

ISSA Proceedings 2010 - Argumentation Standards In The Assessment Of Clinical Communication Competence



1. Introduction

Clinical reasoning, clinical knowledge and clinical skills, which include clinical communication, are essential components of clinical competence recognized internationally in high level policy documents (PSA, 2003; CPMEC, 2006; GMC, 2009). Consequently, communication skills training (CST) has developed as an integral component of medical curricula (Brown, 2008). However, while clinical schools provide general outlines of their CST curricula, content, skills criteria and delivery modes in CST appear to vary across the sector (Bird, Gilbert *et al.*, 2008).

Recently, clinical communication specialists have been calling for new parameters of communication that might draw on inter-disciplinary knowledge and experience to inform how healthcare communication is conceptualised (Skelton, 2008, p.154). In recent work by Gilbert and Whyte (2009; 2010), linguistic and argumentation (*viz.* critical reasoning) frameworks show how clinical reasoning might be made explicit in communication. The work supports recent perspectives on clinical competence in which not merely expertise in specialised clinical knowledge but also the ability to effectively use clinical knowledge in discourse is regarded as essential (Nguyen, 2006).

In medical education, a student's ability to effectively integrate content knowledge and clinical reasoning is demonstrated via his/her communication strategy associated with the performance of clinical skills in an oral examination, the Objective Structured Clinical Examination (OSCE). In a conventional OSCE format, a candidate is required to convey medical knowledge and/or demonstrate clinical skills by enacting scenarios with real or simulated patients (*viz.* actors) or performing specific tasks at several short stations of 8-15 minutes duration. The so-called standardized clinical task is performed under the observation of one or two examiners who score the candidate's performance on a standardized marking

sheet. Thus, the checklist based marking enhances inter-rater consistency and the testing of students' performances on multiple stations increases the number and range of competencies tested.

Researchers have challenged the 'objectiveness' of the OSCE by examining the discourse demands of the clinical assessment context. Roberts, Sarangi *et al.* (2000) emphasize the mix of discourses - personal experience, professional and institutional - that a candidate must manage in conjunction with the unpredictable interactional demands of the oral examination. Additionally, candidates must simultaneously manage both patient and examiner focussed communication (Gilbert & Whyte, 2009; 2010). Not surprisingly, the discourse tensions of the assessment context challenge the communicative competency of candidates, significantly influencing their strategies of conveying knowledge associated with clinical reasoning and decision-making and, potentially, impacting on their OSCE assessment. As an institutionalised form of assessment, the OSCE potentially serves as a gatekeeper to professional membership (Roberts *et al.* 2000; Schryer *et al.*, 2003). To gain access to the medical community, novice practitioners, including practitioners from foreign medical cultures, must 'acquire the rules of assessment as part of their professional repertoire' (Schryer *et al.*, 2003).

The purpose of the current work is to integrate argumentation standards into CST in order to establish a coherent reference of skills and strategies for aligning the teaching and assessment of clinical reasoning as a component of clinical communication. According to the literature, medical students are rarely taught how to integrate clinical reasoning and communication (Windish, Price *et al.*, 2005). Yet, the practice of medicine is grounded in an oral culture in which decision-making is an essential component of both peer and patient communication. There is growing acknowledgement of the important role that the articulation of logic and critical thinking plays in enhancing clinical encounters and improving patient care (Jenicek & Hitchcock, 2005).

By focusing on communication in OSCEs, the emphasis in the current study is on the complexities of articulating clinical reasoning in oral assessment contexts. In this paper, an overview of the study and the outline of the clinical teaching method will be presented, as the authors evolve a strategy for teaching and analysing the content and structure of arguments used to generate clinical reasoning in the assessment context. The pedagogical approach integrates

perspectives on both peer and patient communication and supports students to develop communication strategies that will facilitate their access to membership of the professional community.

2. The Study

In the current study, the model of clinical reasoning and communication proposed by Gilbert and Whyte(2009; 2010) provides the framework for the design and delivery of a program (*viz.* intervention in the context of the study) concerned with teaching clinical reasoning and communication. The program, referred to as '*viva voce* Clinical Reasoning', specifically targets the learning needs of Year 3 medical undergraduate students.

Eighteen students have been recruited and allocated into two groups of 9 students by a process of stratified selection (criteria: age; gender; English language at home; repeat students). One group of 9 students is participating in the *viva voce* Clinical Reasoning program prior to participation in a formative communication assessment task (referred to as a 'mock' OSCE or MOSCE). In the formative assessments, one set of examiners (E1 and E2) will rate the students' knowledge and communication using assessment criteria similar to those used in standard OSCE assessments and the other set of examiners (E3 and E4) will rate the students' knowledge and communication using assessment criteria that specifically measure components of argument and reasoning, consistent with the frameworks established for the program's teaching. Simulated patients will rate the students' apparent effectiveness of communication using a brief evaluation instrument. The results of both groups of students will be compared.

At the time of writing, the intervention phase of the study is completed with the evaluation to take place in late August, 2010. The primary outcome measure of the intervention will be the two formative assessment tasks which students will undertake at the university medical school site. Hence, the focus of this paper will be on outlining the argumentation frameworks which inform the design of the teaching intervention and assessment frameworks. We believe that this is an innovative approach to clinical communication skills training and that the materials evolved for the program, which rest on argumentation principles, should be of special interest to those working in health communication and also to argumentation scholars interested in broadening the applications of critical reasoning and argument to disciplines outside the traditional philosophy domains.

3. The Intervention: viva voce Clinical Reasoning Program

3.1. Theoretical framework

The primary objective of the program is to teach students strategies for effectively communicating their clinical reasoning and decision-making in clinical assessment contexts. Making explicit the tacit rules of clinical reasoning is important for professional acculturation and the development of professional expertise in clinical contexts. The model of argument for clinical practice proposed by Gilbert and Whyte (2009; forthcoming) has been used to design the framework for a program called the *viva voce* Clinical Reasoning program, which aligns the teaching and assessment of clinical reasoning as a component of clinical communication. In this model of clinical communication, clinical practice falls into diagnostic and therapeutic domains and is defined in terms of the core skills of diagnosis, management and counselling. Diagnosis, management and counselling are each typified by primary communicative goals. Arguments used for inquiry, justification and persuasion are sketched in the diagnosis, counselling and management contexts of clinical practice and arguments are used to generate reasons which support the communicative goals associated with the essential skills of clinical practice (Gilbert & Whyte, 2009; 2010). The focus of the model is on aligning communicative goals of clinical practice contexts with professional competency standards of the profession (i.e. what doctors are expected to perform in practice) with an emphasis on the effectiveness of communication on clinical outcomes.

3.2. Learning objectives

Argumentation and linguistic theories underpin the program's learning objectives, and students who complete the program should be able to:

- a. Reconceptualise clinical communication as an argument-based activity, considering the differences between diagnostic determination and therapeutic decision-making;
- b. Recognise and begin to apply RSA (relevance, sufficiency, acceptability) criteria of argument standard;
- c. Recognise and accommodate biomedical beliefs and socio-cultural experiences in doctor-patient reasoning strategies;
- d. Develop effective strategies for communicating provisional diagnoses and differential diagnoses and for outlining a problem prioritisation;
- e. Recognise the defining communication characteristics of informed

- consent: negotiation, concordance, compliance;
- f. Recognise potential biases in therapeutic decision-making;
 - g. Recognise the communication goal of a given OSCE and describe appropriate predictive moves/stages necessary for organising the discourse;
 - h. Select appropriate language for communicating to an examiner (or colleague) relevant issues considered in diagnostic determination; and
 - i. Elicit and deliver relevant clinical content under the time constraints of an OSCE.

3.3 Program synopsis

The pilot study was approved by the Monash University Human Research Ethics Committee. Two 2-hour workshops were approved for delivery. Ideally, a longer series of workshops was desirable but it was important that the study did not impose on the students' current workloads and timetable commitments. Medical students at Monash commence their clinical placements in third year. Owing to the time limitations as well as the learning stages of the students, and after consultation with the relevant clinical school coordinators, it was decided that the focus of the *viva voce* Clinical Reasoning program should be limited to diagnostic reasoning, as this would best accommodate the students' existing learning needs within the context of their curriculum. Therapeutic reasoning, as accommodated in the model, would be better addressed at higher year levels and with more time allocated for program delivery.

The two workshops integrated instruction, practice, feedback and modelling to promote interactive, experiential and reflective processes for students. Although doctor-patient communication was identified as an essential component of the OSCE scenarios, the emphasis in teaching was on intra- and inter-professional communication.

The learning objectives were reformulated to make the important concepts of diagnostic reasoning more accessible for the students so that after the program, students could expect to be able to:

- a. Expand possible causes for patient symptoms (and signs) in an organised way;
- b. Collect evidence to support or deny diagnostic possibilities (for common and/or important surgical and medical problems) using history,

examination and investigations;

- c. Demonstrate reasoning in the consultation process;
- d. Marshall evidence to tell a defensible medical story (anticipate challenges); and communicate diagnostic outcome(s) and recommended action to both medical and patient audiences.

The outlines of the two workshops are sketched below. At the first workshop, some of the concepts of clinical reasoning were unpacked for students and strategies for communicating clinical reasoning effectively within the time constraints of an oral clinical assessment task were considered. The emphasis was on marshalling evidence to support a provisional diagnosis and on defending it from potential challenges (i.e. to demonstrate the student's knowledge of other less likely but still valid diagnostic possibilities). At the second workshop, students were provided with opportunities to put into practice specific communication strategies using mock assessment tasks (MOSCEs) with structured feedback/assessment guidelines.

Workshop 1 Outline

Part 1: Introduction

General outline on the use of reasoning (*viz.* 'arguments') in clinical communication (diagnostic/therapeutic practice)

A focus on the articulation of reasoning in clinical assessment

Part 2: History-taking as Inquiry

Emphasis on focussed data gathering that narrows the options

Part 3: Diagnostic Formulation and Decision-making

Establishing a provisional diagnosis

Building the differential diagnosis

The use of 'defining' and 'discriminating' features in communicating clinical diagnosis

Developing the problem prioritisation

Diagnostic certainty and uncertainty

Part 4: Investigations as Support for Diagnosis and Management Strategy

Workshop 2 Outline

Part 5: Clinical Assessment (OSCE) and the Communication of Reasoning

Organisation of reasoning in OSCEs (predictive moves/stages)

Assessment/feedback frameworks to guide recommended communication strategy

Language of reasoning in OSCEs (semantic qualifiers; transition signals)

Elicitation and delivery of relevant content under time constraints

Part 6: Trial OSCEs (practice scenarios)

4. Argumentation Frameworks used to Teach Clinical Reasoning

Students were presented with clinical scenarios, similar to the OSCE format. Each scenario was designed to be of ten minutes total duration (eight-minute task plus two-minute reading time). Working in small groups of two to three, students rotated the roles of a) simulated patient, b) candidate, and c) examiner in the scenarios to practice the communication strategies and to deliver structured and specific feedback.

Before commencing the role play, students were asked to consider the task and begin a diagnostic hypothesis. The students were provided with a template for building a set of diagnostic hypotheses (refer to Figure 1). As previously illustrated by Gilbert and Whyte (2009, forthcoming), the dialectical tier of argument is subtly constructed in medical discourse. Semantic qualifiers are terms selected to articulate clinical reasoning. Descriptors used to characterise the diagnosis are referred to as defining features and descriptors used to distinguish the diagnoses from one another are referred to as discriminating features. The use of semantic qualifiers provides an efficient linguistic strategy for comparing and contrasting diagnostic considerations (Bowen, 2006: 2219). The most-likely diagnosis is formulated during the clinical reasoning process while the options of differential diagnosis are subtly discounted.

Figure 1

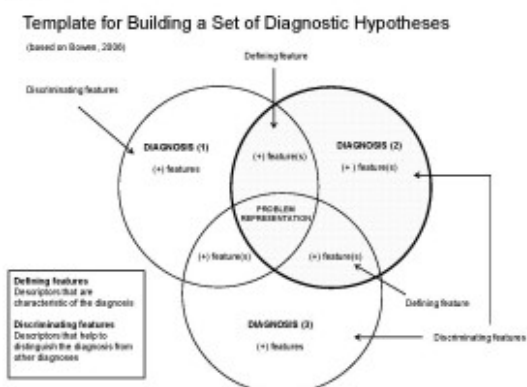


Figure 1

Students were presented with the following clinical scenario:

Mrs WM presents to your surgery with a pain in her chest that makes it difficult to cough. She is 65 years old and has been unwell for the last three days.

You have 5 minutes to take a history, after which you will be asked some questions about likely diagnoses and investigations.

A set of diagnostic hypotheses were established and summarised in the template provided for the scenario (refer to Figure 2).

Figure 2

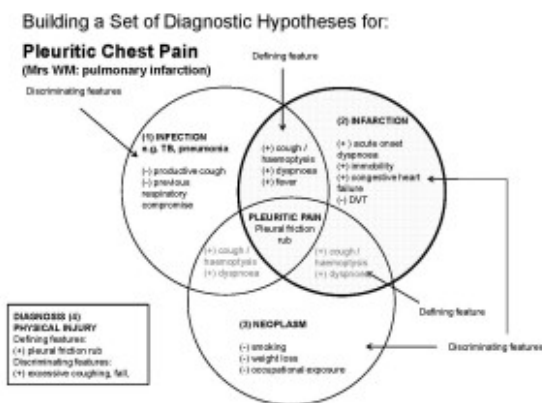


Figure 2

A strategy for organising the discourse in the setting of an OSCE was then outlined. This required the students to recognise the communication goal of the OSCE; in this case, to communicate a diagnostic work-up and diagnostic decision while taking a patient history. The students were then shown how to effectively organise the discourse into predictive moves or stages, equipping them with a strategy for efficiently communicating the diagnostic decision (after taking a patient history) while simultaneously articulating the diagnostic options in the development of a dialectical tier. This required the students to select appropriate semantic qualifiers to emphasise the discriminatory features of illness. Students needed to be familiar with the linguistic descriptors for relevant positive and relevant negative defining and discriminating features of illness.

The following example transcript was provided to students after the task, as a model for practice. Not intended to be prescriptive but merely a guide for practice, the transcript is divided into predictive stages/sequences so that

students may realise the benefits of strategically organising language and discourse in the communication of clinical reasoning. The challenge for the students was to achieve this during the process of history-taking. While students may not know the diagnostic decision at the outset of the simulated consultation, they would expect their summative OSCE assessment at the end of the year to have a range of common and/or important medical and surgical problems and so should be capable of surmising on diagnostic options early in the scenario and then be able to narrow down the available options during the course of history-taking.

The model transcript, below, illustrates predictive stages of a history-taking OSCE station. In Stages 3 and 4, the defining and discriminating descriptors are italicised, to show the importance of these linguistic items in communicating diagnostic deliberation.

Model Transcript 1

[Stage 1: Establishing the problem representation (pleuritic pain and cough)]

1 Doctor: Good morning, Mrs Martin, what has brought you to the clinic today?

2 Mrs Martin: I have a very *bad pain in my chest*, which has been there for about three days now and it doesn't seem to be getting any better.

3 Doctor: Can you describe the pain?

4 Mrs Martin: Well, it's a terribly sharp pain here on my right side, and it hurts mostly when I cough or sneeze.

5 Doctor: Have you tried anything to relieve the pain?

6 Mrs Martin: Oh yes, I if I try to hold my breath, then the pain feels a lot better. But that's not very comfortable to do. So, I also put my hand firmly on my chest over the pain and that makes it feel a little better. I've tried some pain-killers and they also help a bit.

7 Doctor: Do you get pain anywhere else?

8 Mrs Martin: No, just here over the same spot.

[Stage 2: Announcement of diagnostic deliberation: Intention to conduct inquiry]

9 Doctor: Are you experiencing any other symptoms or discomfort?

[Stage 3: Elaboration of the problem representation: Focus on defining features]

10 Mrs Martin: Yes, I started *coughing* about three days ago. You see, this all started by me feeling unwell with a cough and mild fever.

11 Doctor: Is it a dry or productive cough?

12 Mrs Martin: Generally, it's a dry cough. But, when it started, I was bringing up a little bit of sputum.

13 Doctor: Did you notice any *blood in your sputum*?

14 Mrs Martin: Yes, just a very little bit on the first day, but only once and so I didn't get too worried about it.

15 Doctor: Is your cough getting any better now?

16 Mrs Martin: I think my cough is feeling better but even a slight cough upsets my chest pain. I am tired of it.

[Stage 4: Articulation of diagnostic options: Focus on discriminatory features]

[Diagnostic Option 1: Infarction]

17 Doctor: Have you experienced any *shortness of breath or difficulty breathing*?

18 Mrs Martin: Around the time of the pain starting, I told you I also had a fever. Well, I was feeling a little breathless at the time, too, and *quite a shortness of breath overcame me on the first day* so that I had to lie down and take a rest until I felt my breathing get more normal again. Only for about an hour or so was it like that. Now, I'm still feeling a little more breathless than usual.

19 Doctor: Have you recently had a period of *prolonged rest or immobility*?

20 Mrs Martin: Yes, about two weeks ago I sprained my ankle in the garden and so I spent five days resting on the couch at home. My ankle is pretty good right now.

21 Doctor: Do you have a history of *heart failure* or DVT?

22 Mrs Martin: The doctor says I have heart failure but I don't feel too much affected. Sometimes, I notice that my ankles swell a bit, and that's somehow related. But, I don't think it is all that bad. I'm on medication for it.

[Diagnostic Option 2: Infection]

23 Doctor: Do you have a history of chest problems?

24 Mrs Martin: No

[Diagnostic Option 3 : Neoplasm]

25 Doctor: Have you noticed any change in your weight?

26 Mrs Martin: No, I have been more or less the same weight for the last five years.

27 Doctor: Have you ever smoked?

28 Mrs Martin: No.

29 Doctor: Can you tell me about your work history?

30 Mrs Martin: I was an accountant but retired five years ago so that my husband

and I could enjoy ourselves a bit and spend time with our two grandchildren.

Students were also shown strategies for explaining their diagnostic decisions, responding to prompts by the examiner. The following model transcript illustrates a strategy for stating a diagnostic decision, articulating the potential challenges to that decision, and providing suitable rebuttals to discount those challenges. The use of appropriate semantic qualifiers to describe evidence of symptoms and signs is, once again, crucial.

A model transcript illustrating a strategy for articulating and defending a diagnostic decision is shown below. In this transcript, evidence for supporting the diagnostic decision is clearly stated. Diagnostic options are identified but relevant negative symptoms and signs are articulated to discount them as most likely diagnosis.

