

Digital Animal Advocacy: A Study on Facebook Communication Styles of Italian Animal Rights Organizations and their Followers' Reactions*

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Despite online media having become an increasingly valuable tool for social movements to achieve their goals, the digital presence of animal advocacy organizations is still under-explored. This paper contributes to fill the gap by analyzing the social media communication of Italian animal advocates against the backdrop of a typology developed in the offline context that distinguishes political, anarchist, anti-political and mainstream animal advocacy. By using text and data mining techniques, the Facebook pages of eight Italian organizations representative of each type of advocacy were analyzed, based on over 7,000 posts and followers' reactions. The findings complicated the offline typology by showing elements of continuity, discontinuity and hybridization between offline and online activism. They also shed light on the online communication of animal advocates and provided some initial insight into how online media can affect animal rights activism, thus providing a contribution to the emerging field of digital media and social movement studies.

Keywords: Animal Rights Movement, Digital Activism, Social Media, Correspondence Analysis

Introduction

Animal advocacy has not received as much attention as other contemporary social movements. Yet, in recent years, the rise of veganism as well as the development of academic fields such as Human-Animal Studies and Critical Animal Studies, has resulted in more visibility for 'animal issues' (Taylor and Twine, 2014). Focusing on the online communication of Italian animal advocates, this paper aims to raise interest among media scholars and social movements scholars by considering animal advocacy a topic with potential insights for more general sociological analyses.

We analyze the messages and followers' reactions of eight Facebook pages of Italian animal advocacy organizations, in relation to a typology based on offline data, to highlight elements of continuity, discontinuity and hybridization between online and offline advocacy. The Italian case offers a relevant perspective due to its internal variety in terms

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of frames, repertoires of actions and communication strategies (Bertuzzi, 2018a), prompting a critical reflection on social media and their logics (Van Dijck & Poell, 2013).

In section 1, we discuss the importance of the use of digital media for social movements and the critical issues arising from it; in section 2, we touch on some theoretical accounts of social media traits that could impact on activism. In section 3, we introduce the typology used as a touchstone for comparing online and offline activism. The subsequent sections detail research questions, sampling and data mining methods used for the analysis (section 4), the analysis itself (section 5), and finally the discussion (section 6) and conclusions (section 7), which summarize the main results and propose some possible further lines of inquiry.

Transformations of advocacy in the digital space

As observed by Trerè (2018, p. 137), ‘research on the relationships between social movements and digital communication technologies has grown exponentially in the last few years’. Despite some precedents, a major turning point was the Global Justice Movement, whose international dimension stressed the importance of computer-mediated communication between ‘disconnected’ activists (Van Aelst, Walgrave, 2002). From that season onwards, almost all collective mobilizations have assigned great importance to the Internet as an instrument of communication, organization and coordination, adopting specific ‘digital repertoires of contention’ (Earl, Kimport, 2011) to support their political actions. The Arab Springs, the Umbrella Movement in Honk Kong, 15-M in Spain, Occupy, and Fridays For Future are only a few well-known examples.

The partial shift of protests from the streets to the Web (Ruijgrok, 1999) has raised questions about the real effectiveness of contemporary social protests because of the alleged rise in increasingly individual and less collective forms of contestation (Schradié, 2018). However, what happened (and is happening more and more) is the development of innovative forms of ‘individualised collective actions’ (Micheletti, McFarland, 2010), an hybridity between online and offline dimensions (Trerè 2018) which, in some cases, makes it difficult to attempt a clear-cut distinction between what is strictly individual or collective. Criticism has arisen because of the ease with which Internet users can join and support campaigns through digital signals provided by social media platforms, such as likes, shares or tweets. Such ease of action, by allowing digital users to involve themselves in protests without leaving their home and, potentially, without any deep commitment to the cause, has raised doubts about the impact of digital activism, leading to the accusation of Internet campaigns being mere “slacktivism” (Christensen, 2011), activities without real outcomes that only serve to increase the individual feel-good factor through inexpensive “clicks” on morally virtuous online contents. However, ease of action does not necessarily correspond to ineffectiveness, as proved by Arab Springs, Fridays for Future and the other above-mentioned cases in which social media have proved to be effective tools for collective mobilizations (Harlow, 2012).

The 'social media logic' and its impact on activism

Although the accusation of slacktivism may be too severe, the idea that activism may change with its online shift is reasonable. Social media are not ready-to-use tools to bring about social change: entering a digital environment means not just being able to exploit its communication possibilities, but also being subject to its own technological limitations as well as to a set of explicit and implicit norms that constrain users' behavior.

Like traditional mass media, also social media have an intrinsic logic: 'processes, principles, and practices through which these platforms process information, news, and communication, and more generally, how they channel social traffic', according to the definition of Dijck and Poell (2013), who identify four constitutive and intertwined elements: programmability, popularity, connectivity, and datafication. Programmability is the ability of a social media platform to trigger and steer users' creative or communicative contributions through algorithms and interfaces that influence data traffic. Social media, indeed, tend to improve the circulation of the most viral contents, thus encouraging strategic content production that attracts public attention, sometimes even giving rise to attempts to manipulate the algorithms, for instance by massively sharing or liking so as to push a topic to become trending and thereby increase the visibility of some ideas (Marwick and Lewis, 2017; Giglietto, Righetti, Rossi and Marino 2020). In fact, just as social networks have increased communication opportunities, they have increased their supply, so the competition to attract users' attention is high (Webster, 2014; Zhang et al., 2018). Popularity, a second characteristic of social media logic, plays a major role in this economy of attention. Indeed, beneath a veneer of equality (every user can take the floor), social media actually give more visibility to the most popular people, according to the so-called Matthew effect 'the rich get richer' (Merton, 1968). Popularity can be further 'exported' offline: for instance, traditional mass media often pay particular attention to online celebrities and trending topics. Connectivity, the third element identified by Dijck and Poell, refers to the ability of social media to gather loosely bounded social networks around a common interest, thereby also giving rise to new forms of organized protests (Bennett and Segerberg, 2013). Datafication, the fourth one, is the collection and capitalization of digital traces left by users, another essential element of social media architecture and business.

