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REASONABLENESS IN GRANT PROPOSAL WRITING

This paper proposes an approach to the study of grant proposal writing based on the model of "critical discussion" from Pragma-Dialectics and centred around the notion of reasonableness as the key concept explaining the selection of argumentative moves. Thus, we interpret grant proposal writing as a discussion between a funding agency and a researcher, where the content of a future research is negotiated which is acceptable for both parties and, at the same time, can reasonably be realised.

In this perspective we try to provide a deeper understanding of the role of commitments to reasonableness in shaping the proposal text and of the strategies adopted by proposal writers to reconcile their *dialectical* commitment to reasonableness with their *rhetorical* goals through different forms of strategic manoeuvring. Furthermore, both the dialectical and rhetorical aspects of proposal writing are considered, beyond the single episode of text production, for their function in the context of the long term interaction between the funding agency and the proposer. We conclude the paper with a discussion of some directions for future empirical work based on this approach.

Keywords: grant proposal writing, reasonableness, critical discussion, strategic manouevring.

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1. Introduction

The aim of this paper is to propose an approach to study grant proposal writing – i.e. documents submitted to funding agencies to request funding for a specific research project – based on the model of critical discussion from Pragma-Dialectics and centred around the notion of *reasonableness* as the key concept explaining the selection of argumentative moves (Van Eemeren & Grootendorst 2004). The critical discussion is an idealized normative framework of discussion which spells out the consequences of a commitment of the discussants to solving a difference of opinion reasonably, that is on merits. Thus, we interpret grant proposal writing as a discussion between a funding agency and a researcher, where the content of a future research is negotiated which is acceptable for both parties and, at the same time, can reasonably be realised.

While the critical discussion is an idealized model, it is a particularly natural one if we assume that a broadly Gricean theory of dialogic cooperation is descriptively correct (Grice 1998; Clark 1996: 140–153). In fact, the critical discussion simply spells out the consequences of dialogical cooperation given a joint commitment of the participants to solving a dispute reasonably (Rocci 2006). As a consequence, the critical discussion can serve a double purpose: focusing on its *problem validity* it can be used as a flexible instrument to assess the argumentative quality of a dialogue from an external analyst's perspective; while, focusing on its empirically testable *conventional validity,* it can be used, in combination with a *theory of context,* as a basis for capturing the *immanent normativity* and *expectations* on the behaviour of dialogue participants in a given context of argumentative dialogue.

It is this second use of the critical discussion that is mainly in focus in the present paper. Our hypothesis is that the commitment to a critical discussion plays a decisive role in shaping the textual form of proposals, but also in explaining their role in research policy and in the scientific community. At the same time, the social and institutional context in which the discussion takes place (Rigotti & Rocci 2006; Van Eemeren & Houtlosser 2009) influences both the emergence of the critical discussion and its development and needs to be taken into account in a detailed fashion.

Last but not least, arguers are to be accounted for as strategic agents who try to achieve their individual goals within the limits of the joint goals of the dialogue and the contextual constraints. Grant proposal writers aim to get funding for their research programs, and given the "promotional" nature of grant proposals, we need to reconcile this dialectical reconstruction of the process with a rhetorically oriented approach. The framework for studying the interplay of the dialectical and rhetorical dimensions will be offered within Pragma-Dialectics by the notion of *strategic manoeuvring* (Van Eemeren & Houtlosser 2009).

We develop our argument in three steps. Firstly, we provide a short introduction on grant proposal writing and we review the existing studies on them from a linguistic and sociological perspective. Secondly, we try to provide a deeper understanding of the meaning of reasonableness in grant proposal writing and of its implications for the proposal text, as well as on the strategies adopted by proposal writers to reconcile their commitment to reasonableness with their persuasive-rhetorical goals through different forms of strategic manoeuvring. Thirdly, we analyze the interaction between a funding agency and proposer in its social and institutional context and its development in the longer term. The paper is concluded with a short discussion of some directions for future empirical work based on this approach.

The theoretical framework presented here is rooted in past work of the two authors on public research funding and funding agencies (Lepori et al. 2007), as well as on argumentation in context (Rigotti & Rocci 2006; Rocci 2006, 2008). As befits the framework-building stage of our research, the paper rests methodologically on conceptual analysis as well as on the informal generalizations and insights gained through a preliminary argumentative analysis of about 20 proposals, from different Swiss and European funding agencies, performed in the context of a PhD course on grant proposal writing.

