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Deontic power and institutional contexts: the impact of institutional design on deliberation and decision-making in the UK fracking debate

Abstract

In this article I study the constraints and opportunities available to decision-makers in an institutional context (a county council), by analyzing the deliberative process that led to the rejection of an application for exploratory fracking. Drawing on a corpus of 130,000 words, I intend to develop the theorization of argumentation in institutional contexts initiated in pragma-dialectics (van Eemeren 2010) by drawing on philosopher John Searle's (2010) concept of "deontic power". Illustrating both the restrictive and enabling force of the institutional context, my analysis shows that, while decisions which are in keeping with institutional rules are legitimate in the sense of being legal, the reasonableness of the institutional context itself cannot be taken for granted. With various institutional rules in place seeming to obstruct rather than facilitate a rational decision outcome, and a local decision, democratically arrived at, subsequently legally overturned by central government, it can be argued that bias against local democracy was in this case built into (legal) institutional design.

Keywords: argumentative pattern; argument scheme; decision-making; deliberation; deontic powers; fracking; institutional context; institutional design; risks and impacts; shale gas

1. Introduction[1]
This article aims to make two original contributions: (1) theoretically, to the study of argumentation in institutional contexts; (2) empirically, to the study of the public debate on shale gas exploration in the UK from an argumentative perspective. I will take for granted the 'deliberation scheme' I put forward in previous publications (Fairclough 2016, 2018a, 2018b), and will briefly repeat the gist of that theoretical proposal in section 3. I will also suggest how my research can connect with current advances in pragma-dialectics, particularly with the study of "(prototypical) argumentative patterns" in communicative activity types (van Eemeren 2016, 2017). By "argumentative pattern" I understand "*a particular constellation of argumentative moves in which, in dealing with a particular kind of difference of opinion, in defence of a particular type of standpoint, a particular argument scheme or combination of argument schemes is used in a particular kind of argumentation structure*" (van Eemeren 2017a: 159, italics in the original).

The paper examines a corpus of 130,000 words – a transcript of 4 days of debate (23, 24, 25, 29 June 2015) in the Lancashire County Council (henceforth, LCC), on the applications for exploratory fracking submitted by oil-and-gas drilling company Cuadrilla in May 2014. Cuadrilla applied for drilling at two locations, Roseacre and Preston New Road (henceforth, PNR), near Blackpool, in the Fylde area of North-West England. The Roseacre application was rejected unanimously by the councillors, in accordance with the recommendation of the council's officer, on account of unacceptable traffic

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impacts (i.e., roads were said to be too narrow to safely support truck movement). The PNR application (on which I mainly focus here) was also rejected (9 votes against, 3 in favour, 2 abstentions), against the officer's recommendation, on grounds of unacceptable noise and visual impacts, and the unacceptable prospect of industrialization of a rural area. Since then, following Cuadrilla's appeal and a public inquiry, the PNR decision was overturned by the government (October 2016), and exploratory drilling started in Lancashire in August 2017, with the first horizontal well completed in April 2018 (Drill Or Drop n.d.). The 24-hours-a-day, 7-days-a-week rolling protest that began outside the PNR site in January 2017 had resulted in 341 arrests up to March 2018 (Hayhurst 2018).

On 23 and 25 June 2015, members of the public were allowed to speak in favour or against the two applications, in the open session of the council. All speeches were limited to 4 minutes, were video-recorded and were made available for a limited number of weeks on the LCC website, from where they were transcribed for the purpose of this study[2]. (All quotations in this paper are from this corpus, with the exception of a few passages from the LCC Constitution and a few summaries, clearly marked as such.) Both days began with the Council's officer reading his report and stating the case for approving the PNR application, and for rejecting the Roseacre application. In each case, his presentation was followed by a few dozen speeches by members of the public, arguing either in favour or against the proposal to allow Cuadrilla to proceed with drilling for shale gas. Overall, my corpus contains 71 speeches against and 38 speeches in favour of the applications, made by members of the public, as well as several dozen speeches made by councillors, experts and council officers, and the officer's reports, which were read aloud. The purpose of virtually all these speeches was to either support or reject the proposal to allow Cuadrilla to start exploring for shale gas in the area, by arguing for example that all risks and impacts were being acceptably mitigated, or that, on the contrary, the risks and impacts were unacceptable. The corpus is thus virtually entirely argumentative and deliberative, including most of the passages in which procedural and legal matters are discussed[3]. Describing the constraints placed upon the decision-making process by the institutional set-up, and being thus part of the institutional 'context', such passages are not merely background, but furnish decision-makers with 'deontic reasons' or premises (e.g. obligations or prohibitions), which need to be factored into the final decision. Similarly, the officer's two 'reports', containing detailed descriptions of the applicant's proposals (drilling depth, overall surface, decibel levels, rig height, etc.) and including the characteristics of each site and the proposed mitigation measures, also feed into the conclusion that the applications should (or should not) be approved. Their function is also argumentative: at the end of a balance-of-considerations line of reasoning in each case (analyzed in Fairclough 2018b), the LCC officer concluded that, in his view, based on all the evidence, there were no compelling reasons to reject the PNR application, but there were such reasons to reject the Roseacre application.

My focus will be on the deliberation and decision-making process, on the way in which the proposal for shale exploration was defended and criticized by the parties to the debate, and the role played by institutional design in the decision-making process. By institutional design I understand a particular way in which a set of rules are configured in the creation of an institution, in order to give agents powers to act, and thus fulfil the purposes of that institution. Following Searle (2005, 2010), I see an institution as a system of constitutive rules (procedures, practices, norms), giving people the power to do certain things, in virtue of their collectively recognized institutional status, as well as restricting their freedom to act. Institutions are always created by speech acts of declaration. In this case it is mainly

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[2] The corpus was transcribed from the video recordings (webcasts) by Phillip Norris, research intern at UCLAN.

[3] The only exceptions are those passages in which 'primary' procedural constraints are described, e.g. that no speaker shall speak for more than 4 minutes.

the LCC's Constitution, as speech act of declaration (and the various more specific sets of rules and codes or practice operating at the level of each council committee) that gives councillors their power to decide on the applications, but also restricts their freedom to take various considerations into account. For example, as I will show, the rules of the LCC's Development Control Committee[4] include a set of 'material considerations' that decision-makers must take into account, but also prevents them from deciding on the basis of reasons which fall outside this set. For example, 'human rights' and 'climate change' concerns, as well as effects on local house prices are not 'material considerations' for oil-and-gas applications, and cannot be used to decide against them. In a public debate, people may of course argue from such reasons, but the final decision cannot be based on them. I will also refer to the broader institutional context (the relation between local and national institutions) that, in this case, allowed a legitimate, local democratic decision to be subsequently *legally* overturned by a government minister on appeal.

I will develop the theorization of argumentation in institutional contexts initiated in pragma-dialectics by drawing on Searle's (2010) concept of "deontic power" and his theory of institutional reality. I first introduced Searle's theory of the social world into the theorization of deliberative activity types in my 2012 monograph (Fairclough and Fairclough 2012). I argued there that Searle's conception of how institutional reality comes into being and how it provides agents with reasons for action – in the form of rights, obligations, authorizations, entitlements, prohibitions – is essential to an understanding of how arguments are made and evaluated in institutional contexts (see also Fairclough 2016; 2018a). The debate I will analyze here took place in a formal institutional context (a county council), which imposed a range of constraints on the argumentation that was allowed, but at the same time offered opportunities (I will call these "affordances") for challenging and rejecting the proposal. I will show how the notion of "deontic reason" offers a principled way of distinguishing among the different types of pre-conditions that shape argumentation in context, and separating genuinely institutional pre-conditions from non-institutional ones. Both act as constraints and affordances, both can restrict and enable action, but their nature is different.

In the analysis, I will focus primarily on the way in which institutional constraints and affordances (in the form of which reasons may or may not count, what obligations must be satisfied, who has the right to decide) shaped the final decisions. Some of these affordances, available in principle, turned out to be missed opportunities in practice. For example, although it should have been possible, in principle, to reject the applications on account of unacceptable risks, this possibility was foreclosed before the debate, as all relevant agencies tasked with assessing the risks had declared them to be low. With shale gas exploration being yet untested in the UK, decision-makers seemed to have already accepted that view of the risks, in the absence of significant evidence to the contrary from the UK. While the evidence coming from the United States showed fracking to be a highly controversial technology, with clear negative impacts, that evidence was not considered relevant by the expert organizations supporting the industry, in view of the allegedly "robust", "gold-standard" regulatory regime in place in the UK. The strongest public objections against fracking, having to do with risks to the environment and public health, were thus neutralized, while a range of other objections could not be taken into account, being precluded by the institutional rules in place. In spite of this, partially as a consequence of taking legal advice, councillors opposed to shale exploration managed to exploit the narrow constraints and affordances of institutional context in the best way available to them. Unable to reject the application on account of unacceptable risks, left with a small range of unacceptable impacts as possible grounds for rejection, they used these as non-overridable, decisive critical objections, by availing themselves of

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[4] This is the committee that decided on these particular applications.

their *legal rights* to assign different weights to the same evidence and to disagree with the recommendation of their officers.