As part of the 'social media logic', behavioral norms can also be mentioned, such as those presiding over emotional expressions, which have been found to have a slight bias towards positive emotions (Waterloo et al., 2018). Positivity has also been found to have a higher impact than negativity on the share worthiness of a news story, especially on Facebook, although it should not be forgotten that the relations between people and online content involve complex cultural, social and psychological aspects. As suggested by Weeks and Holbert (2013), people tend to share news that is personally meaningful, interesting and emotionally arousing. These aspects are relevant also in the case of animal advocacy where the role of emotions and moral shocks as resource mobilizers is crucial (Jasper & Poulsen, 1995).

Italian animal advocacy in the online battlefield

In a seminal article (Herzog et al., 1997), digital data was indicated as an important source for studying animal advocacy. As Wrenn (2014: 191) points out, the Internet gives new possibilities to animal advocates; it provides 'low startup costs, fosters entrepreneurialism, and gives a platform to abolitionist messages that are otherwise ignored'.

So far, scholarship has investigated social representations of animal issues and animal advocates on offline/online media (Almiron et al., 2015), but have often just 'applied' classic (e.g.: Singer 1975 or Regan 1983) or more recent approaches (e.g.: Nibert 2002 or Best 2014) to the online environment – also in the social movements field (e.g.: Munro 2012 or Wrenn 2014).

Case studies of animal advocates' digital activities have focused especially on the US and other anglophone countries (e.g: Buddle et al. 2018; Gorsky, Lopresti-Goodman et al. 2019). In Italy, besides analyses on specific topics, such as the way veganism is represented on online news media (Righetti, 2016), only 'hybrid texts' between militancy and academia have specifically targeted online activism (e.g.: Romeo and Cittarella 2014; De Matteis and Bertuzzi, 2019). However, as emerged in the first in-depth study on Italian animal advocacy (Bertuzzi, 2018a), most of the activities conducted in recent years have consisted in mail bombing and online petitions (see table 1).

Type of practice	Never	1-2 times	More than 2 times
Promote mailbombing activities and campaigns using the Internet	10.6%	14.6%	74.8%
Promote petitions	15.6%	16.8%	67.6%
Organize initiatives to promote a vegan lifestyle	29.7%	20.6%	49.7%
Collect signatures for a referendum	39.5%	24.0%	36.5%
Contact/cooperate with a single public officer	53.4%	21.5%	25.1%
Contact/cooperate with single politicians	58.8%	19.4%	21.8%
Complain to the judiciary system	77.8%	12.8%	9.4%

Tab. 1 – Practices adopted by Italian animal advocates, 2013-2015 (N= 704). Source: Bertuzzi (2018)

In the following paragraphs, we summarize the internal complexity of Italian animal advocacy, moving from its historical legacies to its current fragmented composition. The

typology that we test in this article is presented as well, followed by a brief description of the main communication characteristics of different types of animal advocacy organizations (from now on referred to as AAOs)¹.

The complex galaxy of animal advocacy in Italy

Italian animal advocacy has a long tradition. The first association was co-founded by Garibaldi in 1871; numerous local associations sprang up at the turn of the 20th century, also thanks to the contribution of liberal thinkers and Freemasonry; these associations were brought together under the Fascist National Authority for Animal Protection (Guazzaloca, 2018). A new wave emerged during the 1960s and 70s, monopolized by animal welfare associations fighting against animal experimentation and looking for contacts with political figures within the institutions. More radical animal rights campaigns had considerable impact only in the Noughties, especially thanks to grass-roots groups that organized disruptive protests and sparked off an animated militant debate. Key moments were 'Chiudere Morini' in 2002, the first radical campaign able to mobilize activists at a national level and achieve media visibility, and a few years later (2010) 'Fermare Green Hill', which brought tens of thousands of activists onto the streets. Both these campaigns were very largely conducted and supported through widespread online propaganda.

In order to systematize the complex reality of Italian animal advocacy, we refer to a typology identified by Bertuzzi (2018b), developed within the framework of research based on a survey (704 respondents) and 20 in-depth interviews with activists. Initially, the sample was clustered into three ideal types according to the main AAO that respondents claimed to belong to, based on classic typology identified by Gary Francione (1996): (old) welfare, new welfare, abolitionism. Starting from the analysis of survey data and especially interviews, a more complex panorama emerged, and the current Italian animal advocacy scenario has been divided into four categories, according to ideological positions and forms of action:

- 1) Political AAOs claim 'leftist' positions, underlining their anti-fascist legacy and links with other social movements and liberation struggles. They do not rule out critical relations with institutions and contribute substantially to the cultural debate within the movement.
- 2) Anarchist AAOs rule out any relationship with institutions, because of their ideological positions.
- 3) Anti-political AAOs argue that other social issues have little relevance to the treatment of non-human animals. Therefore, a broad anti-political stance is proposed.
- 4) Mainstream ² AAOs maintain strong relations with local (and sometimes national/international) politics; they reaffirm the autonomy that animal advocacy should maintain but embrace progressive attitudes.

This clusterization is the combination resulting from two pairs of opposite approaches. The first opposition is between AAOs that are critical but not totally averse to Western neoliberal regimes, and others that are completely opposed and thus champion other political positions (anarchism, or a wholesale rejection of representative democracy). The second opposition is between AAOs that consider animal issues as strictly related to other social injustices, and AAOs that consider animal issues a world apart, subject to specific dynamics and in no need of forging external alliances. The following table shows these two oppositions and the resulting clusterization.

	Alter-systemic	Anti-systemic
Intersectionality	Political Animalism	Anarchist Animalism
Only animal issues	Mainstream Animalism	Anti-political Animalism

Tab. 2 – The four categories of Italian AAOs

The communication strategies of Italian AAOs

Once outlined the typology and in order to introduce research questions and data analysis, a few considerations on the approaches to online communication that characterize the 4 ideal-types is useful.

