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Chapter 10

First person singular in 17th century controversies

Gerd Fritz

i. Introductory remarks

This paper presents research conducted in the framework of an interdisciplinary project on “Controversies in the *Republique des Lettres* (1600-1800)” by a group of philosophers from Tel Aviv (Israel) and a group of linguists from Gießen (Germany).¹ One of the objectives of this project is to analyze the pragmatic organization of controversies in the 17th and 18th centuries. What we are mainly looking for are the historical rules and principles guiding various types of controversy in this period, including characteristic types of moves and strategies and also patterns of text-production.²

Focussing on the expression of individuality in the controversies of this period provides a rewarding new perspective. There are various aims one could pursue in the study of subjectivity in historical controversies. One could, for example, try and find out something about the personalities of individuals engaged in controversies in the distant past. The German astronomer Johannes Kepler, for instance, who wrote four hundred years ago and whom I shall mention on several occasions, is a very interesting personality, with a lively style and a remarkable sense of humour. But this is not my primary aim in this paper. What interests me most is the function of first-person singular utterances as moves in the game of controversy in the period from 1600 to 1800. What I am looking for specifically is indicators of a characteristic rhetoric of individuality in the controversies of this period.

The following list provides a basic survey of some types of utterances in modern English and some typical functions with which I shall deal in the course of this paper. The examples in my paper will be taken from controversies in English, French and German.

- (1) I only enter into this dispute because ...
(function: justifying one's entering into a controversy)
- (2) I shall now turn to the second argument
(function: making explicit an aspect of text organization)
- (3) In my opinion this is not true
(function: first person hedging)
- (4) My opponent says that p, but I say that q
(function: marking a disagreement in quasi-dialogue)
- (5) Aristotle says that p, but I say that q
(function: marking a disagreement with an authority)
- (6) Nobody has done more to clarify this than I have
(function: self-praise, self-advertising)
- (7) I saw it myself
(function: presenting one's own observations or experience)
- (8) What I meant was ...
(function: giving an interpretation of one's own words)
- (9) I do not understand what these words mean
(function: claiming incomprehension or incomprehensibility of one's opponents' utterances)
- (10) After observing this *I* reading this I realized that my original view was wrong
(function: first person narrative of one's progress from error to truth)

There are of course many other moves in controversies which one can perform with first person expressions, e.g., personal complaints about the uselessness of controversies, apologies, explaining one's intentions, confessions, even prayers, but I shall restrict my inquiry to the types I mentioned just now.

2. On reading 17th century texts

Before going into more detail, I would like to mention the problems of interpretation which we, as modern readers of 17th century texts, have to keep in mind if we want to avoid being misled by certain forms of utterance. I shall give two examples.

The first example concerns dedications in 17th century pamphlets, a standard textual element at that time. In these dedications we often find formulations like "this humble booklet" (e.g., "diese meine geringe Arbeit", Feselius

1609, Vorrede; (dieses) von mir aufgesetzten geringen Tractateins”, Gender 1689, Dedication). Taken at surface value, this sounds like an expression of humility, but in fact it is nothing of the kind; it is a typical expression of polite self-depreciation which is a part of the style of dedications. As a rule, humility is not one of the outstanding virtues of the authors of pamphlets. On the contrary, they very often indulge in self-praise and self-advertising, of which I shall mention two instances later on.

As examples of polite diction are not always as obvious as in the case I just referred to, we have to be careful to find out where the authors express genuine humility or admiration and where they are just performing routines of politeness.³ In fact, even for contemporaries it could be embarrassing if what was meant as mere politeness was taken as a genuine expression of attitude. For example, Johannes Kepler, as a young man, wrote a letter to the then famous mathematician Ursus in Prague and in polite exaggeration told him that he (Kepler) had learned all his mathematics from the books of Ursus, when in fact he had learned mathematics from his professor Mastlin at Tübingen University. Later on, when Kepler himself was well-known, Ursus published this letter, which was rather embarrassing for Kepler, as his former professor was quite annoyed with this misrepresentation.⁴