2. A Specific Genre rooted in a Broader Social and Institutional Context

Grant proposals emerge as a very specific type of scientific text, which distinguishes them from widely studied genres like the scientific paper (Bazerman 1988). First, their function is not to get research results accepted

by the peers and diffused in the scientific community, but to convince a funding agency that a future project is more worth to be financed that those of competitors; secondly, instead of presenting results they contain a promise of future research and thus they have to be evaluated against the *credibility* of this promise and on the *relevance* of its expected results rather than on the *relevance* and *empirical support* of actual research results; third, they are written in a structured context, where the items to be covered, their order and the format of the proposal are standardized by the funding agency and thus proposers have limited freedom to shape their text.

With the increasing share of resources attributed to researchers in form of research projects (Lepori et al. 2007), writing of grant proposals has become a central activity of scientists, especially of those in senior positions. Moreover, with the decrease of success rates of proposals increasing attention has been devoted to their redaction, with the assumption that an appropriate choice of arguments and style would enhance their chances of success.

Following this line of reasoning, some studies have analyzed the stylistic and argumentative characteristics of grant proposals, focusing on the function of these arguments to convince the funding agency to accept the proposal (Connor & Mauranen 1999; Tardy 2003); these studies have demonstrated their rhetorical specificities, which makes them similar to promotional, fund-raising, letters. Besides composition rules presented in most proposal writing handbooks (see for example Johnson-Sheehan 2002), earlier studies looked to the textual moves adopted to persuade the audience and, especially, on those specific to them, like the relevance move (Connor & Mauranen 1999; Tardy 2003). Subsequent works examined the variance in the use of moves depending on the scientific domain and on characteristics of the writer (for example between male and female writers or between scientific domains; Connor 2000, 2003), as well as the recurrence and articulation of moves inside the text, given the length and complexity of a grant proposal (Feng & Shi 2004); later work adopts also corpus linguistics techniques to quantitatively compare proposals, for example concerning the amount of space devoted to different moves or the use of specific keywords (Connor & Upton 2007). The choice of moves in proposal abstracts has also attracted much interest because of

their importance in the evaluation process, but also since abstracts have no predefined structure and thus researchers have more freedom to chose different presentational strategies (Feng & Shi 2004; Feng 2006).

Writing and submitting a grant proposal is not a unilateral act, but rather part of a complex interaction taking place in a highly structured context. According to the model of context proposed in Rigotti & Rocci (2006) a contextualised communication activity is describable in terms of the basic *interaction scheme* it invokes and in terms of the institutional goals and commitments of the inter-agents within the *interaction field* in which the activity takes place. The *interaction field* is the institutional dimension of the communication context. It is characterised by defining general goals and values, to which everyone participating in the field is *ipso facto* committed (e.g. the advancement of knowledge, the ideals of scientific integrity and independence, etc.), by institutional roles (e.g. a *reviewer* acting on behalf of the funding agency) characterized by their specific goals, commitments and entitlements. An interaction field is also characterized by the *agency relationships* – in the sense of economical theory – that bind the agents in the various roles to the respective institutions acting as principals. *Interaction schemes,* are broad, culturally shared, "recipies" for interacting, such as *negotiation, adjudication, mediation, problem-solving, deliberation, public debate, expert consultation, teaching,* etc. When mapped onto a specific field, they take the shape of fully-fledged activity types. In fact, we can say that interaction schemes are implemented within a given field by a series of context-specific discourse genres (proposals, reviews, response letters from the funding institution, etc.), which make up what Bazerman (Bazerman 1994; Tardy 2003) calls a *system of genres,* co-extensive with the field.

Works in the genre tradition have focused on the intertextual nature of grant proposals – referring to different genres and embedded in a dense web of communicative exchanges – as an expression of diverse audiences (scientists, policymakers, funding agencies) (van Nostrand 1994; Tardy 2003). Typically, these studies have been based on interviews with researchers, rather than on techniques of text analysis. Acquiring genre knowledge is considered a crucial process, largely done through apprenticeship and cooperation with more experienced researchers, but increasingly also through specific courses (Ding 2008). Other studies are rooted

in the ethnomethodological tradition of science studies, which has developed a specific line of inquiry dealing with the production of scientific texts and arguments, their embedding in social practices of sciences and their impact on the socio-cognitive development of science (see the review in Keith & Reigh 2008). Myers provides a comprehensive study on different types of textual production of two biologists (grant proposals, scientific articles, popular science texts) as they are shaped by varying audience demands. As in the science studies tradition, writing grant proposals (and of scientific texts in general) is looked from the perspective of its influence on the autorepresentation of the scientist and of its positioning inside the reference community, as well as of its impact on the collective autorepresentation of the discipline (Myers 1990).