Starting with anarchist AAOs, they value ideology more than communication. Anarchism has a peculiar relation to digital environments. On the one hand, numerous hackers come from anarchist movements, adopting a highly and disruptive approach to the Internet but not refusing its use; they put their specialist skills at the service of what they see as a more democratic way to exploit the Web. On the other hand, lots of them are extremely skeptical towards technology and social media, for different reasons such as privacy and possible massification. Furthermore, anarchist groups tend to be short-lived, both because of an ideological “intolerance” to structured organizations and a shortage of financial resources: this translates as a tendency to underestimate and partly overlook digital communication.

Anti-political AAOs are skeptical about some of the dynamics of digital environments. At the same time, they strongly believe in the ‘power of the Web’ and in its democratic potential, as opposed to the hierarchical and hetero-directed nature of classic media. These groups exploit social media abundantly, using them as an arena and engaging in confrontational debates with those who oppose their views, often through the adoption of visual material calculated to make a shocking impact. Political AAOs share some of the concerns of anti-political and especially anarchist organizations towards the misuse of social media. However, they are frequently deficient when it comes to translating detailed theoretical and political convictions in media-effective ways, or at least they fail to exceed the boundaries of the (limited) area of their followers.

All three previous categories have one common characteristic: they have very limited financial resources at their disposal. The situation is different among mainstream AAOs

which are structured associations, often with a national or even international range, able to count on public/private funding and in some cases on the professional activity of specialized employees. This type of organization invests heavily in social media campaigning, organizes ‘armies of web-activists’ to engage in digital protests based on the strategic use of comments, shares and reactions on specific content flagged up by the organization, and reaches very broad publics, composed not only of animal activists or sympathizers, but of ordinary citizens.

Research questions, data and method

Adopting a Weberian approach, we considered the above-described typology as an ‘ideal type’ of animal advocacy, ‘a purely ideal limiting concept with which the real situation or action is compared and surveyed for the explication of certain of its significant components’ (Weber, 2011[1904], p. 93). The aim of the study is not just to assess the appropriateness of a typology developed in the offline context as a means of interpreting the online communication of animal advocacy organizations; its main purpose is to compare online data with the aid of such a typology so as to bring out similarities, differences and aspects of hybridization between online and offline activism, thereby breaking new ground in the study of this social movement and its relations with digital media.

The scientific literature previously analyzed suggests that social movement organizations, while shifting to social media to expand their audience and possibly recruit new militants, would tend to adapt their messages to the format required by social media, to its specific ‘social media logic’ (Van Dijck & Poell, 2013), so as to increase the chance for their ideas to reach new people while ensuring the continued engagement of those who are already part of their network. In this way, though some of the traits predicted by the offline typology may also be found online, others could lose their importance or, indeed, become more salient. We thus asked:

RQ1: Which characteristics of the four categories of AAOs are reflected in their social media communication, and which differences emerge in the online context?

We have also observed that a distinctive communication approach of animal advocates relies on ‘moral shock’ (Jasper & Poulsen, 1995), a strategy that solicits negative emotions. However, positive emotions are generally favored on social media (Waterloo et al., 2018), especially within networks that are not so intimate. Since social media provides users with the opportunity to express their emotional ‘reactions’ (which on Facebook are ‘Likes’, ‘Love’, ‘Haha’, ‘Wow’, ‘Sad’ and ‘Angry’) to online messages, and because these reactions provide a rough measure of emotional engagement (Turnbull, Jenkins, 2016), we asked our second research question:

RQ2: What emotions are solicited by the online communication of the four categories of animal advocates?

Sampling and dataset

We based our study on Facebook, a popular social media in Italy whose demographics enable AAOs to reach a wide public and are thus suitable for studying online activism³. Relying on the knowledge derived from previous studies (Bertuzzi, 2018a), we employed a purposive sampling strategy to select two AAOs for each category of the typology, ending up with a total of eight organizations and their corresponding Facebook pages (Tab. 3). This sampling strategy was chosen because of the presence of many small groups that prevent any probabilistic approach. This issue concerns the entire field of Social Movements Studies (della Porta 2014). However, further complexity is due to the digital dimension: some animal rights groups avoid the use of the Internet to achieve their goals, undermining the feasibility of a representative sample of animal advocates based on online data only.

Animal Advocacy Categories	Facebook Page Name	Followers (updated at Aug. 01, 2019)	Number of Posts	Time Period	Number of Posts after data cleaning
Political Animalism	Oltre la specie	8,786	999	From 2016-08-08 until 2019-07-26	643
	Liberaction	14,501	999	From 2017-12-04 until 2019-07-26	411
Anarchist Animalism	Anarchia verso la liberazione del vivente	7,826	999	From 2017-08-02al until 2019-06-30	151
	Antispecismo Radicale - Non Solo Vegan	3,354	999	From 2017-07-10 until 2019-07-22	852
Anti-political Animalism	Iene Vegane	17,167	999	From 2016-10-18 until 2019-07-26	920
	Movimento Etico Tutela Animali e Ambiente (META)	5,567	387	From 2015-02-05 until 2019-07-24	307
Mainstream Animalism	Essere Animali	314,514	999	From 2017-05-06 until 2019-07-26	993
	Animal Equality Italia	338,201	999	Dal 2017-07-31 al 2019-07-26	992
TOT			7,380		5,269

Tab. 3 Facebook pages by animal advocacy type and summary of the collected data

We employed Netvizz (Rieder 2013) to query the official Facebook API⁴ in order to gather up to 999 posts published by each Facebook page⁵. The final dataset included 7,380 Facebook posts augmented with the number of likes, comments, shares, and reactions (Love, Haha, Wow, Sad and Angry).

Although online communication encompasses a very wide range of phenomena, in this work we keyed in on textual communication (RQ1) and the study of reactions (RQ2). Thus,

to answer RQ1 we used only posts that include a written message (5,269 posts), while the whole set of 7,380 posts was used to answer RQ2 about the online publics' reactions.

Data analysis

RQ1 was assessed by using a statistical technique known as correspondence analysis (CA). CA produces graphical representations on which the geometrical proximities among row-points and column-points of a contingency table translate statistical associations among rows (i.e. words) and columns (i.e. the entities that used those words) (Lebart, Salem, Berry, 1997). In other terms, the AAOs which have similar lexical profiles, and are thus similar in the language they use on Facebook, will appear in almost the same position on the correspondence analysis map⁶. CA, moreover, shows the lexical specificity of the different categories, which we analyzed, too.