The second example is more subtle, and therefore it is also more interesting. It is taken from the controversy between Thomas Hobbes and the Anglican Bishop Bramhall on the question of free will, which culminated in the 1650s. On one occasion, when Bishop Bramhall reflected on the “horrid consequences” of Hobbes’ doctrine, he wrote: “I must confess ingenuously, I hate this doctrine from my heart” (Bramhall, Defence, 63). Now this is about as obvious an expression of subjectivity as you can get. It is explicitly styled as a confession of personal hatred. However, in the margin of this passage, we find the note: “Psalm 139, verses 21/22”. These are the last verses of this psalm, where King David complains about the enemies of God:

21 Do I not hate them O LORD, that hate thee? and am not I grieved with those that rise up against thee?

22 I hate them with perfect hatred: I count them mine enemies.

Thus, in this passage, Bramhall was not using his own words but was quoting, perhaps you should say he was alluding to, King David’s psalm. In so doing, Bramhall indicated that his hatred was not just a personal feeling but the appropriate feeling for a Bishop to have when dealing with atheists or heretics. So what at first sight looks like an expression of quite personal feeling, is an expression of the kind of feeling that goes with Bramhall’s role as a fighter against

God's enemies. This kind of pious hatred ("frommer Zorn"; Gierl 1997:158) was not only permitted to someone who was fighting heretics in the 17th century; it was actually his job to express this kind of hatred. Therefore, what *prima facie* looked like a fairly clear example of pure subjectivity, turns out to be strongly filtered through role requirements. This is the kind of thing we have to be aware of when we analyze 17th century texts. Of course, problems of this kind also occur with modern texts, but the problem of interpretation is much more serious when we are dealing with a fairly distant historical period. Incidentally, in his answer to this passage, Hobbes complains: "To the end of this number there is nothing more of argument. The place is filled up with wondering and railing" (Hobbes, LNC, 114).

3. Uses of first-person singular expressions

I shall now look at a number of uses of first-person expressions in controversies which I consider interesting from a historical point of view, as they differ, at least partly, from what we know as present-day practice of first person singular use.

3.1 Justifying one's entering into a controversy

As traditional controversies in pamphlets often cost a lot of time and effort which could be usefully spent on other activities, authors frequently felt they had to explain why they took up a challenge and entered into a controversy. The standard place for such a personal justification in a traditional pamphlet was the preface to the reader. A case in point is the preface which August Hermann Francke, the pietist theologian, wrote for a pamphlet against an orthodox opponent in 1707.⁵ There he explains why he reluctantly decided to write this pamphlet.

- (1) Therefore, although my soul normally despises quarrels amongst religious teachers and although I would much rather suffer all malice silently in Christian patience ... this time I have to justify myself openly before the whole Church ... in order to prove my innocence.

Dannhero wie feind auch sonst meine Seele dem Zanck unter Lehrern ist *I* und wie viel lieber ich mich in der Gedult Christi alleine fassen ... wolte ... so kann ich mich dennoch fur difimal nicht entbrechen / mich

öffentlich vor der gantzen Kirche zu verantworten *I* ... meine Unschuld zu zeigen (1707:277).

Apart from justifying their entering into a controversy, authors often use prefaces and the closing passages of pamphlets for other personal statements, especially for presenting their personal view of the course of the controversy. So prefaces and closing passages are an important source of information for an enquiry into the personal aspects of controversies.

3.2 Making explicit aspects of text organisation

I continue with a fairly inconspicuous type of utterance, which does not seem to express anything very personal but is an interesting indicator of the authors' awareness of their writing strategies. The following example is taken from a pamphlet by the astronomer Johannes Kepler.

- (2) Here I have to introduce a question in between, which is however important enough to deserve a detailed treatment of its own.

Allhie mufi ich eine Frage zwischen eynfuhren *I* welche zwar wol der Wichtigkeit ist *I* dab absonderlich von derselben gehandelt werden solte (1610:169,21).

This kind of utterance is very frequent in our corpus of controversies. It shows that most of these authors were highly expert writers with an excellent grounding in rhetoric, who closely monitored their own text production and tried to help their readers understand the structure of their texts. Textual organization in controversies is a topic in its own right, which I shall not go into in the present paper.⁶

3.3 First person hedging

The next type of utterance I shall mention briefly is of the type "I think", "I am of the opinion" and "I suppose". This type can be used to mark the personal commitment of the author to a certain belief, which is an important move in a controversy. But in many cases it seems to be used, rather, for first person hedging. The central function of what I call "first person hedging" is to reduce the commitment of one's claim from general to personal level. As we know, merely personal commitments are sometimes easier to justify than general ones. In addition, in certain contexts, personal statements tend to be considered more

polite than sweeping general statements. As an example I quote a theological hypothesis put forward by Kepler:

- (3) And I suppose that man in his original state of innocence could have performed these natural movements without committing sin...

