Research report

With different words: The arguments that can empower an e-minority

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ARTICLE INFO

ABSTRACT

Crossing two different research fields, the socio-psychological and the linguistic one, the present work aims at exploring what means to be part of a minority group built through a social media. In particular it will deepen the argumentations used by its followers before and after a very critical phase, and mostly if their discourses entail positive effects in terms of empowerment. The main hypothesis of this study is that the empowerment process of a minority, seen as a form of re-appropriation of individual or collective efficacy, can be constructed by means of the quality of discussion and then through its arguments. The case is represented by "Roars", an active Facebook group of Italian researchers born after a very criticized reform of University. The linguistic analysis of Roars's group aims to understand their discursive and argumentative processes, and to state if they can develop some forms of empowerment. The results show how Roars change their rhetorical moves passing from presumptive and biased to "normative" argumentations, thus improving the quality of discussions and also their level of empowerment.

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1. Introduction

"Resisting means creating, creating means resisting."

(Hessel, 2011)

The famous phrase of Hessel reported above provides dignity to the resistance strategies of people, groups and minorities without power. From a psycho-social point of view in fact minorities create, by means of their divergent — and thus creative - way of thinking, conversion processes, especially when they are based on coherent stances (Moscovici, 1981). In particular, lack of power and personal resilience in everyday life has been explored in various social psychology perspectives. The common determinants of a positive and participative approach to personal and social lack of power are what Freire defined "process of conscientisation" (1970): the development of critical thinking constructed by sharing common ideas, practice, and knowledge within a community (Campbell & Jovchelovitch, 2000). Belonging to a community, as well as sharing knowledge and arguments — mostly in a context of lack of information — can give the opportunity to perceive a sense of control on the events and shared problems and thus it can be a source of personal resilience (Garmezy, 1991).

Within this framework the present work explores what means to be part of a minority group built through a social media (in particular, a Facebook group), and what argumentations are used to face a critical phase in which participants are involved, particularly if their discourses entail positive effects in terms of individual, interpersonal or political empowerment.

The psycho-social notion that best contributes to understand this process is the so-called *active minority* (Moscovici, 1981), that refers not only to social minorities in quantitative terms but also to those having a marginal status and lack of power (Mucchi Faina, Pacilli, & Pagliaro, 2013).

In the influence process, minorities have to assume coherent, autonomous and egalitarian behavioural styles; but what are the argumentations that help them to construct possible solutions and at the same time to resist and to face critical events?

What are the characteristics of minority arguing and then minorities' thinking? What arguments do people in a minority group use, and how do they construct a strategy to firstly empower themselves?

First of all we need to define and distinguish two different types of minority groups, one belonging to the majority (as a social category) but having less power or a different opinion on a given topic (ingroup), and the other belonging to a different social category (outgroup).

This difference looks useful to better contextualize the present work, where we outline the argumentative and empowering

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strategy of a minority that has no power, but indirectly belongs to a majority with decisional power. In particular the argumentations analysed will be extracted from a social media group that has a public visibility and represents a new form of active participation and contribution to a common cause.

2. Participation and media-activism

First of all it is necessary to define "participation". This is viewed by Nelson and Wright (1992) as "a form in which individuals engage in actions as members of a group with the aim of improving on their conditions" (1989). In this sense, as emphasized by Orford (1992), participation represents a "jointly shared and conscious action for a common cause based on a critical and conscientization process" (Freire, 1970). More recently in the field of social psychology Campbell and Jovchelovitch (2000) linked the classic definitions of participation to the theory of social representations, identifying three fundamental dimensions for what concerns the psycho-social construct: (1) Common social identity and social identification (with a social category), (2) Shared social representation of social context (or world view), (3) Shared knowledge of power relations. Sharing a social category, a representation of social context and power relations thus seem basic elements and can be framed as dimensions that enable us to understand more in depth other related phenomena such as the "media-activism".

Media activism is a particular kind of activism that is undertaken through new media. Considering the communication channel it appears crucial to distinguish the different degrees of media activism, since beside the chosen media it is important to consider the "offline" component. To this purpose within the political domain three distinct types have been recognized (Earl & Kimport, 2011): (1) E-mobilization, (2) e-tactics and (3) e-movement.

(1) E-mobilization: the web facilitates the sharing of information in the service of the offline. This is the case - in the Italian context - of the "water as common good" movement (Movimento *"Acqua bene comune"*), in which activists use the media only for communication purposes, such as appointments or information on studies to share. In this case, activists offer their adherence to the events either through "likes" or through discussion or approval of strategies, as well as comments on the social category which they belong or their social context, as fully explained in the meetings live.

(2) E-tactics: this includes online/off line communication. In this case the communication and discussion of the strategies to be put in place is possible both online and offline: in social media extended discussions are present with comments that show a significant continuation of the issues launched by the founding group. An example is one of "Teatro Valle Occupato" ("Occupied Valle Theater"), another case of on-line participation, in which discussion is present both online and offline, since the activists and citizens meet together in the theatre to start a discussion on "theatre as common good", while online they continue to comment and discuss but also try to include those who could not be present at the event (D'Errico, Poggi, & Corriero, 2015a).

(3) E-movement: communication exclusively online. In e-movements, activists do not know each other and they never meet except through social media, they are present in the "groups" only with a common interest in a cause but in different places, they interact just to express their opinions on line.