2. Institutional design as a source of deontic reasons

Recent developments in pragma-dialectics (van Eemeren 2010; van Eemeren and Garssen 2010; 2012) have focused on the way in which institutional contexts create "pre-conditions" for argumentation and its evaluation. One way of summing up this line of research, I suggest, is by saying that argumentation may fail to comply with the ideal normative model of *critical discussion* (van Eemeren and Grootendorst 1992; 2004), yet still be judged reasonable, if whatever deviations from the normative model may occur are the result of institutional arrangements in place in the context. As I show in this paper, for a normative conclusion, leading to a decision, to be reasonable and capable of withstanding criticism, it must be assumed that the institutional context itself is reasonable and capable of withstanding criticism. A decision to adopt a proposal may be unreasonable because the proposal's consequences have not been properly thought through. But even when they have been, the decision may still be unreasonable if the design of the decision-making procedure, in the institutional context, has not allowed decision-makers to give proper weight to these consequences in deliberating over the proposal, or take the concerns of those potentially affected into account. An institutional order that is defensible on the grounds of being legal may be criticizable from a viewpoint grounded in local representative democracy, if the rules in place prevent the local population from participating in the decision-making process, on matters that affect them directly. This particular decision on shale gas is a case in point.

While defending the context-independence of the ideal normative model of critical discussion, the research programme of pragma-dialectics emphasizes that actual argumentation always takes place in a real-life context, and this context is often institutional, sometimes in a very strong, formal sense (e.g., parliament, county council). In the last decade, an important direction of research has concerned the way in which the evaluation of argumentative practice has to take into account the constraints and possibilities created by the institutional context. I have argued elsewhere that, while it would not be reasonable to hold arguers responsible for argumentative moves which they are either forced to make or cannot make due to the constraints placed on them by the institutional context legitimately in place, the legitimacy of that context cannot be taken for granted[5]. An institutional set-up that is collectively recognized and accepted *de facto* may not be one that *ought* to be accepted, normatively speaking, i.e., one that would ultimately withstand critical questioning (Fairclough and Fairclough 2012: 28).

In their research on deliberative activity types in the European Parliament, van Eemeren (2010: 152n48) and, subsequently, van Eemeren and Garssen (2011: 48) distinguish between *primary* and *secondary (institutional) pre-conditions* for argumentation. Primary preconditions are said to be "official, usually formal and often procedural" (such as the Chair stopping participants from speaking more than their allocated time), while secondary preconditions are "as a rule unofficial, usually informal, and often substantial". An example of the latter is the so-called "European predicament" in which MEPs may find themselves, seeing as they "*need* to combine serving the European interest with serving the interests of their home countries" (van Eemeren 2010: 152). In other words they often "are

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[5] See Fairclough and Fairclough (2012: 109-112) for "legitimation" as a two-tier process of justification. Van Eemeren (2010) deals with this by talking about "higher-order" conditions. In actual practice, he shows, it depends on the satisfaction of higher-order conditions, having to do with the socio-political context (e.g., on whether participants are free to question a standpoint), whether it makes sense to give a verdict about the reasonableness of argumentative discourse and its participants.

not in the position to promote only the European cause, as they are officially *expected* to do", but have to "also keep in mind the particular interests of the country that elected them and pursue their national cause as well"; they have, as it were, "unofficial national *obligation*[s]", and are in a sense "*forced* to support their national interests", in addition to the European interest (van Eemeren and Garssen 2011: 47-48, all italics mine). I have italicized these words to draw attention to the fact that, although the connection with Searle's theory of institutional reality is not made in pragma-dialectics, the view of "institutional preconditions" outlined above is evidently compatible with it. Searle's view of the institutional world as a theory of "deontic power" is one where power flows through society by means of the reasons for action people have acquired as members of institutions, and these reasons take the form of rights, obligations, authorizations, prohibitions – exactly the constraints said to be operating on MEPs in the pragma-dialectical account above. To say that MEPs have entitlements and obligations is to say that their 'status function' (Searle's term) as MEPs confers them positive and negative 'deontic powers', which both enable and restrict their possibilities for action, by giving them reasons (premises in practical arguments) to act in particular ways. For example, MEPs may conclude that they ought to defend the European interest because they have an obligation to do so (as reason), in virtue of their institutional role.

Van Eemeren (2010: 138-143) distinguishes among *genres*, *activity types* and concrete *speech events*. Along these lines, a particular county council debate (e.g., the debate that took place on 25 June 2015 in the Lancashire County Council) can be said to instantiate the abstract category of county council debate as *activity type* (i.e., a specific genre format), which in turn instantiates the abstract *genre* of deliberation. The intended outcome of deliberative activity types is a normative-practical conclusion (judgment) that can ground decision and action. For any individual agent, this cognitive outcome can be followed by an *intention* to act, a *decision* to act and by the *action* itself, but does not have to be. Like parliamentary debates, county council debates require more than the minimal outcome of a normative-practical judgment. It is part of their institutional rationale that they should lead to a decision for action, yet this decision may not be in agreement with the normative judgment arrived at by each and every participant who has been involved in the debate. In other words, the outcome that can be reasonably expected is a collective decision (e.g., based on a majority of votes), not a unanimous normative judgment, and initial disagreements among all participants may remain unresolved (Fairclough and Fairclough 2012: 200-207, Fairclough, 2018a: 244).

Searle (2010) gives a clear account of how language creates and maintains the elaborate structures of the social world. All institutions (county councils, marriage, promises) come into being by means of speech acts of *declaration* and are maintained in existence by collective recognition. Declarations assign *status function*s to individuals (and objects), e.g., the UK government granting someone the *status of UK citizen* (and a corresponding passport). Status functions, e.g., being or becoming a UK citizen, carry (and confer) deontic powers: rights, obligations, duties, entitlements, authorizations, prohibitions. Deontic powers, collectively assigned and recognized, thus provide agents with "desire-independent" reasons for action, i.e., reasons that are distinct from what agents *would like to do*, and thus effectively regulate power relations in society. For example, a job contract (as speech act of declaration) gives agents reasons (in the form of rights and obligations) to behave in ways that may be different from or even contrary to their inclinations and desires. The whole point of institutional reality, Searle shows, is to create and regulate power relationships between people (Searle 2010: 6-15, Fairclough and Fairclough 2012: 72-73).

On this account, all institutions enable and constrain human action, creating possibilities as well as restrictions on people's behaviour as agents operating within their constitutive rule-governed

boundaries.[6] In deliberating and deciding what to do, people have to weigh deontic reasons (e.g., obligations) against other motivations (e.g., desires). Desire-independent, "deontic" reasons cannot be easily overridden in deliberation. This does not mean they are not frequently overridden (and there may be bad but also good reasons for doing so), but it may be more reasonable to decide that your obligations ought to override your inclinations than vice-versa. For most people, it would be "wrong" to do otherwise, or at least prudentially ill-advised, seeing as deontic reasons, originating in institutional arrangements, are typically inscribed in norms and laws and backed by the coercive power of the state, of public opinion, etc. (Fairclough and Fairclough 2013). In this paper I argue that, while institutional contexts provide agents with overriding reasons for action that need to be factored into the decision-making process, the effect of these deontic reasons may sometimes be to decrease, rather than increase, the rationality of the decision-making process. This happens when the institutional framework itself (while collectively recognized, in this case legal) is poorly conceived or in other ways inappropriate (e.g., creating obligations or prohibitions that would not withstand critical questioning).

In deciding on Cuadrilla's applications, councillors were using the deontic powers assigned to them by Parliament and inscribed in the Council's Constitution. By declaration, the LCC Constitution (2018) sets out (what from Searle's perspective are) the councillors' *positive* and *negative deontic powers*: what they are authorized, obliged and entitled to do, and what they cannot or must not do. Some of these deontic constraints are purely procedural (not a matter of substantive content). For example:

> At a Full Council meeting no Councillor shall speak more than once on each Motion or Amendment proposed… No speech may exceed 5 minutes… Permission to continue speaking is in all cases subject to the consent of the Chair… Votes shall be by show of hands or by affirmation of the meeting. … [A]ny matter will be decided by a simple majority of Councillors … entitled to vote and present in the room … The Chair of a meeting shall have, in case of equality of votes, a second or casting vote.

Most, however, involve a mixture of procedural and substantive content. For example, regarding the "role of county councillors" (i.e., what this "status function" involves, what "deontic powers" it confers, e.g. what they are *obliged* and *authorized* to do), the Constitution says the following:

> County councillors are elected every four years and are democratically accountable to residents in their electoral division. Their overriding duty is to the whole community of Lancashire, but they have a special duty to their constituents, including those who did not vote for them. All County Councillors will:
>
> 1. collectively through the Full Council approve the Constitution, the Budget, Council Tax levels and Policy Frameworks and carry out a number of strategic and corporate management functions;
> 2. be involved in decision-making by participating in Council Committees … ;
> 3. represent their communities and bring their views into the Council's decision-making process, i.e., become the advocate of and for their communities;
> 4. deal with local issues and act as an advocate for constituents in resolving particular concerns or grievances;
> 5. balance different interests identified within the electoral division and represent the electoral division as a whole…

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[6] Van Eemeren also notes the dual nature of institutional preconditions, as "constraints that involve certain restrictions, but also open up opportunities" (Eemeren 2010: 153).

