ISSA Proceedings 1998 – Burden Of Proof: A Negociable Argumentative ‘Chore’

The allocation of burden of proof is a very classical argumentative issue. This paper does not propose general reflections on the principles which rule this allocation, but rather tries to show how, when engaged in face-to-face argumentation, speakers themselves deal with this question.
I will first evoque briefly how the question of the burden of proof is treated within the frame of judicial argumentation as well as ordinary argumentation. I will then indicate how it can be articulated with a global description of a rhetorico-argumentative situation. Finally I will show, through a case study, how the allocation of burden of proof is negotiated within a specific polemic: the media debate about parasciences (astrology, parapsychology, ufology, etc.).

1. The burden of proof allocation rules
The general principle which governs the allocation of burden of proof in ordinary argument is that argumentative scaffolding falls to the speaker who challenges the doxa, while his opponent enjoys the weight of what is supposedly admitted.
Thus, if two speakers disagree, one claiming that 2 + 2 = 5 whereas the other assumes that 2 + 2 = 4, it falls to the first one to argue his claim, not to the second one. Moreover, the one who promotes an unlikely claim must prove the validity of this claim, and should not ask his adversary to prove it to be false; such an attitude would lead to an ad ignorantiam fallacy.
The first consequence entailed by this general burden of proof allocation rule is that it is governed by a principle of inertia: since presumptions play in favour of what exists, only change requires to be justified.
The second consequence of this rule is that the burden of proof allocation is setting-dependent, since what is considered as doxastic on a given matter may vary with the audience.
The general allocation rule may also be associated with additional sub-rules which condition its application within some specific settings. In particular, within the judicial area, the burden of proof is tightly linked to the presumption of

innocence: the prosecutor assumes the burden of proof, and any reasonable doubt must be in favour of the prosecuted. In this specific setting, using the adversary's failure to prove a proposition p (the guilt of X) as an argument in favour of non-p (the innocence of X) is not considered as fallacious.
Perelman insists on the fact that the allocation of burden of proof within the legal area also plays in favour of inertia: "il est conçu de manière à ratifier, jusqu'à plus ample informé, les faits tels qu'ils sont".**[i]**

2. Integration of the Burden of Proof within a global model of argumentation
Some authors, among whom Plantin, attach a central role to burden of proof in the definition of a rhetorico-argumentative situation. Thus, for Plantin (1993, 1996), the importance of burden of proof is related to the fundamentally asymmmetrical character of many rhetorical situations.
A rhetorical situation is defined by the emergence of a "rhetorical question"**[ii]** which brings two speakers into conflict. The relationship between those speakers and the question to be discussed is more often not symmetrical, contrary to what is suggested by the alternative "for / against" which often typifies such situations. One speaker actually defends a claim close to *doxa*, whereas the other brings in a new thesis which questions this doxastic claim. The allocation of burden of proof is linked to presumptions, and to the determination, for a given rhetorical question, of what may be considered as "normal", "admitted", "doxastic", as well as what challenges the doxa.
This point is crucial; it constitutes an important stake of the argumentation, inasmuch as the position of the one who assumes the burden of proof is somehow weakened: as it is put under discussion, it is not unquestionable anymore.
It is quite paradoxical for argument, which aims at supporting a claim with premises, but which, doing so, puts its fragility in the foreground. The very fact of scaffolding a claim with arguments makes it questionable. Thus it is in the interest of each speaker in a debate to shift the burden of proof onto his adversary, and to enjoy the weight of presumption.
One should not understand this description of a rhetorical situation as implying that the allocation of burden of proof has to be dealt with as a precondition of the argumentative debate itself, as a point to be settled a priori, once and for all, valid for all the following discussion.

Such a conception of burden of proof would pose many problems.
– Deciding what, out of context, stands for doxa about a given matter is

sometimes far from obvious. It is hardly questionable in the case of claims such as "2 + 2 = 5", which clearly challenge the arithmetical doxa. But what is the doxastic answer to the following question: "Is woman equal to man?" It becomes quickly evident that the answer will vary with the audience before which the discussion takes place. Amongst "good thinking people", the doxa will very probably come close to the affirmative; but elsewhere …

– In a debate, the rhetorical question structuring the argumentative exchanges tends to split into many rhetorical sub-questions, each of which may require a specific reflection about burden of proof.

– Even when identifying the doxastic position is possible, it is not necessarily relevant when one is concerned with the very dynamics of the argumentative face-to-face; establishing once and for all to whom the doxa belongs may prevent the analyst from observing that each discussant tries to appropriate it by means of specific discursive devices.

