Historical perspectives on forms of English dialogue

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Over the past thirty years, many studies within English historical linguistics have adopted approaches drawing from sociolinguistics and pragmatics in order to investigate what texts from the past can tell us about the conveying of communicative intentions and stance, and about their codification, in older English. One interesting perspective is dialogue studies, in which the relationship between fictive characters, or that between writer and reader, is analysed (socio)pragmatically in order to highlight the way in which interaction dynamics was reproduced and interpreted at different stages of the English language and culture. This volume is meant as a contribution towards this research field, both as a testimony of the mature stage reached by such studies and, hopefully, as a prompt for future developments in this area.

The first part of the volume examines dialogic elements in literary texts, while the second is dedicated to non-literary text-types, including studies on scientific, didactic, technical and legal texts. From Shakespearean to textbook dialogues; from the rhetoric of letter writing to that of philosophical controversy; from gender-specific features of dramatic dialogue to the dynamics of trial proceedings, the articles in this volume all demonstrate the wide range and lively condition of historical dialogue

studies within English linguistics.

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Molyneux's Problem: the Dialogic Structure of a Philosophical-Scientific Controversy*

by Geoffrey Gray

1. Introduction

Dialogue involves the generation and interpretation of meaning through an interactive sequence of turns. A dialogic utterance is a pragmatic act that responds to, or in some way takes up, an interlocutor's previous turn. Such an utterance may also anticipate the responses that it will itself receive from an interlocutor's future turn. Historical-pragmatic approaches to dialogue analysis use historical data to reconstruct the loci of language use in which these interactive and sequential features emerge most clearly. Speech-act sequences, systems of address and interpersonal stance markers, for example, are examined for their organisation, their evolution, their variations across text types and discourse domains, and for the extent to which they become conventionalised and standardised (Taavitsainen and Jucker 2010: 7).

This paper uses an historical-pragmatic approach to explore a particular form of written dialogue: intellectual controversy. Early contributions to a philosophical-scientific debate known as "Molyneux's Problem" (hereafter MP), which emerged in late seventeenth-century England and engaged several European scholars thereafter, are examined for their sites of dialogic language use. Although «[w]ithin historical pragmatics, the history of controversies is a fairly young field of research» (Fritz 2010: 452), it has already distinguished itself from history-of-ideas or history-of-science approaches. Instead of studying the «abstract intellectual contents» of dichotomous propositions (Mendelsohn 1987: 99), there is a focus on the «pragmatic structure» of proponents' exchanges, on the «dynamics of linguistic interaction, its contexts, text types, types of and sequencing of moves [...]», and «on the history of a form of communication» (Fritz 2010: 457-458).

^{*} The author would like to thank an anonymous reviewer for comments on an earlier draft of this paper.

In order to analyse the dialogic structure of MP within an overall framework that is defined by these issues, this paper starts from the assumption that controversies are a form of communication that is integral to the development of philosophy and science1. Initially, in section two, a macroperspective is adopted in order to summarise the Molyneux controversy as a whole. This allows the diverse, evolving interpretations and interpolations of Molyneux's question to be seen as a dynamic, interactive sequence of extended turns. A micro-perspective is then used throughout the rest of the paper to focus on certain, sometimes overlapping, sites of language use where the pragmatic structure of dialogue emerges most clearly. In section three, a view of participants forming a network of relations prefaces an account of their use of address formulae. In section four, various types of speech acts are analysed in order to show that their illocutionary forces performed a number of interactive, communicative tasks that are fundamental to intellectual controversies. Finally, in section five, attention moves to meta-propositional commentary that allowed readers to detect the stances that writers took towards their propositions.

2. Summary of the Molyneux controversy

After introducing the cultural-historical context of Molyneux's original question, this section shows how MP became a controversy in the "deliberative" sense defined by Dascal (1998: 21-28). It is then argued that both Taavitsainen's (2005: 180) concept of the «appropriation» of scientific knowledge, as well as the idea that a particular lexeme can mark the common ground of a controversy, can enrich understanding of the dialogic relations that occurred between text reception and text production.

2.1. Molyneux's question and its cultural-historical context

In 1688 William Molyneux, whose *Dioptrica Nova* – «the first substantial book in English on optics» (Degenaar 1996: 18) – would be published four years later, penned a private letter to the English philosopher John Locke. Here, Molyneux framed a speculative and, apparently, open ques-

^{1.} Controversy, Cossutta (2005: 127) argues, is inscribed in philosophy's «very foundations» while scientific knowledge, notwithstanding Kuhn's (1970) misgivings about the notion of steady progress (see Gross *et al.* 2001: 212), «can be seen as a sequence of questions to be asked and answered» (Taavitsainen 2001: 21) that has often caused controversy.

tion concerning what might be seen by a congenitally blind person who has just acquired the faculty of sight. Would he be able, by vision alone, to distinguish a sphere («a globe») from a cube – a difference he had previously known only through his sense of touch?