Another role is essential to the functioning of a county council: the council officers, with distinct deontic powers. Unlike County Councillors, who are the "elected representatives of their community" and thus "directly accountable to the electorate for the delivery of policies and Services", Council Officers are "politically neutral and not elected", and are "required to carry out their duties objectively, free of any political bias". They are "administrative, professional, technical and operational staff, who advise the council, cabinet and committees on all aspects of council functions" and implement their decisions. Both councillors and officers have an obligation of "impartiality":

> Councillors must not favour any person, company, group or locality, nor put themselves in a position where they appear to do so… The basis of the planning system is the consideration of private proposals against wider public interests. Councillors must take decisions on behalf of the community as a whole. Much is often at stake in this process and opposing views are often strongly held by those involved. Whilst Councillors should, of course, take account of those views, they must remain impartial…

The main rule governing decision-making in the institutional context of the LCC's Development Control Committee (DCC), is the following: "decisions are to be taken in light of relevant "material" considerations and in accordance with the (local) development plan" – in this case, the planning policies of Lancashire County Council and Fylde Borough Council. The local development plan, however, may reasonably be overridden, for example by national guidance or national policies. In the Constitution, this rule is formulated as follows:

> Decisions should be taken in accordance with the Development Plan unless material considerations indicate otherwise. Departures [from the Development Plan] must be advertised as such and, if it is intended to approve the application, the material considerations must be identified and it must be stated why they override the plan policies…

The Constitution also states that, while councillors *must* take their officers' advice into consideration, they *can* decide in a way that is "contrary to Officer Recommendations and/or the Development Plan", provided the reasons for doing so are "clear and convincing", and also provided the County Council's position "has been reached in open fashion" and can be defended, if needed, at a public inquiry. Councillors *are allowed* to decide against the local development plan, in order "to accord with the legislation and Government Guidance". This indicates that national objectives are allowed to override local ones, if there are good reasons for doing so.

In a way similar to the "European Predicament" identified by van Eemeren, councillors seem to be under multiple and potentially conflicting obligations. They have an obligation to advocate the interests of their own constituency, as elected representatives, but at the same time are required to be "impartial" and represent the electoral division as a whole, including the interests of people "who did not vote for them" and whose interests might in fact be diametrically opposed to the interests of those who did vote for them. They might also be expected to allow local development guidelines to be overridden by national guidelines, in a way that may be at odds with local democracy and their duty towards their electorate. The decision on Cuadrilla's applications illustrated these conflicts of obligations most dramatically, as I will show below.

3. Deliberation and decision-making: analytical framework and methodology
I will draw (and expand on) the analytical framework I have developed in previous publications (Fairclough 2016, 2018a, 2018b; for earlier versions, see Fairclough 2015 and Fairclough & Fairclough

2012), consisting in a 'deliberation scheme' and a set of critical questions for the analysis of deliberative activity types.[7] In my work so far, I have taken a critical rationalist perspective on practical reasoning and decision-making (Miller 1994; 2006; 2013), suggesting a view of deliberation as a critical procedure that filters out those conclusions (and corresponding decisions) that would not pass the critical test of whether the intended or unintended consequences would be acceptable. Unacceptable consequences (e.g., unacceptable impacts or risks of a course of action) are *decisive objections* against a proposal and can conclusively rebut it. I take every objection that is non-overridable – e.g. respect for the dignity and autonomy of the individual – or has emerged as such, in a process of critical questioning aimed at achieving an ordering of the normative sources involved in a particular decision, to be a *decisive objection*. The purpose of critical testing is (1) to eliminate unreasonable proposals by examining their potential consequences; (2) to enable non-arbitrary choice of a better proposal, if several reasonable proposals have withstood criticism.[8]

I see deliberation as the critical testing of alternative proposals for action, designed to enable rational decision-making. As I first suggested in Fairclough & Fairclough (2012), two main argument schemes are involved in deliberative activity types, in my view: an argument from goals, circumstances (facts, "problems") and means-goal relations, and an argument from negative (undesirable) consequences. In deliberation, one or more proposals are subject to critical questioning which seeks to expose potential negative consequences and thus evaluate them in terms of their acceptability: if the consequences are on balance unacceptable, then it would be more reasonable to reject the proposal. Critical testing of alternative proposals may be followed by choice of a "better" alternative among those proposals that have survived criticism (if any) and by a decision to adopt that alternative. The most significant perspective in light of which proposals are to be tested is therefore (in my view) a consequentialist one (Fairclough and Fairclough 2012, Fairclough 2016). I use the term "consequence" in a broad sense, to refer to several types of states-of-affairs: the intended *goals* of the proposed action (the *intended* consequences); the potential *unintended* consequences (possible side effects or risks) involved; various known and predictable *impacts*, including impacts on institutional, social facts. If a proposal is likely to result in a situation that is illegal or unjust, then the proposal can be evaluated as unacceptable from both a consequentialist and deontological ethical position (i.e. it is unacceptable that the consequences of the proposal are unjust for those affected, and it is also unacceptable that the proposal goes against justice as moral-political value). This framework (the "deliberation scheme", Figure 1) can therefore accommodate deontological ethics within a broader consequentialist perspective.

Naturally, other argument schemes may be used in deliberative activity types. For example, proposals can also be supported or rejected by appeals to authority, by argumentation from analogy, or by arguments from positive consequence (this last scheme is in fact shown on the diagram). To put it differently, empirical research shows that a wide range of schemes are used in deliberative activities. However, the strong position I am restating here is that the minimal deliberative situation, as a *normative* construct, involves *two schemes only, and a relation between them*. It involves putting forward a proposal A (or more) as a conjecture (in light of goals and values, and in view of circumstances one is in), and then testing it in light of its potential negative consequences. The first question an agent is likely to ask is: what action is likely to achieve my goals/ solve my problem? The

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[7] An adapted version of this framework is being used by other researchers in argumentation theory, e.g. Lewiński and Mohammed (2019), Rodrigues et al (2019), in this issue. A new methodological perspective on the fracking controversy, combining argumentation and framing theory, is provided by Musi & Aakhus (2019), this issue.

[8] In Fairclough (2018b), I used the term "critical objection" to refer to non-overridable objections or rebuttals. Here, to avoid possible confusion, seeing as all objections, weak or strong, are in a sense "critical", I suggest using the term "decisive objections" to refer to those critical objections that can rebut a practical conclusion.

answer will take the form of one or more conjectures (hypotheses) that A (or various alternatives) will deliver the goals. The second question is: if were to do A, are any unacceptable consequences likely to occur, that would indicate that I should not do A?   I draw a clear distinction between *negative/undesirable* consequences, which do not necessarily indicate that a proposal is unreasonable, and *unacceptable* consequences, which do; undesirable consequences are *counterconsiderations* to a proposal that may go ahead, in spite of these, while unacceptable consequences are *decisive objections* to it, indicating it should not go ahead (see Fairclough forthcoming).

Figure 1 illustrates a particular situation, in which a proposal, tentatively supported in light of desirable goals and other positive consequences, is conclusively rebutted in light of its unacceptable consequences. The only two argument schemes that, in my view, are necessary (and sufficient) for deliberation to occur are these two. In my view, therefore, the "argumentative pattern" (van Eemeren 2017) characterizing deliberative activity types *must* contain these two schemes, though (optionally) it may also include other schemes as well. I also suggest that this proposal alone is compatible with a critical rationalist stance. Like theoretical statements, practical statements can be provisionally accepted or conclusively rejected based on how they withstand criticism in light of their consequences. If a proposal (the hypothesis that doing A will deliver the intended goal or solve a problem) withstands criticism (i.e. no decisive objections are found), then it may be tentatively accepted, but should be rejected otherwise (unless satisfactory mitigation, a Plan B or an insurance strategy are available, or unless the agent is willing to accept the risk, however unacceptable the consequences may be – see below).

The particular configuration of the "deliberation scheme" in Figure 1 can thus be taken as one of the possible "argumentative patterns" characteristic of deliberative activity types (see Fairclough 2018b for two more possible configurations of the same scheme.)[9] The pattern shown in Figure 1 is one where Proposal A_1 is rebutted in light of decisive critical objections that have come to light, through critical questioning, during the deliberative process. While it may be true that A_1 can achieve the goals and other positive effects (the light grey area), it follows conclusively that A_1 should be abandoned, seeing as there are unacceptable consequences (the dark grey area). It no longer follows, not even defeasibly or tentatively, that A_1 is the right course of action. The blank box is supposed to suggest this: the conclusion in favour of A_1, although possible in principle, is rebutted in this particular situation by the decisive objections, which conclusively support the opposite conclusion. The argumentative configuration that actually materializes whenever there are decisive objections is the deductive argument supporting non- A_1 (the dark grey area on the left-hand side).