Vnd erachte ich/ dafi der Mensch im Standt der Vnschuldt gar wol ohne alle Siinde/ ... dieser natiirlichen Bewegungen sich hette gebrauchen konnen (1610:158).

What Kepler is referring to with the words “these natural movements” is sexual intercourse. As his view on this matter is a bit unorthodox and in conflict with the views of Augustine, he is careful to present his claim somewhat guardedly. This kind of cautious speech occurs regularly in those passages where Kepler treats delicate matters of theology. But he also uses hedges in other contexts, e.g., when presenting his own astrological hypotheses. These are just preliminary observations which should be followed up in a special study of forms of hedging in 17th century controversies.⁷

3.4 Contrastive (emphatic) uses

The next group of uses of first person expressions is what I call *contrastive* or *emphatic* uses:

3.4.1 *Contrastive use in quasi-dialogue*

The first type frequently serves to highlight contrast of opinion in the typical quasi-dialogical structure of a staged polemic (cf. Fritz 2002). An example from Kepler may suffice to illustrate this type:

- (4) Feselius says that my view contradicts the laws of physics. I say no...

Feselius sagt Ies sey der Physica zuwider. Ich sage nein darzu... (1610:189).

This vivid presentation of the opponents’ positions gives the reader a lively sense of dialogue and contributes to the readability of the pamphlet. So this is a very effective bit of rhetoric.

3.4.2 *Anti-authoritarian use of first person expressions*

The second type of contrastive use is what one could call an anti-authoritarian use (cf. Machamer 2000:85). The prototype of this use is: *Aristotle says that p, but I say that q*. This move is very frequent in 17th century controversies: it is

used by Kepler, Hobbes and many others. It is part of the rhetoric of innovation which is characteristic of this period.

But this move was no invention of the 16th or 17th centuries. In fact, we find this type of utterance even in the Middle Ages. For example, at the beginning of the 13th century, the Emperor Frederic II wrote in his book on falconry, using the *pluralis majestatis*:

- (5) Wherever it was appropriate, we followed Aristotle in our work. In many cases, however, as our experience has taught us, especially concerning the nature of certain birds, he seems to deviate from truth. Therefore, we shall not follow the prince of philosophers in all points; for he only seldom or never went hunting birds, whereas we have loved [falconry] from our youth and have practiced it ever since (Frederic II, *De arte venandi cum avibus*).

In scribendo etiam Aristotilem, ubi oportuit, secuti sumus. In pluribus enim, sicut experientia didicimus, maxime in naturis quarundam avium, discrepare a veritate videtur. Propter hoc non sequimur principem philosophorum in omnibus, raro namque aut nunquam venationes avium exercuit, sed nos semper dileximus et exercuimus (In Willemsen 1942, Vol.1, 1).

And in 1340, the German scholar Konrad von Megenberg wrote in his *Book of Nature*:

- (6) According to Pliny and Jacobus [the lynx] has such sharp eyes that it can see through thick walls. I don't believe this.

(Der Luhs) hat so scharpfiu augen, sam Plinius und Jacobus sprechent, daz er durch starch wend siht. des gelaub ich niht (*Buch der Natur*, 146, 27f).

This self-assured attitude is remarkable in medieval authors, but in the 17th century it is quite typical, as I shall illustrate with a few examples from Kepler and from Hobbes. In his refutation of a pamphlet by the Astrologer Rbslin, Kepler wrote:

- (7) I have studied (these things), and I showed that there is a much closer relationship between the heavens and Earth than Aristotle - and Roslin with him - believes.

Dann ich hab so viel gestudiert vnd erwiesen *I* das zwischen Himmel vnd Erden vil ein grossere Verwandnis seye *I* als *Aristoteles*, vnd mit jhme Roeslinus mainet (1609:107).