 Let us suppose his Sight Restored to Him; Whether he Could, by his Sight, and before he touch them, know which is the Globe and which the Cube? Or Whether he Could know by his Sight, before he stretchd out his Hand, whether he could not Reach them, tho they were Removd 20 or 1000 feet from him? (in Locke 1976-1990, letter no. 1064)

This deceptively simple question, a second version of which was written by Molyneux in another private letter to Locke in 1692 and published almost verbatim in the second edition of Locke's *An Essay concerning Human Understanding* ([1694] 1975: 146)², eventually became a conundrum of controversial topics. Foremost among these were the correlation of touch and vision versus their independence, the ability to perceive physical distance, and the degree to which a person's sensory perception of the external world is, in the first instance, innate (rationalism) or educated by experience (empiricism). MP was therefore a nexus of philosophical and psychological problems concerning perception and knowledge.

To understand the dialogic nature of the ensuing controversy, it is necessary to place Molyneux's original question within its cultural-historical setting. An overall shift from scholasticism (i.e., quotative knowledge and prevailing deontic modality) to empiricism (i.e., the experimental essay and subjective epistemic assessments) was taking place at this time (Taavitsainen 2002: 206-207). In England, especially after the foundation of the Royal Society in 1660, physical experiments, optical studies and instruments, and an individual's reflection upon direct, sensory evidence were replacing ancient, authoritative texts as the key to scientific advancement. The Royal Society motto *Nullius in verba* ("On no man's word"), reflected the move towards both «the rationalism of "the truth you think for yourself" and the empiricism of "the truth you perceive through your senses"» (Bromhead 2009: 8).

^{2.} This second version reads «Suppose then, the Cube and Sphære placed on a Table, and the Blind Man to be made to see. Quære whether by his sight, before he touchd them, he could now Distinguish and tel which is the Globe which the Cube» (in Locke 1976-1990, letter no. 1609). Two discrepancies, at propositional level, between these two versions of Molyneux's question helped to fuel controversy about what he had meant. The first disparity is that only the earlier version poses the question concerning the perception of distance. The second difference is that only the later version seems to ask, by means of the paratactic insertion «and tel», whether this person would be able to *name* the sphere and the cube.

2.2. Interaction between text reception and text production: "appropriation" of Molyneux's Problem

It was within this intellectual climate that Molyneux's Problem became a controversy in the "deliberative" sense defined by Dascal (1998: 21-28), and summarised by Fritz (2010: 460) thus: «It can begin with a specific problem, but it spreads quickly to other problems and reveals profound divergences». Although the main type of move here is the argument - i.e., the marshalling of reasons and evidence to prove or disprove a standpoint – this did not lead to the codification of MP into propositional content that was dichotomous, static and finite. Instead, Molyneux's question has, in the course of history, «been replaced by numerous other questions which, while related to the original problem, have gone on to lead a life of their own» (Degenaar 1996: 132-133). As a result of the diffusion of empirical methods, the above-mentioned conundrum of topics spread from speculative philosophy into other disciplines such as psychology and neurophysiology. This uptake of new topics built upon previous ones, as well as the changing text types and discourse domains in which they were discussed, can be represented on a timeline:

- 1) 1688: earliest known formulation of MP in a private letter to Locke (see citation (1)). 1694: publication of Molyneux's second version of his question (see footnote 2) along with his answer (see citation (2)) and Locke's answer to it in Locke ([1694] 1975: 146).
- 2) Late seventeenth-century and eighteenth-century discussion of MP within a speculative-philosophical framework: negative answers include Berkeley (1709) and Reid (1764); positive answers include Synge (1695), Jurin (1738) and Leibniz (1765).
- 3) The first experimental data: answers to MP in Berkeley (1733), Smith (1738) and Voltaire (1738) take stock of written documentation of successful eye-cataract surgery in Grant (1709) and especially Cheselden (1728). Other thinkers Condillac (1746), Diderot (1749) and La Mettrie (1745) make the distinctively French contribution to the controversy. Their equation of blindness with «emotional and moral solipsism and sensitivity grew out of, and replaced, the correlation of sight with touch and the ability to see distances» as the crux of MP (Riskin 2002: 42).
- 4) Nineteenth-century empirical approaches in the domains of psychology and physiology: e.g., Home (1807) and Wardrop (1826). Franz (1839) concludes that Molyneux's question cannot be definitively answered either negatively or positively. Discussion of the controversy is extended to

- the visual perception of babies and newborn animals (Müller 1837-1840; Bailey 1842).
- 5) The twentieth century: relevant empirical data continues to be discussed in the domains of not only experimental psychology and neurophysiology (Gregory and Wallace 1963; Warren and Strelow 1984) but also philosophy (Merleau-Ponty 1945; Morgan 1977; Evans 1985).