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[9] I first related my "deliberation scheme" to van Eemeren's concept of "argumentative patterns" in the paper "Institutional constraints as premises in conductive reasoning on shale gas exploration in the UK", given at the Sy*mposium on Argumentation in Institutional Contexts,* held at the University of Central Lancashire (Preston), on 22 March 2017.
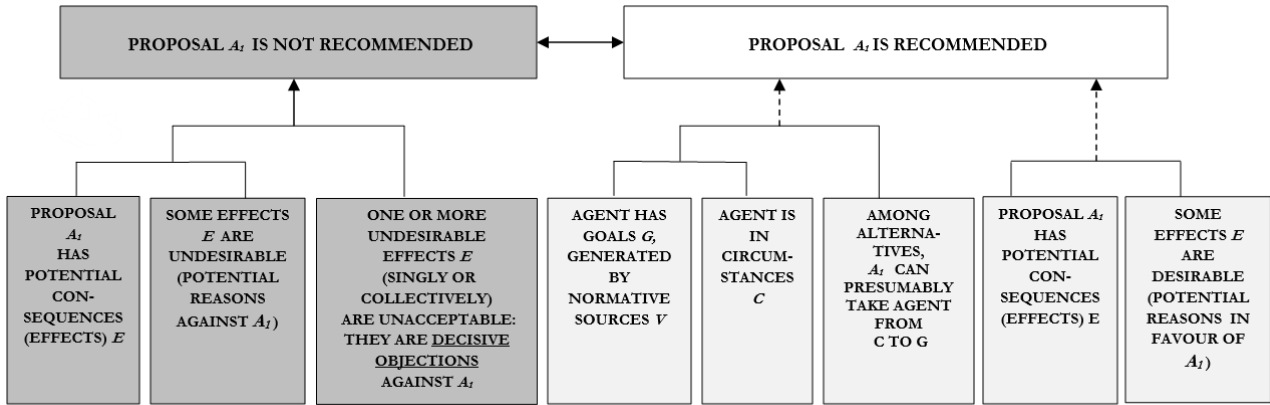
Fig. 1. Deliberation scheme: situation where proposal is rebutted in light of decisive objections

Consequences typically take the form of impacts or risks. Impacts are different from risks. Impacts are *known* consequences: if agents want to achieve their goals, certain impacts will be unavoidable. By contrast, risks may or may not materialize. A visual impact on the landscape is an unavoidable impact if the goal is to exploit shale gas, but causing an earthquake by drilling is a risk that may not materialize. Proposals with potentially unacceptable consequences may be maintained if the undesirable consequences can be avoided, minimized, controlled, or in other ways made acceptable. One way of doing this would be via a "Plan B" (an alternative course of action which avoids those consequences); another would be "mitigating" the impacts or "controlling"/ "managing" the risks; yet another would be transferring them to another party, e.g., "insuring" against them. Risks and impacts can also be simply accepted, as an inevitable way of achieving the goals. The set of critical questions (CQs) that can effectively test a practical proposal (Fairclough 2018a) includes therefore the following: Are the intended consequences (i.e. the goals and known impacts) of the proposal acceptable? Are the foreseeable unintended consequences (i.e. risks) of the proposal acceptable? (And if not, is there a Plan B, mitigation or insurance strategy in place that can make it reasonable to undertake the proposed action?) While these CQs challenge the reasonableness of the proposal itself, and can conclusively refute it, the inference to the conclusion in favour of the proposal can also be challenged, by asking whether, among reasonable alternatives that have withstood criticism in light of their consequences, a particular proposal is 'better', from whatever perspective is important in the context.

The Lancashire debate on exploratory fracking illustrated all of these ways of dealing with known or potential consequences. The applicant and the LCC officer argued that the application successfully mitigated all relevant impacts, while the opponents denied that mitigation was remotely adequate. The applicant and their supporters argued that all risks were low and adequately controlled via the regulation and permitting process in place, while their opponents categorically denied this and called for the "precautionary principle" to be applied, in light of the magnitude of the risks and genuine future uncertainty. The proposal was also judged unacceptable because no acceptable insurance or compensation scheme was in place for those affected. At least one Plan B was also suggested, e.g., locate the fracking pads in another area, far from villages and farms, seeing as the proposed sites were unacceptably close (250 m) to the nearest houses. Finally, even assuming the consequences were adequately mitigated and insured against, i.e. even assuming the proposal could not be refuted in light of its impacts and risks, the opponents still argued that better alternatives were available (investing in renewable energy).

4. Argument schemes in the fracking debate

In rejecting the PNR application on 29 June 2015, councillors voted against the recommendation of their own planning officer. The officer had recommended approving it, subject to about 40 conditions that the applicant would have to comply with. These conditions were said to "minimize" the impacts and risks raised as objections by the opponents, making these objections "unsustainable". The application was also said to comply with all relevant national and local legislation, except for two local policies, which could allegedly be "overridden" in the context (seeing as "little weight should be attached to [them]… and more weight should be attached to the policies of minerals and waste"). (I have provided a more detailed analysis of this recommendation, as a pro/con, balance-of-considerations, "conductive" argument, in Fairclough 2018b. See also Lewinski 2016 for pro-con argumentation over shale gas.)

The same argument in favour of allowing fracking to proceed was made by a few members of the public who took the floor during the June 2015 LCC debates. They argued that the proposal would achieve important goals and other positive consequences – economic growth (job creation), energy security and lower carbon emissions (shale gas being said to be a clean, "bridging" fuel) – that would outweigh all undesirable impacts. Throughout the four days of deliberation, two main arguments in favour were heard: a general one, in favour of shale gas exploitation as a future source of energy and local economic reinvigoration, and a more specific one, in favour of the exploratory phase, involving the construction of just one fracking pad. These can be expressed as follows:

> [Summary] As a potential source of energy, shale gas is likely to achieve important goals and other positive consequences, nationally and locally. The risks and impacts are minimal, given the UK's strict regulatory system, and can be acceptably mitigated and controlled. The proposals for shale gas exploration should therefore be approved.

> [Summary] A fracking pad will have some undesirable impacts (noise, visual), and may involve some risks. Seeing as all the risks are low and the impacts can be effectively minimized and controlled, seeing as the development is temporary, and in view of the national importance of shale gas exploration, the proposals (applications) should be approved.

These two ways of arguing were not clearly kept apart in the speeches in favour. Without exception, all the speakers who supported the application emphasized the alleged local and national benefits of shale gas, on the assumption that the exploratory phase would lead to the commercial exploitation phase. The council officer, however, was careful to dissociate this argument from what he said was really at stake in the debate: *a proposal for exploration only*, by constructing *one* fracking pad in each of the two locations, in relation to which no economic benefit could yet be claimed. His argument in favour seemed to be based not on what the proposal would achieve (beyond finding out whether there are shale gas reserves in the area), but on how it withstood criticism: there were no "sustainable" reasons to refuse it, seeing as the risks and impacts were minimal ("minimized by condition" and "controlled" by the regulation system) and the development would be "temporary" (6 years maximum).

The June 2015 debates saw a continuous redefinition of the confrontation by members of the public, councillors and officers, with the officer insisting on keeping exploration and potential commercial exploitation separate, and the public conflating the two, on the (arguably correct) assumption that they were inextricably linked and should be assessed together. The most prominent way of arguing against the proposals was by emphasizing that the negative consequences were unacceptable (though other arguments, e.g., that they would not achieve the stated goals, e.g. lower carbon emissions, were

also made). The argument against the exploratory applications was often merged with the argument against the prospect of full-scale exploitation (said to potentially involve dozens or hundreds of fracking pads), on the assumption that the exploration phase was in fact intended to "open the door to the massive industrialization" of the Fylde. Both arguments, against exploration and against shale gas exploitation in general, were based on the same range of unacceptable impacts and risks:

> [Summary] The proposals will have unacceptable impacts (noise, pollution, visual impacts, traffic impacts), thus going against a number of local policies, and will involve unacceptable risks (water contamination, earthquakes, damage to public health, damage to the local economy, particularly agriculture and tourism), violations of human rights and obligations regarding climate change. There will be no significant local benefits. No potential benefits at national level are worth these risks and impacts, which cannot be acceptably minimized or controlled, and whose potential magnitude is unacceptable. Therefore, the proposals should not go ahead (the applications should be rejected).[10]

These ways of arguing for and against Cuadrilla's applications involved different ways of weighing the stated goals and other alleged positive consequences, on the one hand, against the alleged negative consequences, on the other. Both argument schemes, from goals and from consequences, were involved in each deliberative process: proposals made in view of goals (as positive consequences) were tested in light of negative consequences, with two outcomes: a conclusive rebuttal of the proposals (the outcome shown in Figure 1), and a claim that the proposals could be accepted in spite of a range of counterconsiderations (illustrated in Fairclough 2018b). In the context, however, the decision had to be taken on the basis of what was technically speaking at stake, i.e., *one fracking pad in each location, for exploratory purposes, and for a limited duration*. Thus, due to constraints imposed by the institutional context (obligations/prohibitions/authorizations), a decision with potentially huge implications was made to look as a much less significant one. Decision-makers *were not allowed* to consider the consequences of full-scale development (and were *obliged* to focus on the applications for exploration only). However, even if a proposal for full-scale development would have to be itself submitted for approval, and in theory could be rejected, independently of the success of the exploration phase, the exploratory phase would, nevertheless, if approved, as the proposal's critics pointed out, *authorize* a change of land use (from agricultural to industrial) that would make a refusal much more difficult to support at a later stage.