Obviously this classification is mixed or even it could change, for example e-movements can become e-tactics since people can start

from online but later they organize events to meet and discuss lively. This is the case, for instance, of *Movimento 5 Stelle* (5 stars Movement), an Italian political party that started as e-tactics but annually organizes meetings with participation of a large number of "citizens" (D'Errico, Poggi, & Corriero, 2014).

The present study analyses Roars researchers: members of a powerless minority group that, from a social media point of view, is an e-movement, because they know each other just online. We will try to understand if their argumentations can promote empowerment under critical conditions.

2.1. Media-activism as a form of empowerment

As we can see from the above classification there is a continuum of "online and offline" activism and from it different activism strategies can emerge, which in turn differently affect the subjective experience of their participants. In e-mobilization we do not expect effects of empowerment affected by the use of media, but what about in e-tactics and e-movement? What effects do activists' discussions produce? Are they a form of empowerment?

Social mediated communities are seen as a "safe place" (Siddiquee & Kagan, 2006; Lášticová, 2012) because of their informative and supportive functions when, by means of narratives, they provide a way to cope with solitude and isolation. Authors like Zuniga, Jung, and Valenzuela (2012) already worked on the motivational force of people on their social capital, civic engagement and offline/online participation when they use social media.

Media use and informal discussions are correlated to production of social capital, but also individual participation in civic and political causes (Zuniga et al., 2012) from an informational point of view; this means that media users are more informed and then more active, but when they interact in online discussions, they add comments and at the same time try to decide a strategy to solve problems; in this case, what are the psycho-social consequences in terms of empowerment?

To understand these aspects we need to identify the different forms of empowerment.

Empowerment is defined as a form of re-appropriation of self-efficacy and confidence in the individual or collective range of possibilities to choose (Zimmerman & Rappaport, 1988).

In this literature several forms of empowerment are recognized in relation to the levels involved: (1) individual, (2) interpersonal and (3) political, with their processes and outputs: (1) in the first case the process of community participation leads to results such as individual control of situation, mobilization skills, growing competences and self-efficacy, (2) in the second - the interpersonal level - the process of collective decision making produces organizational networks, and finally (3) at the political level, through collective action for access to public resources, the corresponding output will be coalitions, effective resources.

These psycho-social dimensions can help to interpret and understand social media exchange and argumentation of a powerless minority.

3. Active minorities and argumentative strategies

One assumption underlying this work is that a chance to promote empowerment processes may be the quality of discussion. In this connection Moscovici (1981) used the notion "active minority" in order to demonstrate how informational and communicative resistance of ordinary people can influence and change the state of things. Within communicative processes and their quality (Graham & Witschge, 2003), argumentation can play a central role.

The link between active minorities and their rules of argument has been pointed out just within an experimental approach,

underestimating the role of argumentation from a qualitative point of view (Mucchi Faina et al., 2013).

First of all, the argument is an activity-oriented verbal behavior aimed at convincing a reasonable critic of the acceptability of a standpoint (Walton, Reed, & Macagno, 2008); generally arguers tend to justify the acceptability/positivity of their views using arguments in their favour, and to reject opposing viewpoints (confirmation bias, Kuhn, 1991).

If this is the main objective of arguers, from a cognitive point of view, the tendency would be one to confirmation rather than to refusal (Kuhn, 1991).

In this regard, Mucchi Faina and Cicoletti (2006) showed that the minority promotes greater quality of cognitive processing compared to the majority, since it promotes conversion, alternative and original thoughts, whereas the majority instead promotes validation processes or compliance (Moscovici, 1981).

Within the field of rhetoric and argumentation, and starting from a pragma-dialectic perspective, Walton et al. (2008) identified 60 types of "argumentation schemes", that can be based either on confirmation – such as generally accepted opinions, bias, ignorance – or on possible disconfirmation - as in the case of cause-effects, evidence or consequence schemes.

Arguers, in Walton's (2008) description, can choose from different types of argumentation schemes, in the majority based on "presumptive" ways of reasoning, because arguments are used mostly when there is an absence of evidences or facts, so arguers need to explain available evidences by making persuasive inferences. Therefore, he acknowledges *descriptive argumentation schemes* that give some hints starting from the source of information as in the case of *argumentation from evidences, memoriam, perception, from ignorance,* or the ones that come from emotions, as in the case of *argumentation schemes from threat, fear appeal, danger appeal, distress.* Walton et al., (2008) also list *normative argumentation schemes* where sentences or arguments are based on norms, rules or other positive or negative examples, analogies, authorities or experts. Within these are *argumentation schemes from rules, examples, analogies, ethotic argument.* The normative argumentation can be differentiated from the *presumptive argumentation schemes,* based instead on possible inferences as in the case of *abductive argumentation, practical reasoning or pragmatic inconsistency, from consequences, from sign to consequences, slippery slope argument, from alternatives, from oppositions, from evidences to a hypothesis, cause to effects, correlation to cause.* Other argumentation schemes are based on the classification and specification of verbal features used in the argumentation, as in the case of *vagueness or arbitrariness of verbal classification* that allows a proper contextualization of the arguments.

And finally the act of discrediting the other to demonstrate he is wrong may be sometimes a case of *"ad hominem fallacy".*

Furthermore Van Dijk (1992) points out how the argumentative approach has a double core: "structural" and "functional". The structural approach concerns cognitive strategies aimed at persuading, that can be oriented to the description of what or how someone has heard or seen, they concern logical (truth preserving), psychological (plausibility preserving) or social (interactionally relevant, normative) inferences. (p.246) So they can be true, plausible or normative.