In a similar context, when writing about his theory of the connection between the heavens and the Earth in a later pamphlet, Kepler claimed: "Aristotle

knew little about these things” (“Darvon hat Aristoteles noch wenig gewusst”; Kepler 1610:200). This anti-authoritarian tendency is also shown in the way Kepler enjoyed mentioning himself in the same breath as classical authorities: “Galenus does not say so. I say so even less” (“So sagt Galenus nit (ich noch vil weniger)”; 1610:223).

Like Kepler, Hobbes is also well-known for his anti-authoritarian tendencies. On several occasions Hobbes claimed that he, as opposed to his opponent Bramhall, arrived at his views by thinking and meditating, and not by reading traditional texts:

- (8) [I] may with as good a grace despise the Schoolmen and some of the old Philosophers, as he [i.e., Bramhall] can despise me, unless he can shew that it is more likely that he should be better able to look into these questions sufficiently, which require meditation and reflection upon a man’s own thoughts. (LNC, 63; cf. also LNC, 311)

What is at stake here is the epistemological choice between personal reflection and the received doctrine of scholasticism. Hobbes used this move in the following passage as well:

- (9) Another reason why [Bramhall thinks] I should be of his opinion, is that he [i.e., Bramhall] is “in possession of an old truth derived to him by inheritance or succession by his ancestors”. To which I answer, first, that I am in possession of a truth derived to me from the light of reason. (LNC, 337)

Of course, the traditionalists tended to criticize this move. A good example is Hobbes’ opponent, Bishop Bramhall, who countered Hobbes’ attack on scholastic jargon with the following complaint:

- (10) It is strange to see with what confidence, now-a-days, particular men slight all the Schoolmen, and Philosophers, and classic authors of former ages, as if they were not worthy to unloose the shoe-strings of some modern author.... (Bramhall, quoted in Hobbes, LN, 58)

3.5 Self-praise and self-advertising

17th century rules of politeness condemned self-praise. Nevertheless, few authors could resist the temptation to praise their own achievements and advertise their own writings. A case in point is Leibniz’s reference to his own *Theodicy* in the following passage from the Leibniz/Clarke controversy:

- (11) [people tend to misrepresent my position on necessity and fate] although probably no one else has explained better and more fundamentally than myself in the *Theodicy* the real difference between liberty, contingency, spontaneity on the one hand and absolute necessity, chance, and force on the other. (Leibniz 1715/1716:389)

In a similar fashion Kepler referred to an earlier work of his and advertised his successful theories:

- (12) For I have set up these Principles of Physics in my recently published *Commentaries on the movements of Mars* in such a fashion as to enable anyone to follow my calculations and to treat the whole of astronomy on this basis.

Dann ich hab diese *principia Physica* in meinem newlich aufigangenen *commentario Martis motuum* also angestellt I dab man jhnen nachrechnen I vnd die gantze *Astronomiam* damit abhandeln kann. (1610: 193)

An extreme case of self-advertizing is Hobbes' statement at the end of his "Epistle to the reader" in *Of liberty and necessity*.

- (13) thou art now acquainted with that man, who, in matters of so great importance as those of thy salvation, furnishes thee with better instructions, than any thou hast ever been acquainted with, what *profession, persuasion, opinion, or church* soever thou art of. (LN, 238)

That man, of course, is Hobbes himself.

A variant of this kind of self-praise is the self-ascription of victory which we often find in the title-pages of 17th century pamphlets (cf. also Gloning 1999: 101). Hobbes, for example, uses this move in the title-page of *Of liberty and necessity*:

- (14) Hobbes, Thomas: *Of liberty and necessity: A treatise wherein all controversy concerning predestination, election, free-will, grace, merits, reprobation, etc. is fully decided and cleared. In answer to a treatise written by the Bishop of Londonderry, on the same subject.*

3.6 Presenting one's own observations and experience

In the field of science, the main motivation for not following the lead of classical authors was that authors of the "modern" period emphasized the importance of their own experience and their personal observations as instruments of knowledge.

Kepler is again a good example of this attitude. When his opponent Feselius asserted that the Astronomer Valeriola had claimed that certain forms of astrology could not become a serious science, Kepler answered:

- (15) That this is true I do not believe because Valeriola said so. As far as he is concerned I could easily deny it and then make him prove it: But I have my own experience in this matter.

