

Inquisitive Semantics and Legal Discourse

Martin Aher

University of Osnabrück

Introduction

Many authors in argumentation theory and linguistics have recognized the importance of studying the language of law, albeit few researchers have investigated the semantics and pragmatics of law within precise logical frameworks. One might mention deontic logics as a notable exception and an example of how the use of language in law is both an interesting area for reflection on language itself and the manner in which legal discourse is inextricably connected with ordinary language use.

Previous formal accounts of legal discourse have often been reductive, re-interpreting utterances as the force of their speech act. For example, Arno Lodder, in his PhD thesis[Lodder, 1998], attempts to model legal discourse with the use of only four conversational “moves.” These are claims (assertions such as “He is guilty.”), questions (understood as rejections of claims, such as “Is that true?”), withdrawals (changing one’s mind) and acceptances of the claims of others. It is true that participants do make assertions and utter other speech acts, yet it might be interesting to attempt to model legal discourse closer to the textual account. For example, one could attempt to model all uses of questions uttered in legal discourse, not merely the ones that cast doubt on assertions. Furthermore, assertions and their acceptances can be captured in semantics and pragmatics using the stalnakerian notion of common ground. One such framework is Inquisitive Semantics[Groenendijk and Roelofsen, 2009] and this paper explores the feasibility of utilizing it for modeling legal discourse.

A yet untapped corpus of natural language examples for the analysis of legal discourse can be found in the public and accessible World Trade Organisation (hereafter referred to as the WTO) panel reports, an international trade law equivalent of legal opinion papers or court rulings. These panel reports are summaries of legal discourse conducted mainly via letters between the country that brought the complaint to the WTO (hereafter the complainant), the respondent and the panel itself, a group of judges called the appellate body panellists. For our purposes, we can consider the complainant, the respondent and the panel as three interlocutors in a dialogue, and this is also the format that the panel report mimics. Yet, a reported interpretation of written communication differs from spoken dialogue in many ways and this should be kept in mind during the analysis. The crucial added value of using panel reports to study the interpretation of disjunction is that each utterance is followed by a reaction by the intended addressee which provides the analyst with valuable subjective data about how to interpret utterances in context.

The Example

Disjunction is a core notion for inquisitive semantics which makes it appropriate to investigate an example that gravitates around disjunction for possible discrepancies.¹ A legal dispute is complex and shrouded in legal terminology but perhaps the following elucidation will provide the background information necessary for the interpretation of the examples.² The banana dispute discussed here stems from the fact that the complainant can produce bananas cheaper than the respondent and so the respondent's bananas are no longer being sold. The respondent reacted by placing a tax on all bananas but exempted his own. Yet, the respondent also provided a way to avoid the tax. If one buys the respondent's bananas and then sells them within the respondent's country for profit, one will be allocated licences that exempt them from the tax because they will be considered to be inside the "tariff quota." The complainant finds this unfair as selling under the "tariff quota" still reduces his profits because he needs to first buy more expensive bananas instead of directly selling his own cheaper ones. This *status quo* led to the following exchange between the complainant, respondent and the panel of judges.

Example 1. Complainant: "[the respondent is] inconsistent with Article III:4 of GATT because this licence allocation amounts to a requirement or incentive to purchase [the respondent's] bananas"

Example 2. Respondent: "[the respondent] does not force any trader to purchase any quantity of [the respondent's] bananas"

Before providing the reaction of the panel, one should note that the panel is here understood as a single interlocutor over several disputes and panels. The principle of jurisprudence establishes that panels must be aware of prior panel reports and would need to explicitly mark uttering a statement that is inconsistent with what has been decided in a prior panel report. This is very similar to how a person would need to mark changing their opinion. Yet, if a prior panel has uttered something relevant, it needs to be explicitly brought to the attention of the interlocutors of the current dispute. This is what they do when they remind the complainant and respondent of the following. (All subsequent quotes came with the voice of the panel but they merely restated a prior panel report.)

Example 3. Panel: "operators wishing to increase their future share of bananas benefiting from the tariff quota would be required to increase their current purchases" [of the respondent's bananas.]

¹ Merely the relevant sections are more than four pages long, so I shall constrain the examples to the bare minimum.

² This summary attempts to avoid taking the side of either interlocutor and will thus probably annoy both. Apologies.

Example 4. Panel: [quoting the relevant GATT article III.4] "The products of the territory of any Member imported into the territory of any other Member shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use."