At the same time Van Dijk (1992) recognizes broader social, ideological or cultural functions of argumentations, since the arguer can be a member of a group and inform his discourse with biased or very biased argumentations. He can also give an admitted or non admitted evaluation, as in the case of argumentations from a personal point of view (arguments from *bias, from position to know, expert opinion, witness testimony, or ad hominem, generic ad hominem and circumstantial ad hominem).*

This can be a first way of acknowledging a functional aim; the second, as asserted by Van Dijk coherently with his socio-cognitive approach, is the fact that argumentations can be the expression of a more social, cultural or ideological point of view, that can be communicated for example by means of a value, a popular opinion, a popular practise or as a member of a social group (as in the case of "*from the group to its member*" argument).

Following Walton's and Van Dijk's considerations we can describe argumentation schemes in the table below.

Taking into consideration the rhetorical aspects, the present work explores what it means to be part of a minority group in e-movements, that is when participants don't know each other but interact just on line; what discourses and argumentations are used to face a critical phase in which participants are involved, going beyond the cognitive processes of confirmation or falsification.

Further, if minority promotes creative cognitive processing and improves its quality (Mucchi Faina et al. 2013) which argumentations, what thoughts does it favour, among the wide range of them, especially under critical conditions? And when do these promote empowerment processes to face those conditions?

4. A case study: the roars (return on academic research)

Within Italian institutions one of the most conflictive debates concerns University. In 2013, after a reform of the University proposed in 2011 by the right-wing Italian Ministry of Instruction, University and Research, Mariastella Gelmini, professors and universities were evaluated by an independent agency called ANVUR (Evaluation National Agency of University and Research), passing from a local evaluation with single competitions between candidates to a professor role-crossing in a national evaluation process of "professor eligibility". The first round of evaluation started in February 2013, and after 1 year at least part of the evaluators' committees – in December 2013 – finished their work and published the lists of eligible and non-eligible candidates, with their corresponding evaluations.

The Ministry of Instruction, University and Research decided that the eligibility would follow numeric criteria obtained by reference to the so called "medians" obtained considering the number of impacted publications and citations by the scientific community. (Only later, when a new Minister came, Francesco Profumo, qualitative criteria were also exploited. Minister Profumo's heir, Maria Chiara Carrozza, did not take particular positions in this regard, but just complied with the programmed procedures).

In this confusing period – due to novelty and lack of information – within the very institution of the Anvur Agency an active group of researchers creates a Facebook group and a website called "roars" (Return on academic research).

They do not know each other but their number grows up very fast and at the time of this work they count almost 5000 members (7 millions views and 21.600 comments) who discuss on the situation trying to share information and find possible solutions together.

4.1. Semantic aspects of roars' on line group discussions

Recently D'Errico, Poggi, and Corriero (2015b) explored the semantic dimensions of Roars' on group discussion by means of a textual and lexical analysis carried out with a lexico-graphic approach, by taking into account two particular phases: the first period, before the national evaluation results, and the second one, after publication of the first results. The first one is characterized by uncertainty about the possible evaluations while the second one is full of pros' and cons' toward the final decisions taken by the national committees.

From a lexical point of view in the first period a very negative adjectivation emerges (54%), mostly focused on the Evaluation Process: researchers express doubts and perplexities towards unclear criteria (referred to as *questionable discretion, objectionable, poor, questionable, unproductive, smoky, doubtful, bad*); in the second period, that corresponds to the first publication of concrete evaluations, adjectives are strongly emotionally loaded, revealing a sense of unfulfilled expectations (*scandalous, disconcerting but also shameful, indecent, disgusting, detrimental, pernicious, laughable, mediocre*).

On the semantic side, the study (D'Errico et al., 2015b) highlights three main recurrent topics:

1) *The evaluation process, its participants and its effects, 2) The researchers' reference values: political and economic processes underlying the evaluation process 3) Participation and common proposals*. In the first one, recurrent topics concern technical aspects of the evaluation by the "committee", both discussions on the application of "bibliometrics" and "parameters", but also the specification of each "mistake" done in relation to these parameters. Within the first topic a very negative evaluation of evaluators (*committee members, committees, committee*) emerges. In terms of the criteria of discredit pointed at by D'Errico, Poggi, and Vincze (2012), they are attacked as to their competence (*ignorant*) and honesty (*clubs, nepotism, barons*), finally being described as a power outside the law (*illegitimate*) and out of control (*insanity, delirium, boycott, rubbish*). Within the second topic the Roars' value dimension emerges, with researchers widening their discourses to the political and economic field.

The term *politics* for example is a key term to understand the level of trust (Castelfranchi, 2013) in political and economic institutions. The term, that is overfrequent in the first period (110 vs. 58), is mainly used to mention "*bad politics*", thus showing a type of discredit that is mostly oriented on the competence and honesty dimensions: "*ignorant and corrupted*", "*incapable, corrupted and ignorant*". In the second period the debate on "*politics*" decreases (58 vs. 110 frequencies), politics is only mentioned as a site in which to ask for explanations and economic resources in public context ("*parliamentary explanation*", "*resources*", "*political and ethical choice*") or becomes something to overcome by means of "*justice*".