In principle, we would expect different types of AAOs to occupy different positions on the map because of the differences and similarities in their ideologies and communicative strategies in the online space. The CA map is organized in a two-dimensional space that, in case of a perfect match between the theoretical typology and the lexical profiles of the Facebook pages analyzed, should be the same as the theoretical one. On the contrary, discrepancies with respect to the theory could help to highlight specificities of the online communication sphere.

To answer RQ2, we analyzed the reactions of the pages' followers through a chi-squared test followed by the analysis of its standardized residuals, applying Bonferroni correction for multiple comparisons, which is a commonly used approach to investigate statistically significant chi squared (Sharpe, 2015). We expected to find differentiated patterns of reactions associated with the different communication styles of animal advocacy pages. We fine-tuned the analysis by applying CA to allow possible underlying dimensions to emerge more clearly. Finally, we analyzed the most characteristic reactions of each category of Facebook pages⁷.

Results

Online language of AAOs

CA pointed out similarities and differences vis-à-vis the theoretical typology. Overall, three axes represented the data (Tab. 4). The first one (Fig. 1) mainly helps to understand mainstream AAOs as opposed to the anarchist and political ones (while the anti-political type has both a low contribution and quality on this dimension, Tab. 5), and is therefore interpretable in terms of the theoretical opposition between intersectional and non-intersectional animal advocacy, where the latter is mainly represented by mainstream AAOs. The interpretation is further supported by the analysis of the most typical words associated with these types of animal advocacy. The words that are more typical of mainstream AAOs are all related to the animal sphere: for instance 'uovo' (egg), 'azienda'

(company), 'gallina' (chicken), and 'gabbia' (cage), besides words that refer to petitions, like 'firma' (signature), and 'call-to-action' words which seem to aim at engaging the followers, such as 'chiedere' (to ask) and 'contribuire' (to contribute). On the Facebook pages of these organizations we can read, for example, posts like the following (author translation):

Intensive farms are dark and unhealthy places where all the natural needs of animals are denied, and they cannot experience the pleasure of sunlight on their skin. CLOSE THIS BREEDING. ('Animal Equality Italia', Mainstream AAO)

Here is the most common maltreatment behind chicken meat ('Essere Animali', Mainstream AAO)

On the contrary, the cloud of words that surround the political and anarchist AAOs refer to more general socio-political concepts, such as 'dominio' (supremacy), 'natura' (nature), 'guerra' (war), 'liberazione' (liberation). On the pages of these organizations we can read, for instance:

When I say fascism, I don't just say State but also speciesism. Speciesism is the same shit; they only changed the word to make it seem less important; in fact the word is the language of domination. ('Anarchia verso la liberazione del vivente', Anarchist AAO).

We live in a strange era where everything that should be more familiar and natural is foreign and sinister. Conversely the artificial has become natural. We fear the earth because it is dirty, and germs lurk ready to attack us. We have the cult of total hygiene, the places that we live in must be aseptic without any life form other than those chosen by us. ('Liberation', Political AAO)

The second dimension mostly illustrates the opposition between the anti-political and anarchist types (Tab. 5). Again, this opposition could be interpreted as between intersectional and non-intersectional animal advocacy, but within the anti-systemic dimension of the typology. Both have (or at least claim to have) a contentious approach towards neoliberal regimes and representative democracy in general. However, on the one hand, anarchist perspectives embrace a 'total liberation' discourse based on a radical critique of existing socio-political systems and often on direct action. On the other hand, anti-political AAOs are characterized by a rhetoric which does not distinguish between left and right, and by the absolute centrality of the struggle in favor of non-human animals, as well as by a sort of 'urgency for action'. These aspects are reflected in the high use of 'organizational' verbs such as 'organizzare' (organize), 'intervenire' (intervene), 'indossare' (wear), and by the presence of words connected to street protests and actions such as 'blitz' (blitz), 'piazza' (square), 'mattatoio' (slaughterhouse). Anarchist groups, on the contrary, use more systemic, but equally contentious, terms such as 'liberazione' (liberation), 'dominio' (supremacy), 'natura' (nature).

This month our group celebrates its first anniversary. A year of blitz, conferences, video, processions, interviews, TV reports and much more. A year of energies all devoted to the lowest of the low: our animal brothers. ('Iene Vegane', Anti-Political AAO)

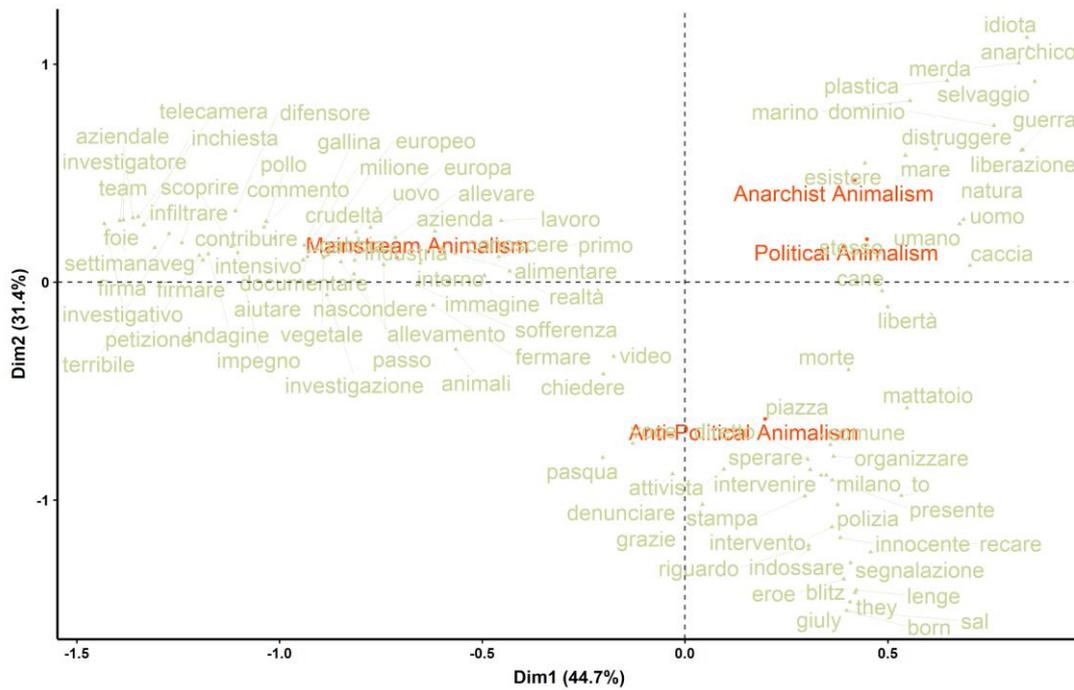


Fig. 1 Correspondence analysis (first two dimensions). The words represented in the map are a subset of the analyzed words with the highest contribution to the axes and representation quality.

