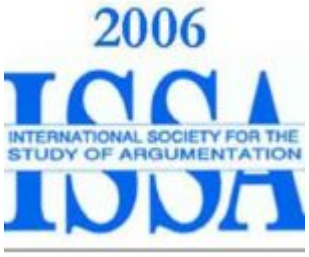
ISSA Proceedings 2006 ~ The Criminal Abduction Paradox



Abstract

In criminal trials at common law there is an apparent clash of legal principles. On the one hand, a jury cannot convict an accused except on a finding of guilt "beyond a reasonable doubt." On the other hand, juries base their verdicts on what they take to be the best "theory of the case". A theory of a case is a conjecture that best explains the evidence led at trial. Theories of the case are therefore exercises in abduction. Since abduction is intrinsically conjectural, it is difficult to see how any theory of the case could meet the proof standard of guilt beyond a reasonable doubt. The present paper offers a possible solution of this apparent paradox.

Key words: abduction, activation, conjecture, criminal standard, explanation, hypothesis, ignorance-problem, proof, reasonable doubt, reasonable person, verdict

1. *Verdicts as abductive*

In the common law tradition, a conviction at the criminal bar is constituted by a verdict of guilt beyond a reasonable doubt.**[i]** Verdicts reflect an interpretation of the evidence heard at trial and an assessment of the competing parties' theories of it. A theory of the evidence is also called an "argument", presented as an address to the jury. An argument in this legal sense is grounded in an inference to the best explanation, which is the most common form of abductive reasoning. So we may say that a guilty verdict is the conclusion of a suitably strong abduction, and that a verdict to acquit is a judgement to the effect that the evidence permits no abduction of requisite strength. A jury's task is to adjudicate between the rival abductions proffered by opposing counsel in their closing statements. It is also possible that a juror might reject the arguments advanced by counsel and make his own interpretation of the evidence. Either way, the jury's task is complicated by the fact that nearly always the sum total of the evidence heard at trial is internally inconsistent. This gives all three parties – prosecution, defence and jury – occasion to trim the evidence with a view to reining in its inconsistency. This is done in one or other of two ways, singly or in combination. Juries will either base

their determinations on a consistent proper subset of the total evidence, or they will form subsets of it that retain some of the inconsistency, but assign to its competing elements different weightings. It is therefore entirely commonplace that the abductions advanced by opposing counsel proceed from different subsets of the total evidence. Nor is it uncommon that the evidence tied to the jury's own abduction is yet a different subset of the evidence, although usually they overlap fairly significantly. Accordingly, a lawyer's address to the jury will typically have two components. One is a presentation (sometimes implied rather than expressed) of reasons for selecting his particular subset of the evidence. The other is the advancement of what he takes to be the best explanation of it. By the time a case goes to the jury, it is often the case that the trier of fact is faced with two rival abductions explaining two rival bodies of evidence. It falls to the trier of fact to assess not only the strength of these rival abductions, but the soundness of the evidence-selection choices to which they are tied.

On the face of it, these features place criminal verdicts at risk of incommensurability. Let the prosecution's and defence's theory the case be schematized as follows, with '*G*' representing "guilty as charged" and '*E*' and '*E*'' representing different and usually mutually incompatible subsets of the evidence heard.

Prosecution: *G* best explains *E.*
Defence: *~G* best explains *E'.*

It is, to be sure, an interesting sort of incommensurability. How could the one claim prevail over the other, given that they both could be true together? I won't be concerned here with the incommensurability problem. Instead, what I want to do in this note is to expose what I take to be the basic structure of abductive reasoning, with special attention on how this bears on the criminal proof standard of guilt beyond a reasonable doubt. I lack the space to examine the dynamics of evidence-selection, interesting and important as this question assuredly is.**[ii]**

2. *Ignorance-problems*

Abductions are responses to *ignorance-problems*. An agent has an ignorance-problem in relation to an epistemic target that cannot be hit by the cognitive resources presently at his command, or within easy and timely reach of it. Intuitively, if I want to know whether *P*, and I lack the information to answer this question, or to draw it out by implication or projection from what I currently

know, then I have an ignorance-problem with respect to *P*. The two most common responses to ignorance-problems are

1. the acquisition of new information
2. acquiescence.

In the first case, one's ignorance is removed by new knowledge, and a new position is arrived at which may serve as a positive basis for action. In the second case, one's ignorance is fully preserved, and is so in a way that cannot serve as a positive basis for new action.

There is a third response that is sometimes available to the cognitive agent. It is a response that splits the difference between the prior two. The third response is abduction. Like response 2), it is ignorance-preserving, and like response 1), it offers the agent a positive basis for action. In response 1), the agent overcomes his ignorance. In response 2), his ignorance overcomes him. In response 3), one's ignorance remains, but one is not overcome by it. It offers the agent a reasoned basis for action in the presence of his ignorance. No one should think, however, that the goal of abduction is to *keep* oneself in ignorance. The goal is to make the best of the ignorance that one chances to be in.**[iii]**

3. *A schema for abduction*

Consider an actual case. In 1900, Max Planck was troubled by the fact that there were no unified laws for black body radiation. He took it for granted that the actual state of the world was such that black body radiation was in fact governed by unified laws. But in 1900, the physics of the day presented no such unification. So Planck took it as given that the physics of the day misdescribed the world in that regard. It presented the world as it wasn't. The laws which were disunited in our theories were united in nature. Planck wanted to know what it was about the universe that subjected black body radiation to unified laws. He didn't know. No one knew. This constituted an ignorance-problem for physics. Planck realized that if light possessed a quantal structure, then the laws of black body radiation could be united. Nothing that was known of the physical world in 1900 lent the slightest credence to this idea of the quantum. Even so, Planck persisted with it. Let *H* be the proposition that "Light has a quantal structure" and let *T* be the epistemic target of wanting to know what the world has to be like in order that black body radiation would be governed by unified laws. Planck didn't draw the answer to *T*, but he did know that if *H* were true, *T* would be answered. He knew that *H*

subjunctively answers *T*. The rest is history. On the basis of *H*'s constituting a subjunctive attainment of his epistemic target *K*, Planck did two things. First, he *conjectured* that *H* is true. Secondly, on that basis, he activated *H* and put it to further premissory work in physics.**[iv]** Since it was grounded in conjecture, Planck's activation of *H* was, of course, presumptive and defeasible. Even so, this did not prevent him saying to his son, "Today I have made a discovery as important as that of Newton." It is useful to note in passing that Planck's was not an inference to the best explanation. For one thing, Planck was convinced that the quantum hypothesis lacked physical meaning. His employment of it, therefore, was for its instrumental value, not its explanatory force.**[v]**

With Planck's example in mind, we can give a general schema for abduction, as follows. Let *T* be an agent's epistemic target at a time, and *K* his knowledge-base at that time. Let *K** be an immediate successor of *K* that lies within the agent's means to produce. Let *R* be an attainment-relation on *T* and *Rsubj* a subjunctive-attainment relation on it. *K*(*H*) is the revision of *K* upon the addition of *H*. *C*(*H*) denotes the conjecture of *H* and *H** its activation. Accordingly, the general structure of abduction is as follows.

1. *T!*
[setting of T as target]
2. *~(R(K, T)*
[fact]
3. ~(R(K, T)*
[fact]
4. *Rsubj (K(H), T)*
[fact]
5. *H* meets further conditions S1, …Sn
[fact]**[vi]**
6. Therefore, *C*(*H*)
[sub-conclusion, 1-5]
7. There, *H**
[conclusion, 1-6]

Here, too, and notwithstanding what might be suggested by the Planck example, it is advisable to guard against a misconception. When we say that an abduction involves the activation of a hypothesis in a state of ignorance, it is not at all necessary, or frequent, that the abducer be wholly in the dark, that his ignorance

is total. It need not be the case, and typically isn't, that the abducer's choice of a hypothesis is a blind guess, or that nothing positive can be said of it beyond the role it plays in the presumptive attainment of the abducer's original target. Abduction is not mysticism. In particular, it is not foreclosed that there might be evidence that lends the hypothesis a positive degree of likelihood. But when the evidence is insufficient for activation, sometimes explanatory force is the requisite "top-up". Loosely speaking, abduction often is a deal-closer for what induction cannot attain on its own.

4. *Its bearing on theories of the evidence*

Of course, some criminal prosecutions are open and shut. They leave no one in any doubt about who did what to whom. Sometimes those cases are defended for merely strategic reasons, often in the hope that a losing defence may nevertheless influence a judge's decision on sentencing.**[vii]** But in the usual run of cases, a defendant will go to trial with a plea of not guilty if he thinks that the Crown's case can be effectively rebutted or if he thinks that, rebuttable or not, it doesn't rise to a proof beyond a reasonable doubt. In the majority of such cases, the total evidence will embody significant inconsistencies. Not only will the evidence led by opposing counsel be in conflict, but witnesses for either side may in various respects contradict one another. This presents a juror with two ignorance-problems. Although he must decide who is telling the truth, by and large he will have to perform this duty on some basis other than knowledge. And, having selected which segments of the evidence he is prepared to accept, a verdict of guilty by and large is also rendered on some basis other than knowledge. While it cannot be foreclosed that a jury will sometimes lodge a conviction in the manifest certainty of the accused's guilt, in the general case a conviction will be underdetermined by what a jury *knows.*

A theory of the evidence is meant to close the gap between what the juror knows and what he desires to know. In the cases we are discussing, a prosecution's closing argument is an argument to the effect that the hypothesis that best explains the evidence is that the accused is guilty as charged. If a juror accepts that evidence and accepts that it provides the best explanation, his remaining duty is to determine whether the explanation is strong enough to justify a conviction. A juror may select a different subset of the evidence and may have a different view of what best explains it. When this happens he must determine whether the hypothesis of guilt is a better explanation and strong enough to

justify a conviction. Even so, a jury cannot *convict* on that basis. Its duty is to determine whether the *Crown's* theory of the case supports conviction, not that its own theory of the case does. On the other hand, a jury may *acquit* an accused on this same basis. If a jury fashions its own theory of the case in which the winning hypothesis is incompatible with the hypothesis of guilt, it has a duty to bring in a verdict of not guilty.

The abductive character of theories of the trial is perhaps most evident when the evidence heard is circumstantial. For the purpose of this paper, I am content to restrict the scope of my abductive thesis to the enormous number of cases that cluster around this paradigm. There is a myth that seems to have become rather entrenched among the laity, to the effect that circumstantially argued cases can't meet the criminal proof standard or, anyhow, can do so only in some diminished sense, *faute de mieux*. The myth is contradicted both by legal practice and juridical pronouncement. Thus we read in [Klotter, 1992, p. 69] that

[*h*]*istory is replete with examples of convictions based exclusively on circumstantial evidence.***[viii]**

What is more, in an American case from 1969,

The trial judge properly instructed the jury that 'the law makes no distinction between direct and circumstantial evidence but simply requires that the reasonable doubt [if it exists] should be drawn from all the evidence in the case', including 'such reasonable inferences as seem justified in the light of your own experiences.' ([Klotter, 1992, p. 68])

This would also be a good place to clarify the constraint that the winning theory of the case be the *best* explanation of the evidence. In 1978, the Indiana Court of Appeals ruled that

[*c*]*onvictions should not be overturned simply because this court determined that the circumstances do not exclude every reasonable hypothesis of [the] evidence.* ([Klotter, 1992, p. 69]).

While the Indiana ruling does not say so explicitly, it would appear to allow for the possibility of a theory's superior explanatory force being undermined by the jurors' doubts about the credibility of the particular subset of the evidence which counsel offers it as explaining. In other words, a losing theory of the case might

have the greater explanatory power in relation to evidence the jury has trouble with than that possessed by the other party's explanation of the evidence that jury is more disposed to accept.

We should also note that, on rare occasions, the evidence that a jury is prepared to accept admits of only one possible explanation. In such cases, it is perfectly proper for the jury to make a "transcendental" inference in the form: "These are the facts. These facts could not have obtained except that the accused committed the crime with which he is charged. Consequently, we must convict." Transcendental arguments are regressive or backwards chaining arguments, but they are not abductive, since, when they come off, they are not ignorance-preserving. But I say again that the occasion for a jury availing itself of a transcendental inference is comparatively rare in actual practice.

Conviction has two components. The jury must find that the hypothesis abduced by the prosecution is strongly explanative and that no rival hypothesis permitted by the evidence is more explanative. The jury must also determine that the best explanation is strong enough to meet the criminal proof standard. In so saying, a nasty difficulty presents itself. On the face of it, this second condition cannot be met. The reason is that abductions are ignorance-preserving, leaving the jury not knowing whether the accused is guilty as charged. This flows from the logical structure of abduction. Accordingly, the hypothesis of guilt is a conjecture, it is an educated guess. How can an educated guess qualify as any kind of proof, still less a proof beyond any reasonable doubt? This is trouble bad enough to deserve a name. My choice is the *Criminal Abduction Paradox.*

5. *Reasonable doubt*

We read in a prominent American text book that

[r]*easonable doubt is a term in common use as familiar to jurors as to lawyers. As one judge has said, it needs a skillful definer to make plainer by multiplication of words …* ([Strong, 1999, p. 517]).

This is a remark wholly typical of the epistemological orientation of the common law. Its fundamental concepts – proof, inference, relevance, probability, among others – are presumed to be adequately understood intuitively, that is, in the absence of analytical tutelage. What is more, the common law embodies a certain scepticism about definitions and formal explications, according to which an

analysis of terms is either redundant or conceptually distorting. Both these sentiments can be found in the lines I have just now quoted.

Even so, judges will on occasion venture forth with definitions. Here is an example formulated by the Supreme Court of Canada in *R. v. Lifchus* as a model instruction.**[ix]** It provides, on the one hand, that jurors need not have absolute certainty of the accused's guilt but, on the other, that his probable guilt is not enough. Even believing that he is guilty is not enough. In a subsequent case, it was averred that it would

[*b*]*e of great assistance for a jury if the trial judge situates the reasonable doubt standard appropriately between the two standards [of certainty and probability].* (*R. v. Starr*, [2000] 2 S.C.S. 144 at para. 242.)

I will not take the time to dwell on the haplessness of these high court explications, beyond saying that they are multiplications of words that make things less plain, not more.**[x]** Even so, the model charge of *Lifchus* also contains a further sentence that may be of some use to us.

In short, if based upon the evidence… you are sure that the accused committed the offence you should convict since this [i.e., the conviction] demonstrates that you are satisfied of his guilt beyond a reasonable doubt. (13-14).

I don't for a moment want to suggest that these words are the acme of clarity, but they do embed (perhaps inadvertently so) an interesting suggestion which I now want to try to tease out. I shall do so by examining the doctrine of the reasonable man.**[xi]**

6. *The reasonable man*

The concept of the reasonable man or, as we must now say, reasonable person, lies at the heart of the law of tort, where it helps distinguish strict liability from the liability of fault. In this usage, it is the subject of a great deal of finely wrought analytical instruction by judges and, so, is an important exception to the law's epistemology of tacitness with regard to its foundational concepts. But the idea of the reasonable person also leaves its tracks in other quarters of the law, notably in its conception of how juries are to be constituted and what they can be considered capable of doing. Juries – both criminal and civil – are made up of ordinary persons who have had no expert or formal tutelage in the matters they will hear in evidence. In most common law jurisdictions, a professional training in

any such matter disqualifies a person from jury duty. In this same spirit, it is assumed that the reasoning and reflection that the jury will be required to bring to bear on the evidence will be of a kind and of a quality open to the ordinary person reasoning in the ordinary way of things. Here, too, if a judge actually did think that a formal training in, say, Critical Thinking endowed its owner with expertise in the matter, he would disqualify him from serving.

This teaches us an important lesson about reasonable doubt. In its commitment to the reasonable-person model of the trier of fact at the criminal bar, the law presumes that the standard of proof beyond a reasonable doubt is routinely meetable by ordinary persons reasoning in the way of ordinary persons. What is this "reasoning in the way of reasoning persons"? It is intuitive and unreflective reasoning. It is reasoning that omits the open calibration of performance to criteria. This means, in particular, that when a juror finds an accused guilty beyond a reasonable doubt, he (the juror) has no duty to make – and in general would be wholly incapable of making – the case that his verdict meets the stated standard.

There is a second moral to draw. It is widely believed that the criminal proof standard is a particularly high one, and artificially so. That is to say, that it is a standard higher than one that would suffice for determinations of guilt in non-juridical settings – think, for example, of a university's misconduct committee – and artificial by virtue of the fact that it is imposed by the courts as a hedge against wrongful conviction. This is twice-over a mistake. If compared to the standards of mathematical demonstration and scientific confirmation, the criminal standard is pretty small beer. And since it is a comparatively low standard, its remarkable loftiness cannot be a matter of courtly imposition. It is quite true that courts do impose artificialities that serve as hedges against wrongful conviction,**[xii]** but the criminal standard of proof is not one of them.

Since juries don't proceed by aiming at standards and don't succeed by aligning their thinking to their criterial requirements, in other words, since jurors are not *hit-the-mark* thinkers, it remains to speculate on how the proof standard is actually met.

Here the last-quoted observation from *Lifchus* is suggestive. A juror must convict if, upon attending to the evidence, he is *satisfied* that the accused is guilty as charged. And since, in reaching that state of mind, he is not a hit-the-mark

thinker, satisfaction here is an *operational* concept, not a criterial one. A juror's satisfaction is not to be confused with his belief that the accused is guilty or his judgement that the accused is probably guilty, or his feeling that the accused could not possibly be innocent, but rather is *constituted* by the decision to convict. The satisfaction is implicit in the conviction.