Model Transcript 2

[Articulation of provisional diagnosis: Diagnostic decision]

Examiner: Can you provide a likely diagnosis for Mrs Martin's problem?

Candidate: My provisional diagnosis is pulmonary infarction secondary to a pulmonary embolism.

[Articulation of differential diagnosis: Potential challenges to decision]

Examiner: What evidence supports your diagnosis?

Candidate: Mrs Martin's acute onset of dyspnoea, haemoptysis and her recent immobility support a diagnosis of pulmonary infarction secondary to pulmonary embolus. Her history of congestive heart failure is also significant.

Examiner: What other diagnoses might you consider and why?

Candidate: Mrs Martin might have a lung infection, as she reports having a mild fever. However, fever may sometimes occur in the presence of pulmonary embolism. Mrs Martin does not show other signs to support the diagnosis of infection e.g. productive cough, previous respiratory compromise.

Pleuritic pain may be associated with a neoplasm. However, Mrs Martin has never smoked, denies weight loss and reports no exposure to cancer-causing substances. Hence, this diagnosis seems unlikely.

Finally, the students were advised on strategies for organising their discourse for an oral case presentation format, a regular requirement of assessment and work-based learning. The following model of case presentation summary was provided

with relevant moves marked in the discourse to illustrate an efficient strategy for organising language and reasoning. Once more, the defining and discriminating features are italicised to show the importance of these linguistic items in communicating diagnostic deliberation.

Model Transcript 3 Case Presentation Summary

[Defining features: Problem representation]

Mrs Martin has presented with a *stabbing right-sided chest pain* that is *especially severe when she breathes, coughs, or sneezes*. It is relieved by holding her breath or exerting pressure against the affected chest. The pain has been present for about three days; although it is not getting worse it has also not improved very much. The pain is localised and does not radiate.

[Discriminating features: Diagnosis 1 Infarction]

Mrs Martin felt unwell three days ago when she experienced an episode of *acute dyspnoea* and subsequently developed a mild low-grade fever and cough. She initially coughed up some *blood-stained sputum*, but only once and not enough to make her feel too alarmed. Her cough has improved slightly but Mrs Martin reports that even mild coughing aggravates her chest pain enough to cause her significant distress. She finds breathing difficult. Two weeks ago, Mrs Martin sprained her ankle and spent about five days relatively *immobile*, resting on the couch at home. Mrs WM has a history of *congestive cardiac failure (CCF)* but has *no history of deep vein thrombosis (DVT)*.

[Diagnosis 2: Infection]

Mrs WM's cough is generally *non-productive* and she has *not experienced any recent respiratory illness*.

[Diagnosis 3: Neoplasm]

Mrs WM *does not smoke* and reports *no recent loss of weight*. She worked as an accountant until 5 years ago, when she retired. She now lives at home with her husband.

[Articulation of diagnostic decision]

Mrs Martin's acute onset of dyspnoea, haemoptysis and her recent immobility support a diagnosis of pulmonary infarction secondary to pulmonary embolus. Her history of congestive heart failure is also significant.

[Articulation of diagnostic options]

[Option 1]

Mrs Martin might have a *lung infection*, as she reports having a mild fever. However, fever may sometimes occur in the presence of pulmonary embolism. Mrs Martin does not show other signs to support the diagnosis of infection e.g. productive cough, previous respiratory compromise.

[Option 2]

Pleuritic pain may be associated with a *neoplasm*. However, Mrs Martin has never smoked, denies weight loss and reports no exposure to cancer-causing substances. Hence, this diagnosis seems unlikely.

5. Argument Frameworks used for the Assessment of Clinical Reasoning

Assessment and feedback rubrics were designed by integrating argument components into the communication frameworks (aligned with the teaching strategies discussed in section 4, above). Students were shown how to use these to guide their feedback to each other during the role play practice.

Figure 3 is an example of one of the assessment rubrics developed for the course on the topic of rectal bleeding. Clinical content is embedded in reasoning strategy to support the communicative goals at each stage of the clinical scenario. Students were encouraged to articulate their decision-making and were advised on suitable discourse and linguistic structures to support and effective communication strategy for their oral assessment tasks (*viz.* OSCE).

Figure 3 Sample Assessment Rubric (Communication context: History-taking OSCE)

Performance level	Criteria	Comments/Examiner observations	Examiner exemplars
1. Identification of problem representation	Agrees (adding context)	<ul style="list-style-type: none"> Asks relevant questions Identifies relevant history Identifies relevant signs 	Asks relevant questions
2. Identification of problem representation	Agrees (adding context)	<ul style="list-style-type: none"> Asks relevant questions Identifies relevant history Identifies relevant signs 	Asks relevant questions
3. Identification of problem representation	Agrees (adding context)	<ul style="list-style-type: none"> Asks relevant questions Identifies relevant history Identifies relevant signs 	Asks relevant questions
4.1. Problem representation	Asks (adding context)	<ul style="list-style-type: none"> Asks relevant questions Identifies relevant history Identifies relevant signs 	Asks relevant questions
4.2. Problem representation	Asks (adding context)	<ul style="list-style-type: none"> Asks relevant questions Identifies relevant history Identifies relevant signs 	Asks relevant questions
5. Investigation of problem representation	Asks (adding context)	<ul style="list-style-type: none"> Asks relevant questions Identifies relevant history Identifies relevant signs 	Asks relevant questions

Figure 3

6. Conclusion

In summary, we believe the *viva voce* Clinical Reasoning program, by integrating principles of argumentation theory and clinical reasoning into a communication concept, offers an innovative approach to clinical communication skills training.

Concepts from argumentation and principles of discourse analysis underpin the strategy. The teaching methods and resources along with the assessment rubrics represent a novel approach to clinical communication skills training. Preliminary feedback from the students attending the program reveals their enthusiasm for explicit instruction on how to communicate their reasoning effectively in the assessment context of an OSCE. All students attending the workshops reported never having received explicit instruction on how to build a case for diagnostic determination (albeit Year 3 students with half a year on the wards) and expressed a strong appreciation of the linguistic strategies and resources as well as the notions of argument that were built into the instruction. Further analysis of the data once data collection is complete is expected to reveal the impact on such instruction on students' communication strategies and assessment outcomes. It is intended to use the results to inform medical curriculum and assessment across both third and fourth years of the medical course.

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ISSA Proceedings 2010 - Is "Argument" Subject To The Product/Process Ambiguity?



1. Introduction

In recent work, Ralph Johnson raises several problems for the adequacy of the Logic/Rhetoric/Dialectic trichotomy and for its alleged basis—the argument as product/process/procedure trichotomy. My concern here is not with Johnson's worries - rather it is with what Johnson

leaves unchallenged. While Johnson ultimately has some reservations about argument as procedure, he leaves the product/process distinction untouched. He writes: "The distinction between product and process seems to me fairly secure. It has a longstanding history here and in other disciplines. In logic, for instance, the term 'inference' is understood as ambiguous as between the process of drawing an inference and the inference that results from that process."(Johnson 2009, p. 3)

Despite its longstanding history and foundational role in argumentation theory, I am not so confident about the security of the product/process distinction as it applies to "argument" or even "inference". I shall first articulate the conditions required for "argument" to be subject to the product/process ambiguity, and then argue that not all of the conditions are met. Finally, I shall show that some arguments for the ontological or intellectual priority of one aspect of argument over another fail given that "argument" is not subject to the process/product ambiguity.

2. The Product/Process Distinction and Argument

In his chapter on ambiguity, just after giving an example of how an argument can go wrong by failing to distinguish the action sense of a word from the result sense of a word, Max Black writes: "A great many words exhibit a similar fluctuation between emphasis upon a process (a doing something) and an associated product (the result of an activity)."(Black 1946, p. 177) I take it that the general consensus, among argumentation theorists at least, is that "argument" is such a word. Indeed, though Black himself does not acknowledge that he thinks "argument" is such a word, his own discussion of argument evinces at least part of such an ambiguity. On the one hand, in his glossary, he defines an argument as follows: "Argument. A process of reasoning in which the truth of some proposition (the conclusion) is shown, or alleged to be shown, to depend upon the truth of others (the premises)."(Black 1946, p. 379) But in the main body of his text he writes: "We have seen that the elements out of which that complex object which we call an argument is constructed are statements (or more precisely, propositions); and we have noticed that the propositions are arranged or related to one another in a certain way."(Black 1946, p. 18) On the one hand, Black defines argument as a process of reasoning, but on the other he calls an argument a complex object constructed of statements or propositions.

That there are words subject to the process/product ambiguity I do not dispute.

Black's own examples of "science" and "education" are perfectly legitimate. But does "argument" fall into this category? To say that a word is subject to the process/product ambiguity is to say that (a) there is a sense of the word that refers to an activity; (b) there is a sense of the word that refers to an object or thing; and (c) the object or thing is in some sense the result or outcome of the activity. For example, we could use "science" to describe the activity of doing certain sorts of investigations or we could use "science" to describe the results or outcomes of those investigations. My main worry about "argument" is that while "argument" satisfies conditions (a) and (b) it is not at all clear to me that it satisfies condition (c) as so many seem to suppose. **[i]**

That "argument" satisfies conditions (a) and (b) is not a matter of contention. Just compare - "It is better to engage in argument than in intimidation" and "Peter Unger's argument for skepticism consists of three propositions." But merely satisfying conditions (a) and (b) is not enough to warrant talking about arguments as process and arguments as product. Satisfying conditions (a) and (b) merely warrants talking about the activity of arguing on the one hand and arguments as objects on the other. Indeed, no one ought to dispute that there are acts of arguing, as opposed to acts of explaining or prophesying or poetry reading, on the one hand and groups of propositions, sentences, statements or utterances, on the other. But for the product/process ambiguity to obtain, the object must in some sense be the product of the activity - does this hold for "argument"?

Many theorists write as if it does. Here are but a few examples:

"O' Keefe and other rhetoricians think that argument in the second sense is given too much importance, especially by logicians and philosophers, and that more emphasis should be placed on the process of arguing, rather than on something produced in that process."(Levi 2000, p. 59)

"The term 'argument' can be used to refer either to the process or to the product of that process."(Johnson 2000, p. 12)

"Logic helps us to understand and evaluate arguments as products people create when they argue."(Wenzel 1990, p. 9)

"An argument is produced by the activity of arguing and arguing is something people do."(Fogelin 1985, p. 2)

Of course, not all theorists are willing to be constrained by the product/process locutions. For example, Alvin Goldman writes:

The term 'argument' will be used here for the product, or perhaps content, of

argumentation, usually, for a set of sentences, or a set of propositions that might be expressed by means of such sentences. One member of such a set is a conclusion and the other members (possibly null) are premises. The elements of an argument might be printed, uttered, or merely thought. 'Argumentation', by contrast, will refer to the process or activity of producing or deploying such a complex object. A process of argumentation can be purely mental, in which case it is 'inference', or it can be overt and public.(Goldman 2003, p. 52)

Note that while Goldman does incorporate the possibility that argumentation is the process or activity of producing arguments, he also allows for the possibility that arguments might be the content of argumentation or what is deployed in argumentation. I shall, however, argue in the next sections, that even Goldman's weaker position concedes too much for arguments are just not the products of the process of arguing.

3. Products as Propositions?

Suppose you hold that arguments as objects are sets of propositions. Should you accept that these sets of propositions are the product of acts of arguing? No. Propositions are abstract objects, either eternal or atemporal, and not the subject of production. Hence, whatever is the product of acts of arguing, if there is such a product, it is not the set of propositions that is an argument.

But perhaps someone might object that while the propositions are not created, perhaps the sets or particular groupings of them are - in other words the argument, i.e., the group of propositions does not exist as an argument until someone groups them that way and that way of grouping happens as a result of the activity of arguing.

Short reply: If the group that is the argument just is an ordered set of a set of propositions and another proposition, then, since the complex ordered set is itself an abstract object and exists independently of anyone thinking of it or creating it, the group is not produced by the act of arguing.

Longer reply: Suppose one holds that the entity that is the argument is not the ordered set of propositions, but rather the group of propositions that results via the activity of some agent. Now one might wonder whether this group just is the ordered set of propositions even if it is the activity of the agent that has made us become aware of the ordered set (even though one may not think of the entity one is now aware of as an ordered set). But assume for the moment there is a distinct

entity that is the result of this grouping activity. The question remains - is the act of arguing the only means of performing this grouping activity? No. Suppose you ask me to give you an example of an argument comprised solely of existential generalizations. I respond with, "Some arguments are composed solely of existential generalizations, so some arguments are composed solely of existential generalizations." While an act of example giving has occurred, an act of arguing has not and yet the grouping of propositions that makes an argument come into existence, on the current hypothesis, has occurred.

But if arguments can exist without being the product of acts of arguing, then perhaps they are never the product of acts of arguing - perhaps the relationship between acts of arguing and arguments is different than one of production. Indeed, what seems common to the act of arguing case and the giving an example case is that in both situations, the activity of arguing and the activity of giving an example made us aware of a given argument. But being made aware of a particular argument should not be confused with production.

Here is another reason to think that the relationship between acts of arguing and arguments as groups of propositions is not one of production. When I argue verbally that "argument" is not a process/product word, I may be making you aware of various arguments via my speech acts, which in this context, certainly constitute acts of arguing -

but I am certainly not making myself aware of these arguments. I was aware of these arguments well before I presented them or wrote them down. Also, while many acts of reflection, imagination, following through implications, etc. occurred, as well as considerable reasoning about everything from word choice, sentence order, possible objections and possible consequences, in the production of these arguments, no obvious acts of arguing, even with myself, occurred. If my arguments exist prior to my using them here to argue and if the groupings happened by some means other than arguing with myself, which I am pretty sure they did, then arguments, as groups of propositions, are not the products of acts of arguing.

4. Products as Sentences?

Suppose one takes arguments to be composed of sentences rather than propositions. Presumably there are two choices-sentence types or sentence tokens. Neither option, I strongly suspect, will do as an adequate theory of arguments as objects, but arguing that is a different paper. Regardless, even

supposing that one of these options will work as a theory of arguments as objects, neither option supports the view that such objects are the product of the process of arguing. Sentence types, quite straightforwardly, are abstract objects that are not the subject of production, but rather instantiation. Sentence tokens, on the other hand, either exist prior to the acts of arguing or are a component of the act of arguing rather than the product of the act of arguing.

Consider for example the sentence tokens that exist on this very page. Those sentence tokens came in to existence long before being spoken aloud or read here. But the act of arguing that appeals to those sentence tokens is happening now.**[ii]** Hence, the sentence tokens are not the product of the act of arguing. But what of the auditory sentence tokens that come into existence when I present this argument verbally? While those sentence tokens are not prior to the act of arguing, they are not the product of it either, for those auditory sentence tokens are part of the very speech acts that are the act of arguing that is going on now. But if they are part of the act of arguing, then they are not the product of the act of arguing.

This latter point also reveals the problem if we suppose that arguments are composed of utterances or statements. While, unlike propositions or sentences, the utterances or statements cannot exist prior to the act of arguing, it still makes no sense to say that the utterances or statements are the product of the acts of arguing. The statements or utterances currently being made just are the acts of stating or uttering that constitute the current act of arguing. If I were not to make those statements or utterances in the proper context or order there would be no act of arguing. Hence, taking arguments to be composed of statements or utterances does not support the claim that arguments are the products of the process of arguing.**[iii]**

Note that the problems for “argument” with regards to the product/process distinction, also apply to Johnson’s “inference” example. There is no doubt the act of inferring – but what is the thing that is the inference that is allegedly the result of the act of inferring? The inference could just be the thing inferred, i.e., the conclusion, but it is hard to see how the conclusion is the product of the act of inferring rather than just the endpoint reached via the act of inferring. One may be aware of one proposition or sentence and aware of another, and then come to realize that the second can be inferred from the first. But the second proposition or sentence existed prior to the inferring of it from the other, so it cannot be the

product of the act of inferring. Alternatively, the inference might be the expression of the form “X, so Y”. But the expression captures part of a description of the act of inferring. But just as a painting is not the product of what it pictures, the expression, “X, so Y” is not a product of the act of inferring, but rather a partial description of the act of inferring (and if Robert Pinto is right a partial description that has the power to invite others to engage in the same act of inferring.) Finally, the inference might just be the event that is the moving from, say, X to Y. But what is this event other than just the activity of inferring X from Y described after it has happened? The event is not the product of the activity - it is the activity. So, like “argument”, “inference” is not subject to the process/product ambiguity, even if it is subject to the act/object ambiguity.

5. The Danger of the Product/Process Distinction for Argumentation Theory

Still, someone might think something is odd about these results. Surely, after acts of arguing we have something we did not have before - surely something was produced. Undoubtedly something was produced, but there is no guarantee that the thing produced was an argument. I have already suggested that the thing produced might be awareness of an argument and if the argument meets sufficient standards we might also produce conviction or belief on the audience’s part.

Surely arguments must be the product of something. Perhaps. If arguments are sets of propositions, then perhaps arguments are better described as being discovered rather than produced. Regardless, even if arguments turn out to be the sort of thing that is produced, there seems little reason right now to say that they are the product of acts of arguing. They, or the expressions of them, may be the result of various acts of imagination, reflection, etc., but that does not make them the product of acts of arguing.

Perhaps, some will say, that I am merely quibbling. Yes, the attribution of “process” and “product” may have been ultimately unfortunate, but all we really mean is that there are acts of arguing on the one hand and some sort of object on the other. Once we are clear on this we can understand comments such as “I will here focus on argument as process rather than as product” well enough.

If this were the only sort of use made of the process/produce distinction, then I agree that much of what I have done here might be rightly construed as quibbling. But as mentioned in the beginning of this paper it is not the only use to which the distinction is put. For example, the distinction is used as part of an

attempt to ground the difference between the so-called Logical and Rhetorical perspectives (though perhaps the act/object distinction would be enough to ground that difference). More significantly, however, the distinction is also used to ground claims of priority or importance.

Michael Gilbert, for example takes Ralph Johnson to task for taking written arguments as primary, when Johnson's own framework seems to indicate that the process should be primary. Gilbert writes:

However, the object of NASTy veneration is not the process, but the product of the process: "At a certain point in the process, the arguer distils elements from what has transpired and encodes them in the form of an argument" (159). This product is the distillate that is the epitome of the practice of argument. But this seems to indicate that the process is ontologically more fundamental than the product, since without the process the product does not come into existence.