Dab es also wahr sey *I* glaube ich nicht eben von debwegen *I* weil es Valeriola gesagt *I* seinethalben kbndt ichs wol verneinen *I* vnd es jhn probiern lassen: sondern ich hab es selbst erfahren. (1610:179, 14ff.)

On another occasion, when Feselius denied that a certain constellation of the Sun and Saturn could influence the weather, Kepler presented a long extract of his daily meteorological observations, which he had made for the last 16 years, i.e., from 1592 to 1609 (Kepler 1610:254f.). It is, incidentally, interesting to see that these meteorological observations had originally been motivated by a hypothesis concerning the parallelism between musical harmonies and stellar geometry, which Kepler had to give up later (p. 205).

It is important to note, however, that Kepler did not accept observation *alone* as the guide to scientific knowledge. When his elder friend Rbslin argued that he - Rbslin - himself had observed and taken notes of the movements of the comet of 1580, when Kepler was not yet 10 years old, Kepler admitted that these observations were highly valuable and that he himself could use them. But he insisted that in order to understand the phenomenon correctly, one had to have an adequate theory (Kepler uses the word *theoremata*), i.e., the theory that comets fly in a straight line (cf. Kepler 1609:119-124).

And, of course, the senses might mislead. When Rbslin claimed that the hypothesis that the Earth moves around the Sun contradicts the testimony of the senses, Kepler replied:

- (16) I will gladly admit that it contradicts the senses that the Earth should move around the Sun. But that is not important. For it is for that purpose that God gave us Reason to compensate for the deficiencies of our outward senses.

Das es wider die eusserliche Sinne das die Erden soli vmblauffen *I* bekenn ich gern *I* vnd hat nit viel zu bedeuten: dann eben darumb hat vns Gott die vernunft gegeben *I* das wir darmit den mangel der eusserlichen Sinne ersetzen sollen. (1609:107, 5ff.)

Thus, according to Kepler, it is observation compensated by reason which furthers scientific knowledge.

Interesting examples of reports of personal experiences are also provided by the medical controversy between Gehema and Geuder on the topic of blood letting and other traditional forms of therapy.⁸ As arguments for their respective sides both doctors report their own cases of successful therapy; Geuder, the traditionalist, reports a case where bloodletting was successful (Geuder 1689: 32) and Gehema, the modernist, reports how he successfully treated fever with warm beverages, which another doctor had unsuccessfully treated with *cold* drinks (Gehema 1688: 58f.). Obviously, in the case of medical controversies, personal reports of successful treatments play a significant role not only as empirical data but also as a means of strengthening the doctors' authority. I should like to add that 17th century scientists knew very well the traditional wisdom that it was a fallacy to infer a general statement from a particular observation, and used this principle in refuting the opponent's "argument by experience": "An inference from a particular [premise] to a universal [conclusion] is invalid" (Geuder 1689: 66f.).⁹

3.7 Misunderstanding and self-interpretation

Misunderstandings and possibly intentional misinterpretations frequently occur in the controversies of our corpus. Very often these misunderstandings indicate deep-seated differences and lack of mutual knowledge. Thus, attempts at clarifying such misunderstandings play an important role in the growth of mutual knowledge. It is worth mentioning that we noticed no debate about first-person authority concerning the interpretation of one's own utterances. The requisite principle, formulated in Latin, was obviously generally accepted: *quisque optimus verborum suorum interpres*.¹⁰

Clarifying misunderstandings by giving an interpretation of one's own text is a very frequent move, which I shall not document here in detail. An example is Kepler's dedication of his *Antwort* to Roslin (1609), where Kepler claimed that Roslin had misunderstood several passages from his (Kepler's) book *De Stella nova in pede Serpentarii* and that he intended to clarify these misunderstandings, which he did in various passages of his pamphlet.