Unless I am badly mistaken, I think that we may now say that we have ready to hand one part of an answer to the Criminal Abduction Paradox:

A. *The criminal proof standard is not particularly high, and is attainable without tutelage by any reasonable layman.*

Proposition (1) is supported semantically. People who worry that the intuitive and untutored character of jury decisions is of too low a standard to qualify as proof overlook the core meaning of that notion. Whether in mathematics or science or the kitchen, a proof is the result of a trial that defeats a presumption. The toughness of both the presumption and the trial vary with the nature of the contexts in which proof is sought. Things are tougher in mathematics than they are in the kitchen, but, for all their difference, a proof of a theorem and a proof of the pudding preserve this core meaning. This gives a second thing to say against the paradox:

B. *The comparative lowness of the criminal standard in no way strains the core meaning of the concept of proof.*

We come now to a third point. If we again reflect on the core meaning, we are reminded that proofs arise from trials. In mathematics, a trial is a sound demonstration of a proposition otherwise presumed to be mathematically inadmissible. In science, a trial is the application of the scientific method to a proposition otherwise presumed to be scientifically inadmissible. In the kitchen, a trial is the eating of a dish otherwise presumed to be unfit for the King. In law, a trial is an attempt to defeat the presumption of innocence. In this we see a deviation from the abductive paradigm schematized in section 3. In the general case, the trial of an abduced hypothesis *follows* its activation. But in the law, activation is reserved until the hypothesis has been tried. So a third thing to say against the paradox is:

C. *A prosecution is an attempt to defeat the presumption of innocence. A defence is an attempt to defeat that attempt. A verdict of guilt survives all available effort to defeat it.*

Perhaps we might think that we have made some progress in attaining a better

understanding of the criminal proof standard. In what we have suggested so far, we have placed good deal of weight upon the notion of satisfaction.**[xiii]** But satisfaction is no less ambiguous a concept than the law's other foundational concepts. If we leave it in this undisambiguated state, we compromise the criminal standard interpretation that rests upon it. It is not that we have done nothing to clarify our intended use of "satisfy". We have said that being satisfied that *H* is, in this legal sense, different from believing that *H,* judging *H* to be probable and thinking *H's* falsity impossible. But what, we might ask, is its further positive mark, and in what way does it bear essentially on the structure of abduction?

7. *The abductive character of verdicts*

What is it to convict a man for murder knowing that you do not know whether he is guilty of it? The general form of this question is answered in the logic of abduction. There is a presumption that risky actions should be circumscribed in the absence of certainty. This is the fundamental principle of risk aversion in conditions of uncertainty. The costlier the consequences should one's action turn out to be mistaken, the greater the need to mitigate uncertainty before the action is taken. This is a wisely conservative principle, but like most good things we can have too much of it. In its most extreme form risk-averse conservatism is equivalent to our second – or do-nothing – response to an ignorance-problem. No one thinks that this is the right form of the principle *in general.* Abduction, or the third response, risks action in the absence of knowledge, even where such actions are neither trivial nor reversible. Even so, the weightier the consequences of being wrong, the stronger the abduction must be. This cues a further operational remark about satisfaction.

D. *Knowing the risks, one's satisfaction with H is constituted by one's activation of it, the higher the risks, the greater the satisfaction.*

*Jurors, like the rest of us, are seized of the great wrong of a wrongful conviction and have a duty to minimize the likelihood of its commission. But jurors are not permitted, still less do they have a duty, to avert the wrong of wrongful conviction by declining to convict no matter what. They have a duty to convict when they are satisfied. The mark of that satisfaction is activation of the Crown's hypothesis of the case, knowing the risks.***[xiv]**

According to the general schema for abduction, a conjecture is activated when the abducer releases it for premissory work in the disciplinary contexts in which

the originating ignorance-problem arose in the first place. This is one way – the abductive way – of sending a conjecture to trial. One puts it to work, and one sees what happens. It is quite true that sometimes a conjecture is sent to trial without the intervening step of activation. In such cases, the conjecturer does not act on the hypothesis he has arrived at until its *bona fides* have been subsequently established. As common as this practice may be, it is not abduction according to the general schema. Some may see it otherwise. They may think that the example at hand shows the general schema in a bad light. Lacking an interest in unedifying semantic wrangles, I am prepared to split the difference. Such cases are not abductions in full; they are *partial* abductions.

This has a direct bearing on the abductive character of theories of the case. When a prosecutor conjectures the guilt of the accused and the defence conjectures his innocence, it lies in the nature of criminal proceedings that neither party can put his respective conjecture to work in ways that qualify as *activation*. Activation falls to the jury. So we may say that a distinctive feature of theories of the evidence is that they are partial rather than full abductions.

8. *Conclusion*

My limited purpose here has been to explain away the Criminal Abduction Paradox by demonstrating, on the contrary, that the criminal proof standard, both in its height and the manner of its attainment, is low enough and ordinary enough to permit satisfaction by the shared structure of the Crown's case, with the Crown making the conjecture of guilt and the jury activating the conjecture. It has not been my further purpose to suggest that in general the results of such abductive partnerships at the criminal bar are epistemically satisfying. My sole claim here is that they are not *paradoxical.*

What, then, of their epistemic reliability? It is a harder question to answer than we might like it to be. Such empirical work as presently exists is disturbing. In an investigation of several hundred Michigan jurors, fully twenty-five percent asserted that "you have a reasonable doubt if you can see *any* possibility, no matter how slight, that the defendant is innocent" ([Kramer and Koening, 1990, p. 414]. Quoted from [Landau, 2006, p. 49]). In another study, one in four Florida-based jurors found that when the evidence is evenly balanced between guilt and innocence, the defendant must be found guilty ([Strawn and Buchanan, 1976, pp. 480-481]. Quoted from [Laudan, 2006, pp. 49-50]). Discouraging as these findings are, there may be some reason not to take them at face-value. For if, as has been

suggested here, a jury's finding is intuitive, unreflective and non-criterial, the very questions that prompted these answers are of a type that require reflection, and reflection in terms that may not have entered the jury's actual thinking. Accordingly, there may be some room for hope that they inadequately reflect what was actually in those juries' minds as they reached their decisions. But this is a matter for another time.

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NOTES

i. It is perhaps a trifle presumptuous to be giving a talk on the common law in a country with so distinguished a record in the code tradition. But we all live in a "Perry Mason", or more recently, a "Law and Order" world, such is the present state of American pop-cultural influence. This is probably background enough to be getting on with, however.

ii. This is attempted in [Woods, 2007c].

iii. Ignorance-problems are discussed in greater detail in [Gabbay and Woods, 2005].

iv. The proposal that activation is essential to abduction is discussed in greater detail in [Gabbay and Woods, 2005].

v. Non-explanatory modes of abduction appear prominently in "reverse mathematics" pioneered by Harvey Friedman and his colleagues e.g., ([Friedman and Simpson, 2000]). The idea of reverse mathematics originates with Russell's notion of the regressive method in mathematical logic ([Russell, 1907]), and is also present in some remarks of Gödel (1944, 1990]).

vi. Roughly speaking, what this means is that H has a no more plausible and relevant rival constituting a greater degree of subjunctive attainment of T.

vii. Still, such cases are rare. It is much more common for defendants to "plead out" in return for an antecedently agreed-upon lighter sentence.

viii. [Klotter, 1992] defines circumstantial evidence as follows: "Direct evidence proves a fct without inference ¼ Circumstantial evidence is evidence from which a fact is reasonably inferred but not directly proven." (pp. 67-68).

ix. (1999), 9 C.R. (5th) 1 (S.C.C.)

x. Such a discussion may be found in [Woods, 2006].

xi. It is not too much to say that in common law jurisdictions the question of the teachability of the criminal standard of proof is in substantial disarray. In a remarkable ruling, the Supreme Court of the United States (In re Winship) found that there was a constitutional obligation that criminal juries were, without exception, to be instructed that guilt beyond a reasonable doubt is necessary for conviction. Given that judges must now tell juries that they are subject to this standard, a question naturally enough arises as to whether judges should also go on to tell juries what the standard means. It bears on this that recently England has abandoned a practice of two centuries of having judges instruct jurors about the meaning of the standard. What has brought this about was pressure from legal theorists to the effect t hat "reasonable doubt could be neither defined, nor uniformly understood, nor consistently applied" ([Landau, 2006, p. 76]). Much the same view prevails in a number of U.S. state jurisdictions. In Oklahoma and Wyoming, to take just two examples, a judge's instruction on the meaning of the standard is automatic grounds for reversal (Pennell v. Oklahoma, 640 P.2d 568 at 570 (1982), and Cosco v. Wyoming, 521 P. 2d 1345 (1974) at 1346). On the other hand, fifteen states require that the standard be defined, while most appellate courts discourage the practice. The Seventh Circuit Court of Appeal "admonished district courts not to define 'reasonable doubt'." (U.S. v. Martin-Tregora 684 F. 2d 485, at 493 (7th Cir. 1982). In 1994, the Fourth Circuit Court ruled that when a jury asks for a definition of the standard, a judge is at liberty to refuse. (U.S. v. Reives, 114 S. Ct. at 2679 (1994). The Supreme Court has never managed to decide whether reasonable doubt should be defined, finding that the Constitution is non-committal about whether a definitional obligation exists (Victor v. Nebraska, 114 S. Ct. at 1243 (1980).

xii. Notably in judicial determinations of the admissibility of evidence, the Crown's burden of proof and the presumption of innocence.

xiii. If space permitted, a good deal more could (and should) be said about what might be called the psycho-epistemic orientation of satisfaction. Interested readers might consult [Woods, 2005], [Woods, 2007a] and [Woods, 2007b].

xiv. Nor should we lose sight that in common law jurisdictions, most criminal convictions are not appealed, and most appeals are lost. So much for the reversibility of wrongful convictions.

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ISSA Proceedings 2006 ~ The Rules Of The Critical Discussion And The Development Of Critical Thinking

The purpose of this paper is to discuss the concept of critical thinking as an operative concept that makes it possible to generate a strategy for developing critical abilities in the students and, in this way, to achieve one of the most important objectives of the Chilean Educational Reform.

It is evident that the concept of critical thinking is vague. Many authors have different perspectives about this concept and, to same extent, they contradict each other. My intention is not to intervene in this controversy, but to look for a solution in a different direction. This means using a methodology that allows us to determine some basic characteristics of the concept of critical thinking avoiding dealing with general conceptions of the concept. The main objectives are then to establish a list of the most important characteristics that allow the development of critical thinking among the students.

1. *Conceptual analysis*

What I am going to do is to analyze the concept of critical thinking in the same way that anyone would analyze concepts such as democracy, education, science, etc. I will make use of the technique of conceptual analysis as developed for John Wilson (1960, pp. 1-49). In Wilson's conception, these concepts are called philosophical concepts, because even though we know how to use them in some contexts, we do not know the boundaries of each concept or, simply, such limits are open or don't exist. We know, nevertheless, some typical cases that are central to the concept. This means that nobody that would use these concepts could ignore them as instances of such concepts. So we can use these instances in order to obtain some specific characteristics of the concept, and we can avoid the difficult task of defining the general concept of critical thinking.

In the case of critical thinking, one of the central instances is, of course, logical abilities, or more specifically, the ability to infer consequences from some principles or assertions. It would be strange to say of a student that cannot infer consequences in a correct way that he is a critical person. It is obvious that one of the main characteristics of a critical student is the ability to distinguish between correct arguments and fallacies or incorrect arguments. Therefore, Wilson's methodology consists in dealing with specific instances of the concept, the central ones in the first place and, then, we continuing attempting to explore the limits of the concept analyzing the consequences that follow from each of these instances. What does logical ability imply?

2. *Formal arguments*

In the first place, logical ability means that we understand that our opinions should be supported by reasons. And, because of this, we acknowledge that our opinions could be questioned by other people and that this is the reason why we need to give reasons. Besides, since our opinions are closely connected with our

beliefs about the world, we can say that the logical ability helps us to develop a way to question our beliefs, in the sense that when we are looking for reasons to back our opinion we are, at the same time, trying to be rational with regard our beliefs and we are trying to understand why we do believe what we believe. From this perspective, to think critically is to make an idea of the world by myself and the reasons that I choose to support my opinion reflect my personal view of the world , therefore, philosophical reflection and critical thinking are, on this point, closely related.

In a general way, logical ability provides a basic tool to obtain the mental flexibility that appears to be one of the main characteristics of critical thinking. We mean by flexibility the ability to see the world and its functioning from different points of view. We can give examples of such flexibility by referring to some of the brief definitions of critical thinking that Johnson discusses (1992, p. 217), for instance, “reasonable, reflective thinking that is focused on deciding what to believe or not to believe” (Ennis), “the skill and propensity to engage in an activity with reflective skepticism” (McPeck), “Skillful, responsible thinking that facilitates good judgment because it (1) relies upon criteria, (2) is self-correcting and (3) is sensitive to context” (Lipman).

Of course, there are many other characteristics that are essential to critical thinking, and some of the definitions already quoted suggest them, but our analysis is just starting. Logical ability also implies being acquainted with the specific mechanisms that connect the opinion or point of view and the reasons. These mechanisms are, in the first place, the rules of deductive inference. They produce the coherence of the argument. So, the logical ability also contributes to develop the rigor necessary to think critically. These mechanisms connect the reasons with the opinion in a valid way and, in this sense, offer a justification of the reasons. So, we can make a distinction between a valid and invalid argument. A very clear example of what we are saying about valid argument is to refer to scientific arguments because in this case the reasons are based on experiments that anyone could check for himself. If we think in the general scientifically assertion that “if ice is lighter than water, then it must float in water”, we can generalize this assertion saying that lighter liquid floats in the heavier liquid, and we can prove this by making our own experiment with whiskey and conclude that ice is lighter than whiskey because ice floats on the whiskey (of course, if you put enough whiskey). We can see then, how both the deductive mechanisms and also

our own capacity to analyze our experience help us to understand how the real world functions. In this way, the deductive arguments increase our mental flexibility and help us to understand the world from our experience.

3. *Informal arguments*

All of us know, nevertheless, that deductive arguments are not the only type of inferences we can get from an assertion. We also have to consider those that are called informal arguments or argumentation (we are not going to make any difference between them) and their main characteristic is that they depend on the context. In other words, could be reasonable to accept an informal argument in some conditions, but it would be unreasonable to accept it, in a different situation. The acceptance of an informal argument depends on the conditions of the context, for instance, the social factors that affect the environment and also of the quantity and quality of the information that we posses about those factors. A good example is the opinion that John is a very polite person. In order to accept this opinion we have to make an appraisal of the context in which this opinion is expressed. What is true in one context could be false in other. So, there is a big difference between deductive arguments and informal arguments, therefore, we can consider that, according to Wilson's method, the informal arguments are a new central instance of the concept of critical thinking.

Which are the consequences of this new instance?

In the first place, informal arguments, or argumentation, show some limitations of formal logic. For instance, as we can easily realize the applications of deductive techniques, is useless to solve controversies. In a controversy, in fact, we have to attend to the reasons that support our point of view, but also we have to take into account the reason of our interlocutor and we always have to face the dangers of a balance in the reasons (the reasons in favor are not enough to distort the reasons against a point of view) or, even worse, that the reasons of my opponent could be more powerful than mine. So, we have to look for strong reasons for our position but also for some important considerations that distort the merits of the alternative position. Besides, the rules to decide which position is more reasonable are not mental entities we can derive from our mind and so, they cannot be imposed unilaterally. Both positions must reach an agreement for the rules that are more acceptable for both sides, and, in general, for any person.

Contextual arguments show that critical thinking is beyond the mechanisms of

deductive arguments. It would be a distortion, in fact, to think that critical thinking is limited to the mastery of deductive schemes. It is very important to take this into account, because we can be tempted to believe that a critical person is an isolated person trying to developed (deductive) mental procedures that can be cultivated within a solitary consciousness.

This is a distortion because critical thinking also means the ability to engage in public controversies. And this implies not only mental activities, but also social behavior, in the sense that to convince another person that our point of view is acceptable requires that our interlocutor, who defends a position that contradicts our position, collaborates with the rules that allow solving the topic in discussion. The practice of argumentation shows, in fact, that cooperation is crucial to solve a controversy, because we must be careful about what is exactly the point that the other person is trying to support, otherwise people can distort what the interlocutor is saying or, worse than that, they can refuse to listen to what the other person is trying to argue. Moreover, the opinions of our interlocutor could be improved and we have to pay attention to that and also his opinions can help us to improve our own arguments. In some sense, when people are involved in a controversy, they must perform a paradoxical task, since, even though they realize that they have a discrepancy, they agree to discuss in common, with some rules previously approved by both sides, in order to solve the discrepancy of opinions in a reasonable way. From a philosophical point of view, we can make a distinction between two activities, which we can call dialogue as opposed to competitive debate.

In general, argumentation shows the public side of critical thinking and this is implicit in the abilities that we discussed with regard to formal arguments, since the smallest move we can make in informal logic, as to provide reasons to support our views, imply fulfilling some standards and, therefore, this means justifying our thinking to other people. In summary critical thinking is never a private activity. At this point we can reconsider Wilson's methodology. We started by saying that formal logic and formal argument is a central instance of critical thinking because the techniques involved in presenting a good formal argument help to develop the mental flexibility that we think is one of the main characteristics of critical thinking.