It is important to realize that the exclusion of certain factors as arguments seems to rely on the distinction between the process of arguing and the product produced by that process. This is a NASTy distinction that most NICE theorists would not really allow. Rather, the NICE theorist will, at best, see the written argument or speech as a snapshot of the process at a given moment in time, much as the inventory of a grocery store accounts for its contents at some specific moment: as soon as the inventory is complete, it changes with the first customer. I have no problem at all with there being such argument products, though, with Willard, I believe they cannot really be understood independent of the process used in arriving at them. (Gilbert 2003, p 6)

While Gilbert, in the middle of this extended quote, seems to be disavowing the process/product distinction, he clearly uses the distinction to give ontological and intellectual priority to the process since, according to Gilbert, the argument products "cannot really be understood independent of the process used in arriving at them."

But if arguments are just not the products of acts of arguing, then such an argument cannot be used to ground claims of either ontological or intellectual primacy to the acts or process of arguing.

The debate about the primacy of various aspects of argument is not new. David Zarefsky, three decades ago, suspected, that "our disputes over definition turn on the question of whether argument₁ or argument₂ should be the primary notion informing our research." (Zarefsky 1980, p. 229). Indeed, at this time, argument₁ was tied with argument as product and argument₂ with argument as process. But

even Daniel O'Keefe, who originally introduced argument1 and argument2 resisted this identification. (O'Keefe 1982, p. 23)[iv]

Zarefsky worried that progress in argumentation theory is being thwarted by "definitional concerns [which] may distract us from the substantive issues we wish to investigate." (Zarefsky 1980, p. 228) But the flipside is that failure to make progress on the definitional concerns may mean that worse than failing to make progress, we are actually producing false theories about the phenomena in question since we have failed to articulate clearly what the various phenomena in question are. This appears to be what is in danger of happening if we insist on talking about arguments as processes and the products of those processes, for it prejudices the relationship between the acts of arguing and the things that are arguments in a way that, I hope I have shown, is likely to distort the real relationship between the acts and the objects.

At the same time, I am certainly not claiming that the arguments as objects are somehow primary. For example, if arguments are groups of speech acts, then acts of arguing and arguments have the same constituents and you cannot have the one without the other. Also, while I have given cases where the arguments are temporally prior to the acts of arguing with which they are associated, in no way does this generate ontological or intellectual priority. After all, the arguments may only become a matter of intellectual interest after they have been made evident by an act of arguing. In addition, I suspect we, as theorists, want to have room to say that acts of arguing can go so awry, that the argument presented via the act of arguing is not the argument the author had hoped to convey. But even with some appeal to charity, it is clearly incumbent upon the presenter of arguments to argue in a way that aids rather than hinders in the presentation of the desired argument. Regardless, the upshot of my comments so far is that restricting ourselves to talk of arguments as acts on the one hand and objects on the other in no way supports the intellectual or ontological priority of one aspect of argument over the other.

6. Conclusion

Despite the longstanding history of treating "argument" as if the arguments-as-objects are the product of the process of arguments-as-acts, the facts do not support this treatment. Regardless of one's chosen ontology of arguments (propositions, sentences, utterances, statements, speech acts, or sets or groups thereof) either the arguments exist prior to the relevant acts of arguing or are

constituents of those acts of arguing – they are not the products of those acts of arguing. If, as part of organizing the domain of argumentation theory, we merely want to distinguish acts of arguing from arguments-as-objects, we should not use the misleading process/product labels to do so. At the very least such labels imply a relationship that does not exist and so distort our perceptions of the domain of study. At worst they ground false claims about the ontological or intellectual priority of one perspective of argument and argument theory over another. Without the distorting lens of these labels, we will be in a much better position to provide accurate answers to some of the fundamental questions of argumentation theory – what exactly are arguments-as-objects and how exactly are they related to acts of arguing?

NOTES

[i] Perhaps “argumentation” as some people use it does satisfy the three conditions. But then, if I am correct in what follows, that just shows that “argument” and “argumentation” are not interchangeable, and even more care must be taken when trying to understand what someone means when they say, “This argumentation is not sound.”

[ii] This sentence refers to the instances when this paper was presented to an audience. For those of you reading this paper, imagine that this paper was never verbally presented. So where exactly is the act of arguing of mine that allegedly produced these arguments you are reading now?

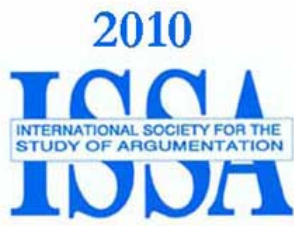
[iii] Of course “statement” or “utterance” also turn out to be ambiguous, since they could refer not to the act of uttering or stating, but to the sentence (or proposition) uttered or stated, in which case the arguments deployed in the first two cases come into play again.

[iv] Some might suggest however that O’Keefe’s act of making an argument¹ and argument¹ are the correlates for argument as process and argument as product. Reply: Though O’Keefe does sometimes use the unfortunate locution – the argument made by the act of making an argument, he also talks about the argument conveyed by the act of making an argument. Indeed, I suspect that what O’Keefe wants to capture by the act of making an argument could just as easily be described as the act of presenting or giving an argument. While the act of presenting or making or giving an argument to you may present or convey an argument to you, it is not the act of producing that argument since it is quite likely the producer of the argument had the argument in mind before it was given or presented to you.

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ISSA Proceedings 2010 - Argumentation On Sustainability In Small Island Communities



1. Introduction

This essay explores oceanic island locales as rhetorical and material places/spaces and discourses on environmental sustainability. The purpose of this essay is to tease out some of the complexities not only in addressing the concept of sustainability itself, but how discourses and arguments on sustainability, particularly environmental sustainability, are shaped, constrained, constructed, and disseminated as rhetorics of place in the humanities. The first part of the paper reports on my early study on environmental remediation. The second part discusses sustainability as a rhetorical concept. The final part provides an overview of some of the initial field observations that will guide the next phase of research and analysis.

2. Bermuda: Environmental Remediation

My current work on islands and rhetorics of sustainability emerges from an earlier project involving argumentation and environmental remediation (Goggin, 2003). In 1995, the US military base on Bermuda was abruptly and unceremoniously shut down and a growing controversy over environmental clean-up of the former baselands between the US Pentagon and the Bermuda government came to a head. The negotiations between these institutions had evolved – one might also say “devolved” – into a rhetorical stalemate as each side staked out a position on its civic, legal, and environmental responsibilities that rendered effective argumentation towards resolution all but impossible. The U.S. maintained a position of caretaker of the land on the basis that it had made huge investments in American taxpayer money for over 50 years in building and maintaining both a military and civilian airport and the supporting infrastructure of roads, buildings, water reservoirs, and utilities that Bermuda, as a beneficiary, inherited at little cost. For its part, Bermuda refused to accept a position of beneficiary and instead claimed a position of landlord to the property, claiming that as a tenant, the U.S. was under no obligation to improve the leased territory and that it made temporary investments in the baselands for its own military purposes, not for local residential use, and was therefore liable for existing and future risks to Bermuda’s fragile environmental structure and ecosystems.

The case demonstrated the need for deliberative argument between institutional stakeholders on environmental concerns, but more importantly, underscored an important disconnect between the material and rhetorical concerns of small

island places, and those of mainstream and mainland perspectives. The study laid a conceptual groundwork for my emerging interest in the rhetorical constructs and discourses of sustainability. In argumentation studies, scholars are increasingly seeking ways to engage with environmental concerns in useable ways to understand and inform public participation and effect change. Collins (2003) notes in her essay on argumentation and media that “scholars investigating environmental campaigns and media coverage note a lack of research into how public attitudes and action with respect to the environment are changed” (p. 207). But she goes on to point to Oravec’s (1984) studies on competing value hierarchies in the Hetch-Hetchy controversy, and Cox’s (1982) analysis of topical and ontological dimensions of *loci communes* as examples that have “nudged scholarship towards a focus on argument and environmental discourse” (p. 206). To Collin’s examples I would add (to name a few) Peterson’s (1997) work on environmentalism and public consciousness, DeLoach, Bruner, and Gossett’s (2002) analysis of environmental disputes and “attack” discourse, and Senecah’s (2004) studies on argumentation strategies in public participation and the formation of environmental public policy decisions.

A challenge for the humanities in general and argumentation in particular and that (American) universities face is to provide the education for a “responsible” global citizenry. That is, as Nussbaum (2010) states more eloquently: “A citizenry with the ability to assess historical evidence, to use and think critically about economic principles, to assess accounts of social justice, to speak a foreign language, to appreciate the complexities of the major world religions” (p. 93). This essay outlines some of rhetoric’s role in terms of environmental sustainability as it relates to the concept of “responsible global citizenry.” First though, what do we mean what we talk about sustainability, and how and why do we look at it as we do? The section that follows provides a brief sketch of what is clearly a much more complex response to these questions.

3. Environmental Sustainability And Responsible Global Citizenry

The following quotations from Cicero’s (1951) *De Natura Deorum* and Glacken’s (1967) *Traces on the Rhodian Shore* remind us that the concept of sustainability exists because of a growing acceptance that human activity has lasting impacts on the earth’s ecosystems. Cicero writes:

We enjoy the fruits of the plains and of the mountains, the rivers and the lakes are ours, we sow corn, we plant trees, we fertilize the soil by irrigation, we confine

the rivers and straighten or divert their courses. In fine, by means of our hands we essay to create as it were a second world within the world of nature. (Cicero, II, 60)

Glacken observes:

Only rarely can one look at a landscape modified in some way by man and say with assurance that what one sees embodies and illustrates an attitude toward nature and man's place in it. (Glacken, ix)

Both remarks draw attention to the crucial point that the quality of life for future generations is at stake depending on what we, as societies and civilizations choose to enact now in terms of economic, environmental, and social development. In other words, sustainability is not a concept for preserving, conserving, or reserving the earth and nature for their own sakes, but rather for their continuing benefit to - and sustaining - human society.

However, one key problem for enacting change towards a sustainable future is that on local and national levels, sustainability is defined and enacted in a multitude of ways, often to serve special interests and political expediency. Consequently, charges of "sustainababble" insinuate that the concept of "sustainability" is too diffuse to be meaningful. Thus, while sustainability and sustainable development are certainly laudable ideals, it is also incumbent on people and societies to look critically and skeptically at who is doing the defining and to what ends.

For humanist scholars who typically reside on the fringes, if at all, of actually implementing social and environmental change compared with our colleagues in sciences, architecture, and engineering, carefully examining the competing definitions and uses of sustainability is perhaps where we can make our most immediate and direct contribution. Most of the contemporary work in sustainability being done by our colleagues in agriculture, architecture, earth sciences, and social sciences is powerfully influenced by the work of Aldo Leopold and more indirectly by Rachel Carson. Leopold (1966), a scientist, in the mid 20th century who influenced a transformation of traditional scientific objectivism to include biocentric ethics and nature mysticism. His concept of "the Land Ethic" tied human morality and ethical or unethical action, such as public policy and scientific authority, to the natural world and established the idea of environmentalism and scientific activism in relation to the environment. Carson

(1962), with whom humanists are likely most familiar through her publication of *Silent Spring*, constructed a new awareness of science and nature in the public mind, and established through her apocalyptic vision of science run amok, the idea that we, the public, were ethically and morally responsible for protecting nature from ourselves.

This is not to say that concepts of humanity's relation to nature are by any means new. In Western Civilization we can go back to roots in Aristotle, Thoreau, Native American mythology. The following passage from the *Bible* is often quoted as both an argument for and against dominionist positions on environmental stewardship: And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth. (*Holy Bible*, King James Version, Genesis 1:28)

By contrast, other passages from non-western scriptures present variations and alternatives to environmental epistemology. The following example from Sikh doctrine illustrates this point:

*Air is the Guru, Water is the Father, and Earth is the Great Mother of all.
Day and night are the two nurses, in whose lap all the world is at play.* (*Sri Guru Granth Sahib*, p. 8)

The *Koran* is full of references to the precious resources of air, water, and land, and warns against wastefulness. Mohammed encourages the planting of trees, decries the destruction of the land, even in war, loves animals, and encourages other to do likewise. Many of these texts are important for situating contemporary study in rhetorical tradition. In one of my own papers on Ursula LeGuin's *A Wizard of Earthsea*, as a parable for sustainability, I draw on Plato's parable of the Cave for comparative analysis (Goggin, 2010).

Still, while the concept of environmentalism - i.e. the direct connection between human civilization and its relationship to the finiteness of nature - has deep roots, the more contemporary iteration of sustainability, particularly in terms of "development" really is a recent invention. And this is where things get really interesting, because the notion of sustainability involves not only conservation or preservation of the natural environment, but present and future economic development and long-term productivity of ecosystems. It is this idea of "development" that seems to be the source of so much controversy and lends

itself to analysis of argumentation.

The generally accepted definition of sustainable development that resulted from the 1987 World Commission on Environment and Development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations, 1987). Because sustainability emphasizes the future benefits based on resolution and consensus (though not necessarily agreement) in the present, for rhetors (or stakeholders) in a given situation that calls for argumentative discourse to move to such an outcome, deliberative rhetoric has demonstrated particular effectiveness. This is not deliberative rhetoric in the classical sense of exhorting an audience to consensus by persuading them that society will accrue some benefit in the future via taking action as a whole, but rather in the sense of dialogism and non-duality to persuade members of an audience to voice their disparate opinions. Waddell (2000) refers to this model of public participation discourse as a “social constructionist” model that “views risk communication as an interactive exchange of information during which all participants also communicate, appeal to, and engage values, beliefs, and emotions. Through this process, public-policy decisions are socially constructed” (p. 9). On environmental and sustainable development matters, a crucial disconnect to avoid creating in the debate itself is that of discursive polemics that calcify crudely divisive environmental politics – what Killingsworth and Palmer term “Ecospeak.” For example, in her contemporary analysis of a case of ecospeak in the proposed Cape Cod wind farm project in Massachusetts, Moekle (2009) illustrates poignantly how environmental discourse on the “public good” breaks down as stakeholders undermine the potential for complementary interests as they argued their cases from binary perspectives.

Consensus, if we can say there is such a thing, lies in persuading stakeholders in a given situation to agree to listen to the opinions of others; the goal is to foster public participation. On matters of environmental sustainability, solutions to future problems based on present actions are addressed through changes in the basic beliefs that underlie current beliefs, attitudes, and, in particular, behaviors that have brought about the emergence or awareness of those problems.

Drawing on Ajzen and Fishbein, Coppola and Karis (2000) identify four determinants in changing behavior: belief, attitude, intention, and behavior. They state:

A person's behavior is determined by beliefs concerning other's perception of the behavior. By producing sufficient change in these primary beliefs, we can then influence the person's attitude towards performing the behavior. These changes lead to changes in intentions and actual behavior. The first step towards producing behavior change is the identification of a set of primary beliefs relevant to the behavior. Once identified, these beliefs can serve as the basic argument in a persuasive communication. (p. xxi)

To illustrate a case with a more desirable outcome than that of the Cape Wind project, Scialdone-Kimberley and Metzger's (2009) Burkean analysis of the United Nations "Forum on Forests" illustrates how multiple stakeholders, both expert and non-expert, represent sustainability as they construct their identities as agents for forest management. The authors demonstrate the role of deliberative rhetoric in recognizing the discursive boundaries that occur in community building, and how to address them. In another case example, Said (2009) shows how a synchronic process of place-making through deliberative discourse worked to build coalition among various stakeholder interest groups and ultimately to enact policy change to protect the headwaters of the San Antonio River in Texas. The issue remains though that deliberation on matters of environmental sustainability are extremely complex and embedded in concerns not only of science, commerce, technology, and design, but of peoples' values, cultures, experiences, fears, desires, and place, space, and time. A model of public participation built on a social constructionist interactive exchange provides a frame for a deliberative process of argument that allows stakeholders on national and local levels, expert and non expert, to engage in decision making and public policy.

However, in the Bermuda base-closure case, one of the many complexities that emerges is what happens when the concerns of a small stakeholder with little political, economic, or military capital are placed in a global context for environmental sustainability, where not only do they not have a place at the table, but their very existence in the world politic and on the environmental stage is barely noticeable, if not invisible, or so constructed as a peripheral entity that even their identity and role as potential stakeholders is considered questionable. This is a problem that appears to be shared, albeit in very different, situated contexts, to non-mainstream places. In their study, *Rural Literacies*, Donehower, Hogg, and Schell (2007) argue that there is a tendency by the generally urban ideal of mainstream society to view, and thus limit and reduce, rural society

through lenses based on commonplace assumptions about small communities, what they term “rurality.” Donehower et al. state:

For those who can’t imagine life in a town with a population under 10,000 or a career dependant on the vagaries of the weather, rurality can seem such an odd state of being outside that of mainstream urban and suburban America, that it can be understood only in terms of not-urban, not-us, not-me. There is a tendency to see rural people and rural places as “other.” (p. 14-15)

A similar notion to rurality can be found in Thompson’s (2006) concept of “tropicalization” in *Eye for the Tropics*. The author examines crafted aesthetics by colonial and postcolonial governments in Jamaica and the Bahamas, which she refers to as “tropicalizing images.” Thompson makes the case that ultimately the cultures and lifestyles are drastically altered as the populations of these islands buy into the very marketing imposed by such economic interests.

Islands, of course, are not necessarily rural and in the case of autonomous or semi-autonomous island nations they often are extremely compact micro systems, not the same as, but in general combining many of the physical, cultural and socio-economic features of continental cosmopolitan urban, rural, and wilderness life as well as concerns related to development and sustainability associated with those environs. However, islands are particularly environmentally fragile, relatively contained in terms of culture, population, and ecosystem, and are generally not self-sustaining in terms of social and economic infrastructure and therefore subject by necessity to negotiation with powerful external influences in terms of their sustainable futures. Furthermore, island communities/nations are each distinctly unique and residents tend to be especially well informed of these external (as well as internal) influences through various local media (including “grapevine” news systems) and deep local knowledge through their connections to place that is magnified by geographic isolation and self-reliance mingled with often absolute dependence on mainland patronage for their very continued survival.

4. Island-ality And Sustainability

In the next section I sketch out some of my initial observations from the four islands I visited over the past year: Anguilla, Malta, St. Mary’s (Isles of Scilly), and Bermuda. I chose the islands I did for this study based on their relatively small land area, variety, population density and diversity, geographical diversity, and dominant language (English). As I was building on prior study in Bermuda, I

also decided to limit places to former or current territories of the UK. These factors will allow for more effective consistency for comparative purposes across island political cultures. The concept of rurality, or in this case “island-ality” if you will, offers a robust frame for the study. The question is how this island-ality affects and shapes deliberation on environmental sustainability in these places themselves and how a more thorough understanding of this can perhaps offer some insight into how rhetorics of place can be employed in a richer understanding of global and local participation on conversations on environmental sustainability.