Finally, the analysis of argumentative discussions shows that the allocation of burden of proof is not given prior to the interaction, but constitutes in itself one of the crucial issues at stake in the discussion. It is tightly negotiated by the interlocutors, each of them trying to ensure the most comfortable argumentative position – namely, the doxastic one.

The following case study illustrates what such negotiations are like, and what kind of rhetorical and argumentative devices they mobilize in a specific controversy: the media debate about parasciences.

3. The burden of proof negotiation devices within the Debate about parasciences

Before the actual analysis, a few points seem to be necessary:

– By "media debate about parasciences", I mean mainly TV debates which were broadcast since 1989 on French TV, dealing with varied disciplines or phenomena such as astrology, parapsychology, ufology or alternative medecines. Henceforth "para pros" will indicate parasciences' supporters, and "para cons" will stand for parasciences' opponents.

– Those debates constitute quite violent verbal exchanges, where argument takes place in a very polemic mode. It does not imply that argument always resembles that.

– it only is a specific case of argumentative discourse, and does not exclude that a pacified and constructive argument would be possible on the same matter. One might also assume that within more friendly discussions, the observations would

be quite different. In particular, discussants would be less inclined to avoid the burden of proof and would probably take it on with less reluctance.
– The debate about parasciences constitutes a rhetorical situation where, at the start, the doxa seems to be rather close to the rationalist position. According to Blackburn (1992 : 418), the burden of proof falls to para pros because very often, the debate about parasciences is about determining whether paranormal phenomena do exist or not. Such a discussion is necessarily asymmetrical, the proof of the non-existence of something being almost impossible to establish, whereas finding out the criteria enabling to settle its reality is a perfectly attainable aim. This general principle is probably relevant in the case of a TV debate, where the audience is highly heterogeneous; but it would probably be defeated towards an audience consisting mainly of astrologers.

Even if a doxastic position within this specific debate may be identified, one should keep in mind that:
– This does not imply that any rhetorical situation presents such an asymmetry *from the start*. One could imagine a rhetorical question which would concern such a novel problem that any answer would be original; the "doxastic" position should then be rhetorically constructed as such, rather than given.
– The a priori asymmetry does not prevent the burden of proof from being negotiated throughout the discussion.

3.1. Refusal of the burden of proof by parasciences' supporters: "rhetoric of acquired assent"
Since the argumentative discourse assuming the burden of proof might be weakened, the para pros try to shift the burden of proof onto their adversaries, and to present their own claims as generally accepted. For this purpose, they use what could be called a "rhetoric of acquired assent".
It consists mainly in mentioning technical works demonstrating the existence of paranormal phenomena, so as to make them appear unquestionable and widely admitted.
It is illustrated in example 1:
(1)
Telepathy – that is, transmission of desires or pictures without using the five senses – is henceforth a well attested fact, already established at the beginning of the century by works such as Tischner's "Télépathie et clairvoyance" (cited in Jean-Claude Becker, *Problèmes politiques et sociaux* 450-451, 1982, p.43).**[iii]** It's

also the case in example 2:
(2)
Telepathy is a fact, proved by experiments (experimental thought transmission), and by observation (spontaneous cases) (Yvonne Castellan, *La Parapsychologie*, Paris: P.U.F., 1985, p. 37). This strategy consists in presenting as admitted what is precisely contested by the adversary; thus it might be a way of begging the question. It often opposes the situation in France (which would be comparable to Prehistory) to the American or, a few years ago, the Russian research situation. In Example 3, doctor Toffaloni defends osteopathy in the following way:
(3)
Dr T: People speak of an untested, non recognized profession or technique; “untested” isn’t true as far as osteopathy is concerned because everything has been written, everything has been tested seriously in the United States – well, you know the way it is, in France, people have blinkers (TV, « *Le Glaive et la balance* », M6, 1991).

Those claims very often follow a regular pattern:
telepathy
psychokinesis
premonition
…
is widely
henceforth
well
… attested
proved
established
… by works such as Tischner’s in the United States
…
which amounts to: /Name of a parascience/is/adverb indicating intensity or temporal break//passed participle pointing out that the parascience is admitted//authority attesting the validity of the parascience/

This pattern may remind one of some discursive devices from popularized science where the journalist willing to legitimate his claims mentions explicitly the background where they first were developped: an authoritative environment in which facts are “attested”, “established”, “proved by experiment” in “highperformance laboratories”.