In the second place, we showed that contextual arguments are a second instance for understanding critical thinking. Of course, some people can make many

objections against considering together formal and informal arguments. But, as we said before, we are not actually concerned with the distinction between them, but with the consequences that follow from both type of inference. So, we can say that in order to develop critical thinking in the students we have to involve them in the analysis and the construction of formal arguments, but we also have to involve them in the analysis of controversies and in the use of the instruments that help to solve the controversies.

If we think in terms of Wilson's analysis, we can say that to develop good (formal and contextual) arguments is a main trait of critical thinking and bad arguments (poor arguments or, simply, fallacies) are part of the opposite concept (or contra concept). In this way we also can establish some extreme limits of the concept of critical thinking by excluding some instances.

4. *The moral conditions*

Some people could consider that the conception of critical thinking that we have trace so far, that is to say, centered on logic and contextual arguments, is an excessively intellectual conception. They may believe that critical thinking must include other types of activities. So we have to analyze the possibility of extending our concept. In Wilson's language we have to look for ambiguous cases (ambiguous instances of the concept) in the sense that they have a mixture of characteristics. Some of them clearly belong to the concept but other traits are controversial. In order to qualify as authentic traits of critical thinking they must be coherent with the characteristics that we already established.

In order to make clear one possible extension of the concept, I will discuss the rules of critical discussion (pragma-dialectic rules) of Frans van Eemeren and Rob Grootendorst. These authors consider these rules as based on communication principles, and so for them the fallacies are moves that break the process of communication that leads to the solution of the controversy. In this way, they can decide if an argumentation is reasonable or not. The justification of these rules is only instrumental, because we have to follow them just because they help us to solve the controversy. Nevertheless, some of these rules, as the first one: "parties must not prevent each other from advancing standpoints or casting doubt on standpoints." (van Eemeren and Grootendorst, 1992, p. 208) and, above all, the implicit conditions of listening exactly to what the other people are arguing and to respect the turns of the people who participate in the discussion are doubtless moral conditions. This is even clearer if we think of fallacies of disqualification,

which are instances of the opposite or contrary concept. We can think, in fact, that these fallacies violate the principle of respect. And because of this we can consider that we are facing a moral principle and, therefore a principle that cannot be justified only in terms of some functionality designed to solve a controversy. The principle needs a strong moral justification.

What I am saying means that we have to move in a different direction in order to understand the development of a critical discussion. We have to consider that the relationship between the arguers is more complex and we have to consider also another type of principles as part of the critical rules. One important clue in this direction is the fact that, in practice, the conditions to solve the controversy are never reached. We can think of the rule 9: "A failed defense of a standpoint must result in the party that put forward the standpoint retracting it and a conclusive defense in the other party retracting his doubt about the standpoint" (van Eemeren and Grootendorst, 1992, p. 209). In an empirical context these requirements are rarely fulfilled, and this is so because the discussions in real life conditions are highly competitive and the main objective of the participants is not to solve the controversy but to put down the interlocutor. For this reasons, it is unavoidable to consider that pragma-dialectical discussions rules are idealistic and so they are inefficient because they cannot solve real life controversies. It is obvious that the rules don't work if the discussion is a competitive debate because in this case, both parties always try to settle down the discussion and not to solve it.

Nevertheless, if we take seriously the principle of respect, we can develop a community ruled by this principle and in that case we can develop an empirical social space in which to solve a discussion in a reasonable way is possible. So, what we need is a justification of the moral principle of respect.

A very important way to provide this justification is appealing to the Golden Rule. This rule can be formulated as: "Treat others as you want to be treated" or "What you do not want others to do to you, do not do to others". The implication of this rule is to consider equalitarian respect to every people as the basis of moral behavior. Nevertheless, in order to do not distort the meaning of the Golden Rule it is necessary to understand that the rule refers to the behavior of any person in general, i.e., a person without specific preferences, bias or interests. In others words, the equal respect doesn't refer to specific preferences such as: I like chocolate ice cream, so everybody must eat chocolate ice cream or I don't like to

talk to other people, so I don't like that the other people talk to me, and so on. Equal respect is crucial to develop a critical discussion and ensure a fulfillment of the rule 9. So, what we need to justify is the equal respect to every person.

A mutual agreement, what seems to be implicit in the pragma-dialectical rules, is not enough because agreements are usually based on the convenience of the participants. But if the convenience is the justification of the moral behavior, then the people could violate the agreement if it is more convenient for their position to act in an immoral way. And a controversy could be a good example of this inconsistency. In some cases, most people would consider that to lose a discussion is more inconvenient than to violate the initial agreement, so, they prefer not to respect the initial agreement about the rules of discussion. In other words, the mutual agreement has a flaw, the mere convenience it is not enough to justify the moral obligation to keep my promises. In a moral sense, nevertheless, I have to respect my promises even if this means to act against my personal interests and it would be an immoral behavior to disregard such obligation and try to get advantages of this, making use of my power position, for instance.

The moral obligation can be justified by appealing to the moral feelings (Tugendhat, López, Vicuña, 1997 pp. 73-90). The moral feelings: resentment, guilt and indignation are defined in relation to the Golden Rule. Thus, if I act, for instance, against the Golden Rule I should feel guilty, because I cause a harm that no person should cause to other person, and for the same reason the person affected by my behavior should feel resented. Anybody that observes that such behavior is violating the Golden Rule, would feel indignation, because everybody can judge that no person should do that to any other person. These feelings arise spontaneously in our consciousness and we can rely on them to judge our moral behavior. In some cases, if we are confused about our behavior we can attempt to put ourselves in the impartial position of a person that observe the behavior without being affected by it, or, simply, we can refer to a third person that acts as a judge. If this person considers that the way one person behaves with respect to other person is immoral, then he/she will feel indignation. In other words, if we consider, according to the Golden Rule that nobody should act in such way with respect to any other person, then such behavior is immoral. In this way, we know in our own consciousness when we act in an immoral way, if we have, of course, the capacity to put ourselves in the place of the other persons. Besides, we value the moral behavior because we value being trustworthy. And the people who

recognize themselves as a moral persons constitute a moral community, that is to say, a community in which every person respects each other, in an equalitarian way. Therefore, in this moral community it is possible to find the conditions that make possible to solve a controversy, such as the critical discussions rules presuppose.

Some persons could consider that to introduce moral conditions as part of the concept of critical thinking would be exaggerated. Nevertheless, we have showed that some basic moral behavior is an unavoidable ingredient of critical discussion rules, therefore, we have to require this behavior if we expect to solve real controversies. On the other hand, the way in which we introduce moral rules is a very argumentative way, in the sense that we accept that any move could be questioned, and we are ready to explain why we arrive to our conclusions. Besides, we don't introduce any move that could be considered a fallacy, such as an appeal to some authority, the common practice or tradition. We just appeal to our own experience. Of course, I realize that I don't provide reasons to prove a point of view. But, I provide a motivation to act in a moral way, and we can consider that this strategy develops an argument in a general sense. It is not unreasonable, in fact, to talk of moral arguments, even though we cannot infer the basic principles, such as the obligation to keep our promises from a different valid principle. We can just give a justification, to be a trustworthy person, to live in a society that respects any person, that is to say, only a motivation to act morally.

5. *The mediation*

If we accept that a critical person has to develop a basic moral behavior, then, we can make another extension of the concept of critical thinking as to include the capacity to be a mediator. What I have in mind with this term is the capacity to solve conflicts, especially interpersonal conflicts. To be a mediator requires a strong training in argumentative skills and also a strong commitment to some basic moral values. The mediators have become very important in my country because they play a very important role in the process that reinforces the recently approved divorce law. Mediation is a good instrument to prevent a divorce that could be very expensive, and extremely exhausting for the family, especially from a psychological point of view.

The process of mediation is important because the parties in conflict (in general, husbands and wives) can reach an agreement that solves, at least in part, their

problems and avoids the difficult situation involved in a trial. The mediator must be able to allow the parties to reach such agreement and in order to that they have to listen to the people, to analyze the arguments of each part, to have the capacity of empathy to understand what the people is going through, and of course, a basic moral behavior to decide which arrangements are acceptable and which are not. For instance, intra familiar violence is a problem difficult to solve and it, obviously, would be an unacceptable arrangements, if it did not to put an end to this behavior. As we can see, argumentative tools, which we can summarize as the ability to detect fallacies (disqualifications), are very important for the mediator, and this is the reason to include this activity as a new instance of the concept of Critical thinking. I cannot say more about this topic, because I don't know it very well and it is just starting in my country. Nevertheless, I realize its importance in education. It is obvious that a good teacher that has to deal with interpersonal conflicts between the students has to develop the typical characteristics of a good mediator. As any educator knows, a good teacher has to face the conflicts, should solve them and, in these cases, has to restrain from using the use of his authority position. Besides, this process of mediation should be socialized with the students, that is to say, it should be a part of the educational process, in order to teach the students how to argue, how to judge a moral situation and also how to solve conflictive situations. For this reason, mediation is a crucial ingredient in the process of developing a moral community. And the moral community, as we mentioned, is the social space that allows the educator to argue in a rational manner.

I realize, of course, that many people could reject these derivations of the concept of Critical thinking. I would like to defend my position.

The purpose of Conceptual analysis is to provide a legitimate use of a particular concept. For instance, we can apply the concept of democracy to political systems and we can define some specific characteristics by opposition to the traits of a dictatorship system. But, we also can apply the concept of democracy to families, and we can distinguish democratic families from authoritarian families. We can find similarities in both situations, but also we can find some discrepancies. The concepts are flexible, some characteristics are important in some situations, but not in others. Besides, the concepts change. New instances appear to be more important in some moment, but in other cases, different instances reach an important relevance role.

So, we have to choose a specific context that allows us to define a legitimate use of the concept. I defined my purposes at the very beginnings, but the last discussion about the role of argumentation in the process of mediation, made explicit that, at any moment, we may refer to an educational context.

I am trying to provide a definition of critical thinking that can apply to the educational process, and more specifically, a concept of critical thinking that we can apply to the Chilean Educational Reform.

If we revise what I have established so far, we can see then, from this perspective, the consistency of the process. Because, from this perspective, we have to pay close attention to the way in which we teach how to be critical and to the specifics instruments and strategies that facilitate this process.

If we think of the rules of critical thinking, we can consider that they are suficient, maybe, for an adult person. But if we have to teach students, secondary students for instance, we have to make explicit the moral requirements of a good argumentation. Otherwise, it would be very difficult to teach the students the necessity of avoiding the use of fallacies.

If we think, on the other hand, of the requirement to satisfy sufficient conditions, we can see that the people must have a great deal of knowledge of the context of the topic in discussion. We cannot solve a controversy using only logical mechanisms, we also need some research and, in the case of students, we must develop group research. This is an additional reason for considering argumentation as a collaborative enterprise.

In the definition of critical thinking, the contextual arguments have a main role and the instances that we add are related to the process of teaching the students how to be critical persons.

6. *The role of imagination*

The practice of argumentation shows that we have to think in different contexts and, sometimes, it is necessary to create ideal situations in order to decide if some conclusions follow from some premises. Plato, for instance, in the Republic created the ideal hypothesis of Giges's ring. As we know, this ring has the special power of making the owner invisible to other people. So, if we have such a ring we can never be afraid of the people and, of course, we can avoid the negative consequences of our behavior. The question that Plato is trying to decide is if we

have any type of reason to act for the sake of Justice or, we only act with justice because we are afraid of being discovered and being punished. This artificial hypothesis permits to isolate the situation of acting in a moral sense. In real life situations, it is difficult and confusing to reflect about the problem of moral behavior and many people actually support the idea that our behavior is always ruled by the threat of punishment. For this reason, we have to learn to develop these “science fiction” examples in order to be critical of everyday situations.

We could never decide whether an assertion is true or false if we have to refer always to everyday situations that are, very often, difficult to separate from mere prejudices. In order to be critical we need to develop this capacity of being able of to refer to unusual situations. This is very crucial to make clear a point.

Even though I am not going to propose a specific method, I will describe some meaningful exercises. We put the students in situations where they are forced to make comments about some enigmatic stories or tell stories about some ambiguous images or pictures. In some cases we propose a set of pictures and we ask them to compare two different tasks. In one case, the students must develop a narration about the whole set of pictures. In the other case, each student must refer to a single picture and also develop a consistent story with the comments of the others students.

We can consider the following example:






I don’t have the space to explain all the stages that the students followed to fulfill both tasks, so I will explain the final story that the students could develop for this

set of pictures. This story is the following:

The first picture of the sequence marks the sense of the story. It is the beginning of the group story and the students will try to continue the story from this point. The first picture refers to the unsuccessful search of a person for finding his self. The next two sequences tell his way out of the opening of this self that wants to know him and to give a sense to his life in different quotidian situations, in the streets, or searching for the old home of his infancy. The concept of returning home marks a direction towards finding his the personal identity, but it is not the only way. Love between two people could be a way out to find himself in other person, but the same picture shows that it is impossible to know each other, and, at the same time, the picture shows that without seeing each other it is impossible to trust in order to hug the other person and to be close to him/her.

Something very import emerges in the penultimate picture, since poetry replaces the difficult step that links it with the last scene. The step from the imperfect romance to misery was, in fact, very difficult, but poetry permitted to build a bridge towards a solitaire and indigent self. It seems that this self is disillusionment of love, of himself and of the poverty of his knowledge. Trough the poetry the disillusionment of love can sublimate the misery and the condition of being nude. It is for this reason that it shows his bare and weak feet i.e., their weak foundations.

The last picture was interpreted in several ways, for instance, that our personal identity only can be found in the encounter with other people, or that the human beings are open and know them when they realize their different dimensions which, nevertheless constitute a unique person. Or, everything in common with other people verifies in one person and this is the element where it is possible to verify the knowledge of oneself.

7. *Comments*

We can make some general comments about this activity. It is true that we cannot appreciate the differences between the individual story and the group story. Nevertheless, we can figure out that when a person tells an isolate story he/she makes an effort based on his/her individual experience and creativity.

On the contrary, the group story shows a sum of efforts and very different experiences and different degrees of creativity. Besides, the effort is greater

because the story changes in a continuous way because of the intervention of different students that develop the story further. This new situation forces the students to concentrate in two aspects. First, they have to maintain the internal coherence of the story, i.e., they have to follow the way that grants a sense to the story. Second, they have to propose a new step, a creative step, in order to make progress in the development of the story.

In summary, we have developed a concept of critical thinking that can be used in an educational context. Because of our methodology, we realize that we can use different concepts of critical thinking. It depends on the context and, of course, on our purposes. In the present case, through this exercise, we have developed a consistent set of activities that help to develop critical thinking among the students. Argumentation, that is to say, the basic activity of supporting our opinions by reasons, is, of course, the central activity. And we can develop this ability involving the students in controversies, especially by discussion of the public controversies. The other activities such as the reflection on the basis of moral behavior, the necessity of solving interpersonal conflicts and the creation of group stories are activities that reinforce the main activity. Of course, argumentation is the activity that involves and permeates these extensions of the concept. In the last case, for instance, the development of group stories is a counterbalancing activity that emphasizes coherence, direction in the conversation, collaboration in a common task and the fostering of personal creativity. This is an activity that counterbalances the personal attacks, irrelevant opinions, appeals to prejudices, etc. that can arise in a controversy. So, it is a crucial tool for developing what Lipman (1980, p. 45) called a community of Inquiry, i.e., a privileged community that we build to solve our controversies.

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ISSA Proceedings 2006 ~ A Discussion Of Habermas' Reading And Use Of Toulmin's Model Of Argumentation

Introduction

It will probably be useful to start with some contextualization of the discussion. Apart from a desire to better understand both Habermas and Toulmin, the starting point here is a research and teaching interest in applied ethics. Difficult epistemological problems are raised especially concerning environmental issues. We find ourselves in need of seeing excellent environmental practices adopted if possible by all the major players, whether it be companies or countries, while at the same time the decision makers are affected by risk assessment problems and uncertainties that require modal judgments, using probability or the like. As we will see, those issues are central to the discussion of Habermas' reading and use of Toulmin.

Habermas contributed in an extraordinary way to normative thinking since the 1960s. He asserted the foundational nature of his theoretical work, especially in the period of the *Diskursethik* and his *Theory of Communicative Action* (beginning of the 1980s). Still quite recently, he presents himself as part of what he calls pragmatic Kantianism (Habermas, 2003, 2, p. 16). Throughout his work, he is looking for some rational validation of moral principles, and in a kantian manner he wants to arrive at this justification by means of a universalizing procedure, but

according to him, this should proceed in considering first and foremost discourse practices. Any norm implies that some action is required, or forbidden; in considering the consequences, could all persons affected by the norm agree on it? (Habermas, 1983). We must remember also that he adopts a cognitivist perspective on moral issues, which means he does not want to let moral evaluation or prescription rely on emotion or on the will, but wishes to understand normative problems as susceptible of rational solutions. Those elements explain in part why he refers to the so-called Toulmin model, especially between 1972 and 1983: it refers to rationality, to argumentation and seems to permit universalization. In 1972, Habermas' purpose is not to give a precise presentation. In fact, even in 1981, his use of Toulmin is rather rhetorical and selective. He is mobilizing Toulmin to serve his foundational project, which should not come as a surprise.