Degenaar's (1996: 133) use of a river metaphor to capture the transformation of this controversy from a single source to a wide delta of investigation is apt. Initially, the discussion had a speculative-philosophical nature: Molyneux's two versions of his question have the formal semantic structure of a counterfactual, predictive, conditional, interrogative. There was no requirement for advocates of negative or positive answers to believe that the acquisition of sight by a congenitally blind person was really possible. Without a sudden caesura, this changed in the wake of early eighteenth-century documentation of successful eye-cataract surgery. This information, which included patients' post-operation reports of what and how they saw, became a conduit of empirical data for assessing the validity of answers to MP. In the nineteenth and twentieth centuries empirical data became more refined. (Animal physiologists, in particular, used «methods more amenable to experimental control than is possible in clinical studies» [Klein 1970: 391].) Referring to such data, the controversy eventually turned full circle. For it has since engaged the attention of not only psychologists and cognitive neuroscientists but also, as at the beginning, philosophers.

The broad sense in which the Molyneux controversy was thus interactive, sequential and dialogic is captured by Taavitsainen's concept of the «appropriation» of scientific knowledge. MP can be seen as:

historically constructed, produced in a dialogue between the propositions contained in the work and readers' responses. Appropriation is a multi-modal phenomenon: the same text is perceived in different ways at different times by different audiences, depending on how and in which context it is presented. There are no stable, universal, or fixed meanings, but plural and mobile significations [...]. (Taavitsainen 2005: 180)

Several "appropriations" (i.e., interpretations, interpolations, extensions and refutations) of the meanings of Molyneux's original question were developed through different discourse contexts (domains) and text types (e.g., the emergence of the experimental essay and the academic journal that evolved from epistolary, communal genres [Gotti 2006]). In this way the meaning of Molyneux's question was constructed through dialogue and was not only a prerequisite – a pretext – for it.

2.3. The mass-noun "experience": marking the "common ground" of a discourse community

Hence it can be asked: how were these *diverse* strands of argument held together and perceived as belonging to a *single* controversy? During the early phases of MP, cohesion of diverse, and even opposed, contributions was facilitated by the use of the polysemic mass-noun "experience". Between the sixteenth and the nineteenth centuries, Wierzbicka (2010: 43) argues, the semantic meaning of this mass noun underwent «an important shift from a long-term and retrospective view, which was also an objective, external one, to one that was subjective and internal, as well as short term and introspective (introspective and yet, as it were, empirical)». Through *reflecting* upon their sensory confrontations with the world, people could arrive at true knowledge based on the trustworthiness of their senses of sight or touch. Such is the essential, denotative meaning of the two tokens of "experience" that are found in Molyneux's answer to the second version of his question:

2) I answer, Not; for tho he has obtaind the Experience of How a Globe, how a Cube affects his Touch. Yet he has not yet attaind the Experience, that what affects my Touch so or so, must affect my Sight so or so [...]. (in Locke 1976-1990, letter no. 1609)

A similar meaning is encoded by tokens of «experience» in Locke, e.g., «we cannot know certainly [...] any farther, than experience, by our Senses, informs us» ([1694] 1975: 546). Whilst the mass-noun "experience" referred exophorically to the scientific revolution that was taking place (i.e., the shift from scholasticism to empiricism described above), it also referred endophorically to the texts of other contributors to the early stages of the Molyneux controversy. There was a semantic grid or web of at least four, partly overlapping meanings of "experience" that clustered around the above nodal meaning:

- 1) A first-person perspective encoded by pronouns and possessive determiners: experiencers could be either the grammatical subject of the sentence «Now we find by experience» (Smith 1738: 46); or its direct-object complement «[...] experience has made us to observe between 'em» (Berkeley 1709: §CXLVII). And the concept of an individual possessing experience could be encoded by the pre-modifier "own": e.g., «[...] as far as my own Experience and Observation will assist me [...]» (Locke [1694] 1975: 102).
- 2) The proximity or co-occurrence, as exemplified by the previous two citations, of "experience" and "observation". Both Molyneux and Locke's use of these words elsewhere suggests that they acted as a single lexeme with a single meaning. Molyneux (1709) praises Locke for having «de-

- livered more profound Truths, established on Experience and Observation», and Locke ([1694] 1975: 162) defines his epistemology thus: «I must appeal to Experience and Observation, whether I am in the right»³.
- 3) The idea that knowledge results from the same, repeated sensory experience of an individual is used to structure certain approaches to MP. The assumption, Berkeley (1709: §CIV) argues, that there is an inherent connection between visual and tactile perception of size is «entirely the result of Custom and Experience». Likewise, Reid claims that "the mind passeth from the sign to the thing signified [...] by having found them *constantly* conjoined in experience» (Reid [1764] 1801: 242, emphasis added)⁴.
- 4) Experience as a basis for learning: in the early eighteenth century, reports from blind people cured by eye-cataract surgery were seen as disproving an innate connection between sight and touch. It was suggested that seeing was instead a uniquely «acquired skill» (Riskin 2002: 23-24). Sensory experience emerged as the crucial basis for the intellectual idea, coined in Cheselden's report (1728: 448), that a person cured of blindness gradually «learned to know» movement, distance and size he *remembered* previous visual perceptions. This is glossed by Reid's ([1764] 1801: 241) assertion that: «[...] we can learn only by experience».