The rhetoric of acquired assent suggests that if so many conclusive experiments do exist, the burden of proof then falls to the para cons. This strategy is mobilized by the parapsychologist Yves Lignon in example 4:
(4)
YL: But anyway Mr Cuniot, this is a false debate; we’re not here to talk about Yves Lignon, but about parapsychology and about experiments signed “Yves Lignon”, which are published in scientific papers. So I am asking you a question: do you challenge those experiments, yes or no? And if you do, where, how and why? In other words, since I claim that an experimental file showing the reality of the parapsychological phenomenon does exist, tell me where I went wrong (TV, « *Duel sur la 5* », 15/04/1988, la 5).
The rhetoric of acquired assent is often associated with two kinds of devices aimed at making facts more credible. The first one rests on the locus of quantity, the second one, on the locus of quality**[iv]**. The first device consists in making the facts appear plain, banal. Since the more extraordinary a phenomenon is, the more convincing the proof of its reality has to be, many discursive devices are used by para pros in order to lessen the unusualness of paranormal phenomena.
The most simple way of reaching this aim is pointing out the great number of experiments in this area. Thus the parapsychologist Yves Lignon claims that “one can find all over the world hundreds of thousands of successful experiments”. Presenting the reality of the phenomena as broadly admitted empowers Yves Lignon to shift the burden of proof onto his adversary.

A variant of this strategy consists in suggesting that the phenomenon belongs to a well established, systematically described area of knowledge. Example 5 describes the way a famous French parapsychologist works:
(5)
Experiments in telepathy – which are the basic requirements of the job – are nothing to him but routine experiments (« Les nouveaux miracles de la parapsychologie », *Nouveau l’Inconnu* 158, août 1989). One may also present the antiquity of a theory as an argument establishing its validity, since it has been tested through ages by many people. This argument is used by Boris, a medium, who has just stigmatized the european research in parapsychology, which, according to him, is left far behind by american research; he adds:
(6)

B: So ok, people blame us, but I wish everybody would ask himself a question; besides, we do exist since the beginning of time, wizards have existed before lawyers and physicians, before scientists, they still exist; they now have a new label, they are called “parapsychologists”. So, with all you can read at present against parapsychology, how can you explain to me why people come back to see us? Ok, just explain that to me (TV, « *Ciel Mon Mardi* », 27/11/1990, TF1). This way of mentioning the antiquity of a theory or practice in order to establish its validity is itself a very ancient (therefore very effective?) device; it was already used by Cicero in *De la divination*:
(7)
Let us make fun of haruspices! Let us pretend they are faithless and lacking authority! Their science, attested by such a wise man, by events and by reality, let us despise it! Let us despise also Babylon and those who, observing the heavenly signs from the Caucasus, follow, owing to their reckonings, the moves of the stars! Let us tax them with stupidity, with treachery or effrontery, those whose writings contain, as they themselves assume, a 470 000 years old tradition! Let us consider they are lying and care little about the way the forthcoming generations will judge them! So be it! Barbarians are faithless and deceitful. But is greek history also deceitful? […] Delphi’s oracle would never have met such a success and such a fame nor would it have received such rich presents from all countries and from all kings, if the truth of his prophecy had not been proved through the ages (Cicéron, *De la divination*, Paris: Les belles Lettres, 1992).

Contrary to focussing on the great quantity of experiments, other strategies aiming at making the paranormal facts more credible are based on the locus of quality. The first one points out on the contrary to the scarcity of a phenomenon in order to make it appear more plausible. Acknowledging only one phenomenon as true among a great number of candidates is seen as an argument in favour of its reliability:
(8)
Rémy Chauvin: in all my long life I had the opportunity to meet three mediums, one being a well known scientist – three, no more, in forty-two years (TV, « *Star à la barre* », 09/05/1989, France 2). In a similar way, one may claim that the more humble a phenomenon, the more reliable it is:
(9)
Bernard Martino: First conclusion: I would say, as far as I’m concerned, that the bigger it is, the less credible it is. (…) That’s what I would say to people who are

inclined to believe too easily. (…) I've heard crazy things, I've heard people saying they were able to make a van levitate! No kidding! (TV, « *Ciel Mon Mardi* », 27/11/1990, TF1).
Rejecting some paranormal phenomena as poorly reliable enables a speaker to build an objective, critical ethos and to increase in proportion the credit attached to the scarce so-called positive paranormal facts.

3.2. Meta-argumentative reactions
The use of the rhetoric of acquired assent by para pros gives rise to varied meta-argumentative reactions by their adversaries, who also reject the burden of proof, and denounce the attempts at reversing it.