3. The Normative Dimension: Grant Proposals as Contributions to a Reasonable Discussion

We can interpret these two traditions of studies as taking two extreme positions on the relationship between text and context; while the "rhetorico-persuasive" tradition focuses on the instrumental use of arguments to get the proposal funded – thus emphasizing the strategic behaviour of researchers –, the "genre knowledge" tradition emphasizes its embedding in a discourse community and the learning by the agent of the rules of the game. These approaches provide interesting insights on some characteristics of the moves adopted in grant proposals and on how researchers learn to manage this process. However, writing a grant proposal involves also a very careful and context-related choice of arguments and both approaches provide little guidance to understand the criteria used by researchers to decide that some arguments are more appropriate than others in the context of a specific proposal and how social norms and values are integrated in this process and potential trade-offs with researcher's own goals are solved. It is precisely this need that motivates our framework, which is centred on reasonableness, on its contextual embedding, and its reconciliation with rhetorical goals.

This framework does not have to be viewed as alternative, in particular, to cognitive studies of persuasion (Hoeken 2001). In fact, the two strands of research may prove in the end complementary. Psychological studies of

persuasion are concerned with *de facto* persuasive power, while normative approaches are concerned with problem solving potential and intersubjectively accepted standards. Yet, to investigate the persuasive effects of *argument quality* in a meaningful and non circular way, an independent and operationalizable definition of argument quality is required (O' Keefe 2006). This is precisely what normative research seeks to provide.

In our case, there are also context specific reasons to start from a normative rather than from a psychological perspective, since we argue that grant proposals share with the rest of scientific production a commitment to reasonableness, which marks their difference with other promotional texts like sales letters and which limits the scope of the rhetorical devices which can be used (Myers 1990). This commitment is both explicitly adopted by the institutions that take part in interaction and implicitly recognized as a central value defining the ethos of the community of researchers. This picture is, by the way, coherent with a commonsense understanding that scientific discourse should comply with standards of reasonableness. Even the most cynical proposal writer would subscribe the opinion that its proposal has been accepted *also* because of the quality of its arguments, not just "because of its good rhetoric" – where *rhetoric* is understood, in its modern everyday meaning, as non inclusive of argument quality.

Following the dialectical tradition, we consider that arguments are deemed reasonable if they can stand the test of a critical discussion where relevant arguments based on common starting points are offered and potential objections are refuted, while the opponents accept and follow a code of conduct ensuring a rational discussion (Van Eemeren & Grootendorst 2004). For example, in a critical discussion is formally prohibited for both opponents to contradict their premises. Thus, reasonable arguments have both a *problem solving validity* – they are part of a discussion leading to an agreement – and a *conventional validity,* meaning that the way the discussion was conducted is fair and acceptable for both parties. Our approach to grant proposal writing thus integrates insights of social studies of sciences, which have developed the idea of scientific communities as discourse communities where agreement is reached through debate and critical discussion based on careful scrutiny of the validity of proposed arguments (Keith & Reigh 2008).

In order to ascertain whether and in what respect we can legitimately apply the concept of critical discussion to this interaction, it is useful first to examine it in terms of its *scheme* and its embedding within the *interaction field,* following the model of communication context in Rigotti & Rocci (2006) discussed above.

At its core our interaction can be brought back to the *interaction scheme* of the *negotiation,* where the different participants have different (and possibly conflicting) individual goals, interests, desires and aim to find an agreeable composition, that is a common course of action that ensures that the individual goals, interests or desires of the different participants are satisfied, at least partially. Researchers need funding to implement their ideas and carry out their research programs, while funding agencies are mandated to select the *best* proposals for funding, according to certain criteria. The funding of a certain project is a course of action through which each participant hopes to be able to fulfil his/her own goal: respectively getting the funding or duly discharging the mandate. This negotiation involves a minimum of three turns: the call, the proposal and the answer of the funding agency.

A speech-act analysis of the turns composing the dialogue between the researcher and the funding agency can illuminate how exactly a critical discussion becomes relevant in this kind of negotiation. The negotiation is initiated by the funding agency. The speech-act that initiates the interaction is not simply an *invitation* to submit proposals, but also a *conditional promise* of funding a number of projects which best respond to certain declared criteria. By means of this commissive speech act the agency is bound (at least formally) to select proposals based on these criteria and needs to convincingly argue the outcome of the process. The presence of this commitment to criteria depends on the nature of the interaction field, and more precisely stems from the institutional goal of the funding agency and from the *agency relationship* that ties it to the governmental or private source of funding. This feature plays an important role in defining the space of critical discussion in the interaction.