While the following may appear somewhat like a travelogue, that is actually an important thing. As I briefly profile each island I encourage the reader to reflect on their own associations, preconception, and experiences with these and other island places: Consider how even the very names of these places and the mental images of them resonate (or not) with environmental concerns and notions of sustainability. The islands to be featured here are Anguilla, Malta, St. Mary’s (Isles of Scilly), and Bermuda. For the latter two islands I offer brief case examples that illustrate the potentials for the study of place-based arguments on environmental sustainability.

Anguilla: Anguilla is a British Overseas Territory. Its land area is about 39 square miles with a resident population of 13,000. Amerindian tribes, sometimes referred to as Arawaks, inhabited the island since about 1600 BCE but were gone by the time the British settled there in 1650 (CE) Anguilla is at the end of the Leeward Islands and there are no nonstop flights into the island from the mainland US. Yet despite this limitation, or perhaps because of this Anguilla has fairly recently begun to build a reputation and economy as an exclusive tourist destination. Indeed it offers a wealth of relatively uncrowded white-sand beaches. Anguilla is quite arid and has few natural resources, poor soil, limited potable water, but this has not seemed to have slowed down runaway development of luxury vacation resorts and, with the accompanying boom economy, home construction for residents. I found that information about Anguilla’s environmental plans were difficult to come by. As one resident I spoke with put it, “Anguilla is not a reading culture.” Most Anguillians get their information about local news and issues via the local radio station radio, or by conversing with each other directly in person or by mobile phone or online. The one weekly paper is more of a paid announcement sheet than a newspaper. While there are number of glossy

magazine publications and government brochures that feature literature on the environment, most of these seem to be directed towards visitors and presents island sustainability as a promotional tool. In general though, it seems that Anguillans are aware of the potential for overextending use of renewable and non-renewable resources. There is evidence of programs to grow local produce, and phased plans to reduce dependence on fossil fuels through renewable energy sources. Still, on the whole there seems to be little sense of immediacy or concern. Due to a relatively small resident population, Anguilla has not reached a crisis point, so it remains to be seen, whether or not the island will actually go ahead to implement its sustainability plans in the near future. For the present, there seems to be no compelling incentive to slow down development and invest proactively in environmental management. Certainly, from what I could see, and from the residents I spoke with, developers have little to no concern about sustainability. And because the island is 95% privately owned, the government has little influence in this sphere to effectively enforce the regulations it does have. Sand mining of coastal dunes for construction materials, for instance, is a significant environmental problem but enforcement to protect this fragile ecosystem is practically nonexistent. Further, conservation and preservation organizations such as the local National Trust are almost completely government funded, and thus, unlike national trusts in other locales, are very limited in their capacities for oversight. Overall, in Anguilla, one gets a sense that because the island is not overdeveloped yet, there is a kind of resigned optimism—a sense that there’s still time. But this attitude also indicates that eventually motivating a public to be aware and willing to change its mindset will be an uphill struggle.

Malta: I decided to visit Malta because of its contrast to the other islands. Malta, a small island republic in the Mediterranean is about 120 sq miles with a population of about 400,000 (not including many tourists mostly from Europe). Malta is an old world island country with strategic importance and has thus been colonized over time, first by the ancient Greeks, Phoenicians, Romans, and French, and most recently, the British. Malta is also massively urbanized. My first impression on arriving in Malta was how does this island avoid sinking under its own weight of development and construction? Malta has only become “wealthy” in the past 10-15 years due to increasing economic deregulation and privatization and admission to the EU via a push by the Nationalist government. Its subsequent booming economy is based on tourism, and its trade network particularly with other Mediterranean countries. More recently, Malta’s economy suffered a

downturn due to the weakening Euro and the massive debts the island nation had incurred during its development phase. Like other islands I've visited, Malta has limited a potable water supply and depends heavily on desalinization and depends entirely on imported oil for energy, despite its excellent potential for renewable energy sources such as wind, solar and wave energy. The island is in the process of connecting via undersea cable to Sicily for electricity with the idea of an eventual expanded grid network throughout the EU that will provide its subscribers with cleaner energy from renewable sources. There are a number of local environmental advocacy groups and at least two widely circulated independent English language newspapers that are very strong on the environment. Readership of print news is very high with strong participation by the public in the editorial sections. What the local National Trust, the *Din l-Art Helwa*, expressed to me as their greatest frustration in terms of environmental sustainability is that the current government rode into power with a lot of promises for a policy of cultural preservation and environmental sustainability, but that actual implementation tends to wax and wane depending on the "mood" of government and much of the talk is merely lip service. A national commission for sustainable development was started up about eight years ago and drafted a plan about three years ago, but since then has basically been left to languish. As one resident stated to me "unless there is political will, nothing happens."

Isles of Scilly: The smallest island community I visited is not a separate country or territory like the others. Scilly is a cluster of small islands about 28 miles off Land's End and is actually administered as part of Cornwall, England. The total population is about 2,000 on about six square miles. Three quarters (about 1700) of those live on St Mary's, the largest island at a little over three square miles, and two-thirds of those, a little over a thousand, live in Hugh Town, the only freehold area in the islands. All the rest belongs to the Duchy of Cornwall. The islands have been inhabited since the Stone Age, surviving until recently mostly through subsistence. Due to a warmer climate than the rest of Britain, flower growing provided an industry for the islanders since the late 19th century, but that has given way to tourism as the main economy since the 1970s.

I spent most of my time in Scilly on St Mary's, and the most striking thing I found was a great deal of emphasis on, and actual implementation of, environmental sustainability projects. This was particularly true of the development and planning offices for the Isles of Scilly Council, the Duchy, and the Wildlife Trust. The

Council is in the process of planning major upgrades and developments to the seawall and surrounding area along the main Porthcressa Beach which will be environmentally low impact, reduce flooding in Hugh Town in winter storms, and rejuvenate the area to encourage tourism. The Duchy is installing photovoltaic panels and geothermal units in its tenancies, and the Wildlife Trust is implementing a conservation cattle grazing plan to recover areas overgrown by gorse. All of these stakeholders practice transparency in their plans and projects through reports, minutes of meetings, and architectural proposals via highly accessible and informative websites that stress their own commitments to environmental sustainability and promote public awareness. Additionally, they publish many print texts designed to be informative and educational. Much of the literature consists of glossy, high-end reports and guides produced by the Council of the Isles of Scilly. Many of these are sponsored by the Cornwall County Council and funded through the UK government's Natural England offices. What is a striking contrast between the Scilly literature and much of the literature from the other islands I visited is that while some of it is clearly promotional and directed at visitors, the bulk is directed to residents themselves.

Despite Scilly's progressive approaches to sustainability, there are still problems. Water is drawn from deep bore holes, ground reservoirs, and from a desalinization unit. Unfortunately the latter, which was originally purchased second hand from the US following the first Gulf War is approaching the end of its lifecycle. Household and industrial waste is mostly incinerated, so recycling is strongly encouraged to reduce environmental and economic impacts. All other waste has to be shipped back to the mainland of England. When it comes to energy, Scilly is connected via cable to the national grid so investment in alternative renewable energy projects is not really an option as benefits from such would not go to Scilly but to the national grid. Probably the most pressing problem though is a severe housing shortage for residents which translates into issues of affordability for residents, retention of key workers from off island, the future of the younger generations, the viability of the local schools, and a highly limited tax base for renewal projects, and thus a tenuous balance for the main tourism industry. Visitors come to Scilly for its unspoiled charm and beauty, but want amenities and services. Scilly needs tourists to survive economically, but too many would further strain available housing, have greater environmental impact, and require development that would threaten the very reason tourists come there in the first place.

One important case issue on environmental deliberation for the island community that has emerged recently is the debate over conservation grazing. The Scilly Wildlife Trust has management authority granted by the Duchy of Cornwall over much of the land area. One of the Trust's key projects has been the introduction of a small herd of cattle and ponies to stem the invasion of gorse on heaths and coastlands, and recover areas that have become overgrown through decades of non-management. In information brochures, newsletters, and reports, the Trust details the environmental significance of its conservation grazing practice through historical records of agriculture and transport, data from wildlife studies on benefits to insect and bird life, and economic studies on the positive impacts to local income through industry (abattoir and dairy) and tourism (increased access to archaeological features and open space). This is all accomplished through sustainable practices. The Trust devotes much of its website, <http://www.ios-wildlifetrust.org.uk>, to information and questions on its grazing project. In my meetings with the Trust's director and staff, they were very enthusiastic about the progress of their land management approaches. However, some residents of Scilly are opposed to the conservation project for a variety of reasons - muddy footpaths, manure, public areas restricted by electric fencing - and have turned to the Internet to voice concerns and to argue and petition for revisions, if not an end, to the grazing project. The response by some Scilly residents resonates with a broader national backlash against the "craze" for conservation grazing. One unfortunate incident for the Wildlife Trust has been the willful damage to some of its grazing project equipment. Still, most resistance is in the form of online articles and petitions that have been employed to not only recruit support from the residents, but also from seasonal visitors. The Wildlife Trust and Council of the Isles of Scilly have responded by forming the Isles of Scilly Grazing and Access Working Group to bring various stakeholders and petitioners together to deliberate on the issue and to compromise. This case study illustrates how various local concerns, in this case, those that are particular to a small island community, play out through argumentation and deliberation in the public sphere.

Bermuda: Bermuda has been inhabited since 1609 when a British ship bound for Virginia was wrecked during a storm. About 700 miles off of Cape Hatteras, Bermuda is one of the world's wealthiest per capita economies primarily due to the offshore banking industry and vacation destination, and is very accessible via air travel from the Eastern US. The string of islands comprises 20 square miles

with a population about 68,000. I visited Bermuda to connect with stakeholders invested in environmental issues. This included meeting with the president of Greenrock, a local grassroots charity devoted to Bermuda's sustainable development, and the education officer for the Bermuda National Trust, and attending a town hall meeting held by the Department of Energy on prospects for wind energy and ocean wave energy. While all of these stakeholders offered somewhat distinctive positions on environmental sustainability, ranging from social activism and behavioral change, to enforcement of government oversight, to economic gain, one thing they emphasized in common was the need for immediate action. The idea of Bermuda as "canary in the coal mine" for predicting drastic ecological failure was a phrase I frequently heard invoked. An ongoing spate of new building construction - primarily for the offshore reinsurance and banking industries - overcrowding, demand for the American consumptive lifestyle, lack of any local energy resources, dependence on imported oil for electricity (in fact imported everything), the decline of tourism, poor soil quality, over fished seas, and so-on have all contributed to an island with an ecological infrastructure stretched to the breaking point.

When I asked stakeholders if Bermuda's environmental future could even be sustained at this point, most were taken aback by the question. I think the idea that it was maybe already too late was something they had considered, possibly even accepted, yet one would assume that their response would be one of guarded optimism. Basically: "it's not too late if we start right now." And there was one other general theme that was a common factor among these stakeholders - the idea that if Bermuda forged ahead with concerted plans for renewable and sustainable energy resources, and social reform, that the island could serve as a model of sustainability for the world, but with little real sense of how that might actually happen. The notion of an island utopia seems to remain important for the ethos of Bermudians as a validation for the Sisyphean task ahead.

5. Conclusion

At this point I am still gathering data, so it is too early to draw specific conclusions concerning the rhetorical constructions of sustainability, but already I am seeing some interesting things. The Bermuda government, for instance, in its official literature (at least that which I have looked at thus far) casts itself as the concerned steward, yet this perspective is in contrast with testimonies by other stakeholders and by government actions that promote the idea of the environment

primarily as a resource to exploit. Lack of transparency further underscores the government's troubled relationship with the public. Meanwhile the National Trust has adopted the role of policy watchdog and cultural preservationist, trying to take back what belongs and restore it. One of their main campaigns is to "buy back Bermuda." The goal is to restore and preserve remnants of open space on the island piece by piece and to ensure that the government follows written policy on development to the letter. For some Bermudians, the Trust is viewed with some skepticism as elitists and obstructionists. Greenrock has cast itself as activists for environmental social conscience, more concerned with sustainability as grassroots movement for behavioral change and less with policy implementation.

However, in a recent case, the local daily newspaper, *The Royal Gazette*, served as a sponsor and catalyst for community activism and community literacy that brought various environmental groups and the public together to bring about environmental policy reform. In "The Co-Construction of a Local Public Environmental Discourse: Letters to the Editor, Bermuda's *Royal Gazette*, and the Southlands Hotel Development Controversy," I co-authored with Elenore Long (Goggin & Long, 2009) we detail the discursive effect of letters to the editor and the way in which the editor of the local newspaper serves as an ecological literacy sponsor for the island. During my field work in Bermuda, a heated controversy over a proposed Government development plan for a luxury hotel on one of the few remaining areas of open space on the island (Southlands) was at its zenith. Much of the public response to the controversy was playing out daily in the discursive space of the newspaper's "Letters to the Editor" columns. The published data I gathered on the controversy, along with interviews I conducted locally with the newspaper's editor, provided a rich opportunity to examine local print media as a conduit for reception, interpretation, and participation in fostering public discussion on environmental concerns. For our purposes, participation posed a particularly provocative site for examining public argumentation and the intersection between sustainability studies and community literacy. We state:

When it comes to focused and sustained deliberation about the environment - the kind of local public discourse that Jimmie Killingsworth and Jacqueline Palmer argue is needed for "the emergence of a culture with environmentalism at its very core" (265) - public spheres scholars would suggest that participation would mean not simply reading, writing and speaking in a public discourse about the

environment that already exists, but rather actively constructing with others a new, alternative discourse. For this alternative discourse to serve as the medium that promotes “people’s public use of their reason” (Habermas 27), it can’t be (what James Paul Gee would call) one of the big-D discourses of industry, business and government – those who typically get to name the terms of environmental discussions and, therefore, the ends in sight. Rather, it needs to be a more inclusive, accessible hybrid discourse that invites what Iris Young calls “communicative” deliberation (73) – which, by definition is *focused* on specific issues and thoughtfully *sustained* rather than scattered across tangentially related topics, but also “untidy” (Hauser 275) in that it neither subscribes to *a priori* standards of logic nor stipulates the bracketing of reasons from additional commitments, values, and motivations that people bring with them to issues they care about (Benhabib 84; Young 72). (p. 6)

However, as we argue, such dynamic and inventive local public discourse regarding the environment doesn’t just happen. It needs institutional support. Thus for this case we draw on Brandt’s (2001) notion of “sponsorship,” the process by which large-scale economic forces [. . .] set the routes and determine the worldly worth of [. . . a given] literacy” (p. 20). We note:

Accordingly, for an editor of a daily newspaper, sponsoring such participation in environmental discussions would involve striking a balance between maintaining an independent press’s autonomy from political interests, while simultaneously serving an advocate (a sponsor) for public knowledge and awareness which may run contrary to that very need for autonomy. (p. 7)

Ultimately, in response to public pressure, the Bermuda Government revised its plans to develop Southlands and, for the time being, the area is no longer under threat of development.

While it may be tempting to talk about how an island can serve as the canary in the coal mine that the rest of the world should pay attention to, and how it could be a model to the rest of the world for environmental sustainability, such talk would serve to further romanticize islands as rarified concepts rather than the real places where people live their everyday lives. But it would also be myopic to not consider the particular, unique cases that each island place offers as rhetorical and material lens on its future as an ecological micro system. What is clear from my initial research is that one can’t talk about island singular but we must talk about islands with an “s” in the plural. Unless we can take local context

- social, political, environmental, historical - into account in confronting problems of sustainability, we cannot find strategies for dealing effectively with the myriad, and substantively different, collections of problems. The study of small nation states (islands) along with other discrete geographical locales and societies (urban, rural, suburban, oceanic, desert, mountain, and so forth), offer opportunities to resist overly broad conceptualizations and deliberations of environmental issues and to locate analysis of arguments on sustainability in contexts of place, and also to see deliberations and arguments within larger global networks of contexts and discussions. As sustainability is debated the rhetorics of small places, all places need to be included in the discussion. I conclude with this final thought that lends some practical urgency to continued work in this area especially for small oceanic nation states:

Islands share many problems and needs with certain continental areas and commonly are subsumed in development literature within the broader category of small countries...[But] where on continents the limits are only beginning to be perceived, on some small islands they have already been reached. (Hess, 1990, p. 3)

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ISSA Proceedings 2010 - Drug Advertising And Clinical Practice: Establishing Topics Of Evaluation



1. Introduction

Preservation of patient autonomy in clinical decision-making is strongly advocated in Western models of medical practice. Ensclosed in a physician's legal and moral responsibility is a duty to ensure the patient receives objective and impartial information that will support his/her ability to make an informed choice. Yet, there is a subtle disparity between 'presentational' and 'persuasive' strategies of providing information on risks

and benefits in therapeutic decision-making (Fisher 2001). The process of informed consent, while institutionally sanctioned, is subject to social and political influences (Goodnight, 2006).

Like all institutional practices, doctor-patient interactions feature bounded communicative rationality. In order to reach an informed agreement, participants in a discussion may in principle appeal to ideal norms of consensus formation. In the routines of reasonable practice, such norms are constrained by the conventions, boundaries, interests and customs of an institutionally regulated forum. In the case of medical consultation, the interests of time and resources engage provider and client in a reciprocal exchange of argumentation, but from quite different perspectives, with different risks at stake. At the ontological level, a patient has his or her health to consider. At the professional level, a doctor has a duty to do no harm, a practice to consider, as well as state of the art credentials backed by peer review and licensing. If the consultation is productive, different risks are minimized for both doctor and patient. Presumably, presumption – the right to question sufficiency of evidence and to say no – resides with the patient because his or her risks involve the less reversible outcomes of mortality. Best practices should be reviewed critically to evaluate communication norms, recognizing that such standards change over time because medical care evolves, state and private programs transform, and aspects of the human condition alter.

2. Biopolitics in the medical domain

The relationships between the institutions of medicine and the conventions of health constitute a subfield of the broader area of biopolitics. State regulations, scientific research, professional training, and public participation configure standing best practices for this field that maintains, as a core feature, the communicative exchange between doctor and patient. Schulz and Rubinelli (2008) define the “doctor-patient interaction” as “an information-seeking dialogue” where ideally a reasonable exchange occurs between requests for and provision of information to support the doctor’s principal goal to convince the patient of most likely diagnosis or best treatment option. Yet, the therapeutic relationship between a doctor and a patient is an iterative process complicated by the potential for emerging uncertainty and probability in medical discourse (Gilbert & Whyte 2009; forthcoming). The ‘reasonable’ exchanges in medical practice typically occur in the form of deliberative discussion where the future is not entirely known, relevant evidence is gathered and assessed, options evaluated,

and a decision reached or deferred (Goodnight, 2006).