The mass-noun "experience" can thus be seen as a site of dialogic, interactive language use. In addition to providing surface connectivity between early contributions to the controversy, it realised two functions. The first was the use of language as a form of "joint action", i.e., «action carried out by an ensemble of people acting in coordination with each other» (Clark 1996: 3). The second was that this resulted in an accumulation in the discourse of "common ground" – i.e., shared, mutual knowledge of beliefs and suppositions (*ibid*, 38). During this period of scientific revolution, discourse participants with different, or even incompatible, ideas were ultimately working together to construct «truth-generating practices» that would provide a sound base for the advancement of scientific knowledge (Shapin 1994: 5). Use of the mass-noun "experience" communicated, amongst other things, the writer's claim to active membership of this discourse community of inquiring, trustworthy gentlemen who had a reputation to gain or to defend.

^{3.} This co-occurrence can also be found in the science section of the Lampeter Corpus: e.g., «experience has assured judicious observers» (Boyle 1684: 8); «A Man may be an Advocate for Experience, and well appriz'd of the Usefulness of accurate Observations» (Guybon 1712: 8).

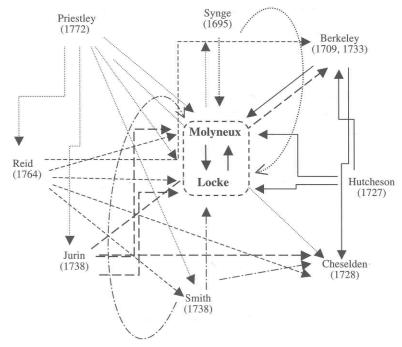
^{4.} Further examples in the science section of the *Lampeter Corpus* include: «which daily experience testifies» (Wallis 1666: 3); and «to have been repeated as oft as any observation» (Hooke 1674: 6).

3. A social network and address formulae

So far, the interactive, sequential and dynamic nature of the MP controversy has been described and, up to a point, explained with reference to the concepts of "appropriation" and "common ground". Discussion now focuses more narrowly on the pragmatic structure of exchanges during the early stages of the controversy. Address formulae, speech acts and metapropositional commentary are treated as sites of language use where dialogic structures can clearly be seen.

Analysis of address formulae needs to be prefaced by consideration of how early contributors can be conceived as a "social network" of interdependent rather than autonomous units⁵. At its centre were the strong, reciprocal relationships between Molyneux and Locke that were forged through their private correspondence about matters that were not limited to MP. Surrounding this core were the third-person references of other writers to Molyneux, to Locke and to each other:

 $Fig. \ 1-Reciprocal\ correspondence\ between\ Molyneux\ and\ Locke,\ and\ contributors'\ third-person\ references\ to\ each\ other$



5. See Bergs (2005: 52) and Fitzmaurice (2000) for discussion and applications of the concept of a "social network".

The use of address terms, which are viewed here as including pronouns. affords a glimpse of the socio-pragmatic values that informed this social network. The openings and closures of Locke and Molyneux's private letters to each other raise two issues. First, to what extent were they simply conforming to the conventions of an established epistolary genre (Brant 2006) by repeating fixed phrases, and to what degree were they exercising deliberate choice? Second, what were the parameters according to which these choices varied? Answers to these questions need to recognise that whilst discussion of intellectual matters was the main function of these letters, interpersonal functions of showing reverence and esteem, and securing the recipient's good will (captatio benevolentiae) were also being realised. Although Molyneux and Locke's opening address formulae have minimal variation («Sir» v. «Honoured Sir»), their closing phrases of endearment could contain adjectives that supplemented the conventionalised «Your most humble servant». Indicative, perhaps, of a socio-pragmatic value that was driven by Molyneux's desire for closer bonding with Locke, is the former's use of «Your Most Obleidged Humble Servant» and «Your most Intirely affectionate Humble servant» (Locke 1976-1990, letter nos. 1652 and 1661). Eventually, rather than immediately, these intensifications of endearment receive «Your most humble, and most faithful servant» from Locke (ibid, letter no. 1693).