Finally the third topic concerns *researchers' participation and collective-cooperative activism*: the most recurrent terms are *petition, rights* and ones linked to shared information to face a *common* problem or strategy and possible a *future* solution taken together (we-ness). Within this topic the emerging most significant words recall the idea of things to do together in order to react and to be protected from injustice, like *possibly, hope, example, can, could, may, plan, possibility, participate, can, I can, discussion, work, best, you, join, proposal, community, work, joint strength, our, us, network, compare, decide, change, change, future*.

In this connection, arguing on the web seems to be a way to give support and share information and at the same time it creates a secure place to discuss and find out an exit strategy. Key words to understand this central topic are in this case *rights, justice* (as "super-partes" institution) and juridical words, seen as tools to defend themselves (*law, human rights, justice, judiciary, self-defense, rules, extension, rules, terms, rules, just, petition*).

4.2. Method and corpus

Method: The present work is based on a quanti-qualitative analysis of Roar' Italian researchers' arguments, and starts from a previous semantic analysis (D'Errico et al., 2015b), which methodologically represents a way to reduce the "noisy" complexity of a so large amount of data, and has the aim of understanding argumentative moves of this e-minority and its possible level of empowerment.

As a basis for the extraction of minorities' arguments, we used the three topics arisen by the content analysis described above. So we extract all sentences with the most frequent words (*politics, political, economic, economy, committee, Carrozza* − the Minister of Education during the evaluation) within each semantic area; further, we coded Roars' claims by applying Walton's theory of arguments (2008) and the notion of empowerment levels by Zimmerman and Rappaport (1988). We extracted 206 posts and answers to some Roars' posts, distinguishing them into before and after the evaluation period (109 vs. 97 posts, respectively), and we coded them according to Walton's argumentation schemes. From the final counting we deleted sentences below 5 frequencies. In coding argumentation we followed Walton's argumentation schemes (2008) also taking into account the structural and functional level (See Table 1).

Corpus: We run a *time and mode analysis* of the corpus by means of the "Imprinting" procedure of Taltac (Bolasco, 2013). The corpus presents a very strong *orientation to the present,* because out of all verb frequencies our subjects express time information most frequently in present tense (82%, as opposed to 11% past and 7% future) mostly in the first period, while in the second, future time slightly increases (+2%): which in a certain sense can be seen as determination in planning. Another characteristic is the conjugation extremely oriented toward the *third person* (69%) compared to first (26%) and second (5%); what we expected was − given the dialogical form of discussions − an overuse of the first and the second person; on the contrary the high frequency of third person might be due to a sort of *contraposition between "me-us" and "they"* (researchers vs. evaluators). This tendency is present in Roars' whole discussions but increases significantly in the second period.

4.3. Roars' argumentative moves

Results point out that Roars discuss in a different way according to the period of evaluation. Before the presentation of results their argumentations are mainly focused on personal expression of the above negative opinions and evaluations (as in the case of a*rgumentation from bias*) and *presumptive inferences* − based on uncertainty − as in the case of *cause-effects, abduction, from consequences*, that are in total 27.8% and functional to understand and hypothesize some possible decisions. Argumentations of *evidences* (11.1%) and *rules* (13.9%) are fewer in total (Table 2). After the results of the public evaluation, Roars' discussion uses a great number of *normative argumentations* (*rules*, 61.1% on the total), and to a lesser extent *descriptive* (30% *evidences*) and *evaluative* from both personal and group point of view (3.4%). In this second period Roars argue by looking at "normative" rules that can help them to react but also analysing "evidence" in light of the decisions made by the commissions.

More in detail, reading Roars' argumentations in the first period, before the evaluation results, we mostly found *argumentations from bias* (38.9%) that express very negative evaluations on politicians, who don't have the competences nor the willingness to change or improve the university system.

(1) Argumentation from bias[1]:

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[1] (1) Argumentation from bias: a. manca solo la volontà politica b. Credo che la volontà di smantellamento dell' Università pubblica è pervasiva nella classe politica e dirigente… c. Non si tratta di un virus, ma di una precisa volontà politica, di un preciso progetto culturale condiviso e pervicacemente portato avanti da un clubd. Chi lo dovrebbe considerare una classe politica incolta, ignorante, incapace e, per molti aspetti anche corrotta, che per ingraziarsi…

Table 1
Argumentative core, level of argumentation and types of argumentation schemes.

Argumentative core	Level of argumentation	Types of argumentation scheme
Structural	Descriptive	Evidence, memoriam, perception, ignorance, threat, fear, danger, distress
	Presumptive	Abductive, practical reasoning, pragmatic inconsistency, from consequences, alternatives, oppositions, from evidences to hypothesis, cause to effects, correlation to causes
Functional	Normative	Rules, examples, analogies, commitment, ethotic argument
	Personal evaluation	From an expert, witness testimony, from a bias, *ad hominem*, generic *ad hominem*, circumstantial *ad hominem*
	Social and cultural evaluation	From the group to its member, from values, popular opinion, popular practise, position to know

Table 2
Evaluation period[*] argumentation schemes. (N = 206).

	Bias	Rules	Cause-effect	Evidence	Abduction	F. Consequences	Other
Before	38.9%	13.9%	13.9%	11.1%	8.3%	5.6%	8.3%
	Rules	**Evidence**	**From group**	**Bias**	**Other**		
After	61.1%	30%	3.4%	3.4%	2.1%		
	Rules	**Bias**	**Evidence**	**Other**			
Total	44%	27%	25%	4%			

[*]p < .05.

a. "political will only is lacking"
b. "I believe that the will of destroying public universities is pervasive in the political class..."
c. "This is not a virus, but a precise political will, a precise cultural project shared and obstinately carried on by a club"
d. "One who should consider a political class, uneducated, ignorant, incapable people and, in many respects even corrupted, that, to ingratiate …"

Argumentations from evidence too are affected by the same level of generalization (as in the comments below).