In an unfettered dialogue, conversation may follow the norms of exchange defined by normative approaches to argumentation, such as pragma-dialectics. Then, conversational rules are embedded resources of critical appeal used to reach and refine an informed agreement. In domains of practice, such as medicine, these norms are bounded by context. In the situated deliberations of medical consultation, Schultz and Rubinelli (2008) point out, asymmetries of doctor-patient interests result in discussions that depart from but are accountable to ideal norms. Departures due to unequal expertise, availability of time, and risk are nevertheless justified within the conventional practices of medicine. The practices of such biopolitics invite critical inquiry into how greater symmetries - that empower the doctor or the patient as needed - are reaffirmed or change.

Institutions that are relatively stable may develop known and trusted settings for communication. The forums of practice are legitimated by professional roles and habits of advocacy that sustain and develop over time in ways that accommodate the needs of more inclusive publics. From time to time, institutional practices undergo shocks. New changes unsettle what is taken for granted as legitimate practices underwriting trustworthy communication. Modern medicine is in a state of rapid change due to the development of research and new options for treatment. Holmer reports that there are “more than 1000 new medicines in development - for Alzheimer disease, cancer, heart disease, stroke, infectious diseases, AIDS, arthritis, Parkinson disease, diabetes, and many other diseases - promising even more effective treatments and better outcomes in the future” (1999, p. 382). Trained doctors must master new medical options and techniques through reading journals, conference attendance, and industry detailing. The public faces an even greater educational challenge. Publicity has increased exponentially the amount of information available to the public, as Holmer confirms: “More than 50 consumer magazines about health care appear on the newsstands every month. Many television stations have a physician dispensing medical news. Nearly one quarter of the Internet is devoted to health care information” (Holmer, p. 380).

Medicine has been in a constant state of change, matching traditional remedies against new scientific research and findings. While drug advertising has been around for 300 years, much of it has offered unproven promises sold by ‘snake oil’ rhetoric. For example, between 1708 and 1938, “advertisements for patented

medications claiming to treat everything from dandruff to infidelity could be found in magazines, newspapers, and traveling medicine shows” (Ghanji, 2008, p. 68). Marketing strategies then changed due to the strict regulation of pharmaceuticals. Dissemination of information about medical care and treatment became regulated by state rules that permitted scientific information in medical journals to guide the decisions of physicians while limiting advertising of prescription miracles to publics. In the 1990s, the expert model was partially dismantled by the United States and New Zealand which permitted direct to consumer (DTCA) advertising. The practice of DTCA has grown even as it remains significantly controversial (Coney, 2002; Mackenzie, Jordens & Ankeny *et al.*, 2007; Vitry, 2007).

We believe that argumentation studies should initiate critical practices in order to appraise the controversy brought about by these growing institutional appeals and examine the potential for advertising to influence the dialogical relationship and deliberative norms of physician-patient engagement. The development of such norms requires critical attention to the consequences of advertising campaigns upon the relative communicative positions of doctor and patients who reason together and argue in the interest of health.

3. Institutional practice ‘in flux’

Biopolitics includes controversies in the critical study of argumentation concerning the risks, resources, and boundaries of medical practices in the pursuit of health. The area includes questions of policy, expertise, and personal decision-making in the social-cultural spaces of influence. Particularly in times of wide-spread changes brought about by research, new technologies, or pressing population health conditions, institutional practices move from steady-state convention to conventions in flux, with resulting debates over the advantages and disadvantages of change. In this respect, David Dinglestad *et al* (1996) report “drugs are not only widely used but also widely debated.” The question of advertising impacts on patient-doctor exchanges remains highly contested (Calfee, 2002; Gellad & Lyles, 2007; Gilbody, Wilson & Watt, 2005; Hoffman & Wilkes 1999, Rosenthal *et al.*, 2002; Bell *et al.*, 1999a, 1999b, 1999c). Much of the debate poses the economic ambitions of pharmaceutical companies against the kind of cooperative reasoning between doctors. In this respect, patient autonomy is integral to achieving competently fashioned informed consent, weighing the risk benefit of therapeutic intervention, and minimizing the medicalisation of

normal human experiences (Mintzes, 2002; Wolfe, 2002; Main *et al.*, 2004).

Recently, the debates have been located primarily in the United States and New Zealand, the only countries where DTCA is fully permitted. In countries where DTCA is prohibited, pharmaceutical companies find other avenues to market their products to consumers; for example, internet, direct mail, meetings with patient groups, consumer targeted websites (Main *et al.*, 2004). As Sweet observes (2010, p.1), “electronic detailing, interactive websites, email prompts and viral marketing campaigns using social networking sites such as YouTube, MySpace and Facebook are among the tools being used”. As the European Community, Canada and Australia ease regulatory changes or face pressures to do so, internet circulation of medical information is making national boundary conditions for practice vulnerable.

The marketing arm of the pharmaceutical industry has sponsored initiatives that have “revolutionized how medical information and treatment options are disseminated to the public” (Bhanji, p. 71). Protagonists argue that such advertising increases the self-diagnosis of conditions that would otherwise go untreated (Main *et al.* 2004). For example, Donohue and Berdt assert that DTCA “increases awareness and expands the treatment of underdiagnosed conditions, such as hypercholesterolemia and depression” (Donohue and Berdt, 2004, p. 1176). Indeed, DTCA is argued to be “an excellent way to meet the growing demand for medical information, empowering consumers by educating them about health conditions and possible treatments” thereby playing potentially “an important role in improving public health” (Holmer, p. 180).

Antagonists argue that “many pharmaceutical companies” engage in “repeatedly” misleading the public and doctors (Troop and Richards, 2003). While drug companies do meet standards established for informing consumers of risks, critics complain that the risks are not fully disclosed, alternative cheaper options discussed, or much actual public health information provided (Main *et al.*, 2004). The net result of DTCA in New Zealand and in the United States has been to increase “medicine enquiries by consumers to prescribers, and subsequent prescribing to consumers” (Rosenthal, 2002). Furthermore, DTCA typically promotes the use of more expensive and newer medications to large consumer populations with chronic conditions (Rosenthal, 2002). The debate continues to evolve. Recently, marketers of DTCA position advertising do not directly recommend to consumers that they take the advertised medication but instead

encourage consumers to talk to a doctor about the medication's costs and benefits. Thus, proponents of DTC advertising argue that it is "an opportunity for improved patient education and may stimulate clinical dialogue with the physician" (Robinson, 2004, p. 427). We are especially interested in considering how DTCA might potentially impact on the deliberative dialogue of clinical practice.

In this sense, these drug debates "are not timeless manifestations of the nature of drugs but rather contingent features of social structure and social struggle" (Dinglestadt *et al.*, 1996). Troop and Richards (2003) proffer an explanation for this problem: "the advertising/marketing and the health paradigms are so very far apart that dialogue and compromise are far from easy. The language of the marketing and advertising arms of industry is characterized by 'bottom lines', 'market share', 'brand loyalty' and 'disease creation'. These are concepts foreign to most health professionals whose framework is the care of individuals in patient-centered and evidence-based paradigms."

The combination of new products and increased advertising constitutes an accelerating structural shift in how information is rendered accessible to publics. The result is an ongoing struggle which places the norms of doctor-patient communication at stake. The costs and benefits are complicated. On the one hand, false expectations of new medicines may increase pressures for marginal prescriptions and undermine trust and responsiveness of patients denied these 'breakthroughs' by a physician. On the other, advertising performs a public health role; even if the result of advertising is over-prescription and inflated expectations, it is arguably better to influence a class of potential patients to come in for treatment than remain in isolated misery.

So potentially great are the stakes of this influence on practice, that critical intervention into the controversy is warranted. The contextually driven cultural controversies - the biopolitics - that influence drug advertising bear implications for how publics may perceive medical conditions and new norms of interaction with doctors. Case studies of controversies over pressures on institutional practices of professional-client argumentation open the way for: (1) the development of new standards for assessing the intent of health messages posited by advertisers, and (2) the development of standards for clinical communicative competence, so that clinicians might accommodate the impact of biopolitics on the clinician-patient dialogue and, subsequently, clinical determination (outcome).

Hence, we contend that biopolitics offers a space for appraising and re-conceptualising institutional norms of reasoned exchange, as in the clinical consultation. We inquire into biopolitics specifically in regard to controversies associated with DTCA and the mental health domain.

4. *Advertising for Mental Health*

Mental health advertising is a good place to begin critical case studies because it is both prevalent and highly controversial. According to Bhanji, “approximately 20% of the 50 most advertised drugs in the United States were medications used to treat psychiatric and neurologic disorders. Antidepressants, antipsychotics, and anticonvulsants are among the top five most heavily advertised classes of medicine” (Bhanji, 2008, p. 69). The controversy over mental health advertising rests in a long history of debate (Goldman & Montagne, 1986; Seinberg, 1979, Lion, Rega & Taylor, 1979). One of the prominent question in the ongoing debate has centered on whether DTC marketing of psychiatric medications “leads to over-prescribing of more expensive drugs, as critics contend, or de-stigmatizes mental illness and promotes use of effective medications, as proponents claim ” (Bhanji, 2008, p. 68).

The biopolitics of mental illness and medical institutions was changed in the 1950s by the development of tranquillizers and antipsychotics that “made possible for the first time the treatment and control of mentally ill people outside of an institutional setting” (Dingelstad *et al.*, 1996, p. 1829). Now, in most developed countries people suffering or in remission from psychosis are routinely treated in the community. In the 1990s “a new era in the sales of psychotropic drugs began in most western societies” with a “dramatic increase in the sales of antidepressants” (Lovdahl, Riska & Riska, 1999, p. 306).

Reportedly, pharmaceutical companies have substantial “economic interest in maintaining patients on medications for chronic conditions like depression” (Donohue and Berndt, 2004, p. 1176). Pursuing such interests, the pharmaceutical industry appears to emphasize persuasion not information in drug promotion and, in the case of depression, advertisements appear “more unscientific and less informative than other types of drug advertisements” (Quin, Nangle & Casey, 1997, p. 597). Quinn *et al.* (1997) found that metaphors are used instead of science generally in the area of mental health (Owen, 1992). Hence, depression is frequently “reduced to a simple single entity (darkness) for which there is only one treatment (medication) by which health (sunlight) will be

restored" (Quinn *et al.*, 1997; Owen, 1992).

Mental health advertising is controversial on several fronts. First, many advertisements are misleading. For example, in the common advertising of antidepressants, serotonin reuptake inhibitors are frequently promoted using information that is inconsistent with scientific evidence on the treatment of depression (Lacasse, 2005, p. 175). Moreover, while drugs for mental illness are often advertised as non-addictive, the technical distinction in drug advertising materials regularly fails to acknowledge difficulties encountered with withdrawal. Finally, it is not clear that altering body chemistry by itself furnishes a cure for mental illness.

In biosychosocial approaches to mental illness, explanatory models of illness are elicited and negotiated between the clinician and the patient (Bloch and Singh 2001). Ideally, the clinician endeavors to understand the patient's problem in the context of the patient's beliefs, cultural lifestyle and norms in order to recommend best treatment for the patient who is expected to comprehend the benefit of and comply with treatment (Andary *et al.*, 2003, p. 137). A process of negotiation is required to reduce the conflicts between the patient's and doctor's models in order to reach a "mutually accepted explanatory model" (Andary *et al.*, 2003, p. 141), as cooperation with treatment requires the clinical intervention to match the patient's explanatory model of illness (Sue & Zane, 1987; Andary *et al.*, 2003). In other words, the negotiated model of illness helps the clinician to justify the treatment and win the patient's cooperation (Andary *et al.*, 2003, p. 141). In the domain of chronic mental illness, the patient's explanatory model is rarely static with the chronic nature of mental illness potentially generating conflicts of understanding that evolve an iterative process of therapeutic decision-making. The movement of meaning across the illness experience and dialogic consultation is subject to contemporaneous biopolitics. Hence, interpretations of DTCA are subject to modification by the patient's chronic illness experience and sociocultural vulnerability to mental illness diagnosis; the chronic and in-flux state of mental illness impose challenges for advertisers wanting to maintain their appeal to audience for extended periods of time. The clinician must accommodate the patient's shifting perspectives on therapeutic decisions. Interpreting conflicts of therapeutic decision-making with a biopolitics framework appears useful.

5. Case Studies: Analyses of DTCA for insomnia and depression

Discussion in this paper is directed to two instances of commercial advertising –

insomnia and depression. Previous studies of DTCA have provided a synchronic study of medical topics through content analysis of DTCA, applying coding schemes of argumentation (Bell *et al.*, 2000; Main *et al.*, 2004; Mohammed & Schulz, 2010). Taxonomies of persuasive appeals include biomedical concepts of effectiveness, social-psychological enhancements, ease of use, and safety, as well as sociocultural concepts of appeal, such as categories of rational, positive, humor, nostalgic, fantasy, sex and negative appeals (Mohammed & Schulz, 2010). The analyses to date have considered the audience of DTCA in terms of the relationship between pharmaceutical drug company and consumer, with the doctor pitched as an intermediary agent (bearing in mind that pharmaceutical appeals direct to health practitioners occur through alternative media, such as academic journals, professional development programs and personal marketing strategies which incorporate gifts, dinner functions and so forth). However, we inquire as to what purpose the DTCA might serve for the clinical practitioner in his/her patient interaction. If DTCA aspires to influence the consumer then it must be sensitive not only to the socio-cultural contexts of illness but also to the diachronic unfolding of controversies associated with patient-centered determination of diagnosis and management of illness in doctor-patient deliberation. Specifically, the call to 'consult your doctor' in drug advertisements imposes challenges for the clinician, implying that doctors should not only own the knowledge of remedies but be also sensitive to the controversies associated with medications, the concerns of patients about their drug regimens and the socio-political elements influencing consumer choice. The criticism contrasts appropriate norms of reasoning in a clinical context against the world depicted for patients by advertising.

Gilbert and Whyte (2009; forthcoming) assert that if reasons are to be used for building effective and purposeful communication in the clinical context, then the interlocutors must share a common reference of argument standard. Relevant are Johnson and Blair's (1994, p. 55) RSA criteria for assessing arguments in a clinical communication construct (Gilbert & Whyte, 2009; 2010). Socio-cultural-political experiences as well as biomedical beliefs of the interlocutors influence the notions of relevance, sufficiency and acceptability of evidence that the interlocutors bring to the deliberative dialogue of the clinical encounter. Recognizing zones of difference and realizing intersections of common understanding in what constitutes reasonable argument supports the development of mutual intelligibility in discourse. Lack of mutual intelligibility is

a source for potential conflict or misunderstanding.

In the spaces of medical care as envisioned by advertising, doctor and patient standards of sufficiency, relevance and acceptability in DTCA are drawn from the socio-cultural milieu of consumer experience, as drug companies develop strategic appeals to motivate consumer behavior. The DTCA standards challenge the biomedical basis of clinical diagnosis and management and introduce a dynamics to the static model of patient-centeredness, by requiring clinicians to acknowledge the relationship between uncertainty, social milieu and technicality of knowledge in medicine. Thus, we examine appeals of DTCA advertisements in the marketing of Rozerom and Cymbalta in the USA. We adapt the RSA criteria of Johnson and Blair (1994) for the analysis: *Standard of sufficiency*: The premises of an argument must have the appropriate types and amounts of evidence to support the conclusion. *Standard of relevance*: The premises of an argument must bear adequate reference to the conclusion. *Standard of acceptability*: The premises must be acceptable to the audience for the conclusion to be true and hence worthy of the audience's belief. These criteria challenge the development of a framework of argumentation that encompasses the clinical rationality of providers and the uncertainties, anxieties and insecurities of potential patients - in the span of what are asserted to be publicly informative, non-stigmatizing, soundly-based, helpful advertisements.

5.1. Depression: 'Cymbalta' (*Depression hurts*)

A 2008 'Cymbalta' television commercial constructs a space for 'taking the first step', a theme that receives more elaborate articulation on its web site. The commercial is constituted by a voice over, a female announcer speaking with a concerned and reassuring voice about the move from depression to Cymbalta upon obtaining a consultation and prescription with a health care provider. Like many such commercials, a dialogue ensues between the claims narrated within the flow of music and the images of women and men captured by screen shots that play darkness against light across the facial articulation of emotion. The diachronic development moves initially from recognition and definition of a personal issue, naming related mood and body disorders, to a self-recognized condition. "Depression can turn you into a person you don't recognize, unlike the person you used to be," the add asserts, voicing over briefly a middle-aged woman with a frown and a black male adult sitting in a dark room while a child with a soccer ball backs out and closes the door. The relevance of the claim is

nearly open ended, available to anyone who feels out of sorts with aches and pains. The sufficiency of evidence is unquestioned as victims lost pop up briefly, isolated and alone even in a crowd. As the voice moves from a warning to call a doctor if one thinks of suicidal impulse, to an acknowledgment that thoughts of suicide might be a drug induced effect, the framed examples change to movement with purpose, one smiling woman entering an elevator, another scratching a cat, and a male setting down a sawhorse in his workshop. Meanwhile the conditions of restriction and risks continue to be spoken as the screen unfolds happier people, turning first frowns into soft smiles, with a child with the soccer ball taking his dad out to play. Thus, the standard of acceptability is posed at radical odds, as the spoken message meets criteria of warning while the visual argument dramatizes success. The patient who is encouraged to self-define as depressed and to get help is directed toward a physician who has to sort out a reasonable space for accepting, weighing risks and benefits over time.

We propose that the physician may use the ads to consider strategy for prompting the patient's illness narrative to move beyond biomedical considerations to the agenda of social participation. However, the physician must not only astutely detect the advertising appeals that are directed to consumers within the design of the advertisement but apply sensitivity in analyzing the impact of those appeals on the individual patient. For, not all advertising techniques of persuasive appeal will impact equally on each and every patient. However, the physician could arguably use the ad imageries to stimulate dialogue that might help to reveal the patient's concerns of his/her illness within the socio-political context of his/her everyday world. For example, the son-dad imagery might impact more strongly on parents distressed by the impact of their illness on family members and dialogue might subsequently reveal potentially stressful contributors to the perpetuation of depressive illness contained within the patient's familial relationship mix, which may not be remedied by drugs alone. The ad imageries promote a social ideal that may be far removed from the patient's social reality. Other issues might be more complex and therefore more difficult to analyze, however, if advertisements lean on socio-political mores to persuade consumer as patient, then there is a duty for the doctor to appreciate these elements impacting on the patient's resourcefulness in managing their illness. As controversies are addressed, the doctor and patient may each shift their assumptions on what counts as relevant, sufficient and acceptable by considering the arguments posited by each other in dialogue for supporting or challenging the appeals in the ads.