On the other side, it is also clear why Toulmin still has an enormous importance today in ethics, in particular (among other things) in decision making situations. Modals and rebuttals are of the foremost importance if we are to make decisions and judgments while taking into account context and possible exceptions. In the problem domain of environmental ethics, where risk issues and decision processes in quite uncertain situations are regularly required, this is even more the case. Those are difficult issues to treat and the available knowledge is far from the level of certainty most people would prefer for making decisions.

Here I will briefly recall some of Jürgen Habermas' theoretical work, and limit the focus to the use by Habermas of Stephen Toulmin's model of argumentation, especially in the article *Wahrheitstheorien* that is not translated in English yet.**[i]** The article will be looked at in detail.**[ii]** I will conclude by looking at the 1981 treatment and to what happens with the issue in later work (especially Habermas, 1983 and Habermas, 2003).

What effect has this use of Toulmin on Habermas' theory, and what is the meaning of his obviously limited take on Toulmin? Toulmin's model has on one side the effect of supporting Habermas' rationalist view of argumentation, according to which to argue or plead is essentially to give reasons that justify the speaker to hold a specific claim in a discussion. Habermas might have selected Toulmin's theory precisely with the purpose of reinforcing his general position on normative theory, according to which we should think the validity claims in the normative sphere (about rightness) in analogy with what happens on the

descriptive or connotative sphere (the question of truth). But this limited reading of Toulmin by Habermas has also for consequence to present a simplified and radicalized Toulmin, in a direction that is not coherent with Toulmin's intentions, as can be seen in his further work, especially the Argumentation handbook written with Rieke and Janik. I argue that Habermas' access to the 1958 famous book, *The uses of argument*, is thoroughly directed by his interest for the theory of validity in the normative sphere, even if Habermas does introduce in 1972 some revolutionary notions that we do not find in Toulmin (1958). The question is to know if Habermas fully considered the implications of Toulmin's theory. It might be that he failed in that direction in reason of his foundational project, i.e. by lack of a sufficient preoccupation for application questions (in which we face nowadays an urgent need to take into account modals and rebuttals).

1. *Habermas' concept of argumentation*

The main characteristics of Habermas' theory of argumentation are constant from *Vorstudien und Ergänzungen zur TKH* and later work on *Truth and Justification or Truth and Ethical theory*, even if some development occurs.**[iii]** We will not present it in detail: the theory of the different validity claims (rightness, truth, sincerity), the presupposition of orientation towards mutual understanding supposedly required in rational argumentation, the idea of the mutual recognition of the validity claims in the Ideal speech situation, the counterfactual and foundational perspective of this Ideal speech situation are notions that are now well known. Truth is defined by justification, a valid claim is a claim that the arguer is ready to back up with arguments, and for him to enter into discussion means to be ready to justify one's claims. We find this line of thought at each turn, whether it be in the context of *MoralBewußtsein*, i.e the *Diskursethik* period, or later in what he calls a *theory of discussion* (around *Between Facts and Norms* and *The Inclusion of the Other*). Habermas is proposing a rational, procedural, universalizing, consensualist theory of truth, especially in a critical discussion with Tarski. But it is in Toulmin that he will turn to give some procedural or specific context to argumentation as such, over and above the reference to Tarski and the T. model, seen as part of a more formal approach to logic. In *Truth and Justification* he still holds his consensualist theory of the truth. He is in an explicit discussion with R. Rorty. He refutes his contextualism because of the need of keeping a truth theory, in two complementary ways: 1) as a simple sanction of cognitive value or validation for a statement, in the context of a semantic theory of truth inspired by Tarski and 2) as a transcendental criterium allowing for the

critique of utterances, for distinguishing knowledge and belief, and as a useful upper limit to knowledge. This last idea was already in *Warheitstheorien*.

Whenever Habermas refers to or discusses argumentation, it is always to assert that the statements recognized as valid, whether it be the truth or the rightness variety of validity, are justifiable by giving reasons. This element is related to a theory of reason that can not be detached from language, and according to which such a rational argumentation would help the partners of discussion to transcend at least in the discussion their more immediate context of interest. This transcending character of argumentation is asserted as late as 2003 (Habermas, 2003, 2, p. 71-74). Furthermore, we should also stress an important point, the linkage of these elements with the speech act theory, by reference to the works of Austin and Searle. Specifically it is in the assertive speech act that something is produced that can be said to be true or false.

As we might recall, speech acts are seen by Habermas as quasi-transcendental ways to ground discussion processes in the validity claims and the mutual expectations that they presuppose among partners of discussion. Habermas does present argumentation as speech acts, and this was certainly a relatively new perspective at the time. But he does not show how the fact that they are speech acts might have an important effect on the arguments and their reception; on the contrary, he unties the question of truth from the conditions of the act in which the assertion takes place. Instead of looking at how the context of a speech act might have effects on arguments, he insists to consider the arguments in relation to normative elements like truth, rightness, or sincerity. This linkage is clearly present also in the *Theory of Communicative Action.* The reference to a pragmatic conception of truth and the other validity claims, present both in *Wahrheitstheorien* and in *Truth and Justification*, goes hand in hand with the reference to the consensual theory of truth, without looking at the importance of dissent or analysis of the embeddedness of argumentation in speech acts; the connexion between pragmatics and consensus is asserted only at a theoretical level.

The proposition is not susceptible to be true or false, only the act of assertion or statement (Austin): this is a first level of distinction. Habermas then says that the truth category applies to the statement, not to the utterances (in a reading of Strawson). He is distinguishing the different levels of the sentence, statement, proposition, with assertion as the required quality of the statements. Further on,

he will say that truth is a propriety that do not pertain to the given information, but to the statement (Aussage), being therefore independent of the context and universalizable. Truth can not be measured by the "probability of prognostics", but by an unambiguous alternative: "ob der Geltungsansprüchen von Behauptungen diskursiv einlösbar oder nicht einlösbar ist", "if the validity claim of assertions can or cannot be honoured in discussions" (Habermas, 1984, p. 136). In that manner, it seems that consensus of the discussants is required precisely to overcome the uncertainties of assertions that are merely probable, while the notion of truth is supposed to give us or permit a clear cut situation that helps to make a decision.

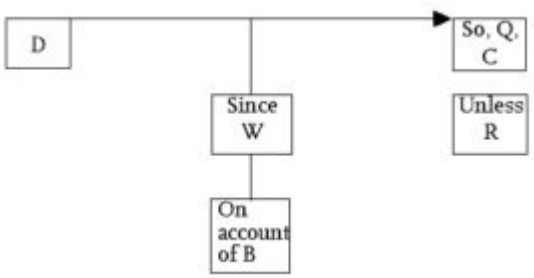
2. *Toulmin in Wahrheitstheorien*

In *Wahrheitstheorien*, while discussing argumentation, Habermas mentions Chaïm Perelman and Bar Hillel, but he mostly refers to Stephen E. Toulmin. It is in the 4th section of this very important article in the whole of his work, while treating the logic of discourse, that he discusses objections to what he presents as his consensual theory of the truth: he draws explicitly on Ch. S. Peirce on that topic. Let's recall what the context and the meaning of this is. He asserts that the theory of truth should not fall back on empiricism or transcendentalism per se, as criteria to decide of the validity claims of the statements. The consensus theory helps to put back truth discussions in the scientific community which builds statements and theories in the first place, where justifications will be required to honour validity claims. He offers some arguments to avoid circularity objections (the conditions that permit to judge a consensus cannot be themselves subject to consensus), he holds that such a truth theory serves to explain the binding character of the arguments without coercion by means of the « formal properties of the discussion ». These seem to be the backing reasons for choosing Toulmin instead of Bar Hillel or Perelman, because as he expresses it this author « chooses the adequate level of investigation for a logic of discussion » (Habermas, 1984, p. 161, "Ich werde mich auf St. Toulmins Analyse des Gebrauchs von Argumenten stützen, weil Toulmin die für eine Logik des Diskurses angemessene Untersuchungsebene wählt".). But here the "formal" leaves some doubt since we will see Habermas exclude from any consideration some important parts of Toulmin's relatively light formalism, namely the rebuttal (R) and the qualifier (Q).

Thus his reading of Toulmin reinforces some classical way to see argumentation as being more in continuity with logics than with literature. This makes sense in a

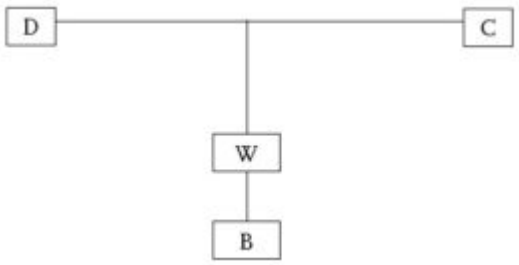
way, because it is true that Toulmin does not help us with style effects, literary effects, figures of speech or other rhetorical uses like metaphors etc, even if we always can, as analysts, take the liberty of putting these elements anywhere inside the Toulmin schema, under G or W etc. Toulmin's work was in good part a critique of the classical, formal logic in the syllogistic form. It seems that it is an essential part of his contribution to introduce modalities in reasoning, in a finitist and fallibilist context, conducing to such interesting cases like « A Swede is almost certainly not a catholic » or « So, presumably, Harry is a British subject ». These carefully limited conclusions can be grouped under a theory of the value and validity of verisimilar affirmations. This might not be equivalent to a theory of truth.

Habermas saw in Toulmin a cognitivist and was right about it. For Toulmin a modal statement attributing a strong positive probability to some future event, can not be said not true if the probable event asserted does not happen; for it was true that the statement was correct when it was made, even if the speaker was not certain of the outcome (Toulmin, (2003) [1958], p. p. 59). Toulmin's attitude on that respect is in contrast with that of Kneale, with which he has a precise discussion: he pleads implicitly for taking the statement asserted as probable as something that can be taken as true. This having been said, Toulmin surpasses this fascination towards truth that we find typically in logics and also in Habermas.



Let us remind that the Toulmin model permits to come to claims presented as conclusions (claims, C), on the basis of some data (ground, G or data, D), by means of certain generalizing statements that are seen as guarantees (warrants, W), themselves being based in some larger semantic context, like the texts of law of this and that country or like a scientific treaty, the backing being always content dependant (backings, B). While helping him to take a distance from formal logic, the introduction of modalities and rebuttals helped to take exceptions into account in a generally valid deduction that still has a lot in common with a syllogism (Q and R). It is the main aspect of Toulmin's contribution to create an opening that amounts to recognizing the cognitive value of statements that imply no certitude in their material content, while they may have an important cognitive

value at the same time. These statements are rationally acceptable, under the condition of an appropriate modalization with the rebuttals explicitly expressed. Habermas will refer often to rational acceptability, *warranted assertability*, making it an importance piece of his discourse, but he will not refer to rebuttals of modal qualifiers (Habermas, 1984), p. 160. It is hard to think that this was only a poor choice on his part, a mistake or an accident.



We arrive at the conclusion C on the basis of D (later called G), with the help of W and B, but in a qualified manner Q which is n relationship to the rebuttals R. These last elements are obviously essential in the toulminian model. The version given by Habermas is the following (Habermas, 1984, p. 163):

3. *Commenting on the habermasian treatment of the toulminian schema*
Habermas states he is presenting a simplified version (the German word is *vereinfachten*) of Toulmin. In many cases, a selective reading can be appropriate in philosophy, but here it is more than a synthetic version : it is the amputation of elements that seem both characteristic of Toulmin's approach and necessary in it. He mentions modalities in general, especially the possible and the necessary, but without looking at Toulmin's treatment of these. The rebuttals and the modal qualifier, which have disappeared in Habermas, might have had the effect of obliging the consideration of different types of statements, with modal qualifiers like "almost certainly possible", "more" or "less probable", elements that are not fitting well inside Habermas' theory of universalization. Habermas prefers a clear cut situation, for the statements to be decidable. Giving a very different outlook, the rebuttal (R, rebuttal) seems to be opening us to a theory of exceptions that does not seem to be useful for Habermas' foundational purposes.

Habermas's does not look at statements like those in Toulmin, of the kind « A Swede is almost certainly not a catholic ». Such a statement is practically acceptable on the basis of the important proportion of Swedes being Protestants (again, according to Toulmin, 1958): in that sense, Habermas would qualify it of being true. But what is the receivable proportion for such an assertion to be admissible? Should the proportion be 98% of the population, or 95%? Obviously,

the number has itself a probabilistic quality. But is it decidable, since a statement needs to be decidable if it is to be able to be true or false? There is incertitude, a blurring of the frontier between true or false, a margin of error that might or might not be important. Any sentence which is deemed to be true has the important characteristic that it "ascribes a property to sentences that is preserved through valid inference" (Heath, 2002, p. 287).**[iv]** Since such inferences seem essential if we are to follow a complex reasoning, we can see the problem it causes if we are dealing with risk issues of a (more or less) probable nature. For instance, the fact that environmentalists will put together, in a long chain of reasons, a series of arguments that all have a certain degree of probability, might not be helpful in convincing some of the receivers of their discourse. Even if a statement can be trivially true while still being probable, it seems doubtful that this quality can be taken together with other similar statements in valid inferences in any conditions.

Also, we should note that Habermas' choice of ignoring the rebuttal and the modal qualifier is a move that seems to be rhetorical. He does mention probability, but moves beyond it on the basis of the necessity to apply some truth category, and he refers the tough job of discussion and decision to people to which he ascribes to obtain consensus! In effect his evacuation of the modality qualifier and of the rebuttal permits him to put in place his bridging principle, which is used as a means to obtain universally valid statements on moral issues, for any possible partner in the discussion. Whereas for somebody like Toulmin, famous also for his writings with Jonsen on the casuistic tradition (Jonsen & Toulmin, 1988), ethical and moral questions or issues always have to be treated in specific and contextualized settings.

4. *A look at details in his treatment*

Habermas briefly presents the Toumin model and gives some examples. He treats backing, B, essentially as casuistic evidence, to sustain an hypothesis in the case of an assertion, or to put forward a norm in the case of a prescription (Habermas, 1984, p. 165). There is nothing of the kind in Toulmin. For him the backing B is a factual statement, for instance the law in its content, details on the period of its proclamation (Toulmin, 2003 [1958], p. 131. In other examples, it will be the classification of living beings, the Linné system for plants, other laws formulated by science. The backing is always in dependence with a specific field of argumentation. In Toulmin, casuistic evidence could be admitted only at the level

of the data or grounds (D or G). Obviously Habermas fuses together the data with the semantic context of foundation or backing (B), since he explicitly holds that some future consequences or some facts can be used at the level of the backing or B. According to Habermas, the warrant (W) is more than a repetition of the facts, it is a « general moral with practical character, concerning the way we can argument without risking to make a mistake ».**[v]** Habermas underscores the important relationship between the warrant (W) and the backings (B). But it seems that from inside the toulminian schema's perspective, what is important instead is the justified passage from D to C by means of W and B, with the reservations R according to possible exceptions, the assertion being done with the proper modal qualifier Q that enables the judgement to be adequate, while at the same time specifying the limits of the discourse. Discussing modalities, Habermas seems to be content with some general reflection on the relationship between parts of the arguments, and with reflection on the possible, the necessary and their negative counterparts, without telling how this could affect his theory.

It is precisely on the basis of this so-called importance of passing from B to W that Habermas will take the toulminian expression of a « bridging principle », an expression he will briefly refer again in *Moralbewußtsein und Kommunikativen Handelns* in particular, where it plays an important part (Habermas, 1983, p. 67; 73). This principle becomes for him the means of universalization, on the basis of the importance of having arguments valid in any time and independently of the context. We find here again his requirement of some transcendental characteristic of argumentation. This is completely independent of a toulminian perspective.

Let us recall the famous sentences of his 1972 article: « Even if there is no deductive relations between the statements figuring in the Warrant and the Backing, a statement gets its consensual strength from the legitimacy of the passage from B to W." (Habermas, 1984, p. 166). If we make a generous interpretation of Habermas, we might assert that this is because of the social and intersubjective nature of the backing, since it is always a semantic context, a theoretical construct or a collection of texts. But he himself does not make such an interpretation.

While discussing his moral reading of Toulmin's model, he asserts that universalization is for normative issues what induction is for empirical questions:« … universalization serves as a bridging principle (*Brückenprinzip*) for legitimizing

the passage from descriptive indications (noticing the direct and secondary consequences of the norm for the satisfaction of universally recognized needs) to the norm » (Habermas, 1984, p. 167). As we might recall, induction gives a way of generalizing, from particular instances to a general or universal law; that is what is requires for practical reason. But it is important to recall that the toulminian discourse, especially the 1958 model, does not address the issue of universalization, even if Toulmin does have a cognitivist position on moral issues. On the contrary, it is the explicit role of the modality and of the rebuttal to help against the spontaneous tendency of classical logical thinking to universalize. As we know, in syllogistic thinking, having clarified that all A's are B's, and admitting that C is an A, then it follows in all possible circumstances that C is a B. Toulmin's essential contribution was to make important modifications to this model, which are completely erased by Habermas.