Example 5. Panel: "this obligation [described in 4] applies to any requirement imposed by a contracting party, including requirements 'which an enterprise voluntarily accepts to obtain an advantage from the government'"

Example 6. Panel: "The Panel then proceeded to examine the [respondent's] licensing scheme in the light of the incentive provided"

Example 7. Panel: "In the view of the Panel, a requirement to purchase a domestic product in order to obtain the right to import a product at a lower rate of duty under a tariff quota is therefore a requirement affecting the purchase of a product within the meaning of Article III:4"

The panel took note of the utterances of the complainant and respondent and found that the complainant's case was justified. The manner in which they reasoned was not by utilizing the language of acceptances and rejections that one would expect if the utterances were to be reduced to their speech acts. In fact, they provide an account which accommodates the positions of both the complainant and respondent and builds on these. It has thus become expedient to now introduce the relevant elements of the framework of inquisitive semantics to determine the feasibility of modeling the preceding exchange.

Inquisitive Semantics and Pragmatics

The following is merely a brief overview of the notions from inquisitive semantics and pragmatics that are needed for the following analysis. At the core of inquisitive semantics lies an innovative account of disjunction in which uttering the following does not merely assert the fact, but also raises an issue.[Groenendijk and Roelofsen, 2009]

Example 8. It is raining or snowing.

Inquisitive semantics couples the notion of informativeness with that of inquisitiveness so that the effect of uttering (8) becomes twofold. Firstly, it eliminates possible worlds that are incompatible with the utterance, in this case the world where "it is not raining and it is not snowing." This can be called the informative content of disjunction. Yet, disjunction also provides two possibilities, modeled as sets of possible worlds, to account for the fact that the interlocutor

is requested to choose between the alternative disjuncts. This choice provides the inquisitive content of the utterance. As disjunction in inquisitive semantics also raises an issue, questions can be modeled via disjunction in the semantics, rather than in a separate syntax. For this, Radical Inquisitive Semantics [Groenendijk and Roelofsen., 2010] defines the notion of counter-possibilities which captures the negative responses for a proposition. For example, "Is it raining?" could be modeled as $p \vee \div p$ to represent the possibility that it is raining and the counter-possibility that it is not. Inquisitive Semantics also provides for non-inquisitive uses of disjunction, for more on this see [Mascarenhas, 2009; van Gool and Roelofsen, 2009].

Inquisitive semantics also provides a stalnakerian pragmatic account. (8) provides us with an example that is generally uttered in the context of information exchange which is widely considered the standard context of language use. Within inquisitive semantics, the aim of interlocutors is to enhance the common ground which might enhance the information that an individual interlocutor possesses or bring awareness of the common ground to all interlocutors so as to facilitate coordinated action.

Each conversational participant has an information state that embodies what the participant takes to be the case. An information state is represented in the traditional way by a set of possible worlds or, in other words, ways in which the participant can imagine the world to be. If the set is empty, the information state is inconsistent. Once the participants exchange inquisitive and informative statements, they shall establish common ground. [Stalnaker, 2002, 1978]

When an interlocutor utters a statement, he or she proposes to update the common ground with the information or alternatives in the statement. An informative update provides information about how the world is and thus eliminates possible worlds from among the possibilities in the common ground. An inquisitive update would provide possibilities between which an interlocutor may choose. Groenendijk and Roelofsen propose that in pragmatic dialogue management, an utterance does not immediately update the common ground; instead, the hearer must either directly or indirectly accept or support the statement. [Groenendijk and Roelofsen, 2009] If an update with an utterance would be contradictory with what the interlocutor is aware of knowing, an explicit cancellation is required to maintain the common ground. [Groenendijk and Roelofsen, 2009, p. 12] Through accepted updates, the common ground ultimately grows in information and shrinks in terms of the number of possible worlds it embodies.

The coherence of discourse is governed by the principle of compliance, which judges the relatedness of utterances to one another. There are two ways in which a subsequent utterance can be compliant with an initiative. It either partially resolves an issue, which happens when it provides information, or the following utterance provides a sub-question that would be easier to answer.³ For example,

³ Easier to answer is taken to mean that the sub-question would provide a partial answer and that all information states that support the original question also support the sub-question.

the way in which to be compliant with a question, or a hybrid such as disjunction, is either to assert an answer or to pose a sub-question.