3.2.1. Making the burden of proof allocation rule explicit
These reactions are often associated with the explicitation of the burden of proof allocation rule, as in example 10 (the author is a rationalist physicist):
(10)
As I said before, it falls to the proponent to bring the proof of what he says. (…) One must clearly claim that the non-impossibility of something presented as an argument in favour of this thing is a fallacy which is close to schizophrenic delirium (Henri Broch, *Le Paranormal*, Paris: Seuil, p.199).

Here the question of burden of proof is associated with the denunciation of an argumentum ad ignorantiam. Example 11 is an answer to a "Science et Vie" reader's mail, which reproached this magazine of popularized science with rejecting astrology without justification:
(11)
So would it fall to us to demonstrate the inanity of astrology? If we published the information that pigs fly when the moon is full, it would fall to us to prove it, and not to those who don't believe us. Besides, we've never heard of a single methodical work in astrology ("scientific" would be a word too strong for that kind of matter) which would show the influence either of signs or of planets (*Science & Vie* 892, 1992, p.10).

3.2.2. Discussion of the application of this rule
Still on the meta-argumentative level, a possible reaction to the mention of the burden of proof allocation rule consists in discussing the plausibility of a theory – this plausibility being crucial for deciding who has to prove. Thus the two physicists Targ and Puthoff did claim in 1977 that:

(12)
In our time of gravitational waves and quantum interconnections, the burden of proof, when the discussion is about excluding the very possibility of paranormal abilities, falls to sceptical people (Targ & Puthoff, cited in Alcock J., *Parapsychologie: Science ou magie?*, Paris : Albin Michel, 1989, p.178). As is shown by example 12, the very plausibility judgment may vary according to the audience, and may itself be negotiated.

3.2.3. Proposition of burden of proof allocation alternative principles
Another meta-strategy may consist in proposing alternative burden of proof allocation rules. In example 13, Yves Galifret, a rationalist, refuses the burden of proof; the reaction of his adversary, the Magus Dessuart, is the following (JCB is the journalist running the debate):
(13)
JCB: So, professor Galifret, I suggest you open the intellectual duel. Please tell us what your position is on clairvoyance?
YG: Well, I'd rather… I don't have anything to prove; the burden of proof falls to the one who claims, doesn't it? I consider that the king is naked, I expect to be shown that the king is not naked.
JCB: Then, Magus Dessuart?
MD: So dear professor, I think it's exactly the reverse, because in the present case, we, mediums, are subjects, we are not scientists, and, having no technical information, we cannot demonstrate the mechanisms which rule that kind of phenomena. We're only subjects […] but how could we explain the facts? We are poorly equipped for that, we are not scientists (TV, « *Duel sur la Cinq* » du 22/04/1988, la 5).

The burden of proof allocation rule proposed by the Magus rests on competence: the burden of proof falls to the most competent speaker (whatever his position in the debate is). Example 14 is from a quite different frame: the controversy about heliocentrism. The position of the Church towards Galileo was that, as long as the contrary has not been established, one should not cast doubt upon the traditional interpretation of the Bible: the burden of proof then falls to Galileo. Galileo claims on the contrary that the falsity of copernicianism has to be established by the Church itself:

(14)
Before a physical claim is condemned [by the Church] one must show that it isn't

rigorously proved, and this has to be done not by the ones who hold this claim to be true, but by the ones who consider it as false. It seems natural and very sensible because those who consider an argument as erroneous may put its flaws to the fore much more easily than those who hold it to be conclusive (*Galilée, naissance de la physique, Les Cahiers de Science et Vie* ("Les grandes controverses scientifiques, n_2), avril 1991). This alternative burden of proof allocation rule rests on psychological or cognitive considerations.

3.3. Other argumentative devices aiming at shifting the burden of proof

Beside the meta-argumentative level, one may meet two other devices aiming at shifting the burden of proof.

3.3.1. Argument ad ignorantiam

The first one is very classical : it consists in using an appeal to ignorance. In the debate about parasciences, the failure of the sceptics to demonstrate the falsity of the paranormal hypothesis is often considered as a proof for its validity. That's the way one should understand the so frequent "why not" answer advanced by parasciences' supporters when asked to justify their belief.

Very often, sceptics try to prove the inanity of a paranormal interpretation of a phenomenon by proposing a rational explanation for the same fact. Thus, para pros will try to show that those "rational" explanations cannot be accepted – and the criticism of the arguments of the adversary is seen as an argument in favour of the paranormal hypothesis.

In example 15, Pierre and Joël are two "UFO hunters". They are in the moutains, and they are commenting on a round mark which was supposedly left by a Ufo. In order to support this explanation, they criticize rival rational explanations "they" proposed ("they" standing probably for "the government", scientists or any non-believer).

