declared as Family Personal Belongings instead of the real content money, by this way the company does not know the true content of the safe as money but family personal belongings. I have in my possession the deposit Receipt which the company gave to my late father on the day he made the deposit with the security firm in Asia. I really don't know what to do than to seek your assistance in claiming these funds on my behalf.

I have been through a lot of hard times here in London. The death of my father has brought sorrows to my life. I am in a sincere desire of your assistance in this regards. Your suggestions and ideas will be highly appreciated. Will you permit me to ask these few questions:-
1. Can you honestly and willingly help me in this transaction?
2. Can I completely trust you?
3. What percentage of the total amount in question will be good for you after the money gets in your possession?
Please, read through and kindly get back to me as soon as possible.

My sincere regards,
Ms Jane Graham

(4) Fishy business proposal, appeal to greed
From: Hello Friend

Date: Wednesday, February 24, 2010 5:15 PM
To: undisclosed-recipients ;
Subject: (SPAM) Hello Friend

Hello Friend,

I am Mr. Yi Kwan a transfer supervisor on investment in Standard Chartered
Bank, Hong Kong. I have a business suggestion for you.
In late 2004 our customer Abdul Hussein Khazal Al Basri who was a journalist
with al hurra channels and also business man made a numbered cash
lodgement for 12 months, with a value of Eighteen millions Five Hundred
Thousand United State Dollars only in my branch.

We have sent him several letters and emails before and after the maturity. We
later find out that the journalist and his three months old only son had been
killed during the war as they left their house in Basra.
On investigation it was revealed that Abdul Hussein Khazal Al Basri did not
declare any next of kin in his official papers including the paper work of
his bank deposit. And he also confided in me the last time he was at my office
that no one except me knew of his lodgement in my bank. So, Eighteen millions
Five
Hundred Thousand United State Dollars is still lying in my bank and no one
will ever come forward to claim it. What bothers me most is that according to
the to the laws of my country at the expiration of 7 years the funds will revert to
the ownership of the Hong Kong Government if nobody applies to claim the
funds.

Against this backdrop, my suggestion to you is that I will like you as a foreigner to
stand as the next of kin to Abdul Hussein Khazal Al Basri so that you will be able
to receive his funds.

Please endeavour to observe utmost discretion in all matters concerning this
issue. Once the funds have been transferred to your nominated bank account we
shall share in the ratio of 60% for me, 40% for you.
If interested send your response to my personal email address:
emailyikwan_1@yahoo.com.hk

Regards
Yi Kwan

(5) Constructing a reliable ethos via status and appealing to common world knowledge

From: Dr. MICHAEL COLLINS
Date: Tuesday, November 04, 2009 12:17 AM
To: None
Subject: DEAR BENEFICIARY

CENTRAL BANK OF NIGERIA
TINUBU SQUARE, VICTORIA ISLAND,
LAGOS, NIGERIA.
OFFICE OF THE EXECUTIVE GOVERNOR.
FROM THE DESK OF: DR. MICHAEL COLLINS.
INTERNATIONAL REMITTANCE DEPARTMENT.
CENTRAL BANK OF NIGERIA.
OUR REF: CBN/IRD/CBX/021/08

DEAR BENEFICIARY,

THIS IS TO NOTIFY YOU THAT YOUR OVER DUE INHERITANCE FUNDS HAS BEEN GAZZETED TO BE RELEASED, VIA TELEGRAPHIC WIRE TRANSFER (TWT) TO YOU THROUGH OUR LONDON OFFICE.

MEANWHILE, A WOMAN MRS. JANET WHITE CAME TO MY OFFICE FEW DAYS AGO WITH A LETTER, CLAIMING TO BE YOUR TRUE REPRESENTATIVE HERE WITH THIS INFORMATIONS BELLOW:

NAME: JANET WHITE.
BANK NAME: CITI BANK.
BANK ADDRESS: ARIZONA, USA.
ACCOUNT NUMBER: 6503809428.

PLEASE, DO RE-CONFIRM TO THIS OFFICE, AS A MATTER OF URGENCY IF THIS WOMAN IS FROM YOU OR NOT, BECAUSE THE FEDERAL GOVERNMENT OF NIGERIA WILL NOT BE HELD RESPONSIBLE FOR PAYING YOUR INHERITANCE FUND INTO A WRONG ACCOUNT NAME,HOWEVER, WE SHALL PROCEED TO ISSUE ALL PAYMENTS DETAILS TO THE SAID MRS.WHITE,IF WE DO NOT HEAR FROM YOU WITHIN THE NEXT SEVEN BANKING DAYS FROM TODAY.PLEASE CONFIRM TO US IF THIS WOMAN IS YOUR

REPRASENTATIVE.

YOU ARE ADVICE TO RE-CONFIRM IMMEDITLY THE FOLLOWING INFORMATION BELLOW FOR

VERIFICATION PURPOSE.