We should then fairly note that Habermas brings important elements that are not in the 1958 book and that are complementary, especially his reflection on terminology and its importance for the selection of relevant facts (Habermas, 1984, p. 166 f.). These remarks are contributions to a (then) developing theory of *framing*, before Erving Goffmann's book on the subject (1974). But we must ask whether these elements should be understood as part of Habermas' transcendental logic. It is true that he wants to assert a distance both from a logic of statements, i.e. a formal logic and from transcendental logic, in what he calls a pragmatic approach. The transcendental logic would examine « the fundamental concepts (categories) needed for constituting the objects of a possible experience » [*relevanten Grundbegriffe (kategorien)*] (Habermas, 1984, p. 161-162). Habermas tells us also, that over W, B and the rest, there still is the system of language, of which the validity is decided as a whole, in terms of cohesion of the statements towards one another, and not in singular each time towards specific referents (it is a consensualist holism, in a semantic and pragmatic conception of language). These categories, that are intervening in a sense before the data and the transition laws (like W) permit the selection of elements in a quasi-transcendental manner. It is the fundamental concepts of the language system that make it possible to deduce from D and W while also providing with B a sufficient reason to accept W and therefore the claim C. It is by way of the categories and *grundbegriffe* that we put together a justification or an explanation to an object domain: we can also say that by choosing a terminological system, we assign a domain of objects to that system (Habermas,

1984, p. 166). Moreover, it is the terminological system that will decide what class of facts are admitted in the argumentation. It is then a transcendental conception of categories and terms that permit what will be called *framing* especially after Goffman: it is the case that to operate, data, warrant and backing (D, W, B) all need the terms selected inside a language system, that can also (in part) be selected: Toulmin will discuss these elements concerning framing later on, especially in his handbook (Toulmin, Rieke & Janike, 1979). Habermas refers to Cicourel to hold that facts, interpretations of data and needs depend on the « categorical frame proper to the chosen terminological system » (Habermas, 1984, p. 166).

It is while introducing the notion of a cognitive schema, referring to Piaget and to the project of a materialistic epistemology, that Habermas will use the vocabulary of the *a priori*, typical of the transcendental method. He writes that even if they come from the practical experience, these cognitive schemas "have an *a priori* value towards the experiences they organize as experiences" (Habermas, 1984, p. 167). As in other papers from the same period, this materialist epistemology takes us back to *social work* as a synthesis (Habermas, 1984, p. 167, " … welche die gesellschaftliche Arbeit als Synthesis versteht. " Even if it comes from experience and from a cultural work of formation, the language of justification precedes experience and work. At the time, it is probably to transcend these obvious historic limitations that universalization is required. It seems that the habermasian statements there are very close to the linguistic (in the sense of *sprachlich*) self-foundation, as we can see in *Knowledge and Human Interests*, and in *Science and technique as ideology*.

5. *A discussion of the relevant theoretical issues*

It is very important in my view to distinguish between the cognitive value of a statement and its decidability in the sense of the formal logic. In practical life, we have to make decisions in a context of uncertainty, using descriptions of complex states of affairs which are themselves more or less certain, with at best probable consequences. When we consider the domain of future events and asserted levels of their likeliness, difficulties arise by the simple fact that many levels of discussion are fused together and blur the issues at hand.

Consider some basic distinctions that might help clarify the matter discussed. If we assert A= 'It is likely that event X will occur', we have to distinguish to levels: one concerns the facts discussed, here event X, the other one proposition A in

itself. One the first level, A is telling something about an event, that might occur; on the second level, there is an evaluation of the probability (in a general sense here) of the event X occurring, the second level being included in the first. We can then distinguish between 1a, the eventual fact of event X, and 1b, the truthfulness of A in relationship to its asserted level of likeliness… which is not the same thing as a level of certainty (Sproule, 1980).

Let's look at a statement probably made by some people in the early summer of 2006, "Germany might win the Football World Cup of 2006 ». It asserted a possibility, a very interesting one at the time for most people in Germany and elsewhere. It is on the basis of what was possible or not in our world that some opinion could be held on the subject. From a non specialist's point of view, there was no important reason to assert the contrary, i.e. the impossibility of Germany winning that championship. So it seems to be true in an habermasian way: it could be acceptable, it could have been backed by some arguments (even if that team did not statistically surface as substantially better than the other leading teams). To decide if an asserted possibility like the one in this statement was true or false at the time of its production, it was not necessary to know what was due to happen in July 2006. We did not even need to know the actual degree of probability asserted. There is two levels in the discussion: the level of the statement, i.e. the pragmatic act of asserting the positive probability, and the level of the facts or events discussed; the level of the facts was not known before the events took place, but we could already discuss the subject before (and make an informed opinion, or an educated guess, even if it was not impartial!). As we know, statistics and probabilities are very popular these days. Let us suppose that in February 2006 a person said: "We can bet that Germany will win the FIFA competition, because this event has a probability of .89 on a total of 1.00», this could have looked fascinating for some people. Eventual gamblers might have placed their money on the team because of their belief in that statement. But what was interesting for the common gamblers was to know whether or not the team of their bet might win, and not to know if the asserted probability was the right one. Furthermore, the German *Mannschaft* might have lost or won, we would never have known if that number was correct, even by adding an eventual margin of errors.

Those issues might seem trivial, but what about the following: "If we do not enact some radicalized version of Kyoto (called, let's say, K3) now and in every country,

there is a 95% probability that the GHG will ruin Earth's atmosphere by 2025"? And what about "Because of wind and other elements, among which extension of the current agricultural practices and competition between markets and local economies, the total surface of the earth covered by GM crops around the world will double in the next 10 years"? These are the kinds of issues for which Habermas might help us to plead for the necessity of debate and deliberation, but it is Toulmin (and the subsequent risk thinkers (Beck, 1986; Leiss, 2001, and already Kahneman, Slovic & Tversky, 1982) that might help us to correctly evaluate such difficult statements that require a lot of specialized, complex and domain-specific knowledge. Without such a knowledge (with all its limits) the habermasian discussion will get nowhere… especially when deciders require of the previsions a level of certainty that seems by definition impossible to obtain, in a context where the knowledge value of an assertion about the strong likeliness of some future events does not have to give certitude about the specifics of the events in question to still be useful and valid.

Conclusion: How Habermas treats Toulmin in later years

If we look at the *Theorie des Kommunikativen Handelns* (Habermas, 1981), the least that can be said is that Habermas' concept of argumentation as articulated there is even more strongly normative than elsewhere, presupposing the reflexive participants do thematize their claims to validity. Taking into account more recent work from Toulmin (Toulmin, Rieke & Janik, 1979) he certainly finds in Toulmin a reflexive and non absolutist concept of argumentation, Toulmin is presented as adopting a non deductive stance towards normative issues *and* rejecting relativism (Habermas, 1981, p. 47). But this reading serves to develop what he calls a *logic of argumentation*. Argumentation is the pursuit by reflexive means of actions oriented towards mutual understanding (Habermas, 1981, p. 48). He does quote Toulmin mentioning the modal qualifier in the foot notes (quoting, as he usually does, in English), but in his text he will refer to it only once, and as a 'modifyer' serving to restrict or modify the validity claims (Habermas, 1981, p. 49). Nothing important seems to come out of that important dimension of Toulmin's work. And he does not comment on the moral examples Toulmin and others offer (Toulmin, Rieke & Janik, 1979, p. 309 f.). After discussing Klein's reading of Perelman and Olberechts-Tyteca, he asserts that Toulmin offers a superior theory by differenciating validity claims (Habermas, 1981, p. 56) while admitting the critical and transcending quality of validity. But Toulmin lacks having sufficiently mediated the empirical and logical levels of abstraction…and

Habermas criticizes his insistence on field dependency of argumentation, presented as having institutional criteria. On that basis, he develops more fully his own theory of the three general genres of validity claims…that have not much to do with Toulmin.

The references to the Toulmin model that we find in *Moralbewußtsein und Kommunikativen Handelns* are there only to introduce Habermas' discourse on the *Brückenprinzip*, a bridging principle that permits the process of universalization on moral issues, a process that appear then grounded in Toulmin's informal logic (Habermas, 1983, p. 73). But since we have shown that in Toulmin, W and/or B do not have that role, it follows that the role of the reference to Toulmin here is purely rhetorical. Habermas satisfies himself there in referring to precisions given in *Wahrheitstheorien*, declaring in the context of the work at hand that an informal logic is required for argumentation theory, and that a moral principle similar to what induction does in empirical science is needed. The discussion continues with moral theoreticians like Kant and Hare. Some misunderstandings are treated, then the principles U and D are introduced, that taken together are the real bridging principle of his *Diskursethik* (Habermas, 1983, p. 76). As we can understand, the very insistence on universalization goes against taking specifics or exceptions into consideration.

In one of the self-critical stances of which he is capable, he later admits that his older conception of the truth as epistemic and discursive might have been due to an overgeneralization of the special case of the validity of normative judgments (Habermas, 2003, p 8). It is the case that in *Truth and Justification*, the process of detranscendentalization that is contemporary to the linguistic turn does have to do with uncoupling truth and assertability. And there Habermas does give some manoeuvring space to a modified conception of knowledge in admitting a plurality of ways to correctly consider a certain state of affairs (Habermas, 2003, p. 227-229). It is also true that in that book, he takes more clearly into account issues of risk and difficulties of radical claims to truth by speakers, especially on normative issues (Habermas, 2003, p. 273). But even in that book, he does not come back to Toulmin's work, in the sense indicated here (or in any other sense).

If Habermas gave a tremendous contribution to normative thinking in the late 20th century by giving to it some rational foundation, it seems that the 21st century will be in need of Toulmin's thought and nuances to go further in taking into account exceptions and reservations before arriving to judgments that, if not

universal, might be susceptible of large approval by numerous people.

NOTES

i. Wahrheitstheorien (=Theories of the truth) was first published in a festschrift for W. Schütz: Fahrenbach (1972). It was then put in Habermas (1984) and later translated in french, see Habermas/Roschlitz (1987), under the title « Théories relatives à la vérité », a translation I previously used. In the absence of an English official version, the translations of sentences given here are mine.

ii. It should be noted that Habermas discusses Toulmin's early work on ethics, Toulmin (1950), in Habermas (1983), p. 60-61. He looks especially at Toulmin's idea of comparing the relationship between moral argument to attitudes, with the one between theoretical argument and the flux of perception; Toulmin's book is seen as a good example of asking the good question without finding the good answers. This book is seen as relatively independent, and as less interesting than the 1958 classic.

iii. Habermas (1999). See also, more recently, a short discussion in french with Alain Renaut and Pascal Engel, in Habermas, (2003). At the time of submitting this paper, that book was not translated into English.

iv. Heath presents "designatedness" as the property common to the different validity claims, truth, rightness and sincerity.

v. In the chapter of the book on probability, Toulmin's discussion with Kneale and Carnap does inform us of the importance that Toulmin puts on the affirmative nature of a statement made as probable: for him; "probable but not true" is not a tenable position. This might be in part why Habermas feels justified to back his theory with Toulmin.

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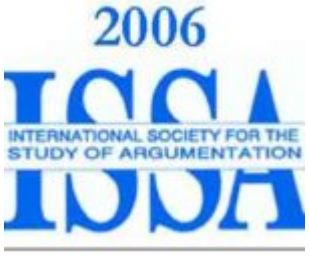

1. *Introduction*

The study examines the argumentative competencies of people with Asperger syndrome (AS) and compares this with those of normal – or what are called neurotypical (NT) – subjects. To investigate how people with AS recognise, evaluate and engage in argumentation, we have adapted and applied the empirical instrument developed by van Eemeren, Garssen and Meuffels to study the conventional validity of the pragma-dialectical freedom rule (van Eemeren, Garssen & Meuffels 2003a; 2003b; 2005a; 2005b; van Eemeren & Meuffels, 2002). Our paper begins with some background information on Asperger syndrome and how it impacts upon communication and argumentation; then it addresses the research questions and methods used; thirdly, it presents some initial findings; finally, it will conclude with some implications for those people with AS, for those they come into contact with and for the pragma-dialectic model in general.

2. *Asperger Syndrome (AS)*

Asperger Syndrome is a neurological disorder named after Hans Asperger. In 1944, Asperger published a paper that described patterns of behaviour in young men who had normal intelligence and language development, but who also had deficiencies in social and communication skills. Despite being identified in the 1940s, Asperger syndrome (AS) is a relatively new category of developmental disorder, and was only 'officially' recognized in 1994, in the fourth edition of the Diagnostic and Statistical Manual (DSM IV) of the American Psychiatric Association. AS is often associated with what is called the high functioning end of the autistic spectrum (Frith, 1991) although there is considerable debate about whether AS is high-functioning autism, or something else (Frith, 2004). It is generally accepted that AS, like autistic conditions, is a neurologically-based developmental disorder, in which there are deviations in three broad aspects of development: first, social relatedness and social skills; second, impaired communication, and a lack of pragmatic skills in particular; and third, certain behavioural characteristics involving repetitive, or what are called perseverative features, often accompanied by an intense interest in a limited range of subjects. It is the level of deficiency in these three categories – social-relatedness, communication & behaviour (which Wing (1993) has called the "triad of impairments") – which can range from relatively mild to severe, that defines all of the pervasive developmental disorders, from those with mild AS through to the

profoundly autistic.

Recently, however, there has been a move away from defining AS in terms of weaknesses, deficiencies and deviance. For example, Dickerson et al (2005: 20) point out that much research on autism, in general, is "comparative, framed around notions of identifiable 'deficit' in Autism and juxtaposed against assumed 'normal' capabilities". This, they argue, is an unhelpful approach, borne of a diagnostic agenda, focusing on what people with autism cannot do, rather than looking at the ways that they actually deploy communicative skills in interaction – and hence ways that practice can be improved. The study of AS has previously been placed in a negative frame whereby the aspects most worthy of attention are those that are considered not normal. There is little room left for the strengths of the individual to come through, and little opportunity for people with AS to appear as real people in the research as opposed to subjects with a syndrome. Notably, in contrast with the diagnostic DSM IV, Gray and Attwood (1999) offer the 'discovery criteria' that define AS in terms of the strengths of people they call 'Aspies'. But it remains the case that there are clear problems associated with having AS. So while it is not uncommon to see people with AS in mainstream educational or professional settings – and they can hold down jobs and can be quite successful – their social and communicative problems may lead to intense frustration, feelings of worthlessness and social isolation. Estimates of the rates of depression for people with AS or high-functioning autism range from 30% (Wing, 1981) to 37% (Ghaziuddin et al, 1998). Similarly raised rates of other psychiatric disorders have also been found (Ghaziuddin, 2002).

One particularly interesting feature of AS (like other autistic conditions) is the lack of what has been called a 'theory of mind': the ability to understand that others have beliefs, desires and intentions that are different from one's own. What this amounts to is that people with Asperger's find it difficult "to put themselves into another person's shoes and to imagine what their own actions look like and feel like from another person's point of view" (Frith, 2004: 676). While some people with autism may never gain this ability to empathize, people with AS may be able to develop such an ability. While they lack an inborn ability to perceive the mental or emotional states of others – what Frith has called an "intuitive mentalising" (Frith, 2004: 667) – they can learn and, when conversing, use "an explicit theory of mind to compute effects on the recipient of the[ir] message" (Ibid.). Amongst other things, this means that through treatments such as

language-communication therapy – where the implicit rules of interaction are taught explicitly – the disaffection felt by people with AS can be reduced (Ozonoff et al, 2002: 90). The communicative competencies of people with AS are discussed in more detail in the next section

3. *AS and communication*

It is clear from anecdotal and clinical experience, as well as from research, that people with AS display problems with discourse – with language in use. In fact these "communicative problems constitute some of the most significant social handicaps in the syndrome, leading to frustration and distress for the individuals and others" (Adams *et al*, 2002: 680).

These difficulties are displayed in a number of ways: first, *how* they speak. Although people with AS (particularly children) "speak grammatically, they do not always speak appropriately" (Kremer-Sadlik, 2004: 185). They display a number of characteristic features, including "formal pedantic language, odd prosody, peculiar voice characteristics, literal interpretation of meaning, too much or too little talk, lack of cohesion, idiosyncratic use of words and repetitive patterns of speech" (Szatmari, Bartolucci & Brenner, 1989; Gillberg, 1989). Similarly, Frith (1998: 54) has come across complaints about AS speech patterns that suggest they speak in "too much of a monotone, too much like sing-song, too soft, too loud, too fast, too slow, wooden and stilted. This diversity", she argues, suggests that "there is nothing wrong with the voice, only the modulation and the use of the voice in the service of communication."

Second, non-verbal cues can be a problem for people with AS – particularly eye contact, which is noticeably different. Often someone with AS will look *away* when you are talking to them, but will look at you when they are talking to you. This might seem subtle, but it can be very unnerving for neurotypical subjects, who often find themselves feeling uncomfortable or unsure that the person is actually listening to them. Tantam (2003) argues that this is in fact a very profound aspect of AS – people do not have the ability to use gaze as a social cue or to signify attention; this in turn can lead to breakdown in communication with the end result that the person feels rejected and, after repeated 'failures', can even withdraw from communicating altogether.