5.2. *Insomnia: 'Rozerem'*

The Rozerem commercial addresses what is asserted to be a medical condition in an inventive manner. Interestingly, a frumpy-looking male wanders into his nighttime kitchen and is hailed by Abe Lincoln, reading a newspaper, who gives him the greeting: "Hey, sleeping beauty." "I didn't sleep a wink," the man says and Abe says, "I know," at which Abe's beaver chess partner chimes in, "He cheats." Someone in a space suit floats at the counter throughout. The man attributes his lack of sleep to stress at work and the beaver says that insomnia is common, establishing relevance. The dreamscape recedes and several clips of women up late at night are shown as the narrator voices over those who shouldn't take the medicine and its risks. The stress condition is not addressed, nor is asserted the established differences with other dependant alternatives. Rather, in the end, Abe the beaver and the spaceman return to counsel, "Just talk to your doctor." "Because your dreams miss you," juxtaposes a fantasy world where stress is banished versus a vigilant world where stress-relief requires judgments of hazard and habit. Oddly enough, a figural dream featuring iconic representations of honesty, industry, and exploration sets in motion a myriad of questions that only medical professionals can complete. Whereas the depression commercial minimizes self-esteem of the viewer in relation to the situation, the insomnia commercial maximizes self-esteem - each without bringing into conditions of refined judgment of relevance, the question of sufficient discussion of alternatives, or a coherent narrative of acceptability.

As in the preceding example, this ad proposes opportunities for the physician to identify and explore the patient's perspectives on his/her illness, and in this instance, the issues of self-esteem and independence in the management of illness being. Ambivalence may be a self-protective mechanism to minimize the acceptance of illness and so divert the stigma associated with diagnosis; hence the ad's clever way of playing down the potentially underlying causes of insomnia. Instead, insomnia is treated as a rather ordinary problem, a shared experience with the iconic characterization of animals, and certainly not presented as a social stigma to the same extent as depression. The ad suggests that insomnia is a condition readily solved. The persuasive techniques provide a useful means to explore why the patient might be impacted by the ad and stimulate dialogue to reveal interpretations of stress, influences on self-esteem and expectations of therapy (whether chronic or acute), all potential points of controversy in the DTCA. Stimulating dialogue this way might assist the

physician to better appreciate the socio-political impacts on the patient's attitude to illness and so assist the physician to determine an effective communication strategy for therapeutic recommendations.

The two DTCA examples, above, have been considered in a relatively simple analysis to illustrate how biopolitics may be applied to the analysis of controversial elements of DTCA to assist physicians and their patients co-construct interpretations of illness which can be used to inform an effective communication strategy for therapeutic decision-making. More detail on this proposal for analysis will now ensue.

6. Integrating biopolitics into clinical communication

Clinical communication is now recognized as a core clinical skill and models of doctor-patient communication in western medical school curricula promote patient-centered approaches. In the medical literature, notions of personal, professional and institutional discourses have been identified as relevant to the construction of meaning and shared understandings that inform clinical problem-solving and decision-making (Roberts *et al.*, 2000). Challenges to patient-centered approaches are identified in sociolinguistic barriers, institutional cultures of hospital/clinical settings and differences in ethno-medical systems (Diaz-Duque, 2001; Fisher, 2001). However, while the models of clinical communication have expanded to accommodate social contexts of decision-making, there is still a tendency to limit the scope of social inquiry to patient-centeredness elements concerning the patient's age, gender, socioeconomic status and race (including language background) and the physician's professional training and experience in the context of the structural features of organized clinical settings (Atkinson, 1995; Clark *et al.*, 1991; McWhinney, 1989; Roberts *et al.*, 2003).

We have considered the controversies in DTCA of mental illness therapies as potential influences on the deliberative dialogue in doctor-patient consultation. We propose a biopolitical dimension to clinical communication frameworks. Figure 1 illustrates a framework for considering the complexities of deliberative dialogue in the clinical consultation.

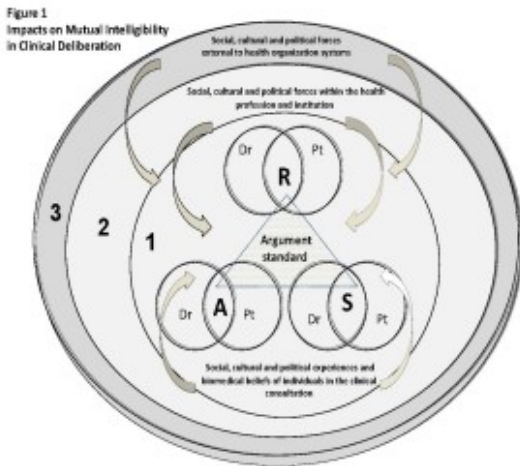


Figure 1

Diagram 1 is an illustration of the layers of communicative complexity associated with the construction of meaning and decision-making in the dialogue of clinical encounters. Clinical communication experts recognize the essential impact on the doctor-patient relationship of implicit beliefs, understandings and attitudes borne of both the patient's and doctor's individual socio-cultural and linguistic experiences. A common set of argument standards is determined by the integration of the socio-cultural values as well as biomedical beliefs of the interlocutors (i.e. the patient and the doctor) in the clinical encounter, which most likely influence argument construction, interpretation and evaluation. Locating common intersections of relevance, acceptability and sufficiency across the patient and doctor's implicit beliefs, understandings and attitudes generates a common argument standard for effective communication. The RSA triangle at the centre of Figure 1 captures this common intersection in the fundamental communication of the clinical encounter. This is the central zone of clinical deliberation (labeled 1 in Figure 1).

However, one cannot isolate the communication experiences of the doctor-patient relationship to mere artifacts of individual language, culture and experience. For dialogue to be effective, arguments of RSA must also accommodate the contemporary socio-political attitudes of the health profession and institutions which influence the underlying premises of ethical and reasonable clinical practice. This encourages doctors to generate what is referred to as 'institutional discourse', a strategy for articulating individual and professional experience within the context of more broadly sanctioned institutional policies and practices (Roberts *et al.*, 2000). Hence, impacting on the fundamental communication

between doctor and patient are the sociocultural and political expectations of the medical community for feasible and defensible practice, ensconced in virtues of professionalism. For example, informed consent is a process institutionally sanctioned, bound up with legal and ethical codes of professional conduct, while subject to social and political influences (Goodnight, 2006). This layer of communicative complexity is represented in the second tier of Figure 1 (labeled 2 in Figure 1), exerting a secondary but phenomenally important impact on the RSA standards of argument adhered to by doctor and patient in the clinical encounter.

Clinical communication experts have acknowledged the dimensions of doctor-patient interaction across the two levels of communicative complexity described in the preceding paragraphs, essentially generated within the health professional domains. What we propose is a new 'tertiary' dimension to doctor-patient interaction, which predicates the social, cultural and political forces on communication external to health organization systems. This element in our framework is, we believe, missing in current manifestos on clinical communication. In other words, to date, the health professional system has failed to acknowledge the pervasive effect on doctor-patient dialogue of public debate and controversy on human understanding of health, lifestyle and medical condition. DTCA illustrates how socio-cultural perceptions of illness may be construed by advertisers as valuable concepts of remedy and cure within the milieu of fuzzy logic in spaces of public controversy. A bio-political analysis of DTCA provides us with opportunity to examine the possible non-medical motivations of individual beliefs, attitudes and intentions which nevertheless assert sanctions on clinical meanings and interpretations and may therefore ultimately influence decision-making in the dialogue of clinical deliberation. In summary, a biopolitical analysis accessing the three zones of clinical deliberation might yield a more comprehensive strategy for understanding and generating an effective communication strategy in the domain of clinical practice.

Clinicians, we argue, would be wise to appreciate the broader complexities of patient's decision-making beyond the immediate environment of personal, professional and institutional notions of healthcare, which until now have dominated the definitions and explanations of clinical cultural and communication. Being alert to a broader range of persuasive strategies stimulated by controversies over therapies would seem to enhance a clinician's knowledge of the patient's socio-cultural and political reality beyond the mere

clinical environment. As controversies over (mental illness) therapies emerge during the juxtaposition of 'doctor' versus 'patient' explanatory models of illness in clinical dialogue, the astute clinician would seek to understand the biopolitical basis of the patient's reasoning for either cooperating with or sabotaging options for treatment.

Examining the controversies over therapeutic options using a biopolitical framework may support the clinician adopting a more adaptive and smarter holistic approach to developing mutually agreed explanatory models of illness with his/her patients, conducive for optimizing therapeutic concordance. This essentially requires the interlocutors to reach a mutual understanding on what qualifies as rational evidence in the communicative encounter, which Gilbert and Whyte (2009) define as the *mutual intelligibility* of argument standard. While acknowledging potential zones of difference, it is the ability of the interlocutors to identify and harness overlap that builds agreement in a communicative encounter. Hence, as controversies over mental illness therapies emerge in the explanatory models of illness posited by the doctor and patient during clinical dialogue, the doctor and patient must negotiate their differences and work towards establishing a common rationality for therapy. This requires each to realize the common intersections of understandings of relevance, sufficiency and acceptability of arguments and to use these to focus the case for therapeutic decision-making. The focus on establishing common elements of relevance, sufficiency and acceptability for optimizing mutual intelligibility within the milieu of fuzzy logic of the clinical encounter is captured in *Figure 2*. The RSA interface represents the ideal position for concordance on therapeutic decisions, where all criteria of relevance, sufficiency and acceptability in the arguments for therapeutic decision-making are equally agreed upon by the doctor and patient. Outside the core argument standard, RSA standards may be more or less equally distributed, which demands a more deliberative practice of medical consultation to address the asymmetries of doctor-patient interests and reach therapeutic concordance.

Figure 2 Optimal Mutual Intelligibility (MI)
Realizing common intersections of understandings of relevance (R), sufficiency (S) and acceptability (A)

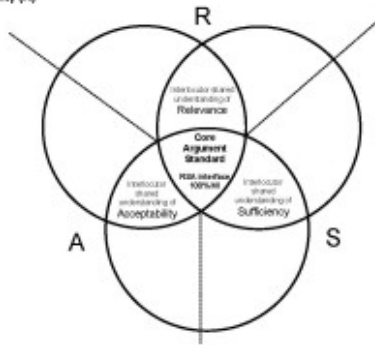


Figure 2

7. Conclusion

Drug advertising is part of an ongoing controversy that places pressure on the practices of doctor patient communication. Advertisements directed at mental illness are especially controversial. Argumentation studies should become engaged with how institutions are working strategically to change the boundaries of institutional practices - as such strategic developments alter the availability and nature and duties of reasonable communicative exchange. In the debate over drugs, both sides have a defensible position. Advertisements do perform a public health service; they do indicate ways to name conditions that may be subject to treatment; and, the sales role is qualified by adherence to regulatory policy that makes public statement of risks mandatory and the movement of the industry to support doctor consultation rather than immediate demand for prescription. On the other hand, advertising succeeds by adding to its information a mix of rhetorical appeals, clever arrangement, stylistic emphasis, and aids to memory that render vivid a message. There are no risks to the industry if consumers buy more than necessary or if they pressure doctors for prescriptions. Indeed, the public health rationale becomes a thin justification in the case of mental health where the costs of a disease untreated is figured to be much greater than nearly any rate of over prescription. DTCA may, in fact, be a useful tool for clinical practice.

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ISSA Proceedings 2010 - A Formal Model Of Legal Proofs Standard And Burdens



This paper presents a formal model that enables us to define five distinct types of burden of proof in legal argumentation. Four standards of proof are shown to play a vital role in defining each type of burden. These standards of proof are defined in a precise way suitable for computing in argumentation studies generally, but are based on a long tradition of their use in law. The paper presents a computational model based on these notions that represents a dialectical process that goes from initial claims where issues to be decided are set, and produces a justification for arriving at a decision for one side or the other that can withstand a critical evaluation by a particular audience. The role of the audience can be played by the respondent in some instances, or by a neutral third party audience, depending on the type of dialogue. The paper builds on previous work (Gordon, Prakken and Walton, 2007; Gordon and Walton, 2009) that has applied the Carneades model to studying burden of proof in legal argumentation.

1. Some Features of Previous Work

This survey is very brief, but fuller accounts can be found in Gordon and Walton, 2009, pp. 250-256). Gordon (1995) modeled legal argumentation as a dialectical process with several stages. Freeman and Farley (1995) presented a computational model of burden of proof as a part of a dialectical process that moves ahead to a conclusion under conditions where knowledge is incomplete and uncertain. In their model standards of proof are defined that represent a level of support that must be achieved by one side to win an argument. Burden of proof is seen as acting both as a move filter in a dialogue, and as a dialogue termination criterion that determines the eventual winner of the dialogue. Prakken and Sartor (2006) constructed an argumentation-based formal model of defeasible logic called the litigation inference system that separated three different types of burden of proof in legal argumentation called the burden of persuasion, the burden of production and the tactical burden of proof. Prakken and Sartor (2009, p. 228) described these three burdens as follows. The burden of persuasion

specifies which party has to prove some proposition for it to win the case, and also specifies what proof standard has to be met. The burden of persuasion remains the same throughout the trial, once it has been set. Both the burden of persuasion and the burden of production are assigned by law. The burden of production is the provision of sufficient evidence to consider the case. The tactical burden of proof is determined by the advocate on one side who must judge the risk of ultimately losing on the particular issue being discussed at that point if he fails to put forward further evidence concerning that issue.

The introduction of an audience in formal models dialectical argumentation, based on the work by Perelman and Olbrechts-Tyteca (1969), has now been carried forward in recent computational models. It is a feature of the formal system of value-based argumentation frameworks (Bench-Capon, 2003) that in practical reasoning, or reasoning about what should be done in a particular situation, the acceptability of an argument should depend in part on the values of the audience to whom the argument is addressed. Bench-Capon, Doutre and Dunne (2007) offer formal dialogue systems that allow for prioritization of the values of the audience to be used as part of the process for evaluating the argument. They build a system of formal dialogues for carrying out evaluation of arguments in this manner, and give soundness and completeness results for the dialogue systems. This idea of incorporating the audience into the dialogue structure for arguing with burden of proof is an important part of the model presented in this paper.

2. Burdens and Standards of Proof in Legal Settings

Burdens and standards of proof are used in many different contexts of legal procedures to determine how strong an argument needs to be to meet a standard appropriate for its use in that setting. A simplified description of the sequence of argumentation in a typical civil procedure, roughly based on the law in California, can give the reader some idea of such a sequence of argumentation. At the first stage, a civil case begins by one party, called the plaintiff, filing a complaint that makes a claim against the other party, called the defendant. In addition to the claim itself, the complaint contains assertions about the facts of the case that the plaintiff contends are true and that are sufficient to prove that the defendant has breached some obligation and entitling the plaintiff to compensation. At the next stage the defendant can choose from several options for making a response. One of these is to file an answer in which the allegations are conceded or denied. The answer may also contain additional facts called an affirmative defense that

contains counterarguments to the arguments previously put forward by the plaintiff. At the next step, the plaintiff can reply by conceding or denying these additional facts in the defendant's previous move. The next stage is a process of discovering evidence, which may take place for example by the interviewing of witnesses and the recording of their testimony. The next stage is the trial where the evidence already collected is presented to the trier, a judge or possibly also a jury, and further evidence is introduced, for example by the examination of witnesses in court. At the closing stage of the trial the judge makes a decision based on the whole body of evidence brought forward during the trial, or if there is a jury the judge instructs the jury about the law applicable to the case. The jury then has the duty of deciding what the facts of the case are, and making a verdict based on those facts. As part of the closing stage, the judge enters a judgment as a verdict, which may then be later appealed if there are grounds for an appeal.

To describe how the chain of argumentation goes forward through the different stages of the sequence of dialogue, it is important to distinguish between different kinds of burden of proof at different states. The first can be called the burden of claiming. When a person makes a claim at the first point in the sequence described above, he has a right to a legal remedy if he can bring forward facts that are sufficient to prove that he is entitled to some remedy. The second type of burden of proof is the burden of questioning, or it could be called the burden of contesting. If one party makes an allegation by claiming that some proposition is true during the process of the argumentation, and the other party fails to present a counterargument, or even to deny the claim, then that claim is taken to be implicitly conceded. This type of burden of proof is called the burden of questioning because it puts an obligation on the other party to question or contest a claim made by the other side, by asking the other side to produce arguments to support its claim. This brings us to the third burden, called the burden of production in law, or sometimes burden of producing evidence. This is the burden to respond to a questioning of one's claim by producing evidence to support it. We are already familiar with this kind of burden of proof as it is the one typically associated with burden of proof in philosophy. This is the burden to support a claim by arguments when this claim is challenged by the other party in the dialogue. The fourth type of burden of proof is called the burden of persuasion in law. It is set by law at the opening stage of the trial, and determines which side has won or lost the case at the end of the trial once all the arguments have been examined. The burden of persuasion works differently in a civil proceeding than

in a criminal one. In a civil proceeding, the plaintiff has the burden of persuasion for all the claims he has made as factual, while the defendant has the burden for any exceptions that he has pleaded. In criminal law the prosecution has the burden of persuasion for all facts of the case. These include not only the elements of the alleged crime, but also the burden of disproving defenses. For example, in a murder case in California, the prosecution has to prove that there was a killing, and that it was done with malice aforethought. But if the defendant pleads self-defense, the prosecution has to prove that there was no self-defense. This is an important point, for it shows that this fourth type of burden of proof varies with the context, that is, with the type of trial. The fifth type of burden of proof is called the tactical burden of proof. It applies during the sequence of argumentation during the trial, when a lawyer pleading a case has to make strategic decisions on whether it is better to present an argument or not. To make such a judgment, the advocate on each side needs to sum up and evaluate the whole network of previous arguments, both on its own side and the other side, and then use this assessment to determine whether the burden of persuasion is met at that point or not. This is a hypothetical assessment made only by the advocates on the two sides, and the judge and jury have no role in it. The tactical burden of proof is the one that is properly set to shift back and forth during a sequence of argumentation.