1. YOUR FULL NAME.

2. YOUR FULL ADDRESS.

3. YOUR TELEPHONE.

4. FAX.

5. AGE.

6. SEX.

7. YOUR OCCUPATION.

8. YOUR FULL BANK ACCOUNT INFORMATION.

AS SOON AS WE RECEIVE THE ABOVE INFORMATION FROM YOU, WE SHALL COMMENCE WITH ALL NESSCCARY PROCEDURES IN OTHER TO REMMIT THIS FUND INTO YOUR BANK ACCOUNT.

THE CENTRAL BANK GOVERNOR,BOARD OF DIRECTORS AND THE SENATE COMMITTEE FOR FOREIGN PAYMENT OVER INHERITANCE FUND HAVE APPROVED AND ACCREDITED THIS REPUTABLE BANK WITH THE OFFICE OF THE DIRECTOR,INTERNATIONAL REMITTANCE
DEPARTMENT TO HANDLE AND TRANSFER YOUR INHERITANCE FUNDS,FOR THIS THIRD QUARTER PAYMENT OF THE YEAR.

WE ARE SORRY FOR THE DELAY IN TRANSFERRING OF THIS FUND; MAKE SURE YOU SEND THE DETAILS OF YOUR ACCOUNT CORRECTLY.

PLEASE RE-CONFIRM YOUR INFORMATION THROUGH THIS
E-MAIL ADDRESS:infoconfidentalcbn_ng@indiatimes.com

BEST REGARDS,

FOR: CENTRAL BANK OF NIGERIA (C.B.N)
DR. MICHAEL COLLINS

CC: FEDERAL MINISTRY OF FINANCE.
CC: FEDERAL EXECUTIVES COUNCIL.
CC: SENATE PRESIDENT.
CC: ACCOUNTANT GENERAL OF THE FEDERATION.

(6) Seeking to build a reliable ethos by proving expertise, building a reliable image of the recipient – 19/05/2010

FROM THE DESkTOP

OF MR SANDERS WEEK

INTERCONTINENTAL

BANK NIG. PLC.

ATTENTION:

I seek for your co-operation; my name is Mr.Sanders Week A Personal Accountant to Late Engineer Michael, a citizen of your country , who used to work with French oil major total, company here in. Herein, shall be referred to as my client. On the 21st of April 2004, Mr. Michael, his wife and his three children were involved in a drastic car accident along Sagamu/Lagos Express Road. Unfortunately he and his three kids lost their lives immediately in the event of the accident, while the wife was taken to the hospital where she died three days later. Their bodies were kept in the mortuary for five months, in order for the authority, to carry out a proper investigation on how to locate their surviving relatives. They have checked all available public files and embassies, but all their efforts had proved abortive, as they could not fund any of their relatives.

After these several unsuccessful attempts, no one has been coming for his account that he deposited with my bank (Intercontinental Bank Nigeria Plc). And due to the banking law and regulation of 1985, sub section 18d page 103 chapter 11 of constitution governing all banking policy, and in accordance to the banking decree 003 sub section 45 which stated that any deposited fund which remains unclaimed after the existing period of four years will be confiscated by the national treasury department as unclaimed fund. And this has brought too much agitation in our bank between boards of directors on how to declare this account unserviceable, base on the fact that the deceased has no next of kin. After the meeting held by the executives of intercontinental bank with the personal attorney to late Michael on 15th of August 2008, they have all agreed to extend the date to 15th of June 2010.

Consequently to this, I have contacted you to assist in repatriating the money and property left behind by my client before the national treasury department gets them confiscated or declare unserviceable by intercontinental bank Plc Where the deceased have an account Valued at about fifteen Million, three hundred and

forty five thousand U.S dollars (USD 15, 345,000.00). The bank has issued out a notice to provide the next of kin or have the account confiscated with in the next few days. Since no one has been able to locate their relatives for over four years now, I seek your consent to present you as the next of kin of the deceased so that this account valued at fifteen Million, three hundred and forty five thousand U.S dollars (USD 15, 345,000.00) can be paid to you and then you and I Can share the money. All the necessary documents concerning this claim are with the Bank legal department. All I require is your honest cooperation to enable us seeing this deal Get back to me for immediate commencement of this deal.

Yours Truly
Mr.Sanders Week.

(7) Anticipating disbelief – 23/05/10

Government Accredited Lisenced!!
Registered Under The Data Protection
Act Of (Reg : GLO/RYWP/07/11/23)
www.gloworld.com

18th Of May 2010
GLO WORLD WIN & RULE WINNER

I know there is absolutely going to be a great doubt and distrust in your heart in respect of this email, coupled with the fact that, so many miscreants have taken possession of the Internet to facilitate their nefarious deeds, thereby making it extremely difficult for genuine and legitimate business class persons to get attention and recognition. There is no way for me to know whether I will be properly understood, but it is my duty to write and reach out to you.