The other participants displayed in Fig. 1 used social or professional titles plus last names to make initial third-person reference to each other: e.g., «Mr Molyneux», «Bishop Berkeley», «Dr. Smith». Anaphoric «he» or «they» were used to refer to names mentioned in the immediate, previous co-text. Anonymous or impersonalised reference to other contributors, especially in Berkeley (1709), could be realised through passive constructions that did not necessarily specify the agent. (Compare: «It is, I think, agreed by all that [...]» (Berkeley 1709: §II) with «Now, It being already shewn that [...]» (ibid, §XVI)). Passivisation could also, then, be deployed persuasively to assimilate a writer's argument into the authority of other voices. Further evidence of this is the utterance: «[...] it seems agreed on all Hands, by those who have had any thoughts of that Matter, that [...]» (ibid, §XLIII). Impersonalised reference was also realised through nominalisation: «It is indeed otherwise upon the common supposition, that [...]» (ibid, §XLII); «I know it is a receiv'd opinion, that [...]» (ibid, §XIX). The reader was sometimes required to infer the exact referent: «wherein the most approv'd Writers of Optics will [...]» (ibid, §XXII).

Writers of published monographs used inclusive «we» to refer to their known or imagined readers. This communicated the writer's assumption of

common ground: «Though we say of this gentleman that he was blind [...]» (Smith 1738: 42); «But we cannot acquiesce in this solution» (Reid [1764], 1801: 240). Impersonal «one» and nominalisation of the reader were used to a lesser extent: «Some things there are which, at first sight, incline one to think Geometry conversant about Visible Extension» (Berkeley 1709: §CL); «I leave this with the Reader to pursue» (*ibid*, §CXLIII).

The data here, then, suggest that cooperative rather than conflictive relations between peers were usually being communicated. This, as is shown by the speech-act analysis that now follows, did not mean there was little or no disagreement about what was true.

4. Communication tasks performed by illocutionary acts

Dialogic structure will now be explored in terms of how various illocutionary acts performed certain interactive, communicative tasks that are central to intellectual controversies, and that can be paired together. These are firstly, reacting to another writer's intervention and anticipating responses to one's present contribution; secondly, asserting commitment to one's own propositions, and requiring readers to accept them as true and/or to follow certain procedures for reading one's text; and lastly, engaging the reader (via questions) with attempts to fill in an apparent knowledge gap.

Although a range of synchronic and diachronic approaches have been used to capture the complex relations between illocutionary meanings, propositional meanings and grammatical forms of speech acts (Archer 2010), the analysis here is based on two fundamental starting points. The first is Gloning's (1999: 84): «To describe a linguistic act or a form of communication, it is crucial to describe the problem it is supposed to solve». The second is Searle's (1969: 29) argument that «propositional acts cannot occur alone»: they are «always expressed in the performance of an illocutionary act».

4.1. Reacting to another writer's intervention and anticipating responses to one's own contribution

Reactions to other contributions were communicated with illocutionary forces that ranged from complete adhesion, as in (3) and (4), through mitigated disagreement, as in (5), (6) and (7), to bald assertion of dissent, as in (8) and (9):

- 3) I agree with this thinking Gent. whom I am proud to call my Friend, in his answer to this his Problem [...]. (Locke [1694] 1975: 146)
- 4) I cannot help assenting to Dr. Jurin's solution. (Priestley 1772: 720)
- 5) What seems to have misled the writers of *Optics* in this Matter is, that they imagine Men judge of Distance, as they do of a Conclusion in *Mathematics*. (Berkeley 1709: §XXIV, emphasis in original)
- 6) I see by Mr S's answer to that which was originally your question, how hard it is, even for ingenious men to free themselves from the anticipations of sense. (Locke to Molyneux, 1695, in Locke 1976-1990, letter no. 2059)
- 7) Setting aside therefore the authority of Mr Locke [...], I proceed to prove against Mr Molyneux, that [...]. (Jurin 1738: 28)
- 8) Messrs. Locke and Molyneux are both wrong about the cube and sphere proposed to a blind man restored to sight. He would not at first view know the sphere from a shaded plane surface by a view from above, but a side view would [...]. (Hutcheson [1727] 1788: 159)
- 9) Bishop Berkeley therefore proceeds upon a capital mistake, in supposing that [...]. (Reid [1764] 1801: 247)

Basic illocutionary acts of agreement, disagreement, complimenting, asserting and refuting are performed by these written utterances. Such acts would have been familiar to the literate, upper ranks of early modern society. Yet they could be qualified by more specific argumentative moves and rhetorical devices that were typical of intellectual controversies, then as now. These include, as in (7), the sidelining of an authoritative voice and a «rhetoric of innovation» (Fritz 2010: 467) where traditional views are contrasted with one's own advanced views; the introduction in (5) and (8) of a conceptual distinction of which one's opponents are apparently unaware; and the mitigation in (5) of a proposition that had the illocutionary force of a challenge. Here, the epistemic modal «seems» is foregrounded by the first clause-like component of this "what-cleft" sentence.