In a critical discussion, the emergence of a difference of opinion with respect to one or more standpoints is a logically necessary step of the resolution process. In Pragma-Dialectics this stage is called *confrontation* (Van Eemeren & Grootendorst 2004: 59–60). To find out what are the

standpoints that give rise to an argumentative confrontation between researcher and funding agency we look at the second move of the dialogue: the speech act with which researchers respond to the call, i.e. the proposal itself. The proposal involves both a directive (asking the agency for funding) and a commissive speech act: the applicant *promises* to carry out a certain research activity, provided that he/she receives funding. Neither directive or commissive speech acts can directly express a standpoint – which is by definition an assertive. In order to recover the main standpoint S1 we need to translate the directive into an assertive:

S1: *The proposed research R is worth funding.*

The commissive part, on the other hand, provides us with two substandpoints that support S1, and that the proposers need to defend in order to support the worthiness of the proposal and which are essential for accounting for the argumentative and rhetorical strategies of proposal writers. Thus, (S2) the action promised must be for the benefit of the addressee, and (S3) the speaker must be able to carry out the promised action (Searle & Vanderveken 1985: 192 ff.):

S2, or the "relevance claim": *The proposed research R furthers significantly the objectives of the funding agency;*

S3, or the "credibility claim": *The proposed research R is likely to be successfully carried out by the applicant.*

Thus, we have a critical discussion where the funding agency and the applicant try to establish whether (S1) a research project reasonably deserves to be funded in view of its relevance to the agency's goals (S2) and in view of its capacity to yield the expected results (S3). At a very abstract level the argumentation structure of a grant proposal is represented in Figure 1.

The structure represented in Figure 1 is a *coordinative* one, where S2 and S3 are not sufficient alone but must be taken together in order to defend the main standpoint S1. In fact, the funding agency evaluates the proposal against both criteria: the *relevance* of the proposal and the

Figure 1: Argumentation Structure of Grant Proposals

S1
The proposed research R is worth funding.

S2	S3
The proposed research R furthers significantly the objectives of the funding agency. *(relevance claim)*	The proposed research R is likely to be successfully carried out by applicant. *(credibility claim)*

| Arguments supporting S2 | Arguments supporting S3 |
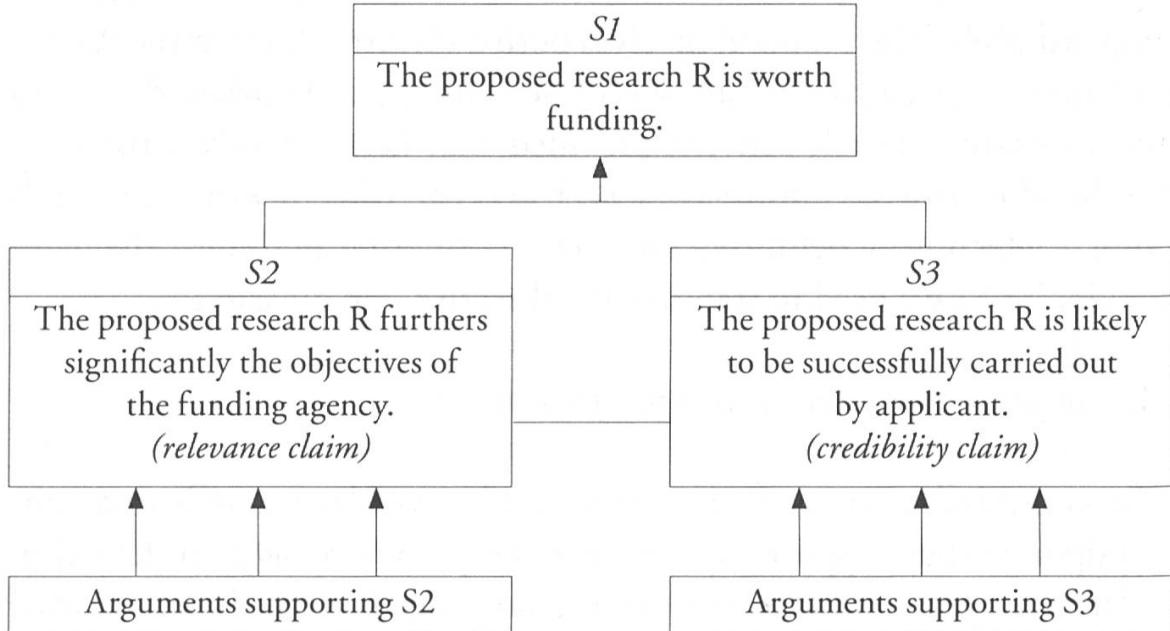
Represented according the notational conventions introduced in Van Eemeren et al. 2002

credibility of the promise. For example, a proposal can be evaluated as non credible because of lacking competences of the proposer, but also because risks are too high and the peers estimate that the research problem cannot be solved in this context. Yet, as we will see in the following sections, at the rhetorical level, the relative emphasis that S2 and S3 receive can vary significantly.