Argumentation from unacceptable consequences took various forms[11]. Arguments from risks and impacts were prominent in the corpus, with *risk** occurring 133 times, and *impact** 275 times. Related terms are: *cause/causing* (84, "cause birth defects/cancer/leukemia/heart disease"); *effect** (61, "damaging/detrimental/cumulative effect", "adverse health effects"), *result** (40, "fracking will result in unavoidable environmental impacts"), *consequence**(11, "unintended consequences", "suffer the consequences"). Risks and impacts were related to health and wellbeing, water, air, farming and

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[10] Unless explicitly marked as [summary], all illustrations are direct quotes from the corpus, the LCC Constitution or other cited sources.

[11] In a fairly basic way, I have used corpus linguistics (CL) software (Antconc 2014) for wordlists, keywords, concordancing and collocations, to examine the range of reasons in favour or against the proposal. The Brown corpus (Francis and Kučera 1964) was used as reference. As I have argued before (Fairclough 2016), while corpus linguistics methods can be extremely useful to the argumentation analyst, it is the structure of the argument (which schemes, which critical questions, which patterns?) that need to come first. CL methods cannot (in my view) be the main entry point into the analysis.

agriculture, tourism, earthquakes, flooding, environmental toxicity and radioactivity. The following frequencies of occurrence are significant for the main concerns of the participants to the debate: *health/healthy* (245); *noise/noisy* (228); *traffic* (130); *water* (126); *safe/safety* (125); *pollution/polluting/pollutant* (80); *visual impact* (75); *children* (70, i.e., exposing them to risks and impacts); *air* (61, e.g., air pollution); *contamination/contaminated* (46); *agriculture/agricultural* (54) and *farming* (16); *flare/flaring* (51, i.e., of methane gas into the atmosphere); *fluid/fluids* (35, e.g., flow-back fluid, migrating fracking fluid); *danger/dangerous* (36); *tourism/tourists* (35); *harm/harmful* (31); *wellbeing* (27) and *amenity* (24); *leaks/leakages* (27) and *spills/spillages* (6); *vibration* (25); *methane* (24); *accidents* (23); *climate* (23); *toxic/toxicity* (20); *chemicals* (16); *radioactive/radioactivity* (14); *anxiety* (15) and *stress* (15); *ill/illness* (13) and *disease* (6); *respiratory* (8), *breathing* (15), *lung* (6) and *heart* (5) *conditions,* including *asthma* (7); *benzene* (9), other *carcinogens* (5) and potential causes of *cancer* (10), including *particulates* (5) with no safe limits; *fumes* (9), *odours* (11) and *smells* (4); *flood/flooding* (8); *earthquakes* (7). Whether or not the regulatory regime in the UK was effective, seeing how responsibilities were dispersed among several agencies, was a prominent topic, with 140 occurrences of *regulatory/regulations/regulated*. If regulation is indeed incapable of preventing breaches of the conditions imposed on the applicant, or of preventing accidents, then the arguments from unacceptable consequence can more easily refute the conclusion in favour of allowing fracking to proceed. For the proposal in favour to withstand critical questioning, the supporters would have to demonstrate that both the likelihood and magnitude of undesirable consequences is insignificant, which is precisely what an inefficient regulation system cannot guarantee. [12]

Impacts (275 occurrences) were uniformly judged to be unacceptable by the opponents, who argued that they could never be adequately mitigated; that the formal *conditions* placed on the applicant would not be complied with, that the council would be powerless to enforce them when breached, and so on. By contrast, they were judged to be acceptable by the supporters, including the planning officer, in light of the alleged mitigation and control in place. Both *unacceptable* and *acceptable* occur 64 times each, as in "unacceptable impacts", "could be made acceptable". The expression *controlled by condition* (i.e., noise impacts can be made acceptable by placing conditions on the applicant not to exceed a maximum decibel limit) occurs 18 times; its synonyms are: *made acceptable by (the use of) conditions(s)* (11), *minimized by the use of condition* (5), *restricted by condition* (1). *Condition* alone (in the sense of restrictions placed on the applicant) occurs 191 times. *Mitigate/mitigation* occurs 35 times, for example in arguing that visual impacts can be made acceptable by making the applicant reduce the height of the rig from 53 to 36 metres, or that noise impacts can be made acceptable by building an acoustic barrier around the rig.

Vocabulary pertaining to deliberation is also quantitatively significant, as expected. In addition to *decision* (140), *consider* (49), *decide* (24) and *deliberate/deliberation* (6), there are: *reason/reasons* (134, "reasons for refusal", "reasons for approval"), *support* (149, "supporting the proposal"), *proposal* (100), *evidence* (76, "no evidence of harm from the fracking industry"), *grounds* (66, "to refuse the application on air quality grounds would be unsustainable"), *weigh/weight/outweigh* (37, "carry weight", "attach weight", "place greater or lesser weight on", "adverse impacts outweighing the benefits") and *override/overriding* (5, "overriding need", "overriding two local policies"), *justify/justification* (7, "justify your decision", "there is sufficient justification to override these two policies"), "on balance" (6, "our officers are of the view therefore that, on balance, insufficient reasons … have been put forward"). The word *(un)reasonable* occurs 28 times ("unreasonable decision",

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"incurring unreasonable burden"), with its contextual synonyms *(un)sustainable* (9, e.g., "unsustainable reasons for refusal") and *cannot be/should be supported* (10, "reasons for refusal that cannot be supported"). *Costs* (37) and *benefits* (70) are measured against each other ("I'm sure that the benefits of the proposed site for Cuadrilla are huge, but for Lancashire I see that the benefits are minimal"), and certain ways of weighing them are considered unacceptable ("we're not arguing for progress at any cost", "not free enterprise at any cost to the local community"). *Material (planning) consideration(s),* as the only reasons that can be taken into account, occurs 21 times (e.g., "this is an understandable concern but not a material planning consideration"); in addition, there are *planning grounds* (5), *planning reason(s)* (4), *planning terms* (4), *planning considerations* (3), considerations that are *not material* (3) and *planning matters* (2).

Most of the words above are keywords, by comparison with the reference corpus. Out of 872 keywords (selected out of 7240 word types), the following words are among the most unusually frequent (their rank, as keywords, is in brackets): *noise* (16), *health* (21), *impact* (24), *environment* (42), *impacts* (46), *environmental* (54), *unacceptable* (60), *pollution* (68), *decision* (73), *sustainable* (78), *risks* (80), *acceptable* (86), *visual* (92), *landscape* (101), *risk* (102), *countryside* (105), *safety* (113), *jobs* (115), *tourism* (123), *wellbeing* (152), *contamination* (155), *mitigation* (173), *decibels* (184), *flaring* (190), *safe* (191), *seismic* (195), *unreasonable* (206), *toxic* (225), *agricultural* (252), *regulation* (270), *employment* (285), *harm* (309), *water* (354), *climate* (401), *farming* (498). The expressions (*un)acceptable, (un)reasonable, mitigate, (controlled by) condition*, *regulatory*, which have important argumentative functions (indicating reasons why the proposals should be accepted or rejected, including deontic reasons), are also among the keywords, as expected.

Argumentation from negative consequence can take various other forms, and these may not be easily captured by wordlists or keyword lists. A positive or negative view of the potential consequences can be expressed metaphorically or by analogy: "Pandora's box" was used by an opponent, and Blackpool's "golden ticket" by a supporter. The unacceptable "visual impact" was sometimes expressed without using these words at all, e.g.: "I for one would not wish to live in the middle of an enormous ugly birthday cake, with those annoying candles which do not blow out however many times one tries…". The unacceptability of the proposal was also expressed via the analogy with "guinea pigs" in medical experiments (5 occurrences of "guinea pigs" and 4 of "experiment") – a potentially very strong argument, seeing as the prohibition against treating people instrumentally (as "means", rather than "ends" provides a non-overridable, decisive argument against any proposal). A wide range of rhetorical strategies were skillfully used by the speakers, from emotional appeals (e.g. the predicted impact on children) to literary allusion. One speaker's overt reference to "England's green and pleasant land" and other lines from the well-known British hymn based on the poem by William Blake can't have failed to make other lines from the same hymn spring to mind, suggesting an analogy between Cuadrilla's drilling pads and "the dark Satanic mills" of Blake's poem. Argumentation by analogy thus strengthened the (un)acceptability of the proposals, by supporting the premises asserting that the consequences were either desirable or unacceptable, and thus fitting into the basic argumentative pattern in a relation of subordination to the two main schemes.