(15)

Pierre: Then some people came to see a few years ago; they studied it; and at that time they told me maybe mushrooms produced those marks. In the old days they were called "witch circles". So, mushrooms would have been responsible for those circles. […]

Joël: Even if one admits that mushrooms may make such a regular mark – why the hell wouldn't they also make a square mark? It's completely unlikely, because if you have a look at books about mushrooms, they don't mention such a thing, never.

Pierre: You know, I think if one day they saw a UFO in the middle of a field, they would tell you "everything is ok"; then what is it? They would always find something to tell you.
Joël: The day before, you came here and there was no mark.
Pierre: Yes, absolutely, there was nothing, and the day after the mark was here. So they said some people had had a party and so on; but there would have been cigarette butts, cans, you know, the kind of rubbish you might find after a party – and there was nothing.
Joël: About three years ago, two guys – actually they were poaching frogs during the night – they saw a luminous phenomenon, a very strange one, fabulously luminous – they compared it with the lighting of a football stadium, so you can imagine how luminous it was. Well, some people managed to explain this observation by luminous mushrooms. So, if you can show me luminous mushrooms giving off light as bright as the lighting of a football stadium, I'd be glad to see that. And nobody questions it! And we have a great collection of such completely foolish explanations… (TV, « *Zone interdite* », M6, 21/09/1997).

Such argumentative strategies are often associated with additional interpretative hypotheses. In particular, the supposedly absurd rational explanations are presented as the indication that a plot is being organized in order to keep the Ufo landings secret (as well as paranormal phenomena in general). The existence of such a plot is of course itself an indication that paranormal phenomena do exist.

3.3.2. Alteration of the general discussion pattern
The last argumentative device used to shift the burden of proof onto the adversary consists in negotiating the general pattern of discussion. In the debate about parasciences, the discussion pattern usually admitted is the following:
– first, establishing the reality of the phenomena;
– second, trying to explain these phenomena;
– third, searching for potential applications.

The rhetoric of acquired assent aims at moving from the facts (which are presented as widely admitted) to their explanation; it appears in example 13 above. It is often associated with a new task allocation: para pros establish (and even provoke) the phenomena, scientists use their technical skills to explain them. Since scientists often refuse to concede the first step to their adversary, they refuse to assume the second step; thus the allocation of burden of proof often gives rise to the negotiation of the discussion pattern, as in example 16:

(16)
YG: “So”, says Fontenelle, “is all this well attested? Let us make sure of the fact before trying to understand the cause. This method may seem quite slow to the many people who run naturally to the cause and pass over the truth of the fact. But let’s avoid the ridiculousness of having found the cause of what is not. In other words, before explaining something you should make sure that this thing does exist”. So I would say there is nothing to be demonstrated insofar as this social phenomenon [clairvoyance] rests on no objective scientific basis (TV, « *Duel sur la Cinq* » du 22/04/1988, la 5).

Thus the pattern of discussion also is an important stake of the debate; trying to move to the explanation or to the potential applications before having conclusively established the facts constitutes an attempt at escaping the chore of burden of proof.

Conclusion
The preceding examples (which may not exhaustively list the argumentative skills aiming at shifting the burden of proof) may suggest that the burden of proof allocation always gives rise to negotiations; actually this is not always the case:
– in some institutional or strict rule-laden situations, the burden of proof may be allocated once and for all, and may be considered as unquestionable (it is the case to some extent in legal discussions, as mentioned previously);
– in situations with a low degree of polemicity, where discussants are not directly confronted with a counter-argument, the burden of proof is often assumed without any reluctance, as Wooffitt (1992) showed;
– in a media setting, discussants may also find some advantages in assuming the burden of proof. Accepting it often enables them to speak first and, while having the floor, to frame favourably the argumentative discussion to come: the asset of speaking first compensates for the handicap of assuming the burden of proof.

There is no doubt that the burden of proof is a crucial component of any argumentative situation: it has to be assumed by somebody, even if it weakens the discourse of the discussant who assumes it, and, in that sense, it is an unavoidable argumentative chore. But one should strongly emphasize that speakers may always use many argumentative skills in order to shift this chore onto their adversaries. So it is a very negotiable chore, and it is constructed by, rather than given previous to, the face-to-face argumentation.

NOTES

i. "[Burden of proof] is conceived in order to confirm the state of the issue, until there is evidence to the contrary" (Perelman 1988, 727, our translation).

ii. Following Plantin (1993, 1996), a rhetorical question is not a question wich requires no answer, but a question which structures an argumentative discussion.

iii. All the examples were initially in French ; the translation is ours.

iv. As defined by Perelman & Olbrechts-Tyteca 1988 : 115-129.

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