The question of when a burden of proof is met by a sequence of argumentation in a given case depends on the proof standard that is required for a successful argument in that case. Law has several proof standards of this kind of which we will briefly mention only four. The law defines the standards using cognitive terminology, for example proposing assessment of whether an attempt at proof is credible or convincing to the mind examining it. However, these cognitive descriptions, although they are useful in law for a judge to instruct the jury on what the burden of proof is in the case, are not precise enough to serve the purposes of argumentation theory generally, or for attempts to provide argumentation models in computing. According to the scintilla of evidence standard, an argument is taken to be a proof even if there is only a small amount of evidence in the case that supports the claim at issue. The preponderance of evidence proof standard is met by an argument that is stronger than its matching counterargument in the case, even if it is only slightly stronger. In other words, when the argumentation on both sides is in at the closing stage, if the argumentation on the one side to support its ultimate claim to be proved is

stronger than that of the other side, then the first side wins. The clear and convincing evidence standard is higher than that of the preponderance standard, but not as high as the highest standard, called proof beyond reasonable doubt. The beyond reasonable doubt standard is the strongest one, and it is applicable in criminal cases.

There seem to be two options with respect to defining the standards. One is to define them in the cognitive terms familiar in the kinds of definitions given in Black's Law Dictionary for example, in its various editions. The other is the attempt to make the definitions precise by proposing numerical values representing degrees of belief or probability, that attach to each claim to be proved. For example, preponderance of the evidence could be represented by a probability value of .51, while beyond reasonable doubt could be represented by a higher probability value of .81. Although attempts of this sort have been made from time to time, we do not think that this is a useful approach generally. We will propose a third way. This third way will respect the three principles of any formal account of argument accrual formulated by Prakken (2005). The first principal is that combining several arguments together can not only strengthen one's position but also weaken it. The second principle is that when several arguments have been accrued, the individual arguments, considered separately, should have no impact on the acceptability of the proposition at issue. The third principle is that any argument that is flawed may not take part in the aggregation process.

3. Argument and Dialogue Structures

In Gordon and Walton (2009, pp. 242-250) we presented a simple abstract formal model designed to capture the distinctions between the various types of burden of proof. Here we summarize the elements of the formal model that define the standards and burdens of proof. The formal model assumes that we have different types of dialogue that can be defined, sets of argumentation schemes with critical questions, as well as rules and commitment stores for each type of dialogue. In presenting these definitions we abstract from all these other components, to produce the simplest model that enables us to distinguish between different kinds of proof standards and burdens of proof that are important to know about. We begin with a definition of the notion of an argument suitable for our purposes representing the premises of an argument, the distinction between types of premises, and the conclusion of the argument. In this model, the proponent of an argument has the burden of production for the ordinary premises, while the

respondent has the burden of production for exceptions.

Let L be a propositional language. An *argument* is a tuple $\langle P, E, c \rangle$ where $P \subset L$ are its *premises*, $E \subset L$ are its *exceptions* and $c \in L$ is its *conclusion*. For simplicity, c and all members of P and E must be literals, i.e. either an atomic proposition or a negated atomic proposition. Let p be a literal. If p is c , then the argument is an argument *pro* p . If p is the complement of c , the argument is an argument *con* p .

Conclusions can be generated from premises using the inference rules of classical logic and argumentation schemes. This definition of the concept of argument does not represent a fully developed argumentation theory. It merely contains enough structure to enable us to model the distinction between the various kinds of burden of proof. But we need one other thing to accomplish this purpose. We also have to model argumentation as a process that goes through several stages. Hence we introduce the notion of a dialogue that has three stages, an opening stage, an argumentation stage and a closing stage. This notion of dialogue that is suitable for our purposes is defined as follows.

A *dialogue* is a tuple $\langle O, A, C \rangle$, where O , A and C , the *opening*, *argumentation*, and *closing* stages of the dialogue, respectively, are each sequences of *states*. A state is a tuple $\langle \text{arguments}, \text{status} \rangle$, where *arguments* is a set of arguments and *status* is a function mapping *literals* to their *dialectical status* in the state, where the status is a member of $\{\text{claimed}, \text{questioned}\}$. In every chain of arguments, a_1, \dots, a_n , constructable from *arguments* by linking the conclusion of an argument to a premise or exception of another argument, a conclusion of an argument a_i may not be a premise or an exception of an argument a_j , if $j < i$. A set of arguments which violates this condition is said to contain a *cycle* and a set of arguments which complies with this condition is called *cycle-free*.

For our purposes, the opening and confrontation stages of the dialogue as defined by van Eemeren and Grootendorst (2004) are both included as parts of the opening stage. We also draw a distinction between a stage of argumentation and a state of argumentation. Each dialogue is divided into its three stages, according to the definition above. The *status* function of a state maps literals to their dialectical status in that state, where the status can be either that of being claimed or being questioned. We disallow the construction of chains of arguments that contain a cycle. This definition has implications for the modeling of circular argumentation and the fallacy of begging the question, but there is no space to

discuss these implications here. Confining the arguments of a stage to those that are cycle free is meant to simplify the model at this point.

The next concept we need to define is that of an audience that is able to assess the acceptability of propositions. We draw upon the recent literature on value-based argumentation frameworks (Bench-Capon, 2003) where arguments are evaluated by an audience. In law the role of audience is taken by a trier of fact, which could be a judge or jury in a legal trial.

An *audience* is a structure $\langle \text{assumptions}, \text{weight} \rangle$, where $\text{assumptions} \subset L$ is a consistent set of literals assumed to be acceptable by the audience and weight is a partial function mapping arguments to real numbers in the range $0.0 \dots 1.0$, representing the relative weights assigned by the audience to the arguments.

There are different methods an audience can use to evaluate arguments. In value-based argumentation frameworks, the audience uses a partial order on a set of values (Bench-Capon et al., 2007). In our system a numerical assignment is used to order arguments by their relative strength for a particular audience.

The next concept we need to define is that of an argument evaluation structure. It brings together the three concepts of state, audience and standard, providing the general framework necessary to evaluate an argument.

An *argument evaluation structure* is a tuple $\langle \text{state}, \text{audience}, \text{standard} \rangle$, where state is a state in a dialogue, audience is an audience and standard is a total function mapping propositions in L to their applicable proof standards in the dialogue. A *proof standard* is a function mapping tuples of the form $\langle \text{issue}, \text{state}, \text{audience} \rangle$ to the Boolean values *true* and *false*, where issue is a proposition in L , state is a state and audience is an audience.

We can now define notion of the acceptability of a proposition.

A literal p is *acceptable* in an argument evaluation structure $\langle \text{state}, \text{audience}, \text{standard} \rangle$ if and only if $\text{standard}(p) (p, \text{state}, \text{audience})$ is *true*.

Basically what this definition stipulates is that a proposition in an argument evaluation structure is acceptable if and only if it meets its standard of proof when put forward at a particular state according to the evaluation placed on it by the audience.

Next we define the various proof standards that are used to evaluate arguments. All of these proof standards need to make use of the prior concept of argument applicability, as defined below. In this definition, P is the set of premises of an argument, E is the set of exceptions, and c is the conclusion of the argument.

Applicability of Arguments. Let $\langle state, audience, standard \rangle$ be an argument evaluation structure. An argument $\langle P, E, c \rangle$ is *applicable* in this argument evaluation structure if and only if:

1. the argument is a member of the arguments of the *state*,
2. every proposition $p \in P$, the premises, is an assumption of the *audience* or, if neither p nor the complement of p is an assumption, is acceptable in the argument evaluation structure and
3. no proposition $p \in E$, the exceptions, is an assumption of the *audience* or, if neither p nor the complement of p is an assumption, is acceptable in the argument evaluation structure.

This definition has three requirements. The first is that the argument is within the state being considered. The second is the every premise has to either be an assumption of the audience, or if neither it nor its complement is an assumption, it has to be acceptable in the argument evaluation structure. The third is that no exception is an assumption of the audience, or if neither it nor its complement is an assumption, is acceptable in the argument evaluation structure.

4. Proof Standards

Now we are ready to define the various standards of proof. The weakest of the proof standards, called the scintilla of evidence standard, is defined as follows.

Scintilla of Evidence Proof Standard. Let $\langle state, audience, standard \rangle$ be an argument evaluation structure and let p be a literal in L . $scintilla\{ (p, state, audience) = true \}$ if and only if there is at least one applicable argument pro p in *state*.

A proposition meets this standard if it is supported by at least one applicable pro argument. Both the proposition and its negation can be acceptable in an argument evaluation structure when this standard is being applied. However, this is the own only standard according to which both the proposition and its negation can be acceptable.

The next standard to be defined, one of the three most important proof standards

in law, is that of the preponderance of the evidence, the standard applied in civil cases.

Preponderance of Evidence Proof Standard. Let $\langle \text{state, audience, standard} \rangle$ be an argument evaluation structure and let p be a literal in L . $\text{preponderance}(p, \text{state, audience}) = \text{true}$ if and only if

1. there is at least one applicable argument pro p in stage and
2. the maximum weight assigned by the audience to the applicable arguments pro p is greater than the maximum weight of the applicable arguments con p .

The preponderance of evidence standard is satisfied if the maximum weight of the applicable pro argument outweighs the maximum weight of the applicable con arguments, by even a small amount of evidential weight.

According to the next standard, that of clear and convincing evidence, in addition to the conditions of the preponderance of evidence standard, the maximum weight of the pro arguments must exceed a threshold and the difference between the maximum weight of the pro arguments and the maximum weight of the con arguments must exceed another threshold.

Clear and Convincing Evidence Proof Standard. Let $\langle \text{state, audience, standard} \rangle$ be an argument evaluation structure and let p be a literal in L . $\text{clear-and-convincing}(p, \text{state, audience}) = \text{true}$ if and only if

1. the preponderance of the evidence standard is met,
2. the maximum weight of the applicable pro arguments exceeds some threshold α , and
3. the difference between the maximum weight of the applicable pro arguments and the maximum weight of the applicable con arguments exceeds some threshold β .

It is easy to see that the clear and convincing evidence is only satisfied by an argument that has greater weight than that required to meet the preponderance standard. It has to exceed the threshold as well as meeting the preponderance standard. In the model we do not set any specific threshold. The beyond a reasonable doubt standard is defined in a comparable way to the clear and convincing evidence standard, except that the maximum weight of the con arguments must be below the threshold of reasonable doubt.

Beyond reasonable doubt proof standard. Let $\langle \text{state, audience, standard} \rangle$ be an

argument evaluation structure $\langle \text{state}, \text{audience}, \text{standard} \rangle$ and let p be a literal in L . *beyond-reasonable-doubt* ($p, \text{state}, \text{audience}$) = *true* if and only if

1. the clear and convincing evidence standard is met and
2. the maximum weight of the applicable con arguments is less than some threshold γ .

We have not given precise numerical definitions of the thresholds, because these need to be set by the dialogue rules applicable to a particular case.

5. Accrual in Argument Evaluation

We do not use summing up the weights of the applicable pro and con arguments as part of our system of argument evaluation, because arguments cannot be assumed to be independent. Also, in our view proof standards cannot and should not be interpreted probabilistically. The first and most important reason is that probability theory is applicable only if statistical knowledge about prior and conditional probabilities is available. Presuming the existence of such statistical information would defeat the whole purpose of argumentation about factual issues, which is to provide methods for making justified decisions when knowledge of the domain is lacking. Another argument against interpreting proof standards probabilistically is more technical. Arguments for and against some proposition are rarely independent. What is needed is some way to accrue arguments which does not depend on the assumption that the arguments or evidence are independent. Thus the question is how to approach argument accrual.

We have to leave it to the audience to judge the effects of interdependencies among the premises on the weight of an argument. However, our model satisfies all three of Prakken's (2005) principles of accrual. As a reminder we repeat these here. The first one is that combining several arguments together can not only strengthen one's position but also weaken it. The second principle is that when several arguments have been accrued, the individual arguments, considered separately, should have no impact on the acceptability of the proposition at issue. The third principle is that any argument that is flawed may not take part in the aggregation process. Prakken explains the first principle as follows. The principle that accruals are sometimes weaker than their elements is illustrated by a jogging example (Prakken, 2005, p. 86). In this example, there are two reasons not to go jogging. One is that it is hot and the other is that it is raining. But suppose we accrue these two reasons, producing a combination of reasons for not going

jogging. Does the accrual make the argument even stronger? Not necessarily, because for a particular jogger, the heat and the rain may offset each other, so that the original argument becomes weaker. It may even be the case that for another jogger the combination of heat and rain may be very pleasant. In this instance, the accrued argument may even present a positive reason to go jogging.

Another example Prakken (2005, p. 86) gives is that of two witnesses who make the same statement. We can represent this situation as shown in Figure 1, with two separate arguments for the conclusion that the statement is true.

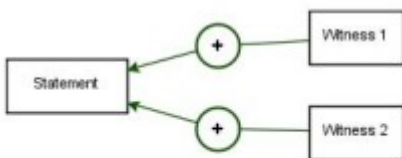


Figure 1: Independent Testimony of Two Witnesses

What Figure 1 shows is a convergent argument, each of which has one premise. Witness testimony is fallible as a form of argumentation, and therefore neither argument is conclusive by itself. Let's say that the standard is that of the preponderance of the evidence, and for the sake of the example we assign each argument a probative weight of .5. Let's say that the testimony of one witness agrees with the testimony of the other. In such a case, normally if we were to accrue the two arguments together and combine them into a single argument, because of the agreement testimony of the witnesses, the probative weight supplied by the combined arguments would be greater than .5.

However, Prakken (p. 86) asks us to make the following additional supposition: "if the witnesses are from a group of people who are more likely to confirm each other statements when these statements are false than when they are true, the accrual will be weaker than the accruing reasons". This situation is represented in Figure 2.

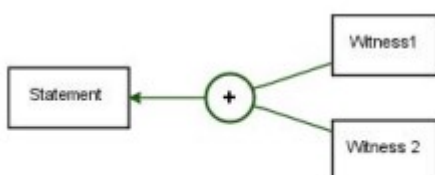


Figure 2: Accrued Testimony of Two Witnesses

In Figure 2 we now have a linked argument, a single argument with two premises. Accrual has now taken place, and the original pair of argument shown in Figure 1 has been combined into a single argument.

What happens now is that since we know that the two witnesses are from a group of people who are more likely to confirm each other statements when these statements are false than when they are true, the probative weight both premises supply when combined into a single argument is less than it was before. In Figure 2, we have assigned a probative weight of less than .5 to the argument representing the accrued testimony of the two witnesses.

6. Burdens of Proof Defined

The issue to be discussed in persuasion dialogue is set at the opening phase. When arguments are put forward on both sides during the argumentation stage, they are judged to be relevant or not in relation to the issue set in the opening phase. The burdens of claiming and questioning apply during the opening stage. The burden of production and the tactical burden of proof apply during the argumentation stage. The burden of persuasion is set at the opening stage, but is applied at the closing stage, where it determines which side has won the case and which side has lost. The burden of proof is also used hypothetically by each party during the argumentation stage to estimate its tactical burden of proof.

During the opening stage, where the burdens of claiming and questioning apply, a proposition claimed is taken to be conceded unless it is questioned by the other party. Because it is taken to be conceded, it requires the audience to assume that it is true. The burdens of claiming and questioning are defined as follows.

Burdens of Claiming and Questioning. Let s_1, \dots, s_n be the states of the opening stage of a dialogue. Let $\square \text{arguments}_n, \text{status} \square$ be the last state, s_n , of the opening stage. A party has met the *burden of claiming* a proposition p if and only if $\text{status}_n(p) \in \{\text{claimed}, \text{questioned}\}$, that is, if and only if $\text{status}_n(p)$ is defined. The *burden of questioning* a proposition p has been met if and only if $\text{status}_n(p) = \text{questioned}$.

Only propositions that have been claimed at an earlier state of the argumentation sequence can be questioned. Therefore a questioned proposition satisfies the burden of claiming. This way of formulating the model gives only minimal requirements for raising issues in the opening stage. Rules for a specific type of

dialogue can state additional requirements. For example in law, in order to make a claim the plaintiff must accompany it with facts that are sufficient to give the plaintiff a right to judicial relief.

The burden of production comes into play only during the argumentation stage of a dialogue. The proponent who puts forward an argument has the burden of production for its premises, and this burden can be satisfied according to the proof standard of scintilla of evidence. The respondent has the burden of production for an exception. The burden of production is defined as follows.

Burden of Production. Let s_1, \dots, s_n be the states of the argumentation stage of a dialogue. Let $\langle \text{arguments}_n, \text{status}_n \rangle$ be the last state, s_n , of the argumentation phase. Let *audience* be the relevant audience for assessing the burden of production, depending on the protocol of the dialogue. Let *AES* be the argument evaluation structure $\langle s_n, \text{audience}, \text{standard} \rangle$, where *standard* is a function mapping every proposition to the scintilla of evidence proof standard. The *burden of production* for a proposition p has been met if and only if p is acceptable in *AES*.

An objection to this way of defining the burden of production would be that since scintilla of evidence is the weakest proof standard, using it to test whether the burden of production has been met is too weak. It might seem that any arbitrary argument, even one that is worthless would be sufficient to fulfill the burden of production. However, there are resources in place to ensure that this does not happen. For one thing, such a worthless argument can be defeated by critical questioning, or by attacking its premises. During the argumentation stage, implicit premises underlying the argument can be brought out by critical questioning and attacked. We can see then that the burden of production for an argument might be met at some state during the argumentation stage, but then fail to be met at some later state where the argument has been attacked or questioned.

The burden of persuasion has been met by one side at the closing stage if the proposition at issue that is supposed to be proved by that side is acceptable to the audience. The burden of persuasion for a trial is set by law, and therefore it is assigned by the judge who has to instruct the jury about it, if there is a jury. The standard of proof for a criminal trial is that of beyond reasonable doubt, whereas the standard of proof for a civil trial is that of preponderance of the evidence. The

burden of persuasion is defined as follows.

Burden of Persuasion. Let s_1, \dots, s_n be the states of the closing stages of a dialogue. Let $\langle \text{arguments}_n, \text{status}_n \rangle$ be the last state, s_n , of the closing stage. Let *audience* be the relevant audience for assessing the burden of persuasion, depending on the dialogue type and its protocol. Let *AES* be the argument evaluation structure $\langle s_n, \text{audience}, \text{standard} \rangle$, where *standard* is a function mapping every proposition to its applicable proof standard for this type of dialogue. The *burden of persuasion* for a proposition p has been met if and only if p is acceptable in *AES*.

How the burdens of persuasion and production work in a criminal trial is worth noting briefly here. The prosecution has the burden of persuasion to prove its claim set at the opening stage. The defendant has the burden of production for exceptions. For example, in a murder trial the defendant has the burden of production for self-defense. However, in a criminal trial, once this burden has been met by the defendant, the prosecution has the burden of persuading the trier of fact, beyond a reasonable doubt, that the defendant did not act in self-defense. Our model represents this situation is by making the exception and ordinary premise after the burden of production has been met.