To conclude, the case against and for fracking was eloquently made in various forms by those who took the floor during the four days of debate, in the form of an argument from negative (on balance, unacceptable) consequences, by contrast with an argument from goals and circumstances (typically, a problem-solution argument) made in favour. Other schemes were used to support the two conclusions, either directly or indirectly (by supporting the premises of these two main argument schemes): argumentation from analogy, example, expert opinion, appeals to majority practice, etc. Surprisingly, however, when the time for decision came, the case against fracking was reiterated in a severely

stunted form. The official conclusion (and decision) was to reject the PNR application on account of visual and noise impacts, and the Roseacre application on account of traffic impacts. No other reasons against fracking (i.e., risks to public health via air, soil and water contamination) made it into the final form of the two decisions. Most of the significant impacts and all risks were said to have been minimized and controlled in acceptable ways by conditions and regulations either already in place or to be imposed on the applicant. All that was within the councillors' powers was to refuse the applications for one temporary fracking pad in each location, based on a small range of impacts that, arguably, could not be acceptably mitigated. It was not possible to the reject the applications by reference to the unacceptable effects of the subsequent commercial exploitation stage, nor on the basis of the unacceptable risks to public health and the environment involved in the exploration stage, as all such risks were allegedly minimized to an acceptable level by the UK 'gold-standard' regulation system (according to various expert organizations).

The institutional context imposed therefore a number of limitations on the design of the deliberative procedure and consequently on the final decision outcome. On the one hand, the decision had to make reference to a limited set of relevant "material considerations" and a limited time-frame. This narrowed down the possibilities for challenging a potential decision in favour of shale exploration, as some grounds for refusal were ruled out. On the other hand, the institutional set-up took for granted, without questioning, the power of regulatory systems to manage all future risks. This made a potential decision against fracking difficult to challenge, seeing as all possible objections based on risks were effectively neutralized. Nevertheless, a majority of councillors decided to reject the PNR application, against the officer's recommendation and general government policy and behind-the-scene pressure. However, not being based on a wide range of significant unacceptable risks but on a small range of (arguably minor) impacts, this decision was going to prove easy to contest and reverse on appeal.

5. Rights, obligations and prohibitions as reasons in the fracking debate

Deontic powers provide agents with premises in practical reasoning, enabling and/or restricting what agents can do, argumentatively and practically speaking. Having the obligation or the right to take certain reasons into account, or being prohibited from doing so, will change the shape of the conclusion and/or corresponding decision. The list of "material considerations" for planning decisions provides a good example of the way the decision-making process was constrained or enabled by the existence of the *obligation* to take certain reasons into account, the *prohibition* against using reasons which are not "material" to the case, but also the *right* to weigh them in any way the decision-makers see reasonably fit. Deontic reasons (obligations, rights, prohibitions) arise from the councillors' deontic powers, conferred to them by Parliament, inscribed in the LCC Constitution and their own job contracts as part of that institution. The source of all institutional constraints and affordances, whether procedural or substantive, as positive or negative deontic powers, lies in speech acts of declaration (Searle 2010). Like all speech acts of declaration, the LCC Constitution regulates power relations, in this case decision-making powers at county level.

The institutional goal of a county council debate is rational decision-making on matters of local policy. All communicative activity types are designed in a way that enables the achievement of an institutional goal, and this goal-orientation creates a generic conventional format which imposes certain "extrinsic constraints" on what participants can do, argumentatively speaking (van Eemeren 2010: 159-160). For example, on any controversial matter submitted for decision to the LCC, public participation is allowed, in order to allow the expression of a wide range of views (more than 100 members of the public took the floor this time), but each contribution is necessarily limited to a few minutes – in this case, 4 minutes was the maximum allowed for each speaker. Also part of the institutional context was the fact that the application was assigned to a particular committee (DCC), tasked with regulating the

development and use of land in the public interest, including planning permission for waste disposal and mineral extraction, and was judged against that committee's specific list of "material considerations". Thus, a range of objections against fracking could not be taken into account, not being relevant as "planning issues".

According to the LCC website[13], the following "material considerations" have to be considered in determining planning applications for oil and gas development (Figure 2): noise, dust, air quality, lighting, visual intrusion, landscape character, traffic, soil resources, contamination of land, impact on agricultural land, flooding, land stability, etc. Although frequent references were made during the debates on Cuadrilla's application to the impact of fracking on climate change, human rights, the price of properties in the area, insurance and compensation, these (as was pointed out) were not material planning issues. Another reason that was "not material" was the prospect of the "costs which the council could be liable for if a challenge at appeal by the applicant was successful". Councillors were reminded that fear of being thus penalized should not influence their decision, *costs* (15) not being a "material consideration" ("the committee should not be subjected to the non-material consideration of potential costs to the council as a basis of their decision-making process").
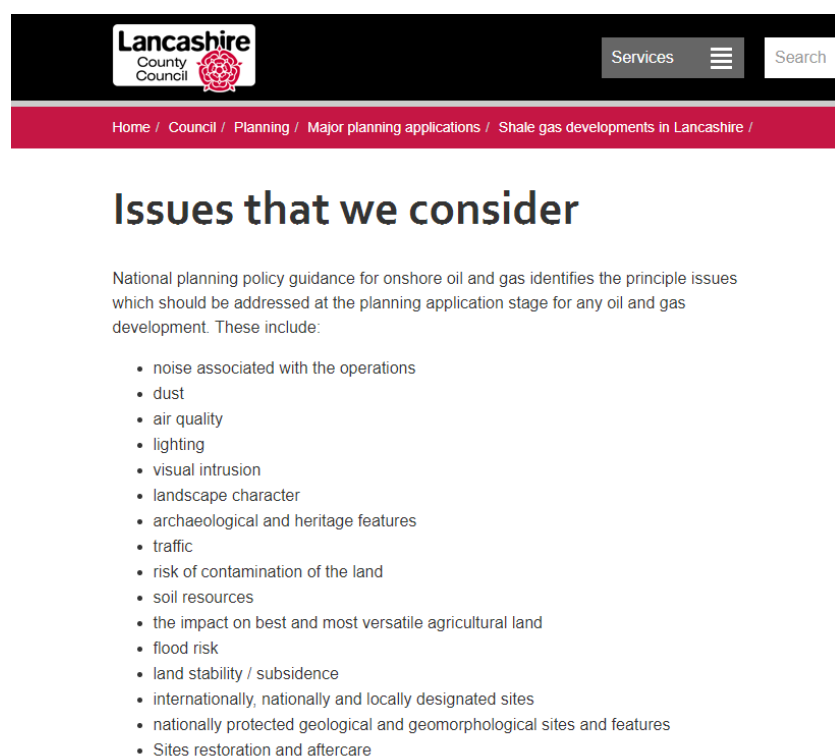

Figure 2: Material considerations for planning applications, LCC website

Many of the reasons that were thrown into the deliberative mix were institutional. The opponents argued that the proposal was in breach of the Local Development Plan, as a normative document (hence the LCC's *obligations* to abide by its provisions), and in breach of the *rights* of citizens as *human rights* (24 relevant occurrences of "right(s)", including "human rights", but also the applicant's "development rights"). Invoking the inviolable character of people's basic rights (rights to life and a

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[13] The Lancashire County Council's *Constitution* was last updated in January 2018. Some of the formulations quoted in this paper may not be an exact match to the current website information.

safe environment, to ownership and enjoyment of one's home, to freedom of expression and assembly, to participation in democratic government) was intended as a rebuttal of the case for fracking. Both the "guinea pig" analogy and the argument from inviolable human rights were put forward as clear decisive objections against the pro-fracking standpoint. However, in the institutional context in which the case was evaluated, both were ignored. As the DCC's list of "material considerations" indicates, an explicit consideration of "human rights" seems to fall outside its institutional remit. If these arguments were at all acknowledged, they were answered (irrelevantly) by assurances that the risks and impacts would be successfully mitigated and no unacceptable consequences on the population would ensue.

The supporters of fracking argued that the proposal accorded with "national policy and guidance", in light of which the local plan's provisions (as *obligations*) were overridable, seeing as satisfactory impact mitigation and risk control were in place. Reasons judged to be material to the application create *obligations* to take them into account, they *enable* or *authorize* arguers to make use of them; reasons which are not create corresponding *prohibitions*. An argument which, according to the Officer, the opponents were not entitled to use to direct the decision outcome in their favour had to do with the potential for future commercial development of the sites, if the exploratory applications were to be approved. The opponents argued that approving the exploration phase would establish the "principle of development" (12) and authorize a "change of land use" (3) (from agricultural to industrial), making subsequent applications harder to refuse. They also urged councillors to consider that there was wide expressed opposition and little expressed support, and that they had a "duty" (14) to represent the will of their electorate; the councillors themselves spoke about their "duty" towards the people of Lancashire – "we owe them a duty to make the right decision". In response, however, the Council Officer reminded councillors repeatedly of a few basic rules, inscribed in the Constitution and other LCC regulations, amounting to the following *obligations* and *prohibitions*:

(1) Any proposal must be judged "on its merits", i.e., not in light of what it could lead to in the future, not on the basis of "*what it could become*"; the proposal being for "exploration", not commercial exploitation, cannot be rejected on the basis of the unacceptable consequences that full-scale future fracking activity might bring; future commercial exploitation, if viable, will be the subject of another application, to be assessed separately when the time comes. The following quotations are from the LCC Officer's presentation:

> Concern has been expressed that each of these sites would subsequently be targeted for drilling in the future and that by granting planning permission now would establish the principle. This is not a view I share. The application must be considered on its merits, and as part of such there are no proposals to develop them in the future, and if there were, further planning permission would be required.