Writers of grant proposals are committed to convincing the funding agency of these standpoints on the basis of arguments that are submitted an open rational evaluation. The funding agency, and the peer reviewers acting on its behalf are also committed to reasonableness in evaluating and selecting the proposals. The latter commitment is apparent, for instance, from the need to motivate the rejection of proposals with rational arguments in reviews and rejection letters. The procedural rules of grant submission should be considered as partially specifying a suitable code of conduct to approach the ideal of critical discussion. For example, the funding agency defines at the beginning its evaluation criteria and is committed to justify the selection outcome based on them.

In fact, most agencies issue guidelines on the format and content of the proposal, which can be interpreted as a set of *critical questions* – entailing an obligation to provide further arguments – that are chosen in order to evaluate whether the sub-standpoints S2 and S3 are adequately supported. For instance, almost all tables of contents include a section where to explain the relevance of the proposed project. On the other hand, a section entitled *Describe the state of your own research in the field* can be interpreted as a critical question probing the support for the *credibility claim* S3 and reformulated as "Do you have *enough research experience* to realize your project?". The discourse strategies deployed in proposal writing seek to provide *argumentatively relevant* answers to these questions rather than just correct but irrelevant answers. In the above case, relevant answers are only those to past work which can give confidence that the applicant can successfully perform the proposed project. We notice, here, that the notion of relevant answer is socially constructed and is closely dependent on the agency's stated or unstated goals; a research council funding academic research would see favourably that the applicant did publish research in the field on international journals, while a policy-oriented agency might expect that the applicant was able to produce reports suitable for decision-making.

By looking at the nature of the sub-standpoint S3 and of its supporting arguments we can see that in proposal writing the evaluation of reasonableness operates in a way that differs subtly but decisively from that of other kinds of scientific argumentation. A promise of future research is risky and dealing with the likelihood that some problems can be solved. The evaluation of its reasonableness cannot be based only on proofs of evidence – according to the strategies of argumentation and standards of evidence sanctioned in each discipline (e.g. statistically significant experimental results) – but involves personal appreciations, personal trust (ethos) and carefully built arguments based on a wide variety of premises, drawn both from the specific store of disciplinary knowledge and the store of common sense. Moreover, because of the interaction field of grant proposals, their evaluation has immediate pragmatic effects (getting or not funded) and takes place in a fixed time, thus the debate cannot be left open until an ideal agreement is reached like in the discussion of scientific theories.

Unlike science policy analyses, which consider evaluation procedures as purely means to select the best proposal, an argumentative approach would consider them rather as means to ensure that selected proposals are reasonable as means of conducting an ongoing, long term, discussion between researchers and funding agencies. The strong feeling of injustice felt by applicants when they perceive that the discussion has not been conducted correctly and/or they identify contradictions in the discourse of the funding agency might be considered as a sign that this interpretation is correct.

4. The Rhetorical Dimension: Strategic Manoeuvring

Applicants don't want to write reasonable proposals only, but also to get them funded. Hence, the need in the proposal writing process to reconcile as much as possible the dialectical dimension with the rhetorical one. Conducting a critical discussion complying with its code of conduct, but at the same time in the direction most favourable to its own interest is what has been called *strategic manouevring* (Van Eemeren & Houtlosser 2006).

How this takes place is strongly dependent on the interaction scheme and on the interaction field in which the critical discussion is embedded. Van Eemeren & Houtlosser 2009 single out three general kinds of choices that can be involved in different kinds of rhetorical strategies within different schemes and fields of interaction: (1) the choice of issues and arguments from the "topical potential" available at a certain stage in the discussion, (2) the framing of issues and arguments according to "audience demand" and (3) the purposive use of presentational (stylistic) devices.