(2) Descriptive arguments[2]:
e. "But I'll tell them ' not only of the 41 million but also the policy of cuts in the last ten years."
f. "it is the usual policy of 5 steps back and 1 forth: I take 1 billion away from universities and later I put back some …".

At the same time they try to understand, by using a *presumptive* way of reasoning on causes, responsibilities and their effects (*cause-effects argumentations*), or in other cases some possible other solutions starting *from consequences*. Less recurrent cases are in this phase *argumentations from rules*, aimed at expressing "implicit" rules behind the evaluation system.

(3) Presumptive arguments[3]:
a. "To listen to us, had we been a system, a compact group to denounce the unacceptable and suicidal policy of cuts to research … would we be in the same situation today?" (argumentation from consequences)

b. "only a policy free from these constraints can really increase the funding " (abductive argumentation)
c. "I begin to feel some "sheer" doubts about the political will to close these qualifications … perhaps the toy got broke in their hands..." (abductive argumentation)
(4) Normative arguments[4]:
a. "I think it's time to accept the fact that the reform of the university is a political and not a moral matter, then, it does not always make sense to use the categories of "right" or "wrong""
b. "I'd like this question, which is not technical but political, to come out of corridors, becoming part of the political debate"

In the second period Roar's comments are aimed at finding solutions to their problematic situation by arguing for their standpoints by *rules* (61.1%) or *evidences* (30%). The negative evaluation of politics and politicians has a strong decrease − compared to the first period − and arguments from bias and from the group and its members are used in 3.4% of cases.

Walton's schemes help us to extract argumentations that look plain, and hypothesize rules and possible solutions and models that can give Roars the possibility to react and improve evaluation system. They argument with "evidences", that consist in studying, reading and running statistical analyses of final evaluations and results.

Let us see some argumentations from rules and evidences of the second period:

(5) Normative arguments[5]:

[2] (2) Descriptive argumentation: g. Ma gli raccontero ' non solo dei 41 milioni ma soprattutto della **politica** di definanziamento degli ultimi dieci anni. h. è la solita **politica** dei 5 passi indietro e 1 in avanti: tolgo all ' università un miliardo ma poi ne metto…

[3] Presumptive argumentations: d … ad ascoltarci, se avessimo fatto sistema per denunciare l'inaccettabile e suicida politica dei tagli alla ricerca … oggi saremmo nella stessa situazione? e. solo una politica libera da questi condizionamenti è in grado di aumentare veramente il finanziamento; f. io comincio a nutrire qualche " velatissimo " dubbio riguardo la volontà politica di chiudere queste abilitazioni… forse il giocattolo si è rotto nelle loro mani.

[4] Normative arguments: c. credo sia tempo di accettare il fatto che la riforma dell'università sia una materia politica e non morale, dunque non ha sempre senso usare le categorie di " giusto " o " sbagliato d. Mi piacerebbe che la questione, che non è tecnica, ma politica, uscisse dai corridoi, entrando a far parte del dibattito politico.

[5] Normative arguments: f. l'interrogazione ci può stare. Quello che é certo é che, più che nei singoli settori, la politica dovrebbe cercare di individuare nell ' abilitazione in sè quello che non ha funzionato. g. fare ricorso e sperare nella giustizia ! h. Inutile cercare altre strade. O si rilancia una **politica** della formazione e della ricerca oppure continueremo sulla strada attuale … i. cambiare le regole un mese prima della scadenza è tecnicamente infrangere… j. Ma non mi pare di ricordare alcuna forza **politica** che abbia mai esplicitamente sollevato il problema di quale modello di nazione vogliamo.

a. "Interrogation can hold. What is certain is that, rather than in individual sectors, politics should try to identify what did not work in the rating itself"
b. "recourse and hope in justice!"
c. "Needless to seek other routes. Either we raise a policy of education and research or we will go on in the same path …"
d. "…changing rules a month before the deadline is technically a rule breach."
e. "But I don't think I can remember any political force that has ever explicitly raised the issue of what model of country we want"

(6) Descriptive arguments[6]:
a. "the committee's evaluations follow a "territorial" logic, just keep an eye on the co-authorship"
b. "committees have not used the bibliometric criteria in all cases"
c. "from the percentages it emerges that a number of final judgments have enabled people with two medians out of three"

(7) Argumentation from bias[7]:
a. **"Carrozza** must stop talking nonsense"