Furthermore, in contrast to the impersonalised tenor of contemporary scientific discourse (Gross *et al.* 2001: 165-167), the pronoun «I» in (3), (4), (6) and (7) anchors the reader to the given, thematic, deictic centre of the writer. But the modality that is used to encode the writer's relationship to his knowledge could vary. Whilst in (4) the writer is deontically asserting that he is obliged to agree independently of any personal preference, the use of «see» in (6) is a subjective epistemic judgement based on personal reflection. Note also that in (5) and (6) the writer positions himself as an objective, omniscient observer who adjudicates between other proponents, and acknowledges the difficulty they have in renouncing a mistaken assumption.

Linked to all this was the communicative task of anticipating the responses of actual or imagined addressees. First-person pronouns marked the writer as a default, deictic centre who uses language to forestall envisaged, dispreferred responses as in (10) and (11), or to predict an audience's thought processes as in (12) and (13):

- 10) [...] if you call me impertinent for sending you my thoughts upon such a speculation, I will retort, and tell that it was your self who put the question to *Your affectionate friend, and faithful servant*, EDW. SYNGE, Mr. (Synge to Quayl, 1695, in Locke 1976-1990, letter no. 1984, emphasis in the original)
- 11) Nor doth it avail to say, there is not any necessary connexion [...]. For I ask any Man, What necessary Connexion he Sees, between the Redness of a Blush and Shame? (Berkeley 1709: §XXIII)
- 12) As to your notion of our mind as a only a system of perceptions, I imagine you'll find that every one has an immediate simple perception of *self*. (Hutcheson [1727] 1788: 158, emphasis in the original)
- 13) You will find thereby, that what I say of its puzling some ingenious men is true; and you will easily discover by what false steps this gentleman is led into his error. (Molyneux to Locke, 1695, in Locke 1976-1990, letter no. 1984)

In (10), the illocutionary forces of retorting and accusatory telling are transformed into playful banter thanks to the *that*-clause which follows. Expressing the closing terms of endearment in a private letter, the message becomes one of mock impoliteness (Leech 1983: 144-145). In (11) a rhetorical question has the illocutionary force of both an assertion that a proposition is true, and a directive to the reader to desist from voicing possible objections. The conjecture in (12) and the prediction in (13) also have the illocutionary force of asserting the truth of a proposition. Finally, the illocutionary forces of (11) and (12) are strengthened by the free-range quantifiers «any Man» and «every one» respectively. Both of these realise an *argumentum ad populum* that shifts the burden of proof onto something being «considered acceptable by a great many people» (van Eemeren 2010: 194).

4.2. Asserting and directing

Intellectual controversies involve, as has just been exemplified, competing assertions of what is true. An illocutionary act of assertion, Searle (1969: 64) argues, can be divided into its preparatory condition (that there is «some basis for supposing the asserted proposition is true»); its sincerity condition (that it is believed to be true) and the essential condition (that it is seen «as

representing an actual state of affairs»). Direct communication that these conditions had been fulfilled was typically performed by declarative sentence types:

- But he cannot choose seeing whether the Object appear more, or less confused. It is therefore a manifest consequence of what has been Demonstrated, that [...]. (Berkeley 1709: §XXII)
- 15) This being premised, I lay down these propositions. (Synge to Quayl, 1695, in Locke 1976-1990, letter no. 1984)

Both of these utterances were placing the writer and his potential adversaries in a relation of opposition between equals. In (14) negation of an adversary's proposition is followed by the causal connectives «therefore» and «consequence». This appeal to an adversary's ability to reason methodically could also consist of a series of logically connected and numbered propositions, as introduced by (15), that echoed medieval forms of scholastic disputation (Fritz 2010: 453, 461-462). Less direct communication of assertions could be realised through positive evaluations of a competing contribution: «The most extraordinary circumstance in this account is that…» (Priestley 1772: 724); or through focusing attention on the topic: «As to the main point in your letter about our activity, we are very much of the same opinion» (Hutcheson [1727] 1788: 159-160).

Another basic task that contributors had to perform was the communication of certain directives; namely, the writer's requirement that his interlocutors accept the validity of a proposition that was being asserted as true, or adopt a certain procedure while reading the text. The former could be realised through the writer's appeal to the reader's general knowledge or reasoning abilities: e.g., «And you know that [...] 'tis an high offence, even to be silent on those abstruse points» (Molyneux to Locke, 1695, in Locke 1976-1990, letter no. 1984) and «This surely must be acknowledged. The same individual object is presented to the mind» (Reid [1764] 1801: 166). In each case the illocutionary force is that the reader is being told that he should invest the writer's proposition with a truth value. This telling is direct and is stated almost as an obligation.