The purpose of (8) is to provide the interlocutor with a choice between disjuncts. Yet, the interlocutor may disagree with the proposed update, negating the disjunction as a whole. To do so, one is required to negate both disjuncts. In fact, uttering merely the negation of one of the disjuncts has quite the contrary meaning. It would allow one to establish, via inference, that the other disjunct is true. The rationale behind this is that (8) was uttered by someone who had good reason to establish that either or both of the disjuncts is the case. The negation of one disjunct does not negate the disjunction and thus provides, by default, an acceptance of the proposal to update the common ground. This establishes the grounds to use the original disjunction and the negation of one disjunct as two premises for establishing the remaining disjunct via elimination.

Discussion

This section sketches a possible way of modeling the way in which the panel resolved the dispute. As inquisitive semantics is still in a developmental phase with new additions published quarterly so this paper needs to be constrained to merely highlighting the promising aspects and likely points of contention of using inquisitive semantics to model legal discourse.

Please recall the example in which the complainant used the disjunctive (1) to accuse the respondent of maintaining a discriminatory requirement or an unfair incentive. For simplicity, let p stand for the proposition that “this licence allocation amounts to a requirement to purchase bananas” (hereafter referred to simply as “requirement”) and q for “this licence allocation amounts to an incentive to purchase bananas” (hereafter referred to as “incentive”). In this case, the relevant utterance has the form $p \vee q$.⁴ The entire utterance was intended to establish an implication relation from the disjunction to the proposition of “being inconsistent with Article III.4”. This could be captured in the following manner: $p \vee q \rightarrow r$.

If the complainant is successful and the complaint is accepted into the common ground the respondent will incur some disadvantages. Assuming that the respondent will try to avoid these, we could predict that they shall negate the disjunction as a whole. But this is not what they do, probably because they are limited by the maxim of sincerity[Groenendijk and Roelofsen, 2009, p. 18] or, in Gricean terms, the maxim of Quality[Grice, 1989, p. 27-28], to only uttering statements supported by their own belief state.

The most salient interpretation for the response in (2) is that it negates the disjunct “requirement” or, in other words, it has the effect of uttering $\neg p$.⁵ One would expect that the judges of the panel have their task made easy by the

⁴ Due to the length of the paper, metalinguistic and other possible uses of disjunction are not taken under consideration in this paper.

⁵ A less plausible interpretation would be that the respondent utters no response to the disjunction, marked by the use of the lexically different “force.”

respondent. If one utters $p \vee q$ and another utters $\neg p$ one could immediately utter something of the kind: “then q is the case” and claim that there is no real dispute as the respondent seems to have accepted the disjunction and negated only one disjunct. As we discussed earlier, when a disjunction is accepted and one disjunct is eliminated, the other disjunct can be established in the common ground. Yet, inquisitive semantics provides an analysis that takes into account that the disjunctive was part of the antecedent of an implication which provides a different interpretation.

The following analysis rests on the assumption that the entire process is directed at resolving the issue $?r$ or whether the respondent’s licence allocation system is inconsistent with the relevant article of legal text. Thus, and this is a possible point of contention, any complaint is going to be interpreted by the panel as an issue formed of the proposition and its counter-possibility. This can be modeled using inquisitive semantics as $(p \vee q) \rightarrow ?r$ or, equivalently, as $(p \rightarrow ?r) \wedge (q \rightarrow ?r)$. Assuming that the respondent understands this, the utterance of $\neg p$ can be seen as rejecting the question behind the $p \rightarrow ?r$ as the supposed antecedent could not be the case. This reduces the complex issue to $q \rightarrow ?r$. The text of article III.4 does not lexically specify “incentives” which provides for hope that no implication from incentives to inconsistency will be found.

It is notable that the the complainant and respondent play no further part in the exchange but the panel makes several utterances. If the issue were, for example, “Is it raining?” then one would expect a straightforward answer that picked whichever alternative is supported by the belief state of the utterer. Yet, a panel seems to be unable to provide a verdict based on merely a belief, it must be derived from accepted facts. Thus, the panel does not utter r or $\neg r$ but instead attempts to reach either alternative via a process of eliminating possible worlds through a sequence of utterances. The entire process is not straightforwardly predicted by the notion of compliance as providing the process of reasoning is overinformative, yet the reasoning itself utilizes the familiar *modus ponens*.