5. Roars' level of empowerment

To look at the empowerment effect of minorities' on line discussions, we took into account all the sentences from the third area of a previous study on Roars (D'Errico et al., 2015b) named "researchers' participation and activism" extracted by means of content analysis where Roars components try to outline strategies to face a critical situation. Within this area we extracted sentences from the corpus where words like petitions, rights, can, participate recur. We obtained 106 posts, plus answers to some Roars' posts, we distinguished them between before (65 posts) and after (41 posts) the evaluation period, and we coded them according to different levels of empowerment (Zimmerman & Rappaport, 1988), as already reported, differentiating into individual, interpersonal and political empowerment (see Sect. 2.2). Besides focusing on different levels of self-categorization, within which me ("I can…"), others ("We can...") and political institutions ("We must", "we pledge to do it"), the empowerment notion allows us to see if the Roars minority - by means of on line discussions – can really improve their critical condition, and how (by leveraging on their self-efficacy, on common and shared self-efficacy, or by acting and deciding to change other contexts). Results on Roars' level of empowerment (See Table 3) point out how, in particular during the first period, comments are oriented especially on individual empowerment (55.6% of comments). Researchers, in fact, express their doubts or try to find confirmation about the functions of the evaluation system (so called "ASN"). In this way group discussions seem to be just a place where followers can find an answer on a personal case. The interpersonal empowerment comments – that represent 22% of the total - in this phase correspond to an expression of shared hopes about the future, but also are a way to create a simple dialogue between researchers and public opinion (i.e. conferences or workshops open to politicians or journalists). Some political issues are carried out with comments that only concern possible contacts that could support Roars' causes (22,%).

Table 3
Evaluation period[*]Level of empowerment. (N = 106).

	Individual	Interpersonal	Political
Before	55.6%	22.2%	22.2%
After	32.1%	42.9%	25%
Total	37.8%	37.8%	24.3%

[*]p < .05.

(1a) Individual level[8]:
a. "if they rule me out I can not participate in further rounds, or did I miss something"
b. "slowdowns and extensions, I can take advantage of a further long period in which I can participate in the competitions."
c. "as classic Italian selection boards, failing to understand that the ASN was only a permission to participate in competitions for a given person.".

(2a) Interpersonal level[9]:
a. "let them focus resources to get to the critical mass necessary to take part in the global scientific and technological dialogue".
b. "we want and we can support our desire for an efficient country"
c. "we must raise our voice to reach the public opinion, the Minister"
d. "should it be possible establishing a dialogue to address the specificities of the disciplines"
e. "We are fed up with this crap without guilty".

(3a) Political level[10]:
a. "We might appeal to the Minister to let him refuse to participate"

In the second period, as we have previously seen, we find an increase in comments oriented toward interpersonal empowerment (42.9% of the comments; $\chi^2(2) = 3.98$; p < .05), in that, beyond the increased sense of "we" as reported by the "mode analysis" below (they speak in terms of we), Roars express a common impatience toward a situation that can no longer be tolerated; they read results together by looking at possible actions of dissent, dissemination in public opinion, signalling of irregularities, as in the sentences extracted and reported below.

(1b) Interpersonal level[11]:

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[6] Descriptive arguments: a. i giudizi delle commissioni seguono logiche "territoriali" basta tenere d'occhio il co-autoraggio b. commissioni non hanno utilizzato i criteri bibliometrici in tutti i casi c. dalle percentuali emerge come un buon numero di giudizi finali hanno abilitato persone con due mediane su tre.
[7] Argumentation from bias: a. Carrozza dovrebbe smetterla di parlare per non sense.

[8] (1a) Individual level: a. e se mi segano non **posso** partecipare alle tornate successive, o mi sono perso qualcosa b. rallentamenti e proproghe, potrò usufruire di un lungo ulteriore periodo in cui potrò **partecipare** ai concorsi. c. come commissioni di concorso classiche italiane, non capendo che l'ASN era solo un permesso a **partecipare** a concorsi per una data persona).
[9] (2a) Interpersonal level: a. concentrino le risorse per arrivare a quella massa critica necessaria per **partecipare** al dialogo scientifico e tecnologico globale. b. vogliamo e **possiamo** appoggiare il nostro desiderio di un paese efficiente c. dobbiamo far sentire la nostra voce alla pubblica opinion, al ministro… d. se fosse possibile instaurare un dialogo per affrontare le specificità dei settori disciplinari e. Non ne **possiamo** più di queste vaccate senza colpevoli.
[10] (3a) Political level: a. Si potrebbe fare appello al ministro affinchè declini di partecipare.
[11] (1b) Interpersonal level: a. Non **possiamo** più stare solo a guardare e lamentarci tra di noi altrimenti saremo complici di questo disastro b. Sì, dobbiamo muoverci, non **possiamo** subire un giudizio che tanta influenza avrà sulle nostre vite. c. Cos' è, un problema generazionale? O **possiamo** ipotizzare che le mediane siano state calcolate in modo non corretto d. Poi **possiamo** dissentire dal suo operato come Ministro (ed io dissento fortemente), ma cerchiamo di non cadere). e. se non a noi stessi perché solo noi **possiamo** trovare gli argomenti per convincere l ' opinione pubblica che l ' investimento in ricerca sia utile e lungimirante) f. posiamo prevederlo politicamente Francesco ma non accettarlo senza reagire; dobbiamo reagire, fare qualcosa, **denunciarli** alla magistratura per truffa o cose così. Alessandro ma allora non ci capiamo; tutte queste cose avevano come scadenza OGGI!.

a. "We can no longer be spectators and complain among ourselves, otherwise we will show complicity in the disaster"

b. "Yes, we need to move, we can not undergo a judgment that will have so much influence on our lives."

c. "What is it, a generational problem? Or else we can assume that the medians were calculated incorrectly"

d. "Then we can disagree with his action as a Minister (and I strongly disagree), but let us try not to fall."

e. "if not to ourselves because we only can find arguments to convince the 'public opinion' that investment in research is useful and farsighted"

f. "we can predict it politically, Francesco, but we cannot accept it without reacting; we must react, do something, report them to the judiciary for fraud or something. Alessandro but then we do not understand each other; for all these things the deadline was TODAY!"