Lastly, the third dimension contrasts the political and anarchist AAOs (Tab. 5) and can be interpreted as the systemic dimension (alter-systemic vs anti-systemic) expressed within the intersectional approach to animal advocacy (Fig. 2). In this case, the difference is much more related to formal aspects (and not to the contents) and regards the peculiarity of these two movement sectors: the more theoretical the political approach, the more pragmatic the anarchist one. The CA also clearly reveals the political AAOs' commitment to culture, in words such as 'dibattito' (debate), 'film' (movie), 'presentazione' (presentation, such as 'book presentation'), and the radical ecology tradition of the anarchist AAOs, in terms like 'natura' (nature) and 'selvatico' (wild), as well as a contentious attitude in the use of coarse language, such as 'merda' (shit) and 'idiota' (stupid).

Anti-speciesism and feminism: here is the video of the debate at the 2017 anti-speciesism party. ('Oltre la Specie', Political AAO).

There is more kindness in a wild wolf than in a self-proclaimed superior human species. ('Antispecismo Radicale non solo Vegan', Anarchist AAO).

	Dim.1	Dim.2	Dim.3
Variance	0.247	0.173	0.132
% of var.	44.712	31.428	23.860
Cumulative % of var.	44.712	76.140	100.000

Tab. 4 CA eigenvalues

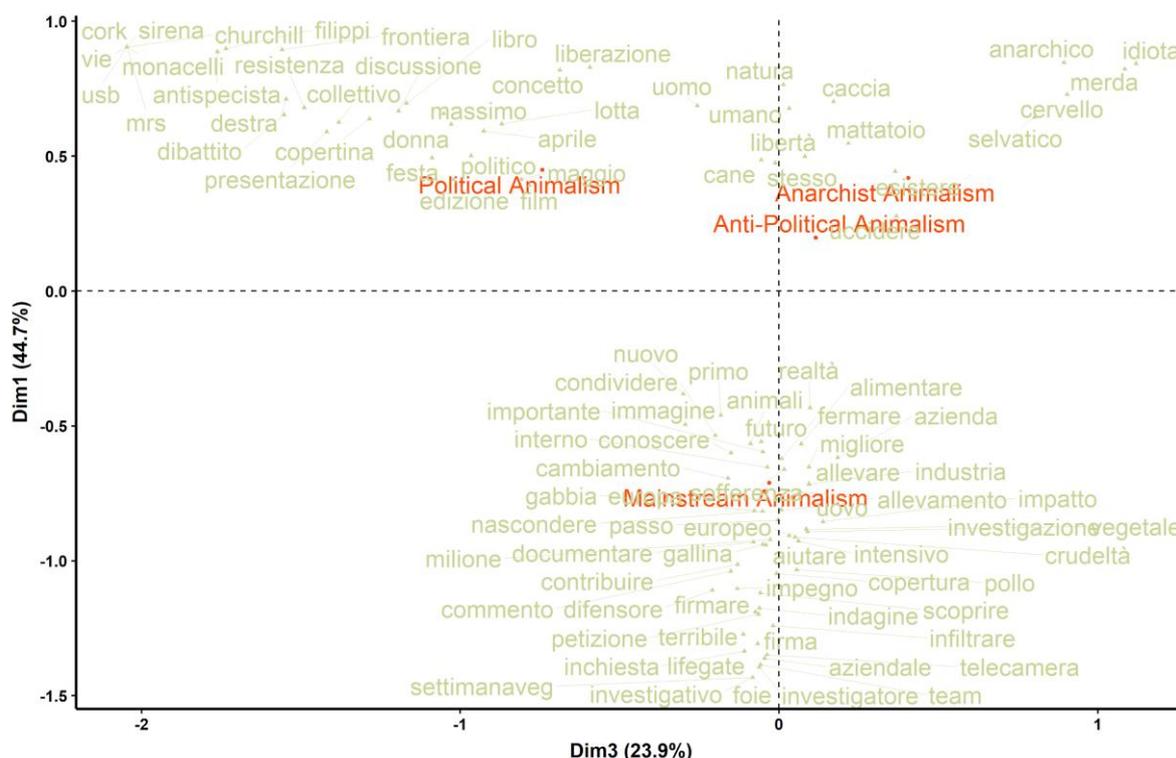


Fig. 2 Correspondences analysis (dimension 1 and 3).

	Dim.1	ctr	cos2	Dim.2	ctr	cos2	Dim.3	ctr	cos2
Anarchist	0.419	16.824	0.314	0.467	29.804	0.391	0.406	29.685	0.295
Anti-Political	0.198	4.485	0.088	-0.628	64.349	0.883	0.115	2.859	0.030
Mainstream	-0.711	65.553	0.974	0.111	2.287	0.024	-0.030	0.219	0.002
Political	0.449	13.138	0.255	0.196	3.560	0.049	-0.742	67.236	0.696

Tab. 5 Contribution (ctr) and representation quality (cos2) by animal advocacy category

Emotional engagement of the online publics of AAOs

Different reactions are used by online publics to interact with the messages of different types of animal advocacy Facebook pages (Fig. 3). Besides the 'Likes' (by far the most common reaction on Facebook), other frequent reactions express negative emotions ('Sad' and 'Angry'), on the one hand, and 'Love', on the other hand. These reactions can be easily interpreted as expressions of love for animals, anger at the perceived injustice of their exploitation and mistreatment, and sadness as an expression of interspecies empathy (Tab. 6).