For grant proposal writing our hypothesis is that most manoeuvring takes place at the level of the *topical potential,* that is in the choice of sub-standpoints and arguments. In general, applicants will try to position the proposal as close as possible to their competence and to make deals between different evaluation criteria, "trading" the good support they mustered for one sub-standpoint to make up for the relative lack of support for another sub-standpoint. Thus, the most general topical choices are those connected to the relative weight and support given to the sub-standpoints S2 (relevance claim) and S3 (credibility claim). For example, a relatively less competent applicant could try to reinforce the

relevance of its proposal – the support to S2, even if this means getting a project far from its current research activity.

The exploitation of the topical potential also involves choices at a finer level. New entrants would prefer to propose small-size and rather paradigmatic projects, while the reasonability of highly-risky and innovative projects would be easier to prove in the case of leading scientists. Our approach suggests then a systematic analysis of the argumentation line followed by the applicants and of the reasons of their choice based on their interests, resources and representations of the objectives of the funding agency.

Adaptation to the audience is a well-known strategy, where applicants display their knowledge of the objectives and context of the funding agency, for example by referring to documents and using keywords from the call. This kind of manoeuvring aims to show awareness of the objectives of the agency and thus that the applicant is more likely to take them into account when realizing the project. Of course good audience adaptation should be related to the specific nature of the proposal and not include just wholesale repetition of chunks of the funding agency's discourse.

Finally, the use of presentational devices is the most widely explored aspect of proposal writing, including issues of clarity, choice of register – displaying appropriate knowledge of the specific discourse genre – and building the personality *(ethos)* of the applicant through style. Again, the use of these devices should be closely connected to the topical choices: for instance, in a proposal strongly built around the fact that the applicant is a leading scientist in the field, it would be completely inappropriate to adopt understatement as a presentational device.

Our approach leads then to consider the three levels of manoeuvring as closely related and organised hierarchically, as well as to suggest that the choice of the arguments is likely to be the prime issue in most proposals; it builds then the foundations of an integrated approach to the use of rhetoric in grant proposal writing, beyond a focus on presentation and writing style.

We would also expect instances of strategic manoeuvring by the funding agency since it has a also strong interest to get proposal which are reasonable and meets the agency own objectives; this opens a completely unexplored topic examining also calls for proposals and evaluation reports as argumentative texts.

5. Broadening the View: Strategic Agency, Repeated Interactions and Timeline

The rhetorically oriented literature discussed in section 2 assumes a static vision, where the researcher wants to get its own proposal funded and adopts all possible means to persuade the funding agency – including rhetoric, but also practical actions like lobbying. However, unlike existing goods on sale, the promised research does not pre-exist the act of writing grant proposals, but it is, to some extent, negotiated in the interaction between funding agency and researcher.

One of the advantages of the approach outlined in the previous sections is that it provides a bridge between the argumentative analysis of grant proposal texts and a sociological concern for proposal writing as an activity being shaped in a developing interaction between researcher and funding agency. While studies on grant proposals in the discourse genre tradition (Tardy 2003) to a large extent look only to the broader and more stable aspects of context, from a sociology of science perspective the most interesting questions relate to the specific patterns of interaction between funding agency and researcher and how the ideas and research goals of the proposers are reshaped by the questions and formal structures given by the funding agency to yield the actual instances of grant proposals we observe.

To this aim, we propose in this section an extension of the model which allows to represent the dynamic interplay between strategic agency of the researcher, the goals of the funding agency and the broader institutional context.

In section 3 we presented the interaction between proposal writer and funding agency as a *negotiation,* focusing on the speech-act analysis of the agency's call for proposals and of the proposal answering to that. A third turn – representing the acceptance or rejection of the proposal – must follow in order to obtain the elementary structure of a negotiation. The research funding negotiation, however, like many other kinds of negotiation can develop well beyond this logical minimum. In particular, negotiations typically imply progressive reformulations both of the call and of the answering proposal until an agreeable composition is reached. In the case of research funding this extended negotiation is in many cases implicit, but it can surface more explicitly in a number of cases, where, for example, hearings are used for the final selection round or in two-stage submissions

or, finally, when after selection the funding agency enters into a negotiation on changes to the research, as in the case of European Framework Programs. In the call, the funding agency indicates its preferred research project, but, since the best ranked projects will be selected, it implicitly accepts to fund also projects which only partially correspond to its objectives and signals its readiness to negotiate. On its side the researcher will construct its promise for future research taking into account different factors: the chances of success, the interest of the proposed research and its feasibility, the added value for his/her own career and/or for his/her long-term research programme. Moreover, since writing a proposal in many cases involves scientific work, for example in describing the state of the art, defining the methodology etc. issues of time and effort are likely to play a relevant role. In economic terms, the expected advantage from the investment in the proposal has to be compared to other foregone opportunities, like writing papers, doing research, submitting other proposals.