From a political point of view, we found a slight increase (24.3%; Table 3) of comments useful to construct concrete actions (as in the case of "class actions", see sentence 3f below) and (external) resources, like planning a search for fundings of common projects or even a "national network of researchers" (n: 3 h) to change and reform universities and enter the real decisional contexts, as in the last comments reported. Nevertheless, in Roars' group we did not find direct actions to get access to public resources, but just construction and planning of external possibilities (i.e.EU Fundings).

(3b) Political level[12]:

a. "If you like I can talk about it better or get directly in touch with those who today take advantage of this small incentive"

b. "give a seminar in my course. I just do not have money to pay you, of course … but I can find you a place to sleep"

c. "Francesco we are organizing something with INET (Institute for New Economic Thinking) on the subject do you want to participate, too? http://ineteconomics.org/"

d. "Within Research Framework Programme, they win grants because they are clever, but at least we can make a network with them …"

e "Always just to talk about it, the possible stop on the part of TAR (Regional Administrative Court) might become more than plausible in presence of a *class action*, rather than complaints by individuals. This is even more likely if you highlight the need to review the entire procedure of qualification"

f. "Not mere discussion and perhaps challenge, but a true *national network of Italian university communities*, starting

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[12] (3b) Political level: a. Se ti fa piacere **posso** parlartene meglio o metterti direttamente in contatto con chi ad oggi " beneficia di questo piccolo incentivob. fare un seminario nel mio corso. Solo che non ho soldi per pagarti, naturalmente … ma ti **posso** trovare da dormire c. Domanda: se per un collaboratore chiedo un assegno, non **posso** mettere il suo nome nel progetto giusto? altrimenti che senso avrebbe il bando aperto che poi, com ' è possibile? d. Francesco stiamo organizzando qualcosa con INET (Institute for new economic thinking) su questo tema volete **participare** anche voi? http://ineteconomics.org/ e. vincono **grants** perché sono bravi, ma in compenso noi possiamo fare network con loro … f. Sempre tanto per parlare, il possibile blocco da parte del TAR potrebbe diventare più che plausibile in presenza di una **class action**, piuttosto che di **ricorsi** di singoli. Tutto ciò è ancora più probabile se si evidenzia la necessità di revisionare l'intera procedura di abilitazione g. Non mera discussione e magari contestazione, ma una vera rete nazionale delle comunità universitarie italiane, partendo dai ricercatori italiani strutturati e non. Sinceramente sul piano concreto solo noi ci troviamo nella condizione sostanziale che **possiamo** farlo. Sia per la nostra esperienza e conoscenza decennale delle Università, come struttura, come tranelli e come ricerca. Comunita' di riflessione e speculazione libera, libera da ogni influenza politica e mercenaria.

from structured and unstructured Italian researchers. Sincerely in concrete terms we only are in the substantive condition that we can do it. For both our experience and decennial knowledge of Universities, as to structure, pitfalls and research. We must go back and above all this is what we must preserve from EVERYBODY. Community of reflection and speculation free, free from any political and mercenary influence."

6. The relation between quality of argumentation and level of empowerment

The relation between the used argumentations and developed empowerment was analysed: from Table 4 a strong correlation emerges between arguing with rules and interpersonal and political empowerment (r = .54; r = .58; p < .01). Discussing with an experimental approach (with argumentation *from evidence* and *cause-effect*) can also contribute to the interpersonal but mostly political empowerment, while expressing negative evaluation toward the majority (with argumentation *from bias*) can give the right boost to minorities right in terms of political empowerment (r = 35; p < .05).

7. Conclusion

One aim of this study is to highlight what argumentations can be useful to overcome critical situations for an active minority group. A previous study (D'Errico et al., 2015b) stated that minority groups discuss on line in order to analyse together either macro-themes (the political and economic situation) or micro-experience (personal experiences like rejection from the national evaluation, legal action). In this sense discourses can be seen as a case of active participation but also − beyond the institutional contexts where group members live − they can facilitate the so called "process of conscientization" and critical consciousness (Campbell & Jovchelovitch, 2000).

But what arguments are specifically developed by an ingroup minority exemplified by the Roars group, as a case of e-movement? Can the quality of discussions developed within the group allow participants to start processes of empowerment? And if so, what are the levels involved?

To answer these questions we combined the argumentative approach developed by Walton et al. (2008) with psychosocial studies on the characteristics of active minorities (Moscovici, 1996). If we go in detail we see that the Roars minority tries, in a period of uncertainty, to argue by expressing, first of all, its negative assessment of the political and academic system, mainly using "argumentations from bias" codified as "functional" argumentation (Van Dijk, 1992). At the same time they argue from a "structural" point of view trying to hypothesize causes and responsibilities through "presumptive" arguments (causes-effects, starting from consequences, abductive argumentational schemes).

In the period of resolution of uncertainty, instead, Roars mainly argue exploiting structural argumentations, like the ones based on

Table 4
Argumentation schemes*Level of empowerment.

	Individual	Interpersonal	Political
Argumentation from Rules	.27**	.54**	.58***
Argumentation from Evidence	.19*	.23**	.51**
Argumentation from Bias	.12	.15	.35*
Argumentation from Cause-Effects	.21*	.25*	.32*

*p < .05; **p < .01; ***p < .001.

"rules" (44%) or "evidence" (25%), that help them to find individual or shared solutions. Negative feedbacks towards majority and thus toward the committees get dramatically reduced (27%). The ways of both arguing and thinking of minorities in this case become more active, effective and constructive.