The panel’s first utterance (3) establishes that an “incentive” is the case⁶ because one must increase the amount of bananas purchased from the respondent or face a tax. At this point, the panel does not conclude the case solved even though they have established q which is in itself sufficient to find the complainant’s $p \vee q$ to be the case.⁷ Instead, one should recall that the disjunction was uttered with the intent of resolving $?r$ and for this it becomes relevant to investigate $q \rightarrow ?r$.

The panel then utters (4) to note that article III.4 makes no explicit mention of “incentives,” but it does explicitly list “requirements.” This has the effect of uttering $p \rightarrow r$ but it also suggests that there is no textual reason to provide

⁶ The wording is complex but the panel reinforces the reading of 3 by soon afterwards uttering 6.

⁷ This is reinforced by a separate panel report: “panels are not required to make a finding on every claim raised, but rather panels may practise “judicial economy” and make findings on only those claims necessary to resolve a dispute.”[Summary of DS33]

a link between q and r . Without introducing new variables, the panel has the remaining issue of whether there exists a relation from “incentives” to “requirements.” This issue is reinforced by the use of “to require” in (3). The panel finds in (5) that providing an “incentive” to accept some “requirement” can still be referred to as establishing a “requirement.” The idea behind this reasoning is that to qualify for the advantages which provide an incentive, one must accept a requirement. Or in this case, to avoid the tax imposed by the respondent, the complainant must meet the requirement of purchasing some bananas from the respondent. Once requirements can be understood as something that one voluntarily accepted, the difference between “requirement” and “incentive” dissolves. Whenever an incentive is the case, a requirement must also be the case. This is what the panel also makes explicit in an introductory paragraph to the conclusion (6).

In brief, one can sketch the panel’s actions as the following:

$$\begin{array}{ll}
 \textit{Complainant} & p \vee q \quad (1) \\
 \textit{Respondent} & \neg p \quad (2) \\
 \textit{Panel} & q \quad (3) \\
 \textit{Panel} & p \rightarrow r \quad (4) \\
 \textit{Panel} & q \rightarrow p \quad (5) \\
 \textit{Panel} & p, r \quad (7)
 \end{array}$$

Conclusions

This analysis cannot be considered exhaustive and its contribution relies mainly in highlighting the advantages of using semantics and pragmatics in the programme of modeling legal discourse. The sketched model captured most parts of the discourse. It also brought into focus two aspects of legal pragmatics that require careful consideration and further analysis.

Firstly, the initial statements of the complainant and respondent do not seem to have the same discourse effect as they would in other contexts. The crucial point here is that the panel was directed at the resolution of whether there existed an inconsistency with article III.4. This could have been part of the effect of the respondent’s reaction yet it could also be a feature of the context that the panel exists to determine whether such inconsistencies exist. Furthermore, if we were to say that the respondent produced the utterance $\neg p$ then one must account for the fact that the respondent could not reject the final conclusion of p in (7) from entering the common ground.

Secondly, the panel’s response to the dispute was, under the notion of compliance, overinformative as it did not merely answer the issue at hand but produced the entire reasoning process which consisted of utterances that were not directly compliant (although entirely relevant) with the aim of resolving the issue $?r$.

As to the feasibility of modeling legal discourse with inquisitive semantics and pragmatics, this limited analysis found no major obstacles.

Bibliography

- Herbert Paul Grice. Logic and conversation. In *Studies in the Way of Words*. Harvard University Press, 1989.
- Jeroen Groenendijk and Floris Roelofsen. Inquisitive semantics and pragmatics. In *Stanford Workshop on Language, Communication and Rational Agency*, 2009.
- Jeroen Groenendijk and Floris Roelofsen. Radical inquisitive semantics. Preliminary version, presented at the Colloquium of the Institute for Cognitive Science, University of Osnabrueck, January 2010.
- Arno Lodder. *Dialaw on Legal Justification and Dialog Games*. PhD thesis, Universiteit Maastricht, 1998.
- Salvador Mascarenhas. Inquisitive semantics and logic (unpublished). Master's thesis, University of Amsterdam, 2009.
- Robert Stalnaker. Assertion. *Syntax and Semantics*, 9(P Cole):315–332, 1978.
- Robert Stalnaker. Common ground. *Linguistics and Philosophy*, 25:701–721, 2002.
- Sam van Gool and Floris Roelofsen. Disjunctive questions, intonation and highlighting. In *Proceedings of the Amsterdam Colloquium*, 2009.