The management of the Glo Telecommunication Company are pleased to inform you that you/your online profile have been selected as one of our six lucky people in the Glo Telecommunication WIN & RULE WORLD ESTHER/NEW YEAR PROMOTIONS of $1,000,000.00 USD (ONE MILLION UNITED STATE DOLLARS).This is in celebration of our 5th year anniversary as a merger in the TeleCommunication Company and also to promote international awareness for the Glo networks. Your profile id was selected randomly from a total list of 1,550,250 profile id's from around the world, from our affiliate email clients, websites, social networks.

Global com is currently one of the largest corporations in the Telecommunication company, both in the Africa and other continents and you have been selected as a winner in this years inaugural promotions for $1,000,000.00 USD. Please note that this is not a lottery sweepstake or windfall and due to the high rate of internet lottery scams on the internet today, the Management of Global com wishes to dissociate itself from this activities and to assure you of the legitimacy of this promotion, please note that this program is open to any scrutiny on your part. It is also in your interest to keep this notification highly confidential to avoid double claims of your winnings and unwarranted abuse of this program. Security Code: GXP/SIX/GW/09ATT115.

To this regards you are required to send to me the below information for further directives on how to claim your prize.

Your full name
Your occupation
Age
Contact Home address
Contact phone number

Upon the receipt of the above information, further instructions will be given to you

This is for your information, attention and necessary action as I await your urgent response. You can reach me on this number +2348078141212 for verbal discussion immediately.

BEST REGARDS,
MR. JAMES ZINI
GLOBAL COM COMMUNICATION CERTIFIED PROMO AGENT.
Claim Global Com Communication Department office,
Congratulations from the Staff & Members of the
Glo Telecommunication Company Lottery Board Commission
NAME: MR A.FARROUKH NAME: MRS F JAKOET NAME: JOSEPH SOLAN
POSITION: BOARD MEMBER POSITION: DIRECTOR POSITION: DIRECTOR
THIS PROGRAM IS SPONSORED BY: GLO TELECOMMUNICATION COMPANY: AND SUPPORTED BY (PRIVATE BODIES).

(8) Anticipating disbelief – 16/04/2010

Attention,my dear,

This urgent massage is to inform you that your fund has be cleared from Taxi department and i have Paid the fee check delivery but the manager of EcoBank Benin told me that before the check will get to your hand it expired and it will be hard for you to cash it in your bank due to amount involved and tried to secure all the documents but secretary refused with the reasons that in't allow them to divert your payment. So i told Mr.Koffi EcoBank Benin manager to cash $750,000.00 usd. We did the work past one week and all the necessary arrangement of delivery sum of $750,000.00 usd. in cash has be made with DHL DIPLOMATIC COURIER COMPANY BENIN REPUBLIC. They carry out the delivery last monday and their diplomatic agent is on the way to your home.

Please Re-confirm your information below to Dhl Diplomatic agent conveying the consignment and don't allow him to delay in delivering the consignment today as they promised.

Contact Mr. Donald Parker (Dhl Diplomatic Agent)
EMAIL:(top_diplomatparker1@gala.net)
Contact him on this telephone number,5165023146.On no circumstances you should let him know that there is $750,000.00 usd. inside the consignment to avoid divertion of your compensation. They moved the trunk box to you as families Treasure.

Re-confirm your below info to diplomat right now.

1.Your Nearest Airport======
2.Your Full Name=========
3.Full Address===========
4.Your Private Phone Number==

The trunk box Key still in Bank because they advised not send the key to you with the same delivery company for security reasons so you can easily brake it.I will move back to Haiti to finish the project there and will not come back till ending of June so don't allow any body to deceive you any more.

Sincerely,
Barr.Charles.B.B.EZe
Debt.Secretary

(9) Friendly approach, appeal to emotion (pity, greed); positive image for the recipient due to charity, huge cut (50% of the deal) – 16/04/2010

Hello Dear,
How are you and everything happening around you? I am contacting you because I need someone who will help me establish an orphanage, and also run a charity program with my life time savings as I will depart this wicked world due to esophagus cancer. I want to help the poor kids as much as I can. I am Malaysian, widow and have no one around me to trust as they all want to loot my money and never care about my interest. Presently I am at the hospital. The total amount for this project is $8.5million dollars and 50% of the money will be yours and 50% will be for the project. We have never met before but after going through your profile I decided to contact you. I wish you are the honest and hardworking type I am looking for. Please get back to me so that I can give you the details.
Regards

NOTES
[i] [...] the perpetrator also sometimes tries to elicit sympathy from the victim through a variety of personal problems as in the following example: "I have had a hectic day with my wife been admitted in the hospital for her treatment for cancer (Chemotherapy)." (Corperleijn 2008 quoted in Schoenmakers et al. 2009)
[ii] On the ad hominem front, there is also an indirect appeal to the special circumstances in which the recipient is found: "One must also remember that for the susceptible recipient of such a message, there will be all sorts of reasons to rationalize the apparent mass-mailing of the messages. For the susceptible victim is likely to be desperate, greedy, or good-hearted to the point of being almost willfully naïve." (Kich 2005, p. 131)
[iii] All spelling and grammatical mistakes are in the original form. A discussion of the rhetorical effects of the faulty style can be found in Kich 2005.

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