We find some differences in relation to the evaluation period. Under conditions of uncertainty Roars use social discussions mostly in terms of individual search for information and resources. But when results are known, finally Roars group's discussions become a way to share common projects and reactions to suffered injustice. Yet, this does not give rise to "political" empowerment proper; in their discussions they don't find a tool to organize collective action and get access to public resources. Nevertheless, more in general Roars' argumentation on rules, evidences and also biases could become a way to reinforce their possible real mobilization, as they are strongly correlated with political empowerment.

This first quanti-qualitative study shows how social media can be a tool of resistance for an e-minority. The argumentational point of view adopted here can help us to better understand discourse quality in uncertain and certain situations, within a particular type of e-minority: e-movement. But what changes in their discussions when conditions change? - i.e. in case of e-tactics, private vs. public chatting or ingroup vs outgroup minority. Answering this question might be a further research issue, even with larger corpora of argumentation.

References

Bolasco, S. (2013). *L'analisi automatica dei testi. Fare ricerca con il text mining.* Roma: Carocci, ISBN 9788843070183.

Campbell, C., & Jovchelovitch, S. (2000). Health, community and development: towards a social psychology of participation. *Journal of Community and Applied Social Psychology, 10*(4), 255–270. http://dx.doi.org/10.1002/1099-1298(200007/08)10:4<255::AID-CASP582>3.0.CO;2-M. Issn 1052–9284.

Castelfranchi, C. (2013). La paradossale «sfiducia» degli italiani nelle istituzioni. *Sistemi Intelligenti*, 113–121. http://dx.doi.org/10.1422/73663. n.1.

D'Errico, F., Poggi, I., & Corriero, R. (2014). Aggressive language and insults in digital political participation. In *Proceedings of conference on computer science and information systems: Web based communities and social Media 2014* (pp. 105–114). Isbn: 978-989870411-5.

D'Errico, F., Poggi, I., & Corriero, R. (2015a). "How sad prudence is". Teatro Valle Occupato as a case of minority empowerment through media-activism. In *Proceedings of SMART 2014 Medimond S.r.l. - Monduzzi editore international proceedings division* (pp. 153–160), ISBN 978-88-7587-712-5.

D'Errico, F., Poggi, I., & Corriero, R. (2015b). Minority group discussions as resilience strategy in social media. The case of "roars" in the Italian academic context. In *Proceeding Ceur Essem 2015. Emotion and sentiment in social and expressive Media* (vol. 1351, pp. 116–126). issn: 1613 0073.

D'Errico, F., Poggi, I., & Vincze, L. (2012). Discrediting signals. A model of social evaluation to study discrediting moves in political debates. *Journal on Multimodal User Interfaces, 6*(3–4), 163–178. http://dx.doi.org/10.1007/s12193-012-0098-4.

Earl, J., & Kimport, K. (2011). *Digitally enabled social change.* http://dx.doi.org/10.7551/mitpress/9780262015103.001.0001.

Freire, P. (1970). *Pedagogy of the oppressed.* London: Penguin.

Garmezy, N. (1991). Resilience in children's adaptation to negative life events and stressed environments. *Pediatrics, 20*, 459–466.

Graham, T., & Witschge, T. (2003). In search of online deliberation: Towards a new method for examining the quality of online discussions. *Communications/Sankt, 28*(2), 173–204.

Kuhn, D. (1991). *The skills of argument.* Cambridge: CUP.

Lasticova, B. (2012). New media, social capital and transnational migration: Slovaks in the UK. *Human Affairs, 24*(4), 406–422. http://dx.doi.org/10.2478/s13374-014-0237-6.

Moscovici, S. (1981). *Psicologia delle minoranze attive.* Torino: Boringhieri.

Mucchi Faina, A., & Cicoletti, G. (2006). Divergence vs. ambivalence: effects of personal relevance on minority influence. *European Journal of Social Psychology, 36*, 91–104. http://dx.doi.org/10.1002/ejsp.278.

Mucchi Faina, A., Pacilli, G., & Pagliaro, S. (2013). *L'influenza sociale.* Bologna: Il Mulino.

Nelson, N., & Wright, S. (1992). *Power and participatory development. Theory and practice.* London: Intermediate Technology Publications.

Orford, J. (1992). *Community Psychology: Theory and practice.* Chichester: Wiley.

Siddiquee, A., & Kagan, C. (2006). The internet, empowerment, and identity: an exploration of participation by refugee women in a community internet project (CIP) in the United Kingdom (UK). *Journal of Community & Applied Social Psychology, 16*, 189–206. http://dx.doi.org/10.1002/casp.855.

Van Dijk, T. (1992). Race, riots and the press. An analysis of editorials in the British press about the 1985 disorders. *Discourse studies, 43*, 229–253.

Walton, D., Reed, C., & Macagno, F. (2008). *Argumentation schemes.* Cambridge: CUP.

Zimmerman, M. A., & Rappaport, J. (1988). Citizen participation, perceived control, and psychological empowerment. *American Journal of Community Psychology, 16*, 725–750. http://dx.doi.org/10.1007/BF00930023.

Zuniga, H., Jung, N., & Valenzuela, S. (2012). Social media use for news and individuals' social capital, civic engagement and political participation. *Journal of Computer-Mediated Communication, 17*, 319–336. http://dx.doi.org/10.1111/j.1083-6101.2012.01574.x.