3.8 Claiming incomprehension

I do not understand what these words mean is one of Hobbes' favourite objections against his opponent Bramhall. The following is a wonderful example of the irony connected with this move:

- (17) This term of *insufficient* cause, which also the Schools call *deficient*, that they may rhyme to *efficient*, is not intelligible, but a word devised like *hocus pocus*, to juggle a difficulty out of sight... I can make no answer; because I understand no more what he means by sufficiency in a divided sense, and sufficiency in a compounded sense, than if he had said sufficiency in a divided nonsense, and sufficiency in a compounded nonsense. (Hobbes, LNC, 384)

On the one hand, this is an aggressive and arrogant move, which implies that the opponent is either too stupid to realize that he is talking nonsense or that he is talking nonsense *on purpose* in order to fool his opponent and his readers, which is even worse. On the other hand, it is a defensive move that gives the controversialist a chance to avoid getting drawn into a maze of scholastic discussions. From this point of view the move has a therapeutical function. For an opponent of scholastic thought it is probably the *only* chance to avoid being forced to play the scholastic game. It is therefore not surprising that anti-scholastics like Galileo, Bacon and others should have used this move (cf. Biagioli 1993: 21If.). But Hobbes is probably the 17th century author who cultivated this strategy with most delight.

Two more examples of this kind of move come from Samuel Clarke, who used this move twice against Leibniz in their controversy on space and other matters:

- (18) 41. What the meaning of these words is; *An Order (or Situation) which makes Bodies to be Situable*; I understand not (in Leibniz 1715/1716:387).
20. What This tends to prove, with regard to the Argument before us, I understand not (in Leibniz 1715/1716:385).

In the first case, Leibniz answered that he was misquoted:

- (19) 104. I am not saying that space is an order or situation which makes objects positionable; to say that would be nonsense... I am thus not saying that space is an order or situation, but an order *of* situations.
104. Je ne dis point que l'Espace et un ordre ou situation qui rend les choses situables; ce seroit parler galimatias... Je ne dis done point que

l'Espace et un ordre ou situation, mais un ordre des situations. (Leibniz 1715/1716:415)

In the second case Leibniz just complained that his opponent intentionally refused to understand why Leibniz had said what he had said (Leibniz 1715/1716:409).

3.9 Personal narrative of one's progress from error to truth

Progress from error to truth is a model situation for the growth of knowledge. It is therefore not surprising that we find personal narratives representing this kind of event in a more or less propagandistic manner. I shall give two examples, one from Kepler and one from the medical controversy between Gehema and Geuder.

In the course of his answer to Feselius and Rbslin, Kepler told his opponents that he had originally assumed a close parallelism between musical harmonies and the geometry of the planets' constellations. But as his observations did not bear out this assumption, he had to modify his theory (1610:205). The moral of this story was that, as an open-minded scientist, Kepler was prepared to change his theories if his observations forced him to do so.

More dramatically, in 1688 the medical man Gehema related his conversion from traditional Galenic medicine to modern medicine in a first person narrative. He told his readers that he had already started doubting the wisdom of traditional medicine when he read some of the medical reformers of his day. He then reported that, soon after, he saw the light of truth, for which enlightenment he still thanked God every day (1688:74f.). Of course, the main function of this story of enlightenment was to emphasize the contrast with the traditionalists, who still lived in the darkness of medical ignorance.

4. Conclusion

For modern readers, subjectivity is probably not the most striking feature of contributions to 17th century controversies. On the contrary, in this period controversies seem to be very much guided by traditional rules and principles, not the least of which is the principle that one should deal with *realia* and not with *personalia*. In judging potential loci of subjectivity, we have to take into account, amongst other factors, the typical rhetoric of contemporary genres

(e.g., dedications and prefaces), contemporary rules of etiquette and principles of text construction.

As the material presented in this paper shows, however, we do find many remarkable passages where authors mention personal experiences, voice personal opinions, and make personal reflections. And this is not just the case in Descartes' *Meditations* and other major works of the period, but also in texts of minor authors. Thus, there is much material for a comprehensive study of the 17th century rhetoric of individuality or subjectivity. At least some of these forms of expression of subjectivity could be regarded as facets of the rhetoric of innovation typical of the period.