The tactical burden of proof, which applies only during the argumentation stage, is the only burden that can shift back and forth between the two parties. To meet the requirements for tactical burden of proof, an arguer needs to consider whether stronger arguments might be needed to persuade the audience. This assessment depends on whether the audience reveals its evaluations to the parties on each side as the argumentation stage proceeds. In a trial, however, this does not happen.

Tactical Burden of Proof. Let s_1, \dots, s_n be the states of the argumentation phase of a dialogue. Assume *audience* is the audience which will assess the burden of persuasion in the closing phase. Assume *standard* is the function which will be used in the closing stage to assign a proof standard to each proposition. For each state s_i in s_1, \dots, s_n , let *AES* _{i} be the argument evaluation structure $\langle s_i, \text{audience}, \text{standard} \rangle$. The *tactical burden of proof* for a proposition p is met at state s_i if and only if p is acceptable in *AES* _{i} .

The tactical burden of proof comes into play when a proponent has an interest in

proving some proposition that is not acceptable to the respondent at that state, given the argumentation that has gone forward so far. In a real example, evaluation of the tactical burden of proof would depend on how relevance is modeled in the type of dialogue.

7. Conclusions

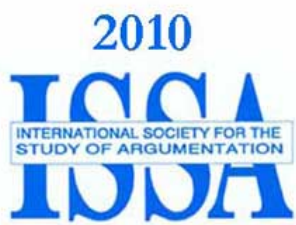
In this paper we presented formal structures to represent argumentation in dialogues, and incorporated the notion of audience into the formal structure. We argued that whether a burden of proof is met by a sequence of argumentation in a given case depends on the proof standard that is required for a successful argument in that case. We defined four such proof standards, scintilla of evidence, preponderance of evidence, clear and convincing evidence, and finally, beyond reasonable doubt. We used the model and standards to distinguish five types of burden of proof: burden of claiming, burden of questioning, burden of production, burden of persuasion and tactical burden of proof.

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ISSA Proceedings 2010 - Binary Oppositions In Media Argumentation



1. Introduction

This paper addresses the study of relations between descriptive and normative argumentation models. It examines persuasive tools in a modern media text by introducing cognitive binary oppositions into the analysis.

These oppositions make a certain “reasoning scheme” that is lavishly used in the modern press. The approach taken in this paper might be called political linguistics; it aggregates diverse research programs mainly connected with the critical analysis of the language of politicians (speechwriters), journalists, TV presenters as well as the study of language in the decision making process, and types of persuasion and manipulation of the public. We argue that introducing binary oppositions into the analysis follows modern trends of complex approaches to linguistic data encompassing cognitive analysis, argumentation analysis and semantics.

In our introduction we deal with more basic foundations of the case study which is to follow in our main part. These bases deal with cognitive linguistics and structural semantics. At present, cognitive linguistics has achieved certain progress in defining mental spaces as small conceptual packets showing frames and scenarios as we think and engage in discourse; these conceptual packets map onto each other in intricate ways, and provide abstract mental structures for shifting viewpoints and directing our attention to very partial and simple structures. It has become possible to disclose an elaborate web of connections

helping the memory for purposes of understanding and persuasion. These mental spaces are presented as very partial assemblies containing elements structured by frames and cognitive models that are interconnected and can be modified as thought and discourse unfold. From the cognitive point of view language is the process of real time perception and production of temporal signs and sequences that present discrete units but act in functional semantics as dynamic open systems. (Tretyakova 2006, pp.275-277). This type of analysis allows identifying language units in terms of dynamic procedures.

In structural semantics binary oppositions were looked upon as opposites which were studied in the field as semantic antonymy. Linguists identify three types of antonymy: (1) *Gradable antonyms*, which operate on a continuum: (*very*) *big*, (*very*) *small*. Such pairs often occur in binomial phrases with *and*: (*blow*) *hot and cold*, (*search*) *high and low*. (2) *Complementary antonyms*, which express an either/or relationship: *dead or alive*, *male or female*. (3) *Converse or relational antonyms*, expressing reciprocity: *borrow or lend*, *buy or sell*, *wife or husband*." (McArthur 1992). The modern cognitive paradigm allows us to broaden the concept of antonyms in linguistics by introducing inferences that could be drawn from the concepts of antonymy implying the procedure of choice on the one hand and the concept of binary opposition relying on the functional semantics of an evaluation process. Apart from words that disclose an inherently incompatible binary relationship, when making oppositions, it is the cognitive aspect of antonymy that makes these words function as effective persuasive tools. These oppositions allow the analyst to identify opposite points of view. In this paper we are more closely dealing with gradable antonyms which allow us to show the axiological aspect of binary oppositions used in argumentation schemes.

The argumentation scheme of a media text is best described through the pragma-dialectical approach as it allows us to identify stages of appearance of binary oppositions and their persuasive effect. In the pragma-dialectical approach of van Eemeren, Grootendorst, Jackson and Jacobs (1993) natural argumentative discourse models were described through normative models which gave us tools for a more theoretically grounded identification of the argumentative force of utterances. We argue that the binary oppositions start argumentation situation in press forming public opinion. Daniel O' Keefe (2003) wrote on persuasive effects in presentation of normative vs. realistic argumentation. Although evasion, concealment and artful dodging are and should be excluded from an ideal model

of critical discussion (van Eemeren et al., 1993, p.173) and clarity is crucial for argumentation, still in reality the ideal happens very seldom. The arguers might think that explicit articulation can undercut their persuasive success but we show that this is not the case especially from the vantage point of binary oppositions. In fact binary oppositions define the framework within which argumentation is built. They direct the argumentative vector of the arguer's reasoning. This is especially true in the case of arguments based on the notion of conflicting systems of belief. Beliefs are not independent of each other but make sense only within a system. Within these systems there are fundamental beliefs and there are peripheral beliefs that are tempered by both empirical experience and the conceptual core content of the system of beliefs. Both kinds of beliefs may change over time or their location can change from periphery to core or core to periphery (Gough 2009). Argumentation can be represented in terms of the dynamics of binary oppositions: a thesis opposes an antithesis, an argument opposes a counterargument, a proponent opposes an opponent. An examination of these can easily unveil the conflicting system of beliefs depending on discourse type as every discourse is characterized by its own set of values that can be fundamentally at odds with the system of values of other types of discourse.

A binary opposition also deals with the aspect of categorization. The modern global world is full of opposites that could be defined through diverse categories - good opposes bad, big opposes small, right opposes left, night opposes day, old opposes young, and globalists oppose anti-globalists. These oppositions create society's beliefs and misconceptions of what is good and what is bad, or what is ethical and non-ethical, and from a young age we subconsciously conform to these without even knowing it, and even as adults we continue creating these oppositions in our minds when processing facts and evaluating facts. A binary opposition as a pair of opposites powerfully form and organize human thought and culture.

Linguistic, cognitive and argumentative aspects of "binaries" are interconnected interactive tools providing basic analytic categories for unveiling the manipulation technique in modern media. We would also like to add that the category of binary opposition is so deeply rooted in cognitive patterns that we cannot evade them as this concept is entailed into our cognition. We believe that an effective way of reasoning is through the appeal to the members of binary oppositions and analysts would do well to recognize this if they are to define the vector of an

author's reasoning.

The focus of the present research is to analyze the linguistic representations of binary oppositions in argumentation structures in a debate in which each party has a different set of presumptions, equally basic and in conflict with each other. The case study chosen for analysis deals with an urgent debate going on in Russian/St. Petersburg media over the project proclaimed as a "Gazprom Tower" or later as an "Okhta Centre".

2. Project history

The Okhta Centre, the HQ building for Russia's state-controlled gas company Gazprom will be built in the Krasnogvardeysky district of St. Petersburg, on the bank of the Okhta River. Part of urban regeneration project aiming to reclaim the city's stature as a major European centre for culture and commerce, this community and business area is said to be the tallest building in St. Petersburg.

The 396 meter high Centre will be comprised of contemporary office buildings, apartment blocks, shops, cafes, restaurants, a library, a sports complex with a swimming pool, a recreational park, an embankment and boulevards. The development will also include a theatre and sculpture park, as well as a Modern Art Centre, plus the Museum of the History of the First Settlements in St. Petersburg.

The project initiators turned to foreign, not Russian, architects, inviting seven to submit designs. Six agreed: Jean Nouvel of Paris; Massimiliano Fuksas of Rome; the Swiss team of Jacques Herzog and Pierre de Meuron; Rem Koolhaas of Rotterdam; RMJM London; and Daniel Libeskind, who of course designed the master plan for the World Trade Center site. Among the six renowned architectural companies, the tender was won by the international architectural practice RMJM London Limited. RMJM renamed the Gazprom City as the Okhta Centre in March 2007. The first stage of the project was completed in November 2006. The skyscraper is expected to be built by 2010, and the entire project is scheduled to finish by 2016.

According to the competition-winning design, the Okhta Centre will be divided into three zones. The first zone, occupied by the skyscraper of the Gazprom administrative complex, is located in the triangle where the Okhta river meets the Neva river, will house offices, a parking area for 3000 cars and an IT center. The

second zone situated north of the first, will incorporate additional social facilities such as a modern art museum, a multifunctional theatre and a concert hall. Situated to the south of the first, is the third zone proposed as potential development territory. The anchor facilities to be built by RMJM include a sports and leisure complex along with a swimming pool, an indoor ice rink, a fitness center and spa, a shopping center and an apartment hotel. The rest of the last zone will be kept for future investors and architects.

It is the height of the skyscraper that has caused controversy, for the proposed 400 meter high tower of the Gazprom Okhta Center will completely dominate St. Petersburg's skyline. Its height of 396 meters exceeds the dimensions of the city's television tower (310 meters) and completely overshadows the tallest historical landmark - the spire of Peter and Paul Fortress (122.5 meters).

3. Okhta center debate

The Okhta centre project has gotten big publicity and has been widely discussed in the Russian media with arguments put forward from both sides. For the linguistic analysis in this paper we shall consider the main arguments of both parties.

3.1. Arguments for the Okhta centre project

The argumentation of the proponents may be represented in the following way.

The standpoint of the proponents is an evaluative thesis:

The construction of the ultramodern skyscraper in Saint-Petersburg will improve the image of the city.

The understanding of this thesis is a necessary condition for its adoption. But it is not a sufficient condition. The reader must be ready to accept that the structure of his cognitive space may change for a new knowledge that will take the place of an accepted thesis. There is a possibility of rejecting theses or arguments subconsciously. This happens if the proposition of the thesis contradicts the system of thoughts, ideas and beliefs of the reader. In this case the thesis will be rejected however correct and persuasive the reasoning is. The reader's cognitive space rejects it before the argumentation starts. That means that the arguer should take precautions so that the thesis won't be rejected subconsciously at the stage of understanding. The thesis won't be rejected if it isn't at odds with the system of values, thoughts and beliefs of the reader. Since the arguer is not

familiar with the mentioned above system (he can reconstruct the system hypothetically) he builds his reasoning appealing to the cognitive space that is shared by all members of the community (Goudkova 2009).

The reasoning employed mostly deals with binary opposition 'good - bad'. Language indicators in the thesis are "ultramodern" and "improvement". To support their standpoint the proponents put forward the following arguments:

(1) *The skyscraper is needed for the city 'development'. It will provide 'new jobs'. The construction will 'encourage the development' of Okhta - depressive industrial outskirts.*

(2) *Like the Eiffel Tower Okhta-centre will become a 'new symbol' of the city and Saint-Petersburgers will 'love' it as Parisians like the Eiffel Tower.*

(3) *The city lacks "fresh" architectural ideas. Peter the Great, the founder of Saint-Petersburg, was for 'innovation' and Gasprom follows his suit.*

(4) *The construction is necessary for the 'rich taxpayer' to 'remain' in the city.*

(5) *The site of the would-be skyscraper has no archeological significance but all artifacts, if any, will be saved.*

From pragma-dialectical perspective we consider the argumentation as a convergent one, for all premises appear to constitute separate reasons which independently converge on the conclusion (Eemeren & Grootendorst 1984, 1992). We base our consideration on the simple fact that all arguments don't belong to one party but each argument represents a separate group. The analysis of the arguments shows that the arguer directs the argumentation vector to the positive member of the binary opposition "good - bad.

In the first argument the main binary opposition in the frame of which the reasoning is built is "development-regress". The arguer shows that the construction of the skyscraper will affect positively the development of the city. And he constructs the argumentation in such a way in order to activate the concept "development". Lexical indicators of the concept in question are "development", "new jobs", "encourage the development". The implications inferred from the argument are the following. Being an opponent of the construction means being an opponent of the city development which is needed especially in this depressive industrial region.

The second argument represents comparison argumentation. The skyscraper is compared to the world known Eiffel Tower in Paris. The Eiffel Tower used to

cause a lot of dispute. Many citizens were opposed to the Tower as they considered it incompatible with the architecture of Paris. The proponents of the Okhta centre believe that the situation is the same. And the skyscraper is to become an Eiffel Tower of Saint-Petersburg. It will be appreciated by future generations. Concept-semantic analysis let us identify the structural binary oppositions. Similar to the first argument this is the opposition “development-regress”. The lexical indicators for the positive member of the opposition are “new symbol” and “love”. The adjective “new” has a clear positive connotation.

The third argument as well as the second is structured by the binary opposition “development-regress,” the lexical indicators for which are “fresh ideas” “innovation”. The argument is supplemented by the argument from expert opinion. The expert is Peter the Great who designed Saint-Petersburg as the first European city in Russia and modernized and westernized Russia greatly. The Gasprom actions are compared to Peter the Great’s deeds. Like Peter the Great the company invited foreign architects to propose their designs to take part in the competition. The binary opposition “development-regress” is a universal opposition as it belongs to the cognitive system of all people. Development is always viewed as a positive concept and regress as a negative one.

The binary opposition that structures the fourth argument doesn’t belong to universal oppositions. The form of the opposition is “profitable -unprofitable” and it is a basic opposition for economic discourse, for in the field of economics the concept “economic profit” is at the same level as the concept “good”. Lexical indicators of the concept “profit” are “rich taxpayer” and the predicate “remain”.

The fifth argument is a factual argument, the proposition of which is that the site of the construction has no archeological significance. This argument can be considered as a counterargument and will be dealt with further. Normally factual arguments don’t represent any appellations to value system.

Thus the main concept to which the proponents appeal is the concept “economic development”. Saint-Petersburg is a big modern metropolis and should develop accordingly. Since it is an important industrial centre it can’t remain a city-museum. The proponents of the construction claim that the skyscraper is “good” for the city. The whole argumentation is build with that in mind.

3.2. Arguments against the Okhta centre project

Similarly the argumentation of the opponents can be analyzed. The standpoint of the opponents is:

The skyscraper will spoil the panoramic views of the city and ruin this city-museum

The opponents hold opposite views and appeal to the negative member of the binary opposition “good – bad”. Language indicators of the appellations are the predicates “spoil” and “destroy”. These predicates have clear negative connotation thus directing the argumentative vector to the negative member of the opposition: “bad”.

The opponents support the claim with the following arguments:

(1) *The skyscraper will ‘spoil’ the historic view of the city. The ultramodern silhouette of the skyscraper will ‘ruin’ the familiar city skyline.*

(2) *The huge office centre will create ‘traffic congestion’ in the Krasnogvardeysky district and neighboring territories.*

(3) *The skyscraper ‘ruins’ the concepts of the founders of the city.*

(4) *The construction of the Okhta -centre will result in ‘excluding’ Saint-Petersburg from UNESCO World Heritage List.*

(5) *The construction site has archeological significance for there was a Swedish Fort of the 17th century there.*

We consider all the arguments as convergent ones by the same reasons we used to identify the proponents arguments as convergent. Conceptual-semantic analysis let us identify binary oppositions that structure the argumentation and single out lexical indicators of the main concepts. The opponents put forward their arguments directing the argumentative vector to the negative member of the opposition. The skyscraper is bad for Saint-Petersburg.

It can also be seen that the opposition binary “preserving traditions – destroying traditions” structures the argumentation of the opponents.

Lexical indicators in the first argument are the verbs “spoil” and “ruin”. These are verbs with clear negative connotation that serve the arguer’s intention to appeal to the negative member of the opposition bringing about negative images.

The second argument is a counterargument for the argument that the skyscraper will provide new jobs. The concept that is activated is the concept “economic

development". But the opponents appeal to the negative aspects of the concept. Any concept is a complicated comprehensive structure with positive and negative aspects. That's why there is a possibility to appeal to different parts within the same concept. We deal with such reasoning in this argument. The opponents appeal to negative sides of development: "traffic congestion". Traffic problems are dire for Saint-Petersburg for it is situated on islands and with the increasing number of vehicles and the shortage of bridges across the Neva the situation is becoming worse and worse. That is why the argumentative force of the argument is very strong.

The lexical indicator in the third argument is the verb with negative semantics "ruins". It is the argument from tradition, for the proposed 396 meter high tower of the Gazprom Okhta Center would completely dominate St. Petersburg's skyline - the building would be three times taller than anything currently standing nearby.

The fourth and the fifth arguments are factual. The lexical indicator in the fourth argument is "excluding" and it represents the appeal to the negative member of the opposition "preserving traditions - destroying traditions". If Saint-Petersburg is excluded from UNESCO World Heritage List it will lose its uniqueness and become an ordinary metropolis. The fifth argument should be analyzed with the fifth argument of the proponents as these arguments represent two conflicting propositions. The opponents claim that the site has archeological significance while the proponents say that there is nothing there at all.

4. Conclusion

The case study of a "tower" concept in Russian argumentative media discourse with the help of binary oppositions allowed us to unveil major trends in organizing the discussion of the same topic in which the journalists hold opposing views on the problem. Both parties pursue a goal of winning the argument and persuading the audience that their position is the right one by building up their argumentation in the frame of a universal binary opposition "good-bad". The proponents direct their argumentation to the positive member of the opposition, while the opponents to the negative member accordingly. To achieve that they appeal to different concepts which are inherent in the background cognitive knowledge of the audience. The argumentation of both parties is structured by the main binary opposition "good - bad" that takes the form of sub oppositions: "development-regress" and "preserving traditions - destroying traditions".

Linguistically these oppositions are represented with lexical markers with positive and negative connotations. The identification of basic oppositions and sub oppositions in the argumentative debate with the help of a cognitive paradigm broadens the concept of antonyms in linguistics through introducing inferences that could be drawn from the concepts of antinomy implying the procedure of choice on the one hand and the concept of binary opposition relying on the functional semantics of an evaluation process on the other.

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