The paradigmatic case of a writer's requirement that the reader follow a certain procedure is Molyneux's use of a sentence-initial speech-act verb with a directive illocutionary force, and an imperative mood to preface his question(s): «Let us suppose his Sight restored to Him [...]» / «Suppose then, the Cube and Sphere [...]». Although the writer is using markers of irrealis here that have the surface meaning of an invitation, they also carry,

at a deeper level, the illocutionary force of an expectation that the reader follow the writer by suspending disbelief and by assuming that X is the case.

4.3. Filling a knowledge gap: questions and answers

With an assertion, a writer takes full responsibility for a proposition in which words and world are alleged to be in full correspondence. In contrast, an interrogative act, Schrott (1999: 336) argues, indicates that the writer «does not know yet whether world and words are in full correspondence, be it that the propositional content itself is marked by a gap or that a complete proposition has not yet been tested as to its correspondence with the world». Treating the interrogative act as pointing to a knowledge gap helps to identify its central illocutionary forces; namely, a question that requests the filling in of this apparent gap, and an answer that ideally fulfills this request and closes the gap (*ibid*, 332). The interactive, sequential nature of dialogue emerges most clearly here when a question and its answer form an adjacency pair, as in Molyneux's second version of his question and his immediate answer to it in (16), and as in (17):

- 16) Suppose then, the Cube and Sphære placed on a Table, and the Blind Man to be made to see. Quære whether by his sight, before he touchd them, he could now Distinguish and tel which is the Globe which the Cube. I answer, Not; for tho he has obtaind the Experience of How a Globe, how a Cube affects his Touch. Yet he has not yet attaind the Experience, that what affects my Touch so or so, must affect my Sight so or so [...]. (in Locke 1976-1990, letter no. 1609)
- 17) But does Mr *Locke* allow the blind man all these advantages? No. As soon as he is made to see, he requires him to pronounce, *with certainty at first sight*, which is the globe, which the cube [...]. (Jurin 1738: 28, emphasis in the original)

Nominalisation of both parts of a question-answer exchange as in (18), or just one part as in (19), helped to create an interactive, sequential and thus dialogic structure within a monologic text type:

- 18) It having been shewn, that there are no Abstract *Ideas* of Figure [...]: The Question now remaining is, whether the particular extensions [...]? In answer to which, I shall venture to lay down the following Proposition, *viz*. The Extension [...]. (Berkeley 1709: §CXXVII)
- 19) But then say you, by Sight we have also the *Ideas* of Extension, and Figure, and Motion [...]. In answer to this, I appeal to any Man's Experience, whether the visible Extension of any Object do not appear [...]. (*ibid*, §XLIII, emphasis in the original)

There were also rhetorical questions. These pointed to an apparent know-ledge gap while implying that an answer or, better, *the* answer was already known to the writer, or to the reader, or to both. The illocutionary force of a rhetorical question could thus be close to an assertion: the truth value of a proposition was put into the question (Schrott 1999: 345-347). Moreover, a rhetorical question could establish a consensus through writer and reader working together to deduce the answer that the question implied (*ibid*, 346):

- 20) [...] and when the question is asked, Why I see the object erect, and not inverted? It is the same as if you should ask, Why I see it in that position which it really hath? or, Why the eye shows the real position of objects [...]? (Reid [1764] 1801: 249)
- 21) Quere: Is there not here plainly an idea, viz that of desire or volition, and an object, viz, the desire or volition distinct from this perception of it? May there not be the same as to ideas I call the concomitant? (Hutcheson [1727] 1788: 159)

In (20) there are successive mutations of -i.e., semantic equivalences are explicitly drawn between - the same rhetorical question that has the form of a W/H interrogative. In (21) existential "there" + negation occurs in two versions of a rhetorical question. Each of these questions in (20) and (21) is close to the figure of a *subiectio*, i.e., a feigned dialogue in a monological text type. Another dialogical feature of these questions is that since they imply the obviousness of their answers, they also communicate expressive, exclamatory values to the reader (Schrott 1999: 345).

5. Meta-propositional commentary

Although address terms and illocutionary acts form an essential part of the pragmatic basis of dialogue, their analysis here needs to be complemented by an investigation of how dialogic structure can be found in writers' use of language at meta-level. They were intervening in some way to route readers' receptions and responses to their words. (Taavitsainen 2002: 216). Three types of meta-level commentary can be identified in the early stages of the Molyneux controversy: metasequential operators that guided the reader's comprehension of the stages and direction of an argument, meta-linguistic commentary that told the reader the speech acts that the writer saw his words performing, and meta-propositional information that allowed readers to detect, and possibly share, the writer's attitudinal stance towards his propositions. This last type of commentary, which will be examined here, can be placed on a continuum that ranges from subjective, epistemic stances to more objective, deontic ones. Examples from both ends of this continuum will now be discussed.