These factors connected with the goals of the researchers and with economy considerations concerning the trade-offs of the proposal writing activity, interact with the two main argumentative tasks discussed above and contribute to shape the argumentative strategies adopted by the applicants. Thus, the structure of the strategic decisions underlying the negotiation of a grant proposal can be represented as in Figure 2.

What is apparent is the dynamic character of the system. Most of the factors involved are to some extent flexible: the researcher own objectives can be renegotiated if it emerges that the proposal is likely to open a new promising research line; also, reality data are to some extent modifiable, for example proposers competences can be reinforced by including new partners or a new methodological approach can be devised. Finally, funding agency objectives can to some extent be informally renegotiated in the evaluation process and thus the researcher could take the risk of not satisfying them fully (depending on its evaluation of own strengths, as well as of potential competition). Writing a proposal can be best interpreted as a balancing act between these requirements; usually, experienced researchers are well-aware of these trade-offs and act strategically to handle them.

By looking the broader set of interactions where this process is embedded, many additional instances of dialogue emerge which contribute in shaping the proposal.

Figure 2: Dynamic Structure of Strategic Decisions underlying Grant Proposal Negotiation
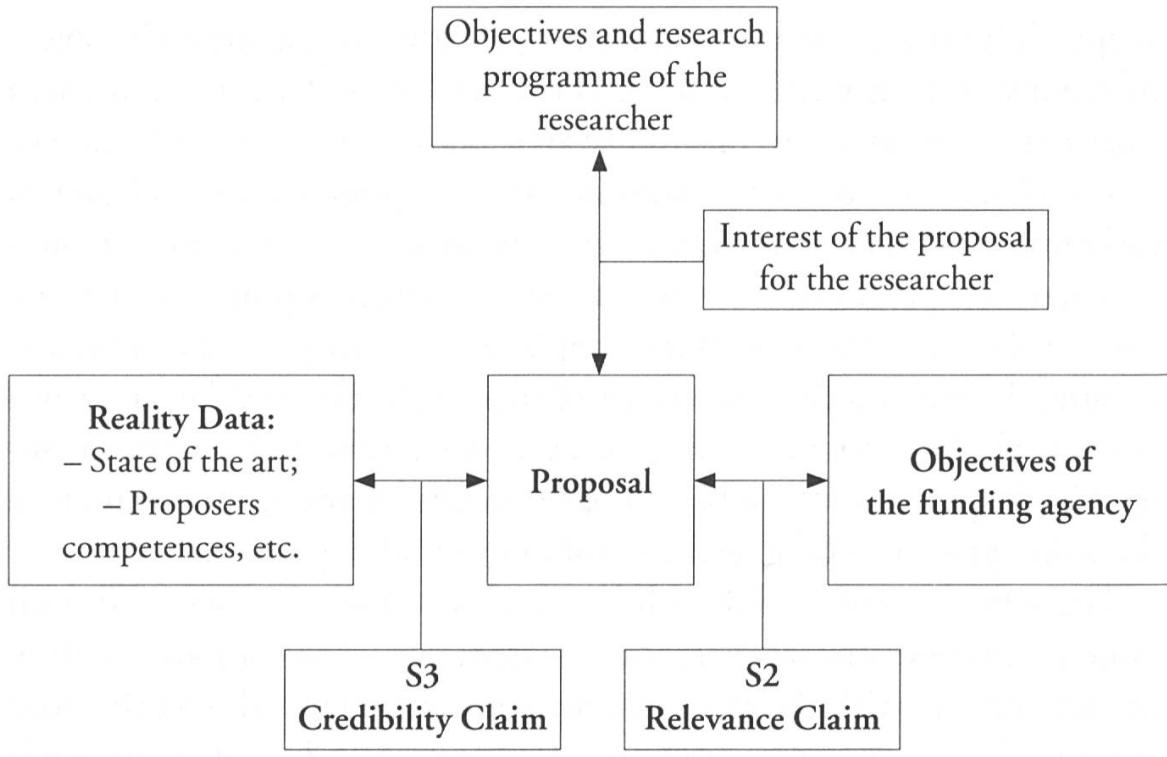
Firstly, proposal writing is in most cases not individual work, but rather a social process where other members of the team and colleagues are asked to contribute and to comment on successive drafts (as documented by Myers 1990). Colleagues are deemed to play the role of referees or members of evaluation panels of the funding agency and thus their answers are considered as proxies of a dialogue with the funding agency. This is related to the fact that in most agencies researchers themselves are involved in the evaluation process, especially in the academic-oriented research councils (Braun 1998); moreover, since the basic procedural rules of a critical discussion are fairly general, the evaluation of reasonableness of a grant proposal can be to some extent conducted in a different context and with different parties, thus for example letting peers play the role of discussant. Of course, there is no guarantee that they will advance all objections made by the funding agency, but at least if peers share the same normative

context, probably many of them. The process of writing successive drafts of proposals and then letting colleagues criticize them can then be seen as a way to test the reasonableness of the proposed arguments.