Chi-squared test turned out to be statistically highly significant ($\chi^2 = 21.212$, $df = 15$, $p < 0.0001$), thus pointing out a statistical association between types of AAOs and the emotional expressions – as per Facebook reactions – of the followers of their social media pages. Furthermore, the residuals analysis revealed clear differences and more

specifically the opposition between the negative reactions 'Sad' and 'Angry', mostly associated with the mainstream and anarchist AAOs (the latter with particular regard to the 'Sad' reaction), and the political and anti-political ones, which have lower values on these reactions (Tab. 7). Examples of messages that elicited such negative reactions are the following:

This is not a 'hobby'. Shouldn't I be glad when this filthy scum dies during hunting?! Fucking fanatics. ('Antispecismo Radicale Non Solo Vegan', Anarchist AAO, 70% Angry).

Locked up for weeks in a cage without even being able to look after her babies. A life behind bars is not life. SIGN NOW to say stop to cages ('Animal Equality Italia', Mainstream AAO, 31% Sad)

	Likes	Love	HaHa	Wow	Sad	Angry
Anarchist Animalism	57%	9%	1%	1%	12%	20%
Anti-Political Animalism	68%	11%	1%	0%	9%	11%
Mainstream Animalism	62%	8%	0%	0%	14%	16%
Political Animalism	63%	18%	1%	1%	8%	9%

Tab. 6. Proportion of reactions broken down by type of AAOs

	Likes	Love	Haha	Wow	Sad	Angry
Anarchist Animalism	-25.34	2.48	27.37	4.25	-7.24	32.52
Anti-Political Animalism	38.54	32.31	29.31	1.07	-38.25	-46.91
Mainstream Animalism	-18.24	-80.50	-47.34	-12.34	55.33	46.23
Political Animalism	5.54	96.80	21.91	16.33	-41.93	-49.65

Tab. 7. Pearson's chi-squared test standardized residuals. All the residuals greater than 4.1 or less than -4.1 are statistically significant at $p < 0.001$.

With specific regard to anarchist pages, the high number of 'Angry' reactions appears to be consistent with the sometimes aggressive language which also emerged in the lexical analysis previously presented.

Political AAOs, and to a lesser extent the anti-political ones, are marked by more positive reactions, compared with the other categories of the typology. The page of 'Oltre la Specie', for instance, also shared ironic memes, such as one that depicted a priest and captioned: 'At Easter save a lamb: cook a priest!' ('Oltre la Specie', Political AAO, 21% AhAh, 77.5% Likes). Particularly noticeable are the highly number of 'Love' typical of the pages belonging to political AAOs, that explicitly contrast with the more negative reactions of the mainstream and, in part, anarchist Facebook pages.

The elephants have been imprisoned in captivity for many years, but the elephant sanctuary gives them the opportunity to live their life in freedom. It took just a moment for them to recognize each other and now Shirley and Jenny live their lives together in this sanctuary. ('Liberaction', Political AAO, 49% Love)

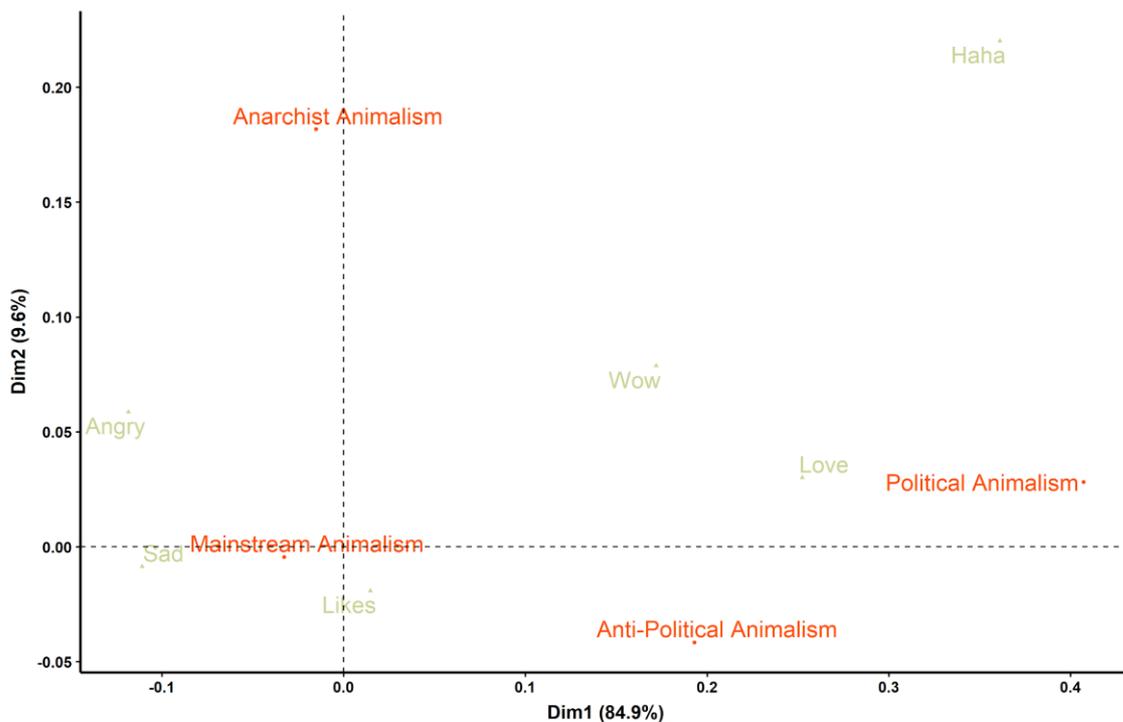


Fig. 3 Correspondence analysis on the reactions of the followers of the Facebook animal advocacy pages.