> [W]e must consider this application on its merits and not on what it may become, and we can't attach weight to those comments that were made about what they would become in the long-term.

(2) In addition to being judged solely on their merits, all applications must be judged against the background of existing legislation, namely (also according to the LCC Officer):

> We must consider the applications on their merits against the national guidelines, national policy and policies of the local development plan.

(3) It is irrelevant how many people oppose a proposal if the proposal can be reasonably defended. In this case, although for the Preston New Road application alone 18,126 representations (letters, emails) objecting to the proposal had been received, as opposed to 217 in favour (for the Roseacre Woods application the numbers were 15,664 and 205, respectively), *"the weight of opposition in terms of the numbers and representations received is not a material reason for refusing a planning application"*, seeing as, according to the LCC Officer, the case for supporting the proposal had been made in a satisfactory way.

(4) Similarly, the proposal cannot be rejected on account of unacceptable impacts, according to the Officer, seeing as the development is classed as *temporary* and its impacts *reversible*. Different rules apply for temporary vs permanent developments, and it is not reasonable to argue that a temporary development is unacceptable if impact mitigation and risk management are in place.

Some of the constraints on the argumentation that was allowed were contested by the participants (members of the public and councillors themselves). They objected to the alleged "temporary" nature of the development as a mitigating factor (80 occurrences of "temporary") and to the requirement of assessing the application in isolation, "on its merits" (12). It was pointed out that each application, if approved, will set a "precedent" (4), and is actually a "forerunner" (1), and "in preparation" of (1), "full-scale commercial extraction", which is what is allegedly at stake.

> You must know by now that there is a huge industrialized monster waiting in the wings to stamp its dirty footprint all over our county. And this application is laying down the foundations for this to go ahead and should be judged as such. It is preparation for full-scale commercial extraction. Mr. Perigo [The LCC Officer] stated that if commercial gas were found another application would be submitted. This is their plan.

> The applicant's modus operandi is piecemeal…, and we are directed to view the applications as they stand in isolation and on their own merits. This is misleading and inappropriate for a new shale gas industry. The applications in front of us this week are setting a precedent and should be managed as such. (…) Authorising a change of land use will cause a precedent. This will make it very difficult to refuse further applications for development.

There were also objections to the officer's noticeable attempt to downplay the quantity of public opposition. He had suggested that, in spite of the "unprecedented number of representations that had been received", many letters were duplicates, from the same individuals, or in other ways irrelevant, and they represented a very small percentage of the adult population of Lancashire. In response to the Officer's insistence that what counts is the strength of the case being made, not the number of people making it, which is in principle a reasonable rule, the anti-fracking side brought concrete evidence to show that their case not only enjoyed the widest possible support but was also the better case.

According to the LCC website, "the county council exists to serve everyone who lives or works in Lancashire, helping people to be healthy, happy and enjoy a good quality of life"; its Constitution ensures that "decision-making is efficient, transparent and accountable to local people". Not surprisingly, therefore, the *duty* of democratic representation was strongly emphasized in the fracking debate, for example: *represent/representing/representative* (29, "as a parish councillor, it is my duty to represent the opinions of my parishioners", "this current government does not represent us", "people are in tears because (…) they feel that you, their representatives, are being deliberately misled"), *democracy/democratic* (10, "a democratic decision", "a democratic right to object to shale

gas"), *elected* (10, "as elected representative of the people of Lancashire", "do what you were elected to do, which is representing the people of Lancashire").

6. Public health: material or non-material consideration?

During the proceedings, councillors were reminded by the officer and the council's lawyer that all decisions must be made "in accordance with the development plan unless material considerations indicate otherwise", as specified in national planning practice guidance, and with "regard to the evidence presented" and to the "advice of the Council's Officers". Many speeches referred to the range of "material considerations", as reasons that could potentially count against a proposal, and argued that it was too restricted:

> If I were a member of this committee, I would be seeking to separate the issues, in regard to just what is a material consideration and that which is not. …[A]s members of this committee you do not need reminding that when elected to LCC, you assumed certain responsibilities to the wider community regardless of their and your political allegiances. These responsibilities include matters which lie outside the strict material considerations. If representations from members of the public, officers and indeed members of the committee were confined to material considerations, we would have seen a significant curtailment of discussion.

Many speakers emphasized that other considerations were highly relevant to the decision and should be allowed to carry weight in the planning balance, most importantly health risks ("health" is one of the main keywords, with 245 occurrences):

> Public health should be paramount in the considerations of the committee, not simply confined to the artificially narrow planning parameters suggested by your officer.

> You must refuse this application on health and environmental grounds, which you and the industry know cannot be mitigated, and not just on noise and landscape which, you will recall, caused the applicants to giggle and smirk when they asked for a deferral back in January.

These objections show that, in the view of sections of the public, the legal institutional framework is not designed in a way that will facilitate rational decision-making, seeing as a range of relevant reasons have to be left out as "immaterial" to the case or are given insufficient weight in the planning balance. Insisting that councillors should take public health implications seriously into account and give them appropriate weight in deliberation, as an overriding duty, should be seen in the context of the expert reports received by the council, which had concluded that all risks and impacts would be successfully mitigated and controlled, hence within acceptable limits. These impact and risk assessments, originally produced for the applicant (and available on Cuadrilla's website), were not challenged by either the LCC officer or the councillors during the debate. Impact and risk assessments with similar positive conclusions were produced by the Environment Agency, the Health and Safety Executive, Public Health England and other public organizations, whose experts gave evidence in the debate. "All [these agencies] have confirmed that with a properly regulated industry, the risks are minimal", one supporter said.

The following argument was used in various forms by the supporters of the applications:

If properly regulated, fracking will be safe.
Fracking will be properly regulated,
Therefore, it will be safe.

This was supposed to persuade people to accept fracking applications, by accepting that the UK regulatory system is "robust" or "gold standard", which will make the process safe. The validity of the argument did not, however, obscure the questionable truth value of the premises and conclusion for the audience. As one councillor put it (my italics):

> Significant bodies, Public Health England, The Royal Academy of Engineering, and The Royal Society say that fracking would be safe in the UK if properly regulated. *This is a big if.*

Evidence was also cited of Cuadrilla's record of "non-adherence to planning conditions elsewhere", and of the "incapacity of various government bodies to regulate this industry". In spite of this, the decision-making process seemed to proceed on the assumptions that fracking *will* be properly regulated (and conditions *will* be observed and enforced), and that proper regulation does guarantee safety. This (valid but arguably unsound) argument played a crucial role in neutralizing the most important objections to the proposals, based on risks to public health and on perceived violation of people's basic right to living in a safe, healthy environment.

7. Deontic reasons as premises in decision-making
With the public health argument disposed of by appeals to "gold-standard" regulation, and no grounds to challenge the ability of regulating agencies to enforce *future* observance of rules, Councillors were left with a limited range of reasons they could use against fracking. These were not in the form of unacceptable risks, but in the form of unacceptable impacts. Among impacts, it was not the impacts on air quality or water resources that were used, as these too had been declared within acceptable limits by the experts. It was only noise and visual impacts that were demonstrably impossible to mitigate adequately and contrary to local policies regulating permitted developments in the countryside. On this rather slim basis, the motion to refuse the Preston New Road application was first put forward by Cllr Kevin Ellard, seconded by Cllr Chris Henig, and later summed up by Cllr Paul Hayhurst, who proposed

> …that the application be refused on the grounds that the development would cause an unacceptable adverse impact on the landscape arising from the drilling equipment, noise mitigation equipment, storage plant, [flare] stacks and other associated development. The combined effect would result in an adverse urbanizing effect on the open and rural nature of the landscape and visual amenity of local residents, contrary to policy DM2 of the Lancashire Waste and Minerals Plan, and Policy EP11 of the Fylde local plan… And that, secondly, the development would cause an unacceptable noise impact, resulting in a detrimental impact on the amenity of local residents, which could not be adequately controlled by condition, contrary to policies DM2 of the Lancashire waste and minerals plan and policy EP27 of the Fylde local plan.