Notes

1. The project was supported by the German-Israeli Foundation for Scientific Research and Development (GIF) in the years 1999 to 2001.
2. This project is part of a long-term research endeavour in historical pragmatics, especially in the history of forms of communication (cf. Fritz 1995). The importance of a pragmatic approach to the study of controversy was first emphasized by Marcelo Dascal (cf. 1989).
3. On routines of politeness characteristic of the period under survey cf. Beetz (1999).
4. The history of Kepler's controversy with Ursus is investigated in Jardine (1984).
5. A pragmatic analysis of the controversy between August Hermann Francke and his opponent Johann Friedrich Mayer is presented in Fritz and Gliier (2001).
6. The strategies of text organization in 17th and 18th centuries controversies have been analyzed in detail in the case studies produced in the course of the project, e.g., Fritz (2001), Fritz (2002) and Fritz and Gliier (2001).
7. Hedging in present day scientific writing has recently been studied by several authors, e.g., Hyland (1998).
8. The results of an in-depth case study of this controversy are presented in Gloning and Fusing (2002).
9. "A particular! ad universale nulla valet consequential"
10. "Everyone is the best interpreter of his own words".

References

- Beetz, M. (1999). "The polite answer in pre-modern German conversation culture". In A. H. Jucker, G. Fritz, & F. Lebsanft (Eds.), *Historical Dialogue Analysis* (pp. 139-166). Amsterdam: John Benjamins.

- Biagioli, M. (1993). *Galileo Courtier. The Practice of Science in the Culture of Absolutism*. Chicago: The University of Chicago Press.
- Bramhall, J. (1655). *A defence of true liberty from antecedent and extrinsecal necessity; being an answer to a late book of Mr. Thomas Hobbes of Malmesbury, entitled a treatise of liberty and necessity*. In *The works of The Most Reverend Father in God, John Bramhall, DD. Sometime Lord Archbishop of Armagh, Primate and Metropolitan of all Ireland*, Vol. IV (pp. 3-196). Oxford: Parker, 1844. [Defence]
- Dascal, M. (1989). "Controversies as quasi-dialogues". In E. Weigand & F. Hundsnurscher (Eds.), *Dialoganalyse II* (pp. 147-160). Tübingen: Niemeyer.
- Francke, A. H. (1707). "Gründliche und Gewissenhafte Verantwortung gegen Hn. D. Johann Friedrich Mayers/ Professoris Theologi auff der Universitat zu Greiffswald/ harte und unwahrhafte Beschuldigungen/ [...]. Halle: in Verlegung des Waysen-Hauses". In P. Erhard (Ed.), *August Hermann Francke. Schriften und Predigten*. Band I: Streitschriften, 1981 (pp. 265-381). Berlin: De Gruyter.
- Fritz, G. (1995). "Topics in the history of dialogue forms". In A. H. Jucker (Ed.), *Historical Pragmatics. Pragmatic Developments in the History of English* (pp. 469-498). Amsterdam: John Benjamins.
- Fritz, G. (2001). "Remarks on the pragmatic form of the Hobbes/Bramhall controversy (1645-1658)". In M. Dascal, G. Fritz, T. Gloning, & Y. Senderowicz (Eds.), *Controversies in the Republique des Lettres (1600-1800)*. Technical Report 1: The Hobbes-Bramhall Controversy (pp. 5-24). Tel Aviv.
- Fritz, G. (2002). "Dialogical structures in 17th century controversies". In M. Bondi & S. Stati (Eds.), *Dialogue Analysis 2000* (pp. 199-208). Tübingen: Niemeyer.
- Fritz, G., & Gliier, J. (2001). "The pamphlet and its alternatives ca. 1700: A historical-pragmatic study of the final phase of the controversy between Johann Friedrich Mayer and August Hermann Francke (1706/1707)". In M. Dascal, G. Fritz, T. Gloning, & Y. Senderowicz (Eds.), *Controversies in the Republique des Lettres (1600-1800)* (pp. 42-79). Technical Report 4: Theological Controversies. Gießen.
- Gehema, J. A. a. (1688). *Grausame Medicinische Mord=Mittel/ Aderlasse/ Schropffen/ Purgiren/ Clistiren [...]* Brehmen I Gedruckt im Jahr Christi 1688 [Reprint Lindau: Antiqua Verlag, 1980].
- Geuder, M. F. (1689). *Heilsame Medicinische Lebens=Mittel/ Denen grausamen Medicinischen Mord=Mitteln I Herrn D. Jan. Abrah. a Gehema Entgegengesetzt [...]*. Ulm: Im Verlag Georg Wilhelm Kuhn [Reprint Lindau: Antiqua Verlag, 1980].
- Gierl, M. (1997). *Pietismus und Aufklärung. Theologische Polemik und die Kommunikationsform der Wissenschaft am Ende des 17. Jahrhunderts*. Göttingen: Vandenhoeck and Ruprecht.
- Gloning, T. (1999). "The pragmatic form of religious controversies around 1600: A case study in the Osiander vs. Scherer and Rosenbusch controversy". In A. H. Jucker, G. Fritz, & F. Lebsanft (Eds.), *Historical Dialogue Analysis* (pp. 81-110). Amsterdam: John Benjamins.