Third, as Grice (1975) observed: "Talk is not a series of disconnected remarks." To construct coherent speech effectively, "a speaker needs to construct what he

or she knows about the listener's thoughts, knowledge, desires and intentions, in order to tailor the content and other aspects of his or her talk to the listener" (Kremer-Sadlik, 2004: 187). But because of their difficulties perceiving others' intentions and perspectives and their impaired capacity to read the unspoken gestures and nuances in everyday social communication, individuals with AS often respond inappropriately or not at all in interaction. This impairment is noticeable at a number of discursive levels, and appears to be fundamentally related to the theory of mind hypothesis. Pragmatic accounts of communication, such as Grice's, stress "the importance of mentalizing for intentional communication" (Ziatas, Durkin & Pratt, 2003: 75). For example, in a study of conversational implicatures, Surian et al (1996) investigated the ability of children with autism to identify violations of Gricean maxims. They found that the "children with autism able to pass the theory of mind task also did well in identifying violations of Gricean maxims" (Ziatas, Durkin & Pratt, 2003: 76). That said, the overly pendantic style of speech that characterises some people with AS – in which "the speaker conveys more information than the topic and goals of the conversation demand" (Ghaziuddin & Gerstein, 1996) – *does* contravene the Gricean maxims of quantity and (sometimes) relevance.

At a micro level, Happé (1993) looked at the role of theory of mind in understanding similes, metaphors and irony. And the relationship is very clear: "those children who were unable to pass even the first order theory of mind task were able to pass the simile task but not the metaphor or irony tasks. Those able to pass the first order but not the second order theory of mind task were able to complete both the simile and metaphor tasks, and those able to pass both first and second order theory of mind tasks were able to comprehend similes, metaphors and irony" (Ziatas, Durkin & Pratt, 2003: 76).

To summarise, the communicative problems of people with AS centre on pragmatics- on prosody and voice modulation, on recognizing and adhering to Gricean maxims and on recognizing certain tropes such as metaphors and irony.

4. *AS and argumentation*

There does not appear to be any existent research on the argumentation of people with AS, despite the fact that they often find themselves in conflict situations due, in part, to their inability to read social cues accurately. The lack of such research suggests that researchers are unwilling or unable to engage with those with AS and this is supported by the apparent bias in the research literature towards

quantitative research and away from qualitative studies. Mercier et al comment on the restricted interests in high functioning persons with pervasive developmental disorders:

When one reviews the literature, it is striking how little use is made of certain methodological approaches in seeking to understand high-functioning autism. In the last few years, populational epidemiology, neuropsychology, and the various branches of neurobiology, especially genetics, have permitted significant advances (for a review, see Bailey et al., 1996; Bryson, 1997; Happé and Frith, 1996). On the other hand, qualitative approaches linked to psychosocial research and based on methods such as in-depth interviews, discourse analysis or case studies have remained greatly underused (Denzin and Lincoln, 1994; Miles and Huberman, 1994). Only a few qualitative studies are to be found in the literature in this field. They primarily deal with case reports (Williams et al., 1996) or with the way families come to terms with autism and with the relations between professionals and parents (Gray, 1993; 1994; 1997). (Mercier, Mottron, & Belleville, 2000: 408)

Another striking characteristic of much of the available research is that it relies much more on the opinions and views of parents or caregivers than the person(s) with AS themselves. Whilst this may be a result of the difficulties which people with AS have in maintaining social relationships with others, it also suggests that people with AS are not considered capable of speaking up for themselves, or that their accounts are not accepted as reliable unless corroborated by another.

Based on general communicative difficulties, summarised in the preceding section, we expect that people with AS will have argumentative competencies different to neurotypical (NT) people and may not always follow the accepted rules of argumentation. Superficially, we expect that their argumentation will be overly logical and, as Stenning and van Lambalgan (nd: 220) have claimed, driven by "an obsessive attempt to extract exceptionless truth about a complicated world." In their discovery criteria, Attwood and Gray (1999: 2) put it slightly differently, suggesting that AS discourse is often characterised by an "ability to pursue personal theory or perspective despite conflicting evidence" – which is a nice spin on saying that they may perseverate or just not listen to other people's point of view. Perseverative thoughts – where the person with AS returns to a particular line of thinking unexpectedly or without apparent linking from the directly previous content of conversation, resulting in incohesive communication –

may cause particular problems in interaction.

More specifically related to pragma-dialectics, and the pragmatic difficulties in recognising or observing the Gricean maxims, a small amount of other research has been done on the use of assertive speech acts, but none of this relates explicitly to expressing standpoints or advancing argumentation. Ziatas, Durkin & Pratt (2003) for example, studied assertive speech acts produced by children, focusing on assertives that relate closely with a theory of mind. That is: internal reports, expressing emotions, intents & other mental states; attributions, expressing beliefs about another's state; and explanations, expressing reasons or relationships between phenomena. The children with AS used more internal state assertions than the other groups (with autism, SLI & NT), though some of these were inappropriate (echolalia); correspondingly, children with AS used fewer assertions relating to another's mental state ('you're thinking…', 'you don't know…', 'you believe…') than the other groups. Clearly this isn't argumentation, because the discourse didn't take place in a context of disagreement. But these findings – essentially showing the difficulties that people with AS have in discerning another's point of view when it isn't fully externalised – may be significant in studying their argumentation.

Anecdotally, it does appear as though people with AS often lack the necessary social skills to persuade other people. This deficit in interpersonal communication has implications for their ability to function independently in a complex social world where persuasion plays an important role in ensuring that one's needs are met. This may also relate to Michael Gilbert's recent work on emotional argumentation – specifically, the "dissonance between a logical discursive message and the emotional content or context of that message" (2005: 44-45). People with AS seem particularly prone to feeling this dissonance or are unable to understand the emotional perspective of others and hence to decode this dissonance. This seems like it could be a particularly fruitful avenue to explore when analysing the argumentation of AS.

5. *Research questions*

The review of current literature around AS and argumentation has thrown up a series of research questions. They are formulated as questions, rather than hypotheses, due to the exploratory nature of the work. These first two are the focus of work currently in progress:

1. Will AS respondents evaluate speech acts involving *ad hominem* fallacies as less reasonable than non-fallacious speech acts?
2. Does the evaluation of fallacious/non-fallacious speech acts by AS respondents show greater variance than the data of NT respondents?

The next four may be the focus of future work. It seems the main argumentative problems of people with AS are felt during social interaction as a result of inabilities to pick up and/or translate emotional or other pragmatic cues. On this basis:

3. Is AS face-to-face argumentation more or less reasonable than NT participants? In what ways (if any) do AS arguers find face-to-face argumentation problematic?
4. Are AS written arguments (both A1 and A2, in O'Keefe's (1977) terms) more or less reasonable than NT participants? In what ways (if any) do AS arguers find written arguments problematic?
5. Are certain pragma-dialectical rules of reasonableness more problematic (in terms of their recognition and application) for AS arguers?
6. Conversely, are certain pragma-dialectical rules of reasonableness less problematic (in terms of their recognition and application) for AS arguers?

It may be that some rules are easy for Aspies to follow in advancing their own arguments, but very problematic when it comes to the arguments of others. For example, the ambiguity rule or the standpoint rule may not be especially difficult for Aspies to follow: they tend to be very literal, or in the words of Attwood and Gray (1999: 2), to communicate in a style that is "free of hidden meaning or agenda". However, unless the standpoint of the other party is fully externalised, and argument presented in an explicit, accurate and literal way, the application of these rules in context may be difficult.

6. *Methods*

To explore our first two questions, we have taken 12 of the short discourse fragments constructed by van Eemeren, Garssen and Meuffels (2003a; 2003b; 2005a; 2005b) nine of which contain fallacies and three of which do not (see APPENDIX 1). Respondents were asked to judge the reaction of the antagonist and rate it on a 7 point Likert scale – though, to make the scale was clearer to the AS respondents, the labels were changed slightly from those used in van Eemeren, Garssen and Meuffels' work, to 1 meaning 'entirely unreasonable' to 7 meaning 'entirely reasonable'. The research instrument includes exchanges in

three settings: domestic, political and scientific (or academic). For each of these settings there are 4 exchanges: a direct *ad hominem*, an indirect or circumstantial *ad hominem*, a *tu quoque ad hominem* and a non-fallacious standpoint. There is a sizable body of literature summarising the findings of these studies, and it would therefore be interesting to see if these results are replicated for AS respondents.

The second group of questions are for future research – though initial results do suggest some interesting things relating to question 4, on written arguments. Eventually we intend to collect data from face-to-face interviews with AS clients (ASIn) in which they discuss personal histories of communicative problems. We also intend to collect data from focus groups with AS clients (ASFg) where participants will be presented with a series of contentious or perhaps controversial standpoints and asked to evaluate them. These will then be compared to similar focus group sessions with NT subjects (NTFg).

7. *Initial results*

From only three respondents thus far, there are some interesting though extremely tentative findings. The table here shows the average judgements for the three respondents:

Table 1: AS respondents' evaluation of fallacious and non-fallacious exchanges

Respondent	All fallacies	Non-fallacies	Direct fallacies	Indirect fallacies	Tu quoque
1	4.33	7.00	3.00	5.00	5.00
2	4.33	5.67	4.00	4.33	4.67
3	4.11	5.00	3.67	5.00	3.67
Mean	4.26	5.89	3.56	4.78	4.45

Table 1: AS respondents' evaluation of fallacious and non-fallacious exchanges

Given the extremely small n-base, it is not possible to offer any firm conclusions, but the table does suggest three things: first, the respondents do appear to consider violations of the freedom rule to be less reasonable than non-fallacious responses. However, the fallacious responses, as a whole, were considered to be just this side of reasonable. This is slightly higher than the Amsterdam studies – which found a mean of 3.75. Looking at the three variants of the ad hominem fallacy, the respondents were more critical of the direct or abusive variant than

they were of the other two. This finding is in agreement with the findings of the Amsterdam studies, although again our average here is slightly higher than their NT respondents.

But these averages do cover up some significant differences between the three respondents. Respondent 1 – a woman in her early 20s – answered either a 1 or a 7 to every fragment: it was either 'entirely unreasonable' or 'entirely reasonable'. In a follow-up email she said:

I found it difficult to make decisions about degrees of reasonableness. I tend to see things as OK or not OK with no grey areas. I hope that is alright.

Each of the non-fallacious responses she judged correctly (which is why her average is 7), but her judgments of the fallacies were less successful: she thought that 5 of the 9 fallacious responses were 'entirely reasonable' which reduced her average. This was different to the other two respondents – both male, one 21 and the other 18. The judgements of these two respondents had less variance: on only 2 occasions did they judge a fragment to be either a 1 or a 7. This may be due to their respective experiences of AS: both of the men were diagnosed as children, whereas the female was only diagnosed as a young adult. This meant that the two men benefited from specialised schooling. The mother of one of the men wrote to explain that since 2000 her son had been at a school for young people with communication difficulties. He had benefited from having a weekly session with a speech and language therapist, and a lot of work had been done with him "on his social skills and relating to others, not least helping him to appreciate that others have different points of view and that it is right to respect this." Nonetheless, he still found the exercise difficult – he stated at the end that he found it difficult because of the "Lack of facts about the argument". Nevertheless, he still provided more finely graded judgements of the discourse fragments than our first respondent. When the first respondent was asked why she found it difficult and whether there was any problem with the clarity of the questionnaire, her reply was revealing:

In reality if I heard two people having any of the exchanges listed I would probably feel confused as to how they meant it… Were they being aggressive?, joking?, cruel?, friendly? […] When I was reading person B's responses I struggled to imagine what they meant or why they were saying it in the way they did. The only reasoning I could use to decide whether they were being reasonable

or not was to decide whether or not their response was justified given the apparent circumstances […] I know that people's feelings should be important too, but I could not imagine what the people involved might be feeling given the limited information.

This excerpt is interesting for a number of reasons. It suggests the importance of contextual cues in the way that ordinary language users reconstruct argumentation in order to analyse it. Here she tries to use an explicit theory of mind that she's learnt to try and decide whether B's responses were justified. Emotional cues are one of perhaps many inputs used in this reconstruction, which – in the case of this woman and perhaps people with AS as a whole – is what creates difficulties in judging the reasonableness of certain speech acts.

8. *Conclusion: the study's contribution*

This ongoing study will hopefully contribute to a better understanding of the condition of AS in general; and of the discourse of adults with AS in particular, who tend to be under-represented in the literature. In terms of argumentation theory, our study should be viewed as part of the pragma-dialectical research programme, and will add further detail to the data collected thus far on the conventional validity of the freedom rule. In addition, our results may contribute to the more analytical work by Gilbert (2005) on the emotional content of argumentation and specifically on the role that emotional cues play in ordinary language users' reconstruction of argument. But primarily the study is a practical piece of research- once complete: a list of "guidelines for good arguing" will be produced which will hopefully help people with AS to engage in arguments more appropriately. Therefore this study can be classed as "Action Research" in that the results will hopefully directly benefit the participants themselves and people like them.

Appendix 1

Domestic 1 (direct ad hominem)
A: I think Ford cars drive better; they shoot across the road.
B: How would you know? You don't know the first thing about cars.
Domestic 2 (indirect ad hominem)
A: Mum, I really think you should buy a new camera; the one you have isn't any good.
B: Wouldn't you like that! I bet you just want to get your hands on my old camera.

Domestic 3 (tu quo que ad hominem)
A: I think you'd better not eat so much chocolate; it affects your weight.
B: Look who's talking! Your own tummy is getting bigger and bigger.
Domestic 4 (no fallacy)
A: I think you can safely trust me with that car; my driving is fine.
B: I don't believe a word you're saying! You've borrowed my car twice and both times you've damaged it.

Scientific 1 (direct ad hominem)
A: In my opinion, you have been acting unethically; you failed to inform your patients about what they would be exposed to.
B: What do you know about medical ethics? You are not a medical specialist yourself.
Scientific 2 (indirect ad hominem)
A: In my view, it is highly questionable whether smoking really causes cancer; there are studies which deny it.
B: Do you want me to accept that opinion from you? Everyone knows your research is sponsored by the tobacco industry.
Scientific 3 (tu quo que ad hominem)
A: I believe the way in which you processed your data statistically is not entirely correct; you should have expressed the figures in percentages.
B: You're not being serious! Your own statistics aren't that good either.
Scientific 4 (no fallacy)
A: I believe my scientific integrity to be impeccable; my research has always been honest and sound.
B: Do you really want us to believe you? You have been caught tampering with your research results twice.

Political 1 (direct ad hominem)
A: In my opinion, making people work on a Sunday is terrible – they'll never get any relaxation.
B: But you belong to a religious party! How could you ever objectively assess the pros and cons of such a decision?
Political 2 (indirect ad hominem)
A: In my view, the best company for improving Social Services is Capita. They are the only contractor in Britain that can handle such an enormous job.
B: Do you really think that we can believe you? It's not a coincidence that you

recommend this company – it's owned by your father-in-law.
Political 3 (tu quo que ad hominem)
A: I believe that a minister should not withhold any information from Parliament; this would mean the end of democracy.
B: Of all people, I can't believe you're saying this! You once tried for months to keep a case of subsidy fraud secret.
Political 4 (no fallacy)
A: In my view, we have never used empty election slogans; we have always kept our promises.
B: No one believes you! You promised lower taxes in the last election campaign but people have to pay considerably more taxes since you have come to power.

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ISSA Proceedings 2006 ~ Cultural Differences In The Persuasiveness Of Normatively Strong And Normatively Weak Expert Evidence

1. *Introduction*

People sometimes use expert evidence in support of their claims in persuasive texts (Hornikx, 2004) or speeches (Levasseur & Dean, 1996). The fact that, for instance, Professor Jackson underscores that playing party games helps young criminals to become more socialized, may serve

as expert evidence in support of a claim about the effects of playing games for young criminals. In such cases, an argument by authority is formed, because “a statement is defended by pointing out the fact that an authoritative person or institution subscribes to it” (Schellens, 1985, p. 179).

Walton (1997) provided a detailed discussion of the argument by authority, and distinguished two different types of authority: the administrative authority and the cognitive authority. An administrative authority has “the right to exercise command over others or to make rulings binding on others through an invested office or recognized position of power” (p. 76). Examples of this kind of authority are a minister and a mayor. When a cognitive authority is concerned, there is “a relationship between two individuals where one is an expert in a field of knowledge in such a manner that his pronouncements in the field carry a special weight of presumption for the other individual” (p. 77). When expert evidence is used as support for claims in a persuasive setting, it is related to this cognitive authority.

In Section 2, I will give an overview of studies that investigated the persuasiveness of expert evidence as well as other types of evidence. One of these studies demonstrated that the persuasiveness of expert evidence was not the same in two different cultures. Section 3 will therefore discuss the relationship between expert evidence and the cultural background of people who judge expert evidence. Special attention will be paid to the question whether people from different cultures may vary in the persuasiveness of expert evidence that is normatively strong or normatively weak according to criteria from argumentation theory. The second part of this article will report on an experiment that investigated the persuasiveness of normatively strong or normatively weak expert evidence in France and the Netherlands.

2. *The persuasiveness of expert evidence*

The persuasiveness of different types of evidence has been empirically investigated for more than 60 years. Evidence has been defined as “data (facts or opinions) presented as proof for an assertion” (Reynolds & Reynolds, 2002, p. 429). Hoeken and Hustinx (2003) distinguish anecdotal, statistical, causal, and expert evidence. Anecdotal evidence consists of one case, whereas statistical evidence consists of numerical information about a large number of cases. Causal evidence, next, consists of an explanation, and expert evidence, finally, consists of a confirmation by an expert. The types of evidence appear not to be equally

persuasive. In a recent review of empirical studies, which was the first to include all four types of evidence, Hornikx (2005) concluded that statistical and causal evidence are more persuasive than anecdotal evidence. For expert evidence, such conclusions are harder to make because of the limited number of empirical studies that examined the persuasiveness of expert evidence and other types of evidence: Hoeken and Hustinx (2003), and Hornikx and Hoeken (2005).