The contrast between positive and negative reactions, although quite obvious from a semantic perspective, is significant from a sociological one. Indeed, it seems remarkable that the communication styles of animal advocates elicited such emotionally differentiated patterns of reactions from the followers. The CA analysis highlighted this difference in greater detail (Fig. 3). Indeed, the most significant dimension, according to the analysis, contrasts positive (Wow, Love, Haha, Likes) against negative reactions (Sad and Angry). On the positive side we see the political and anti-political AAOs, while on the negative side the anarchist and the mainstream ones. This opposition, clustering together organizations that are very different from one another, is not easily interpretable in the light of the typology of animal advocacy, but leads to some reflections which we will discuss, along with other findings, in the next section.

Discussion

The CA analyses showed similarities between the lexical profiles of political and anarchist organizations and their differences from the mainstream ones, helping to interpret them as

expressions – revealed by the words most associated with each category of organization – of the contrast between intersectional and non-intersectional forms of animal advocacy. While the former questions not only animal issues but the social structures that make possible contemporary forms of human and non-human exploitation, the latter mainly include mainstream organizations ratcheting up pressure on institutions, for instance by online petitions, exclusively aimed at improving the living conditions of non-human animals. The analysis also confirmed the cultural dimension of political AAOs – which represents their characteristic feature and is intrinsically connected with intersectionality, cultural debate being necessary to link different forms of oppression – as well as the specificity of anarchist AAOs, distinguished by a more aggressive approach and the explicit adoption of radical ecological legacies. Aggressive language can be interpreted, as per typology, in the light of the anti-systemic character of this kind of advocacy, while the focus on ecological issues clearly recalls a tradition that has its roots in the radical ecology approach.

Thus, the lexical analysis of the sampled organizations' social media communication shed light on some of their distinguishing traits that have their roots in those ideological spheres and repertoires of action that also mark their offline activities, and were thus appropriately interpreted through the typology. In this sense, some dynamics are reinforced by social media, contributing to amplify the differences and especially the possibilities of gaining an audience. The architecture and functioning logics of social media (Dijck and Poell, 2013), and of Facebook pages in particular, are favorable to the activities of mainstream, and partially anti-political, AAOs. The social media ecology does not change or construct the different positions of different sectors of animal advocacy, but contributes to amplify their distances, favoring the visibility or, using the term adopted by Dijck and Poell (2013), the 'popularity' of some groups over others. It is no coincidence that mainstream AAOs, which have greater financial and professional resources at their disposal, also have Facebook pages with the highest number of followers (Tab. 3), nor that they are clearly fully aware of the possibilities of exploiting the algorithms that preside over the distribution of the most popular content (what Dijck and Poell refer to as 'programmability') in order to hack the social media attention economy (Webster, 2014; Zhang et al., 2018) and improve the circulation of their ideas (Marwick and Lewis, 2017; Giglietto et al., 2020) by calling on the concerted efforts of well-organized armies of web-activists. From this perspective, Italian animal advocacy reflects a lack of democracy in digital platforms and is a further proof of the adage 'the rich get richer and the poor get poorer' (Merton, 1968). At least for the moment, the horizontal and democratic nature of Internet-based communication that is hoped for (in the case of anarchist AAOs) or explicitly claimed as already existent and widespread (in the case of anti-political AAOs) is absent, while the social media logics contribute to the reproduction and amplification of unbalanced dynamics within the movement area, and not to flattening or horizontal outcomes. Anyway, to properly evaluate the success of the online strategies of these organizations, a deeper analysis should be conducted into their needs and goals. Indeed, although the chance to reach a wider audience is surely central for most organizations, the opportunity should not be ruled out for some groups to use social media to cultivate

relations and debate with a narrower network of like-minded activists who are already engaged, as opposed to using it for building 'weak-tie' networks (Bennett and Segerberg, 2013).

Not all the dimensions of the theoretical typology have proved equally useful for interpreting the online data analyzed in this study. While intersectionality proved to be the most useful interpretative dimension, the alter-systemic/anti-systemic axis was less applicable. It is reasonable to assume that these results depend more on the online communication that we analyzed than on the typology, since the main traits of these organizations are not equally salient in the social media sphere: as previously mentioned, it is easier for those contents that invest in visual, effective, synthetic communication to emerge and succeed, rather than for more political and philosophical discourses.

All four categories maintain a similar online and offline approach: this means that, on the one hand, the online and offline dimension effectively hybridize; but on the other hand, it means that a quick, spectacular and impacting environment (such as that of social media) favors those groups that pour more resources into smart communication or perhaps aim for moral shocks, rather than those proposing elaborate analyses of connections with other forms of exploitation or theoretical discussions.

As in the Weberian methodological tradition based on the use of ideal types, the typology helped to shed light both on the continuity between offline and online forms of advocacy, and on the specific differences of online communication. From this perspective, further studies should extend the analysis to make the role of intersectionality in drawing boundaries between AAOs clearer, and also to identify what is distinctive about their digital expressions.

By leveraging the digital traces left by online followers of the selected Facebook pages, the analysis also found differentiated patterns of emotional interactions with the messages of the four categories of AAOs. However, unlike the results of the lexical analysis, these patterns were not easily interpretable in light of the typology. The patterns were nonetheless significant. The strongest dimension emerging from the data appeared to be the contrast between positive and negative emotions, the former more frequent, in particular, on the pages of political AAOs and the latter on those of mainstream and anarchist AAOs. These reactions could signal different approaches to animal advocacy: while the sad and angry reactions might be traced to the sadness and rage evoked by the unjust treatment of non-human animals, and thus could probably be associated to the traditional animal rights communication tactics based on moral shock, shame and feelings of guilt (Jasper and Poulsen, 1995), the use of positive reactions may signal a different approach, more in line with digital media logic such as that of spreadability (as in the case of the use of ironic memes revealed by the analysis) which favors positive emotions over negative ones (Waterloo et al., 2018). However, somewhat contrary to expectations, results show that the messages of the most popular organizations on Facebook, those belonging to mainstream AAOs, are not marked by the most positive reactions. On the contrary, they are characterized by negative ('Sad' and 'Angry') reactions, which are more in line with the classic communication strategy of animal rights activists, based on moral shock. Thus, while these results shed light on the fact that some organizations

communicate with messages more in line with the logic of social media, the very fact that these organizations are not the most popular online shows the importance of pre-existing offline cultures, practices and social networks (such as those of animal advocates or simply animal lovers) in shaping online strategies that are effective in that they resonate with the complex socio-cultural background of their target (Weeks and Holbert, 2013). This is another aspect of the complex relation marking offline/online hybridization.