Secondly, resubmission of rejected proposals has become a widespread case since in most cases funding agencies do not have enough funds to finance all good-quality proposal. In a few cases in the refusal letter the funding agency explicitly advises to resubmit the proposal improving some specific points, thus committing itself to finance the project if these requests are satisfied; the dialogic nature is made explicit by the fact that applicants usually attach a letter explaining how they responded to the criticisms. A more frequent case is where the evaluation report identifies weaknesses of the proposal and the researcher uses it to prepare a revised version; thus there is no explicit commitment of the funding agency if improvements are made, but at least a response assessing the compliance with the evaluation criteria.

Thirdly, a broader view shows that typically the dialogue between researcher and funding agency takes place through repeated submission of proposals through the whole researcher's career. Competition for grant proposals takes place in highly institutionalised quality markets characterised by strong social ties and by the selection of a core set of participants, which are regularly funded, while most funding agencies take long-term commitments to support a specific type of research (White 2002; Viner et al. 2004). In this perspective, short-term grants are mostly a monitoring tools of long-term commitments to avoid performer's shirking (Fudenberg, Holstrom & Milgrom 1990) and grant proposals in many cases reflect this broader context. For example, explicit reference to the previous projects in follow-up grants does not only show that expected results have been achieved, but commits implicitly the funding agency to further finance this research line, except there are good reasons to decide differently. We found also cases where the funding agency explicitly deals with follow-up, for example stating that this is the last grant to be funded in this area or requiring significant innovation at the next submission. This long-term dynamics, with its reputational implications, only reinforces the seriousness of the commitments taken in grant proposals – research funding is not a "take the money and run" game but rather the progressive construction of a reputation-based market position.

In empirical terms, there are thus opportunities to analyse the dialogue taking place around a grant proposal beyond its core structure, taking into account the broader set of interactions (as in the genre tradition; Tardy 2003), in a career perspective (as in the science studies tradition; Myers 1990) or in a funding market perspective as in economics of science (Viner et al. 2004).

6. Perspectives for Empirical Work

In the previous sections we proposed an approach inspired by Pragma-Dialectics aimed at integrating in a coherent framework the different dimensions of grant proposal writing. Firstly, the proposal has been analysed as a communicative act – an act realizing a dialogic turn within a negotiation between a funding agency and an applicant, which is, in turn, embedded in a social and institutional field of interaction. Secondly, we have considered the explicit commitment to reasonableness of the participants in the research funding negotiation and emergence of a critical discussion about standpoints S1 (S2, S3), which is instrumental to the settlement of the negotiation. Thirdly, we have considered grant applicants as agents that act strategically deploying *strategic maneuvering* in proposal writing in order to reconcile their commitments to reasonableness with their individual goals. Finally, we have argued that these individual goals – and the manoeuvring stemming from them – cannot be simply seen as the goal of persuading the agency in order to get their own research funded. Rather, the strategic choices of grant applicants stem from the need to balance their long term research and career goals, the requirements of funding and the costs of satisfying these requirements given the researcher's current competences, resources and academic standing.

To conclude, we would like to briefly sketch the kind of empirical research in which the theoretical framework we have presented in the previous sections can be put to test. A qualitative small corpus study based on a theoretical sampling appears the most natural next step to assess the plausibility and insightfulness of this framework. The design of the mini-corpus should ideally include applicants with different academic biographies (both experienced and novice researchers) and funding agencies or instruments that differ in the way in which they define the criteria for funding

(e.g. both targeted research programs and general basic research funding). Given such a corpus, the argumentative analysis should initially focus just on strategic manoeuvring with the topical potential with respect to the *relevance claim* S2 and the *credibility claim* S3, since we believe that this kind of manoeuvring offers a privileged site of observation for capturing *in vivo* the interplay of the different factors of proposal writing described above. To this aim, textual analysis of proposals should be integrated with contextual details about the biography and position in the scientific community of the application, as well as on its record on grant proposal writing.

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