Hoeken and Hustinx (2003) were the first to investigate the persuasiveness of all four types of evidence. Expert evidence was found to be as persuasive as statistical and causal evidence, and more persuasive than anecdotal evidence. Hornikx and Hoeken (2005) also investigated these four types of evidence, but not only with Dutch participants – as in Hoeken and Hustinx (2003) – but also with French participants. Moreover, the quality of the evidence instantiations was taken into account. The instantiations of statistical and expert evidence were normatively strong according to criteria from argumentation theory. Normatively strong statistical evidence should consist of a large sample of cases that is representative for the population in the claim that it supports (Garssen, 1997; Schellens, 1985). Expert evidence is normatively strong if the expert is credible and reliable, and if the expert's field of expertise corresponds to the field of the claim (see also Walton, 1997). For the Dutch participants in Hornikx and Hoeken (2005), expert evidence was as persuasive as causal evidence, less persuasive than statistical evidence, but more persuasive than anecdotal evidence. For the French participants, expert evidence was as persuasive as statistical evidence, but more persuasive than causal and anecdotal evidence.

Both Hoeken and Hustinx (2003), and Hornikx and Hoeken (2005) demonstrate that expert evidence is more persuasive than anecdotal evidence. However, their results differed in how the persuasiveness of expert evidence relates to that of statistical and causal evidence. This difference may be attributed to the two studies' differences in participants (Dutch or French) and material (normatively strong instantiations or not). In the next section, therefore, I will discuss the possible influence of culture and normative criteria on the persuasiveness of expert evidence, and – in particular – the interplay between these two factors.

3. *Culture and expert evidence*

Some argumentation scholars have stressed the importance of possible cultural differences in the evaluation of argument types (e.g., Hollihan & Baaske, 1998; Sanders, Gass & Wiseman, 1991), and of strong and weak arguments (e.g.,

MacIntyre, 1988; McKerrow, 1990). Hornikx and Hoeken (2005) were particularly interested in cultural differences in the persuasiveness of expert evidence. The results of their experiment demonstrated that expert evidence was relatively more persuasive to the French participants than to the Dutch participants. This cultural difference was explained with reference to the concept of power distance (cf. Jansen, 1999; Pornpitakpan, 2004). Power distance is "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" (Hofstede, 2001, p. 98). For expert evidence to be persuasive, the receiver will have to accept that the expert possesses more knowledge about the topic in question. Kruglanski et al. (2005) suggested that the influence of experts on people depends on the perceived gap between their own knowledge and that of the expert. It could be argued that such a gap in knowledge is accepted more easily in large power distance cultures such as the French than in small power distance cultures such as the Dutch. Therefore, expert evidence might be more persuasive in the French culture than in the Dutch culture.

The difference in the persuasiveness of expert evidence in both cultures in Hornikx and Hoeken (2005) was less pronounced than could be expected on the basis of the large difference in power distances in the Dutch and the French culture that Hofstede (2001) reports. In Hornikx and Hoeken (2005), the expert evidence instantiations were strong according to criteria from argumentation theory: the experts were constructed to be credible and reliable, and their field of expertise was relevant to the field of the claim that the expert supported. Larger cultural differences could be suggested with normatively weak expert evidence, consisting of experts with an irrelevant field of expertise. In fact, the French communication scholar Breton (2003) argues that experts can influence people's opinions about an issue that is far from their own field of expertise. This suggests that – under conditions of a large power distance – expert evidence with an irrelevant field of expertise (normatively weak) may still be persuasive. People from the French culture more easily accept differences in power distance, and may therefore be less affected by the relevance of the experts' field of expertise, provided that these experts have a high status (e.g., because of titles). People from small power distance cultures such as the Dutch could be said to take into account the relevance of the field of expertise. This leads to the first research question:

RQ1 – Is there a cultural difference in the relative persuasiveness of normatively strong and normatively weak expert evidence in France and the Netherlands?

If such a cultural difference indeed occurs, normatively weak expert evidence could be more persuasive in the French culture than in the Dutch culture:

RQ2 – Is normatively weak expert evidence more persuasive in France than in the Netherlands?

4. *Method*

An experiment was set up to answer these two research questions. Dutch and French participants were given a number of claims supported by normatively strong and normatively weak evidence.

4.1 *Material*

Participants received 20 claims, taken from Hornikx and Hoeken (2005). An example of such a claim is 'Waiters that repeat the orders of customers verbatim receive a higher tip'. Ten claims were supported by causal or anecdotal evidence. These were used as fillers between the ten other claims, which were supported by normatively strong or normatively weak evidence. Normatively weak expert evidence was created by changing the relevant field of expertise into an irrelevant field of expertise. Each field of expertise in Hornikx and Hoeken (2005) was used for strong expert evidence, but also for weak expert evidence.

Statistical evidence was also included in the material because it allowed to control whether French participants were sensitive to differences in evidence quality for this type of evidence. The statistical evidence instantiations in Hornikx and Hoeken (2005) were normatively strong because they had large sample sizes, and high percentages of cases in the sample. In this experiment, two sets of normatively strong and normatively weak statistical evidence were created: '78% of 314 persons' and '74% of 381 persons' for the strong instantiations, and '35% of 46 persons' and '38% of 53 persons' for the weak instantiations.

4.2 *Participants*

The Dutch participants were mostly Arts students from universities in Amsterdam (n = 73; five groups), Delft (n = 21; two groups), Enschede (n = 28; three groups), Nijmegen (n = 77), and Tilburg (n = 101; three groups). The French participants were also mostly Arts students, in Besançon (n = 49), Paris (n = 56; two groups), Roubaix (n = 58), Strasbourg (n = 65; six groups), and Tours (n =

72). Of the French participants, 81.3% was female, whereas this percentage was only 70.0% for the Dutch participants. The age of the French participants ranged from 17 to 30, with a mean of 20.19 (*SD* = 1.81). The Dutch participants were 20.64 years old on average (*SD* = 1.91), with ages from 17 to 26**[i]**.

4.3 *Design*

The multiple message design of Hornikx and Hoeken (2005) was used. All participants received the 20 claims in exactly the same order in each version, but the distribution of the five types of evidence over the 10 experimental claims and the five versions followed a balanced Latin square. The fifth type of evidence was the no evidence condition. This condition served as a baseline, and allowed to compute the persuasiveness of evidence: the judgment of a claim with evidence minus the judgment of the same claim without evidence.

4.4 *Instrumentation*

The booklet that participants received was titled 'Opinions on social issues'. After an instruction, 20 pairs of claims with different types of evidence followed. For each of the claims, participants judged the probability on 5-point semantic differentials (very improbable – very probable). After these 20 judgments, participants received a number of items of three context variables for which they had to indicate their agreement on a 5-point Likert scale. As a control with Hornikx and Hoeken (2005), participants were given seven items of the Need for Cognition scale (NFC; Cacioppo, Petty, & Kao, 1984). In order to better be able to explain possible cultural differences (see Hornikx, 2006), two variables were included: four items of the Preference for Expert Information scale (PEI; Hornikx & Hoeken, 2005), and 10 items of the Right-Wing Authoritarianism scale (RWA; Altemeyer, 1988), which has proven to be related to power distance (see Rohan & Zanna, 1996). All three scales were reliable (NFC: Dutch α = .72, French α = .78; PEI: Dutch α = .75, French α = .79; RWA: Dutch α = .60, French α = .71).

After these items, the perceived expertise of the experts was measured as in Hornikx and Hoeken (2005). Participants indicated the degree to which they agreed with a standpoint on a 5-point Likert scale, such as: "Professor Timmermans is a researcher in the field of retail marketing at the University of Rotterdam. In that capacity, he has enough expertise to make a judgment about the relation between slow music in supermarkets and their turnover". For the perceived quality of normatively strong statistical evidence, participants were asked to indicate on a 5-point semantic differential which of the two examples

they would choose as proof for the generality of the occurrence of an effect: “the effect occurs in 35% of 46 persons” or “the effect occurs in 78% of 314 persons”. The questionnaire ended with questions about participants’ age, sex, nationality, and current education.

4.5 *Procedure*

Students of several universities in the Netherlands and France filled in the questionnaire. The study was introduced as being about social issues. The students were not rewarded for their participation, which took about 13 to 18 minutes. After the questionnaires had been collected, the real research purpose was revealed, and participants were thanked for their cooperation. There were no disturbances during the experiment.

4.6 *Statistical tests*

The research question about cultural differences in the persuasiveness of normatively strong and normatively weak expert evidence was evaluated through a 2 (culture) x 2 (type) x 2 (quality) analysis of variance, where culture was a between-subjects factor, and type of evidence and evidence quality within-subjects factors. The research question about cultural differences in the persuasiveness of normatively weak expert evidence was investigated in two ways. The persuasiveness of normatively weak expert evidence in the two cultural groups was directly compared with an independent t-test, and indirectly by comparing it with the persuasiveness of normatively strong expert evidence. Next to these analyses by participants, analyses by stimuli were also conducted.

A within-subjects design carries the risk of a carry over effect: the participants’ judgments of claims in the second part of the booklet may be influenced by their judgments of claims in the first part. The occurrence of a carry over effect was tested with a 2 (first judgment, last judgment) x 2 (expert, statistical) analysis of variance with repeated measures, and a 2 (first judgment, last judgment) x 2 (strong, weak) analysis of variance with repeated measures. If participants had learned to perceive differences between the type and the quality of evidence, there should have been significant interaction effects. However, interaction effects were not significant for time of judgment and type of evidence (F (1, 599) = 2.33, p = .13), or for time of judgment and quality of evidence (F (1, 599) = 1.63, p = .20).

5. *Results*

Before I present the results relevant to the research questions (5.2), I will discuss participants' reactions to the manipulations of strong and weak evidence (5.1).

5.1 *Manipulation of strong and weak evidence*

Since scholars in cross-cultural methodology suggest checking whether participants with different cultural backgrounds have the same use of scale extremities (Van de Vijver & Leung, 1997), this was done for the Dutch and French participants with the Bachman and O'Malley (1984) index. Because of cultural differences in response extremity on the claims and the context variables (p's < .01), the scores on these items were standardized. The analyses below will concern standardized data, unless indicated otherwise.

Next, it was tested whether the manipulations of strong and weak statistical and expert evidence were successful. Strong statistical evidence was indeed perceived as stronger than weak statistical evidence (t-tests with raw data). This was the case for both the French participants (M = 3.71, SD = 1.28; $t(290) = 9.52$, $p <$ .001), and the Dutch participants (M = 4.39, SD = 0.99; $t(298) = 24.12$, $p < .001$), as each group of participants scored above the scale midpoint (3.00). However, the manipulation was more successful for the Dutch participants than for the French participants ($t(547.15) = 7.12$, $p < .001$).

Next, it was checked whether the normatively strong experts were considered as having more expertise than the normatively weak experts. The French participants perceived the strong experts (M = 3.02, SD = 0.86) as more expert than the weak experts (M = 2.61, SD = 0.92), F (1, 299) = 46.48, $p < .001$, η2 = .14. Similarly, the Dutch participants considered the strong experts (M = 3.30, SD = 0.83) had more expertise than the weak experts (M = 2.33, SD = 0.85), F (1, 299) = 255.81, $p < .001$, η2 = .46. The operationalization of weak and strong expert evidence was successful, but the difference in expertise between strong and weak experts was more pronounced for the Dutch participants than for the French participants (F (1, 598) = 43.93, $p < .001$, η2 = .07).

In sum, the manipulations of strong and weak evidence were successful, but to a larger extent for the Dutch participants than for the French participants. Whether these cultural differences affected the sensitivity to evidence quality will be shown below, where the results relevant to the research questions are presented.

5.2 *Research questions*

An experiment was conducted to investigate the persuasiveness of normatively strong and normatively weak expert evidence in the Dutch and the French culture. Table 1 shows the persuasiveness of these two types of evidence, and of normatively strong and weak statistical evidence.

Table 1. Persuasiveness of evidence in function of culture, type and quality

type of evidence	Dutch ($n = 300$)	French ($n = 300$)	total ($N = 600$)
expert evidence			
strong	0.73[b] (1.73)	0.25[a] (1.66)	0.49[b] (1.71)
weak	0.25[c] (1.74)	0.36[a] (1.59)	0.31[c] (1.67)
statistical evidence			
strong	1.04[a] (1.77)	0.46[a] (1.72)	0.75[a] (1.77)
weak	0.42[c] (1.72)	0.35[a] (1.62)	0.39[b,c] (1.67)

Note: Standardized data, *SD* between parentheses, different superscripts refer to significant differences within-cultures, alpha level of .05

Table 1. Persuasiveness of evidence in function of culture, type and quality

For RQ1 about cultural differences in the persuasiveness of normatively strong and weak expert evidence, the interaction effect between culture and quality on the persuasiveness of expert evidence is relevant. This interaction was significant: $F1$ (1, 598) = 11.43, $p < .01$, $\eta 2 = .02$; $F2$ (1, 9) = 14.05, $p < .01$, $\eta 2 = .61$. For the French participants, there was no difference in the persuasiveness of strong and weak expert evidence ($t1$ (299) = 0.89, $p = .37$; $t2$ (9) = 1.03, $p = .33$), whereas strong expert evidence was more persuasive than weak expert evidence for the Dutch participants ($t1$ (299) = 3.77, $p < .001$; $t2$ (9) = 2.37, $p < .05$). It should be noted that a similar interaction effect was found for statistical evidence: $F1$ (1, 598) = 7.62, $p < .01$, $\eta 2 = .01$; $F2$ (1, 9) = 20.47, $p < .01$, $\eta 2 = .70$. For the French participants, strong statistical evidence was as persuasive as weak statistical evidence ($t1$ (299) = 0.90, $p = .37$; $t2$ (9) = 1.65, $p = .13$), but for the Dutch participants strong statistical evidence was more persuasive than weak statistical evidence ($t1$ (299) = 4.65, $p < .001$; $t2$ (9) = 4.63, $p < .01$).

The second research question focused on the persuasiveness of normatively weak expert evidence in the Dutch and the French culture (RQ2). In an absolute way, weak expert evidence was equally persuasive in both cultures ($t1$ (598) = 0.77, $p = .44$; $t2$ (9) = 0.61, $p = .56$). In a relative way, however, weak expert evidence was more persuasive in France, as it was as persuasive as strong expert evidence. Finally, context variables were selected in order to be able to explain possible

cultural differences in the persuasiveness of expert evidence**[ii]**. The French and Dutch participants, however, did not differ with respect to their scores on the PEI ($t(585.51) = 1.65$, $p = .10$), and RWA scales ($t(581.81) = 0.61$, $p = .54$).

6. *Conclusion and discussion*

Hornikx and Hoeken (2005) demonstrated that normatively strong expert evidence was more persuasive in the French culture than in the Dutch culture, but only in a relative way. Larger cultural differences could be suggested with normatively weak expert evidence. On the basis of Breton (2003) and Hofstede (2001), I suggested that there could be cultural differences in the persuasiveness of strong and weak expert evidence in the French and the Dutch culture. An experiment was set up to investigate the persuasiveness of these two types of expert evidence. A cultural difference indeed occurred: strong expert evidence was more persuasive than weak expert evidence for the Dutch participants, but both types of expert evidence were equally convincing for the French participants.

Normatively weak expert evidence was not more persuasive in the French culture than in the Dutch culture in an absolute way. It was more persuasive, though, in a relative way, because it was as persuasive as normatively strong expert evidence for the French participants. Below, I will explore possible explanations for these cultural differences (6.1), and I will present implications of this study for argumentation theory (6.2).

6.1 *Possible explanations*

In order to be able to explain possible cultural differences, I included the PEI and the RWA scale in the questionnaire. Unfortunately, these scales were not successful in providing explanations. Other explanations for the French result that normatively strong and normatively weak evidence were equally persuasive can be explored in two directions. A first explanation may come from the Elaboration Likelihood Model (Petty & Cacioppo, 1986). According to this model, people's sensitivity to variations in argument quality (e.g., strong and weak evidence instantiations) depends on factors such as people's motivation and ability to scrutinize a message's claim and arguments. Under conditions of low motivation and/or low ability, people are predicted to use heuristics such as 'There is numerical information / an expert source, so the claim must be probable' rather than to carefully elaborate the message's arguments. It could be suggested that the French participants relied more on heuristics, whereas the Dutch

participants carefully elaborated the claims with evidence. The only indicator for participants' motivation in this study is their score on the Need for Cognition scale (Cacioppo, et al., 1984). As the French and the Dutch participants did not differ in their (moderate) score on the NFC, there is no strong support for a cultural difference in the participants' elaboration.

A second, more specific explanation deals with the perceived quality of normatively strong and normatively weak evidence. French participants perceived a much smaller difference between the expertise of strong and weak experts, and between the quality of strong and weak statistical evidence than the Dutch participants. Explanations for these small French differences are not straightforward. A possible explanation for expert evidence, however, lies in the French educational system, in which teachers are considered omniscient (e.g., Gruère & Morel, 1991; Planel, 1997). In such an educational system, it is understandable that the French participants accorded the professors quite a high level of expertise on a domain that is not their field of expertise.