The motion to reject the PNR application was put to the vote at the end of Wednesday 24 June 2015, and was defeated (7:8) on the casting vote of the Chair. However, in light of controversial and multiple legal advice received, another vote took place on Monday 29 June, instigated by Cllr Hayhurst, when the motion was approved (9:3, 2 abstentions) and thus Cuadrilla's application for exploratory fracking at Preston New Road was rejected. In so doing, councillors made use of the "deontic powers" attached to their position (inscribed in the Constitution and also reconfirmed by the legal advice they took). The Constitution and the lawyers that had been consulted said that, while being *obliged* to take the officers' recommendations into account, as well as the views of experts and all the available evidence, councillors (as elected politicians) have the *right* (or are *entitled*) to weigh the evidence differently and

come to a different conclusion from their officers. This fundamental *right* turned out to be crucially important in the decision-making process.

As predicted, Cuadrilla appealed against this unfavourable decision, which was re-evaluated by an inspector, following a public inquiry held in Blackpool in February-March 2016. The appeal was "recovered" by Communities and Local Government Secretary Sajid Javid, who overturned LCC's decision against Cuadrilla's application on 6 October 2016. In appealing against the original decision, Cuadrilla's lawyers argued that the LCC had "failed to apply national policy and carry out anything that approximated to a reasonable planning balance". Seeing as "the strong national need for the development [of shale gas] was clearly stated in national policy at the date of refusal", the LCC's decision had been unreasonable, "in plain breach of national policy, and relied on two wholly unreasonable and unsustainable grounds in doing so..." (McKay 2016).

The planning inspector acknowledged that some of the impacts causing "demonstrable harm" could not be eliminated, but argued that the impacts "would be reduced to an acceptable level", the development would be in accordance with all local policies (the Local Development Plan and the Fylde Borough Local Plan) "taken as a whole" and "should therefore be permitted unless material considerations indicate otherwise". Crucially, the development was supported by national policy: "the national need for shale gas exploration is a factor of great weight in support of this appeal", while the local population's concerns, being "satisfactorily controlled by planning conditions or by other regulatory regimes", "can only be attributed little weight in the planning balance" (McKay 2016).

Clearly, the Inspector and the DCC councillors weighed the arguments for and against Cuadrilla's applications very differently. If, for the councillors, the "national need" argument had played no role in decision-making, the inspector seemed to find it overriding, in a situation where the impacts (arguments against), found non-overridable by the councillors, were deemed to be all within acceptable limits by the inspector. Both the inspector and the councillors, however, were within their legal *rights* (and *entitled*) to come to a different planning balance, provided they took all evidence into account and could justify their choices. In coming to different conclusions, both the councillors and the inspector were using the deontic powers assigned to them in virtue of their job contracts with their own institution (county council, planning inspectorate). In making the final decision, the minister was also using his own deontic powers, within a legal institutional framework. This framework was nevertheless vocally contested by local people who suggested the system was biased against local democracy and unduly favouring the applicant. It was, they said, unjust to remove decisions on matters with local impact from local decision-making powers, seeing as central government was geographically far away from the impacts and risks that local people would be subjected to. Doing so also contravened stated government policies – the devolution of power to local government. I will return to this discussion further below.

8. Non-deontic power: government and corporate power

A decision that is in keeping with the rules (i.e., in accordance with all the institutional constraints and affordances) is not necessarily a decision that can withstand critical questioning, if the rules themselves are unreasonable. Throughout the debate, members of the public challenged the institutional design, for example the obligation to consider the application in isolation, "on its merits", and as a "temporary" proposed development. While both of the latter constraints are in principle reasonable, their effect was only to make Cuadrilla's application harder to reject, by weakening the force of otherwise powerful arguments against it. They also argued that risks to public health should be given a more significant role in the planning balance, rather than being ignored in the light of assumptions about the efficiency of regulatory systems ungrounded in actual evidence. The combined effect of these institutional constraints was to downplay the potential impact of the application and make it more difficult to reject.

Searle's theory of institutional reality offers a principled way of distinguishing between institutional constraints and affordances, such as the rights, obligations and entitlements at work in the decision-making process discussed above, which are all manifestations of deontic power, and other manifestations of power which are not legitimate in the institutional context at issue. The source of all genuinely institutional constraints lies in the speech acts of declaration that constitute the institutions in question. What agents are institutionally obliged to do must be distinguished from what they feel (dis)inclined to do, or what is prudentially (un)advisable for them to do. It may be prudentially advisable for councillors to agree with the government, but their main institutional duty is to the local population.

Many speeches during the debate referred to perceived government interference behind the scenes, the bias displayed by some of the pro-fracking expert reports, including the LCC officer's report, and the active attempts (by the pro-fracking side and the government) to discredit, ignore or withhold inconvenient evidence (the "redacted DEFRA report"). A leaked letter from Chancellor George Osborne to cabinet colleagues was cited during the debates as demonstrating collusion between the government and Cuadrilla, and a clear intention to have future decisions removed from local democratic institutions (Carrington 2015), in violation of existing institutional rules. There is no space to discuss these here in detail. One councillor spoke of the "restrictive force of government intervention", of an unacceptable "degree of interference" from ministers "into the decision-making process of this local planning authority", of a "bullying government" trying to turn the LCC's decision into a "sham event", a "pretence" of democracy. He asked councillors to do the "right" thing, do what they "were elected to do, which is representing the people of Lancashire's best interests", "not the narrow self-interests of a handful of industrialists".

Such speeches refer at once to deontic and non-deontic constraints: obligations arising from councillors' institutional roles as elected politicians, on the one hand, and illegitimate government pressures, attempting to influence the outcome, on the other. The latter manifestation of power is non-deontic in the context of the LCC: the government had no right to intervene directly in a local planning matter. However strong the unofficial pressures coming from the government might be, they were not *institutional* constraints in the LCC decision-making context and were legitimately criticized and ignored. Councillors acknowledged a deontic reason (obligation) to arrive at a decision that embodied the interest of local communities, as elected representatives, and took advantage of their legal right to disagree with their officers (as an "affordance"). They did not acknowledge an institutional obligation to agree with the pressures coming from the government but described such central interventions (across institutional spheres or domains) as "illegitimate" and "illegal"[14].

While the government arguably had no legal right to interfere in the original decision, it was given this right on appeal. The appeal procedure (as a matter of institutional design) highlights the bias that is legally built into the procedure. If the outcome of deliberation at local democratic level is undesirable from the government's point of view, the decision can be legally overturned, via a procedure so designed as to enable decision-makers at central level to assign different weights to the same evidence, to support a different conclusion. In this way, a government minister can have the final say over a fracking application, regardless of opposition at local level, and people who will not have to bear the negative consequences of their decisions will be given the right to decide for those who will. (Recent research in the UK has focused increasingly on fracking in relation to social and environmental justice, democracy and "social licence" – see Bradshaw and Waite 2017, Cotton 2017, Whitton et al 2017.)

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[14] This in spite of the fact that, in principle, the Constitution *allows* councillors to decide against local interests in order "to accord with the legislation and Government Guidance", if there are good reasons for doing so.

9. Conclusion

I have suggested that understanding the impact of the institutional context on the reasonableness of argumentation, as well as the rationality of decision-making, requires Searle's theory of institutions and his notion of deontic power. Taking the form of obligations, rights, entitlements, prohibitions, and the like, deontic reasons shape the conclusions and decisions that can be reached. Deontic reasons are in principle non-overridable, being part of collectively recognized (though not necessarily collectively accepted) institutional arrangements. The LCC debate took place within an institutional framework criticized by many as incapable of producing a maximally rational outcome, including a legal, yet overly narrow set of planning considerations, a way of neutralizing critical objections (including decisive ones) by appeals to systems of rules and regulations, an appeals procedure that seemed inherently biased against the standpoint of local people. The constraints and opportunities provided by a less-than-ideal institutional design were nevertheless skillfully exploited by county councillors, who (in June 2015) managed to make the best of an unfavourable argumentative situation, by using their legal *rights* to disagree with the recommendations of experts and officers, and to weigh the evidence in a way that refuted those recommendations. The fact that their decision was *legally* overturned by central government on appeal (October 2016) points to in-built bias against local democracy at the level of institutional design. An institutional order grounded in the law collided with a political order grounded in representative democracy: the latter won the day in June 2015 but was subsequently defeated in October 2016 (when the original decisions were overturned).

I have looked at a range of institutional "pre-conditions" to argumentation, both procedural and substantive. In any institutional context, in addition to manifestations of legitimate (i.e., deontic) power, there may be manifestations of other forms of power. In any argumentative context, people may find themselves under various kinds of pressures to decide in a particular way. They may have rights and obligations prescribed in virtue of their institutional roles, but they may also feel bound to adopt a line of conduct for prudential reasons, in relation to self-interest or in response to perceived danger or threat. These latter manifestations of power are not institutional, but may in practice be (illegitimately) used in the institutional context. Attempted government interference in the LCC's decision was an example of an illegitimate use of power, and whatever pressure it exerted on the councillors ought to have been (and was) overridden by the rights and obligations that councillors had as part of their institutional roles. The final outcome of Cuadrilla's appeal, however, illustrated the way in which local deontic powers can be legally (though arguably illegitimately, from a political point of view) overridden by the powers of central government, via an institutional procedure designed in such a way as to prioritize national and corporate interests over the rights of local populations.

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