It is also remarkable that, when looking at the Facebook users' reactions, there are some similarities between sectors of animal advocacy that are (or, at least, claim to be) very distant from one another. This is partly related to the high share of overlapping memberships among Italian animal advocates who belong to very different AAOs at the same time (Bertuzzi, 2018a): this is true at offline level, and is likely to be even more so if we look at Facebook page likers and followers. However, such unexpected similarity gleaned from Facebook – and in particular the non-verbal elements offered by Facebook – raises numerous questions, at once theoretical and methodological, that go beyond animal advocacy and concern the relation between social movements and media studies (Trerè and Mattoni 2014). Is online activism somehow flattening the philosophical differences between social movement sectors? Is this only related to the fact that non-verbal features are limited, or does it prefigure kinds of convergence which are very difficult to hypothesize in offline environments? Are the opportunities of expression provided by social media a sufficient mirror of human feelings, and are the current tools used to investigate them sufficiently accurate? These and numerous other questions could serve as a springboard for some kind of follow up to this study.

The research also has many limitations that should be acknowledged and might profitably be addressed by similar studies in the future. First, the organizations included in this study, although they fall within the quadripartite typology of Italian animal advocacy, cannot be said to be representative of the entire, complex galaxy of Italian animal advocacy. Future studies should integrate the findings presented here by expanding the sample taken into consideration. Second, and strictly related, here we used collective actors as the main unit of analysis and especially as sample units; however, as also emerged from other researches (Bertuzzi, 2018a), numerous activists claim non-affiliation to any collective actor: this does not automatically mean that they are not following Facebook pages, but a study that samples individuals and not the groups should prove relevant. Third, the quantitative approach we employed, although methodologically innovative in this field of study, tends to favor statistically significant differences between groups and risks neglecting more nuanced semantic differences which would only appear through a deeper qualitative inspection. Fourth, the study considered only Facebook, which is the most popular social media in Italy but represents just a part of the online communication environment of AAOs. A fifth main limitation of the analyses is that the focus has been limited to textual forms of communication, while an accurate analysis of visual materials (images, videos and so on) would also prove important.

Conclusions

This study analyzed the social media communication activity of Italian AAOs, using text and data mining techniques applied to about 7,000 posts published on Facebook by a sample of eight group pages. Results were interpreted against the backdrop of a quadripartite typology of animal advocacy, developed in the offline context, which resulted from the crossing of two factors, namely the intersectional attitude and the endorsement of neoliberal regimes. The study highlighted elements of continuity, discontinuity and hybridization between online and offline activism. While the typology enabled a neat interpretation of some aspects of online animal advocacy based on their offline traits (in particular, the relevance of intersectionality for understanding the digital presence of different types of animal advocates), it allowed traits to emerge typical of the online environment and its impact on activism. Social media logic (Dijk and Poell, 2013) interacts with the 'offline' characteristics and ideologies of the organizations and seems to have an impact on them.

Despite its limitations, the research opens the way for the study of the online communication of Italian animal advocates, yet an underexplored field, by implementing methods that made it possible to analyze large amounts of online data. Furthermore, the theoretical approach used, permitted us to investigate animal advocacy on the border between online and offline, thus also offering an original empirical contribution to the literature on social movements in the digital sphere.

Biographical notes

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democracy and democratic ecology. The challenges of the Italian environmental movement(s) within the European market democracy. *European Journal of Cultural and Political Sociology* (2020, forthcoming); Becoming hegemony. The case for the (Italian) animal rights movement and veganwashing operations. *Journal of Consumer Culture* (2020); The individualization of political activism. The case for Italian animal rights movement. *International Journal of Sociology and Social Policy* (2020); Innovative Youth Activism and the Permanence of Collective Actors. *American Behavioural Scientist* (2019).

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Note

¹ We use the label AAO instead of the more widespread 'animal rights organizations', as we consider animal rights as one approach within the broader field of animal advocacy which includes other perspectives such as animal welfare, animal liberation, abolitionism, and so on.

² In the original typology (Bertuzzi 2018b), this label was 'moderate'. However, in this paper we consider it more effective to change it to 'mainstream', a less evaluative label, more suitable especially for online analysis.

³ In the "Audience Insight" section, Facebook reports about 25/30 millions monthly active users in Italy (April, 2020), evenly split between male and female, about 60% of the total users almost equally distributed between the age groups 25-34, 35-44, and 45-54, a lower percentage of younger users (just 12% of the users are between 18 and 24 years old) and older ones (about 15% of the users are between 55 and 64 years old and about 10% of them are over-64 years old). This suits with the demographic distribution of Italian animal advocates, as emerged in Bertuzzi (2018): all three initial clusters in which the sample was divided (old welfare, new welfare, abolitionism) witnessed an average age for activists of between 42 and 45 y.o.

⁴ An API is an 'Application Programming Interface' which allows researchers to gather data from social media or websites. The Facebook API permits one to collect public data (all the pages included in our sample were public) in accordance with the terms of service of the platforms, respecting users' privacy and all the ethical standards of research. The query was conducted on July 26, 2019.

⁵ Only the page of 'Movimento Etico Tutela Animali e Ambiente' had less than 999 posts, signaling a level of online activity lower than the other groups taken into account.

⁶ Implementing a standard procedure, the analysis was preceded by a pre-processing phase: the inflectional endings of the words were removed to return them to the base form; rare words (thus not statistically meaningful) were excluded, keeping only the words with less than 5 occurrences in all the posts of all the eight pages, and the non-meaningful grammatical categories filtered out, retaining only the nouns, adjectives, verbs, and adverbs. The textual content of the posts published by the pages of each type of animal advocacy was then gathered in a single document representing the online linguistic choices of that type, and the four documents obtained in this way were analyzed.

⁷ All the analyses were performed with the R software environment for statistical computing and graphics.