6.2 *Implications for argumentation theory*

Normative criteria for strong argumentation have been developed by American and European argumentation theorists. There are no research findings to date that demonstrate that norms related to the persuasiveness of evidence types (or argument types) differ or not from culture to culture. Still, if norms should be culture-independent, cultures may react differently to these norms. The experiment presented here demonstrates that the degree to which expert and statistical evidence met the criteria of a relevant field of expertise and a large sample size respectively did not influence the persuasiveness of these evidence types for the French participants. However, it is still an open question as to whether normative criteria are universal and people's reactions to these criteria are culture-dependent, or as to whether the normative criteria are culture-dependent. Empirical research is needed to gain insight into this question. Focus groups or interviews could be used to learn what normative criteria laymen from different cultures have for evidence types such as statistical and expert evidence (cf. Timmers, Šorm & Schellens, 2006). Laymen's responses could be compared to normative criteria listed by argumentation theorists. This research approach can provide valuable insight into the conditions under which evidence can be persuasive, and into how the cultural background of people affects this persuasiveness.

Notes

i. The difference in sex distribution was significant (X2 (1) = 10.32, p < .01). Participants' sex, however, did not affect the relative persuasiveness of the types of evidence (F < 1), but it did affect the relative persuasiveness of strong and weak evidence (F (1, 597) = 4.71, p < .05, η2 = .01). In fact, strong evidence was more persuasive to the male participants (M = 0.42, SD = 0.73) than to the female participants (M = 0.27, SD = 0.68) (t(597) = 2.25, p < .05). However, more importantly, for both the male participants (t(145) = 3.41, p < .01) and the female participants (t(452) = 2.55, p < .05) strong evidence was more persuasive than weak evidence. Next, the Dutch participants were significantly older than the French participants (t(596.21) = 2.97, p < .01). This difference did not affect the persuasiveness of evidence, as age did not interact with evidence type (F (1, 598) = 1.35, p = .25), or evidence quality (F < 1).

ii. Other main and interaction effects not mentioned in the text are listed here. There was a main effect of type of evidence on persuasiveness with an analysis by participants (F1 (1, 598) = 8.22, p < .01, η2 = .01), but there was only a tendency for such a main effect with an analysis by stimuli (F2 (1, 9) = 4.01, p = .08). There was also a main effect of quality (F1 (1, 598) = 18.53, p < .001, η2 = .03; F2 (1, 9) = 9.26, p < .05, η2 = .51): high quality evidence was more persuasive than low quality evidence. A main effect of culture occurred with an analysis by participants (F1 (1, 598) = 8.43, p < .01, η2 = .01), but not with an analysis by stimuli (F2 (1, 9) = 3.29, p = .10). There was no interaction effect between evidence type and evidence quality (F1 (1, 598) = 2.16, p = .14; F2 (1, 9) = 1.48, p = .25), or between evidence type and culture (F1 (1, 598) = 1.37, p = .24; F2 (1, 9) = 1.34, p = .28). Another interaction effect, however, did occur, namely between culture and evidence quality (F1 (1, 598) = 17.91, p < .001, η2 = .03; F2 (1, 9) = 25.61, p < .01, η2 = .74). Finally, a three-way interaction effect between the three factors was not significant (F1 < 1; F2 < 1). The same effects were found with the raw data.

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ISSA Proceedings 2006 ~ An Analysis Of Preschool Hebrew Speaking Children's Arguments From The Perspective Of The Pragma-Dialectical Model

1. *Characteristics of Children's Verbal Arguments*

Verbal arguments are part of young children's normal activity and are usually "rule governed and socially organized events" (Benoit 1992, p. 733). Researchers have concluded that they have a positive effect on friendships and cognitive development (Corsaro 1994, Dawe 1934, Garvey 1993, Green 1933, and Shantz 1987). Corsaro (1994, p. 22) states "disputes provide children with a rich arena for development of language, interpersonal and social organization skills, and social knowledge." In fact, O'Keefe and Benoit (1982) see argument as part of normal language learning. Piaget (1952, p. 65) states "[i]t may well be through quarrelling that children first come to feel the need for making themselves understood".

Children's arguments are generally short in duration. For example, Dawe (1934) found that on average quarrels last 14 seconds, while O'Keefe and Benoit (1982) found that young children's disputes consisted of an average of five turns. Although these disputes are not long in duration, they are powerful events. Once a dispute has begun, "any prior goal or task is abandoned and the attention is directed to resolving the incompatibility" but "[o]nce the conflict is resolved, play can once again be resumed" (Eisenberg and Garvey 1981, p.151). These verbal disputes can be considered as "side-sequences" (Jefferson, 1972), important at the moment, but with no lasting effect on interaction.

2. *The Study and Research Question*

This paper will report on ongoing research investigating the verbal arguments of Hebrew speaking pre-school children. The data for this research was transcribed from videotapes of fourteen triads of pre-school children at play in a playroom that was set up for the purpose of the study. The children are also in daily attendance at the same pre-school. The subjects' ages ranged from 4 years six months to six years five months, however the maximum age differences of the children in each individual group was usually around six months. Children above the age of four were chosen since by this age normally developing children have acquired the basics of their language system (Brown, 1973). The children were all native speakers of Hebrew. While the children conducted their talk in Hebrew it was transcribed and translated simultaneously into English by the author.

While this is an ongoing study with a number of research questions, only one of these will be related to in this paper. This question is presented below:
Is the process of Israeli preschool children's arguments consistent with the pragma-dialectical model of van Eemeren and Grootendorst (2004)?

3. *The Pragma-Dialectical Model* (van Eemeren and Grootendorst 2004)
By using the pragma-dialectical model for critical discussion to reconstruct an argument, we are able to see its deeper structure. Since the model is informed by speech act theory (Searle 1976), this will allow for the investigation of both the children's pragmatic ability and of their ability to sustain an argument.

The model has four discussion stages. These are confrontation, opening, argumentation, and concluding. In the confrontation stage, it becomes clear that there is a difference of opinion. In the opening stage the parties "try to find out how much relevant ground they share (as to the discussion format, background knowledge, values and so on)" (van Eemeren and Grootendorst 2004, p. 60). In the argumentation stage protagonists advance their argument, and if antagonists are not convinced, they will give further arguments, and finally in the concluding stage the argument is resolved to the satisfaction of the protagonists and the antagonists. Nevertheless, van Eemeren and Grootendorst recognize that this is an ideal model and that not all arguments go through all four stages, nor do all arguments go through the stages in order.

Searle (1976) distinguishes five basic kinds of speech acts. These are assertives (also known as representatives), directives, commissives, expressives, and declarations. Assertives are statements of fact that may be either true or false

such as “But somebody needs to sleep in the bed” (the examples are from the corpus of the study). Directives are requests or commands, which can be made directly (“give it back to me”), or indirectly (“Do you want three buildings [I will give you a building if you give me the block]”), questions are directives as well. Commissives commit the speaker to “some future course of action” such as a promise or a threat, for example, “I will be your friend [if you give me the block]”) (Searle 1976, p. 11). Declarations must have some kind of official backing and authority such as a judge sentencing a criminal to a jail term, or in our case “I am (King) David, who solves the problems [(if you come to me I have the authority to solve your problems]”). While declarations have no place in the model, van Eemeren and Grootendorst do suggest a sub-type of speech act that they call ‘usage declarative’. Usage declaratives are definitions, specifications, amplifications and explanations to help the listener understand other speech acts (“There are two, two [J don’t accept what U says, there are only two buildings]”). Different kinds of speech acts are used in the four stages to bring the argument to resolution. While participants in an argument may use expressives, these do not aid in advancing an argument; only assertives, directives, and commissives are relative to the resolution of an argument.

4. *Analyses of Two Verbal Arguments*

Two verbal arguments will be analyzed below from the perspective of the pragma-dialectical model. The first is an argument between two boys. J is who is four years and nine months old is the protagonist, U is who is five years old is the antagonist. In addition, A who is four years and six months old is a participant observer who tries to clarify an error in U’s argument. The boys had previously divided the room into J’s territory and A and U’s territory. This behavior is very common in the play behavior of young children (Ariel and Sever 1980). J is building with large wooden blocks in his area of the room; there are two separate buildings in J’s area. U wants a block J is holding in his hand. Disputes over object possession are very common among children. In fact, the majority of disputes among English speaking children are over object possession. (Dawe 1934, Eisenberg and Garvey 1981, Howe and McWilliam 2001).

Argument 1
J is building with large wooden blocks. U wants the block that J has in his hand. A tries to clarify the facts.
Length: 30 seconds Number of turns: 13

Stage	Turn	Speaker	
I1	1	U	Is it possible to take this? (*directive-direct request*) I will be your friend. (*commissive*)
I1	2	J	No (*commissive- rejection*)
III1	3	U	J, if you are with us you will have three buildings. (*commissive/assertive- a promise of friendship and a promise of three buildings instead of two in exchange for the block*)
	4	A	There are two. (*usage declarative*)
I2	5	U	Do you want three buildings? (*directive-indirect request*)
	6	A	No, there are two buildings J. (*directive-warning—The exchange of a third building for a block is a fallacy since the third building does not exist.*)
I2	7	U	No, I want three. (*commissive*) Do you want three buildings? (*indirect request for the block*)
III2	8	J	I already have two. (*assertive*)
I3	9	U	Do you also want three? (*indirect request for the block*)
IV3	10	J	Yes (*commissive- By accepting U's offer, J has made a commitment to give U the block.*)

Argument 1a

IV3	11	U	So, give me. (*direct request- U now requests the block in exchange for friendship and a third building.*)
I4	12	J	I do not want three. This is enough for me. (*J interrupts U after U says give and uses two assertives.*)
	13	A	Two (*assertive*)

Argument 1b

In turn one U uses a directive, making a request for the block. To make the request more attractive he adds a promise of his friendship and uses a commissive. This is the confrontation stage. It is now up to J to accept or reject the offer. When he says "no" he refuses U's request and also performs a commissive. This is still the confrontation stage. Now, the players may move on to the opening stage. Yet, they leave this stage out and move straight on to the argumentation stage. U makes J an offer of A's friendship as well as his own by performing a commissive and making an assertion that J will have three buildings if he allies himself with U and A. Nevertheless, A sees U's mistakes and points out that there are only two buildings. This can be seen as a usage declarative since it is an attempt to help J understand that U's offer is flawed – there really are only two buildings. In turn 5 there is a second confrontation and U uses an indirect directive by asking J if he wants three buildings (in exchange for the block). U does not need to make a direct request for the block again since according to the "Rule of Reinstating Request" (Labov and Fanshel 1977, p. 94) once a request has been made (turn 1) it is in effect and does not need to be restated. Again A feels

the need to correct U. This time he uses a directive in the form of a warning to J. Now U commits himself to wanting three buildings, and again asks J to be with him and A so U can have three buildings and the block. J goes on to the argumentation stage and uses an assertive when he says he already has two. Again U asks J if he wants three buildings. This is the third confrontation. He is again requesting the block in exchange for three buildings and friendship. Now we come to the concluding stage when J finally says, "Yes" and agrees. U again requests the block for the fourth time by asking for it directly ("so give it to me") since J has finally committed himself. In the next turn J rejects U's requests by using assertives – "I do not want three" (and I do not want to give you the block or be your friend) "This is enough for me" to make his point. This is the fourth confrontation in the argument, but the argument does not continue since U has either given up or lost interest and walks away. Another explanation for U's not continuing with the argument is J's interruption in turn 12. Lein and Brenneis (1978) found that among white American middle class children simultaneous speech during a dispute would bring the argument to an abrupt halt. Finally, A cannot resist and must get in the last word (two).

To reveal the deep structure of the argument van Eemeren and Grootendorst (2004) propose making an analytical overview by performing analytical transformations. These include:

Deletion: of all those parts of the discourse or text which are not relevant to the resolution of the difference of opinion at issue.
Addition: of relevant parts that are implicit (unexpressed premises)
Substitutions: by the replacement of formulations that are confusingly ambiguous.
Permutations: require part of the discourse or text to be rearranged where necessary in a way that best brings out their relevance in the resolution process.

By using, deletion and addition, we can discover the structure of each participant's arguments in the above-mentioned argument. For example, the structure of U's argument and J's arguments can be represented in the tables below (adapted from van Eemeren and Grootendorst 2004, p. 122)

The Structure of U's Argument	Unexpressed Premises
1. U wants the block.	J should give U the block in exchange for his friendship.
2. If J gives U the block, he will have three buildings instead of two as well as U and A's friendship.	J should be willing to make the exchange since it is worthwhile.
3. If J agrees to accept three buildings and U and A's friendship, he must give A to block.	Once U states a desire for a third building and friendship, he should be willing to give up the block.

The structure of J's argument can be represented as follows:

The Structure of A's Argument	Unexpressed Premises
1. J does not want to give U the block.	U's friendship is not worth a block. Moreover, J knows that U is already his friend from previous experience.
2. Two buildings are enough for J. He does not want to exchange the block for an additional building, and A's added friendship.	U and A's friendship and a third building are not worth the block. J already has U's friendship, and there are only two buildings.
3. J agrees that he wants three buildings.	J accepts a third building and U and A's friendship. J does this so U will leave him alone, and J can continue playing.
4. J is happy with two buildings.	J does not want to give up the block.

The second argument is between M the protagonist, who is a six-year-old girl, and the antagonist H who is six years two months in age. Again, there is a participant observer. T is a boy who is six years and four months old and offers his services as a mediator. Again this is an argument over object possession, but unlike U who never received the object he desired, H does succeed in getting the object, in this case a toy screwdriver, away from M. This may be because of his persuasive skills or simply because he had had possession of the object originally. For example, Bakeman and Brownlee (1982, p. 108) found that the resolution of "possession episodes" among young children often had a social base and not a power base, that is previous possession of an object gives a child the right to that object. Bakeman and Brownlee refer to this as the "prior possession rule".

The preliminary stage of this argument begins when M declares that she has completely finished fixing the shelf. At this point in time H is playing with some clothes, which he and T found previously. He speaks to M and uses a directive and makes an indirect request for the screwdriver followed by a direct request. This is the first confrontation. When M replies with "What" she uses a directive for clarification. Again, the disputers could go on to the opening stage, but instead H uses an assertive that he considers a true fact and presents an argument (argument 1) of why M

Argument 2 – Length: 65 seconds – Number of turns: 19

should return the screwdriver. H's argument is actually flawed. Although he had played with the screwdriver first, he gave it to M without any stipulations. M presents her argument with a commissive and agrees to return it within a certain time frame. She may have forgotten that she had not actually said she would return the screwdriver, or it may have been clear to her from the beginning that it was only on loan. In turn 6, H goes to the concluding stage, using two directives and agrees to the time frame. At this point T understands that there is an argument and offers his services as a mediator. In turn 10, H uses a directive as a direct request for the screwdriver, then waits three seconds and makes another direct request that tells M her time is up. This is the second confrontation. Again T offers his services to no avail. In turn 12, M uses a commissive and again offers the argument that she will return the screwdriver within a certain time frame. Again T offers his services, this time as King David from the bible no less. In line 14, M goes on to the third confrontation and uses a direct request for the screwdriver, but H has lost his patience and interrupts M. H uses an assertive and reminds M of what she said previously. This is the argumentation stage of the third confrontation. M finally gives H the screwdriver since her time frame was finally up. Yet, in turn 16 M regrets her action and begins a fourth confrontation. She first uses the expressive 'no' to protest her action, and then a direct request for the screwdriver back. However H has gone on to some private play and begins

a monologue. Finally even though M again uses a directive as a direct request she is ignored. If we look at the structure of each participant's argument we will see the following:

The structure of H's argument can be represented as follows:

The Structure of H's Argument	Unexpressed Premises
1. H needs something different to play with, so M should give him the screwdriver back.	Items on loan should be returned.
2. M should return the screwdriver, since she said she would.	You should keep your commitments.
3. The screwdriver is rightfully H's, and it should be returned with in the designated time frame.	The designated time frame is up, and the screwdriver must be returned.

The Structure of M's Argument can be represented as follows:

The Structure of M's Argument	Unexpressed Premises
1. M does not want to give up the screwdriver.	If H has to repeat his request, perhaps he will change his mind.
2. The screwdriver belongs to H, but M needs to finish the task at hand before she can return it.	The longer it stays in M's possession, the greater M's claim.
3. M returns to screwdriver, but she really has not finish her task.	M can try and get it back by demanding it back.

5. *Discussion and Conclusions*

If we compare the two arguments, we can see that they both leave out the opening stage. Perhaps this is due to the fact that the children are so well acquainted with rules of their mini-society that they are already aware of what they share together and, thus, find it unnecessary to elaborate further, or perhaps they are just too intellectually immature to engage in the opening stage.

In both arguments it seems difficult to find a solution that is satisfactory to all participants through argumentation. In the first argument the antagonist simply lost interest, and in the second argument once the antagonist had what he wanted

he went on to something else, while the protagonist was certainly unhappy with the outcome and tried to reopen the argument to no avail. Nevertheless, we can see that these pre-school children are capable of sustaining an argument from the confrontation stage until the concluding stage.

Furthermore, we can see the children do use the speech acts available to them according to the pragma-dialectical model to try and resolve their arguments. Thus, we can conclude that the process of the children's arguments is consistent with the pragma-dialectical model. However, perhaps more importantly for the study of child language is that by using the pragma-dialectical model we can see how children use various speech acts and organize their arguments.

Finally, the model is very useful in the understanding of the structure of each child's thought processes. Therefore, I have concluded that the model can be a valuable tool to help us better understand children's verbal arguments.

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