- Gloning, T., & Losing, J. (2002). "Die Kontroverse zwischen J. A. Gehema und M. F. Gender (1688/1689). Zur pragmatischen Form einer medizinischen Kontroverse um 1700". In M. Dascal, G. Fritz, T. Gloning, & Y. Senderowicz (Eds.), *Controversies in the Republique des Lettres (1600-1800)* (pp. 87-142). Technical Report 3: Scientific Controversies and Theories of Controversy. Giefien.
- Hobbes, T. (1654). *Of liberty and necessity: A treatise wherein all controversy concerning predestination, election, free-will, grace, merits, reprobation, etc. is fully decided and cleared. In answer to a treatise written by the Bishop of Londonderry, on the same subject. London 1654.* In *The English Works of Thomas Hobbes of Malmesbury; now first collected and edited by Sir William Molesworth*, Vol. IV. London 1841 [Reprint Aalen: Scientia, 1962, 229-278]. [LN]
- Hobbes, T. (1656). *The questions concerning liberty, necessity, and chance, clearly stated and debated between Dr. Bramhall, Bishop of Derry, and Thomas Hobbes of Malmesbury. London 1656.* In *The English works of Thomas Hobbes of Malmesbury; now first collected and edited by Sir William Molesworth*, Vol. V. London 1841 [Reprint Aalen: Scientia, 1962, 1-455], [LNC]
- Hyland, K. (1998). *Hedging in Scientific Research Articles*. Amsterdam: John Benjamins.
- Jardine, N. (1984). *The Birth of Philosophy and Philosophy of History: Kepler's A defense of Tycho against Ursus with essays on its Provenance and Significance*. Cambridge: Cambridge University Press.
- Kepler, A. (1609). *Antwort Joannis Keppleri Sae. Cae. Mtis. Mathematici Auff D. Helisaei Rbslini Medici & Philosophi Discurs Von heutigerzeit beschajffenheit [...] Gedruckt zu Prag bey Pauln Sesse. Im Jahr.* In Hg. von M. Caspar & F. Hammer (Eds.), *Johannes Kepler. Gesammelte Werke*, Band IV, 1991 (pp. 102-144). Munchen: Beck.
- Kepler, J. (1610). *Tertius Intervenens. Das ist / Warming an etliche Theologos, Medicos vnd Philosophos, sonderlich D. Philippum Feselum, dafi sie bey billicher Verwerffung der Sternguckerischen Aberglauben / nicht das Kind mit dem Bade ausschiltten ...* Gedruckt zu Frankfurt am Mayn / In Verlegung Godtfriedt Tampachs. Im Jahr. In Hg. von M. Caspar & F. Hammer (Eds.), *Johannes Kepler. Gesammelte Werke*, Band IV, 1991 (pp. 151-258). Munchen: Beck.
- Leibniz, G. W., & Clarke, S. (1715/1716). Correspondence Leibniz/Clarke. In C. J. Gerhardt (Ed.), *Die philosophischen Schriften von Gottfried Wilhelm Leibniz*, Band VII, 1978 (pp. 345-440). Reprint Hildesheim: G. Olms.
- Machamer, P. (2000). "The concept of the individual and the idea(l) of method in seventeenth-century natural philosophy". In P. Machamer, M. Pera, & A. Baltas (Eds.), *Scientific Controversies: Philosophical and Historical Perspectives* (pp. 81-99). New York: Oxford University Press.
- von Megenberg, K. ([about 1350]). *Das Buch der Natur*. Hg. von F. Pfeiffer. Reprint Hildesheim/ Zurich/ New York: Olms, 1994.
- Willemsen, C. A. (Ed.). (1942). *Friderici Romanorum. Imperatoris Secundi De Arte Venandi cum Avibus*, 2 Vols. Leipzig: Insel.