5.1. Subjective-epistemic stance markers

Although epistemic stance could be marked by modal verbs and nominalisations (e.g., «And this seems to me the true Reason, why [...]» Berkeley 1709: §XCVIII), the device most frequently used was an adverbial comment on information presented in a main clause. Grammatical realisation of epistemic stance adverbials included single adverbs, e.g., «Infallibly, it hath not» (Reid [1764] 1801: 166); adjectives with predicative syntax, e.g., «For it is evident, that [...]» (*ibid*, 165); non-finite subordinate clauses, e.g., «And this being found constantly to be so, there arises [...]» (Berkeley 1709: §XXI); and finite subordinate clauses that were either pseudo-parenthetical, e.g., «No Man, I believe, will pretend to see [...]» (*ibid*, §XXII); or truly parenthetical, e.g., «[...] wou'd seem to him (as in truth they are) no other than a new Set [...]» (*ibid*, §XLI).

Epistemic stance adverbials that are parenthetical occur frequently in Berkeley (1709). Although they would seem to be non-truth conditional (since they have degrees of semantic detachment from their host clauses), they are united with the rest of the clause at discourse level (by virtue of indicating a stance towards a proposition). A comparison of the following further example of this in (22) with a main-clause affirmation of certainty in (23) helps to show why the former is more interactive and dialogical than the latter:

- 22) But what has been said is, if I mistake not, sufficient to convince anyone that [...]. (ibid, \$CXXXIV)
- Nor do I see, how I can easily be mistaken in this matter. I know evidently that Distance is not perceived of itself [...]. (ibid, §XVIII)

In both utterances the writer uses a present-indicative interjection to impose his authoritative knowledge upon the reader. Yet there are subtle differences. In (22) the adverbial « [...], if I mistake not, [...]» can be understood in one of three ways: firstly, as an additional, reinforcing "discourse marker" (Brinton 2010: 290-292) that makes no contributions to the truth-conditions of the host clause; secondly, as marking the "if-protasis" on which the truth of the surrounding proposition depends; or thirdly as a pseudo-conditional "if-clause" that has a rhetorical function. It creates consensus by making it easier and more efficient for the reader to "collude" with the writer's asserted veracity, rather than resist his claim that his proposition is true. This last possibility is the most dialogical, and the most likely given Berkeley's predilection for self-serving rhetorical devices in this text. In contrast, the

main-clause interjection in (23) is more monological and less persuasive: it is the writer alone who asserts his veracity.

5.2. Objective-deontic stance markers

An objective stance created an impression of distance between a writer's proposition and his attitude towards it. This placed the possibility or necessity of a proposition being true in a factual, "objective" world that was to some degree independent of the writer's subjectivity, and thus helped to make the proposition more convincing in the eyes of the reader. For example, although strong writer involvement is communicated by Synge's use of epistemic «must» in the phrase «This must needs be so» (in Locke 1976-1990, letter no. 1984), this verb is coloured by the more deontic meaning of «needs». The latter encodes the meaning "without doubt" in a superordinate world which exists independently of the writer's mental attitude. A similar strategy for representing information as being partly or completely independent of the writer is found when Jurin (1738: 28) claims: «But here, in order to prevent mistakes, I must observe, that the question is not, whether [...]». The writer is presenting his question in terms of an overarching ethical necessity. Deontic modal «must» and the speech-act meaning of «observe» (i.e., "state that") set up a directive (rather than an assertive) meaning. There is an established norm that writer and reader should follow. As is the case for the "common ground" discussed in section 2.3., the existence of joint thought and behaviour is presupposed here.

6. Conclusion

Employing first a macro- and then a micro-perspective, the dialogic structure of the early stages of MP has been examined within the historical-pragmatic framework for studying controversies that has been defined by Fritz (2010: 457-458). Attention has focused on the dynamics of interaction (i.e., the diverse, evolving interpretations of the meaning of Molyneux's question, which can be seen as a sequence of extended turns); on the pragmatic structure of utterances (as realised by address formulae, speech acts and meta-propositional commentary); and on the history of a form of communication (i.e., the analysis started from the cultural-historical context of a question that became a controversy in Dascal's (1998: 21-28) "deliberative" sense). The early stages of MP were seen as exemplifying the shift from

scholasticism to empiricism, as operating within the then overlapping domains of philosophy and science (natural philosophy), and as occurring at a time when experimental essays and academic articles were evolving from epistolary genres.

In the introduction to this paper, it was noted that an historical-pragmatic approach to intellectual controversies seeks to avoid reducing adversity to the codification of dichotomous propositional content. If, then, the proper object of study concerns the *actions* performed by utterances, it is important to remember that the controversial and dialogic dimensions of MP did not arise from conditions that were extrinsic to philosophical-scientific discourse. Central to western philosophy, if not to science, are linguistic actions whereby «alterity is always repeated from the outside by a new voice which tries to cover the previous ones» (Cossutta 2005: 127).

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