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SOCIAL MEDIA: TRUTH WILL OUT, EVENTUALLY

Abstract

Since 2013, when the World Economic Forum mentioned in its annual report the "global risk of *massive digital misinformation*", situating it at the centre of a constellation of technological and geopolitical risks, the issues of truth in digital communication and fake news have become a key area of academic research and public discourses.

Misinformation is often described as the widespread diffusion of intentionally false information or of satirical contents. Nevertheless, misinformation has been described also as the diffusion of "unsubstantiated rumors, whether intentional or unintentional"[1] that circulate online, contributing to a sort of collective credulity[2].

The article will focus on the latter typology of misinformation based on the diffusion of unsubstantiated rumors resulting in a "shared and believable truth". In particular, the article will describe how the peculiarity of diffusion flows in social media, the homophily of social networks and some social media logics affect both the spread and the likelihood of misinformation. Special focus will be placed on the question of trust in social media and the evolution from a systemic trust in newsrooms to a predominance of the so-called affective trust given not only to charismatic figures (horizontal or vertical opinion leaders), but to ordinary people or friends and friends of friends. The paper will also take into account the role of some crucial characteristics of 2,0 communication: the programmability of contents[3] and popularity logic[4].

The description will be based on the review of existing literature on trust and credibility and on information diffusion models in contemporary social media applied to a case history from November 2016 in Austin, Texas, which also became a news story for *The New York Times*. The case history will be used to exemplify some of the processes described.

The final goal of the paper is to describe how the truth in social media, eventually, is the result of the interaction of specific models of information circulation and the evolution of the attribution of trust.

Keywords

Social media; trust; post-truth; credibility; digital media; shareability.

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[1] A. Bessi *et al.*, "Viral Misinformation: The Role of Homophily and Polarization", in *WWW 2015 Companion - Proceedings of the 24th International Conference on World Wide Web*, Association for Computing Machinery Inc., 2015: 355-356.

[2] M. Del Vicario *et al.*, "The Spreading of Misinformation Online", *Proceedings of the National Academy of Sciences*, 113, 3 (2016): 554-559.

[3] Z. Papacharissi, P.L. Gibson, "Fifteen Minutes of Privacy: Privacy, Sociality, and Publicity on Social Network Sites", in *Privacy Online Perspectives on Privacy and Self-Disclosure in the Social Web*, edited by S. Trepte and L. Reinecke, Berlin-Heidelberg: Springer, 2011, 75-89.

[4] J. Van Dijck, *The Culture of Connectivity: A Critical History of Social Media*, Oxford: Oxford University Press, 2013.

1. INTRODUCTION

Over the last 20 years we have witnessed an evolution from social networks to social media. The first have been defined as "web-based services that allow individuals to 1) construct a public or semi-public profile within a bounded system, 2) articulate a list of other users with whom they share a connection, and 3) view and traverse their list of connections and those made by others within the system"[5]. The second have been described as part of a connective culture or a platform society[6] and are characterized by some emergent logics labelled as: programmability, popularity, connectivity and datafication[7].

The evolution of social media has also been marked by the differentiation of the contents' producers (including ordinary people, representatives of institutions, commercial companies and so on) and by the increasing relevance of the sharing activities of users.

Spreadability[8] of publicly accessible contents is also a crucial issue, bringing together users' activities, algorithms that filter the visibility of contents and social media logics of connectivity.

In particular, during the US presidential elections in 2016, the spread of fake news called into question the relationships between truth and information diffusion in social media in terms of control, the platforms' economy of power, the accreditation processes and the so called "filter bubbles".

In many cases, the focus was on fake news deliberately disseminated with a view to backing opinions or political positions; in many other cases, misinformation was due to the diffusion of "unsubstantiated rumors, whether intentional or unintentional"[9] that circulate online, contributing to a sort of collective credulity[10]. The latter case is still relevant as the emergence of a collective credulity in unsubstantiated rumors in social media is connected to the peculiarity of diffusion flows in social media, some social media logics and the homophily of networks. The transition from unsubstantiated rumors to a "shared and believable truth" (information shared and perceived as credible by users) is due also to trust attribution and propagation in social media.

The article will focus on how some theories on information diffusion, homophily and trust in social media can be used to explain a case history.

The case history unfolded in November 2016 in Austin, Texas, and was also given coverage in *The New York Times*. The social dissemination and re-use of a single tweet of an ordinary (digital) citizen ended in news (a true story) mentioned by digital media, broadcasters and newspapers.

The case history will be described as a starting point and theoretical issues will be presented hereafter.

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[5] d. boyd, N.B. Ellison, "Social Network Sites: Definition, History, and Scholarship", *Journal of Computer-Mediated Communication*, 13, 1 (2008): 210-230.

[6] The terms connective media and platform societies emphasize the socio-technical nature of social networks, while the term social media emphasizes also the human interactions hosted by platforms. Van Dijck, *The Culture of Connectivity: A Critical History of Social Media*, 2013.

[7] Van Dijck, *The Culture of Connectivity: A Critical History of Social Media*, 2013; J. Van Dijck, T. Poell, "Understanding Social Media Logic", *Media and Communication*, 1, 1 (2013): 2-14.

[8] H. Jenkins, S. Ford, J. Green, *Spreadable Media: Creating Value and Meaning in a Networked Culture*, New York: New York University Press, 2013.

[9] Bessi, "Viral Misinformation: The Role of Homophily and Polarization", 355-356.

[10] Del Vicario, "The Spreading of Misinformation Online", 554-559.

2. CASE HISTORY: A STARTING POINT

A starting point to describe the process of constructing a "shared and believable truth" in social media is provided by a case history which occurred in November 2016. It is based in the USA and involves different kinds of digital platforms: from social media to blog and television news or websites.

Even if the story is a non-exhaustive example of the construction of "shared and believable truth", it is useful to give an account of it in order to identify some crucial aspects of the process we are interested in.

The case history will be described using the information included in the news story published by *The York Times*[11] and analyzed below. The whole history occupies three days: from November 9th to November 11th 2016 and can be divided in/into three phases: the first tweet; the first spreading; the divergence of communication flows.

The first tweet: November 9th 2016. A Twitter user (named Erik Tucker) publishes on his profile an amateur photo showing an unusual number of buses parked in a street in Austin, Texas. He sees the buses while driving home from work and is surprised how many there are. After a quick google search on events scheduled in Austin, he supposes that the buses were carrying anti-Trump protesters involved in a demonstration planned for that day.

The photo is accompanied by the text: "Anti-Trump protestors in Austin today are not as organic they seem. Here are the buses they came in #fakeprotests #trump2016 #austin".

The tweet was written for a very small community of 40 people who follow Eric Tucker on Twitter, but it had an unexpected circulation.

The first spreading: November 10th. The tweet (thanks to the #trump2016 hashtag) is shared by a group of Trump supporters on Reddit (a different social media). The tweet is used as an original testimony that anti-Trump protests are supported by Democrats. The Reddit post is shared in a right-wing forum called FreeRepublic. The original tweet, the photo, the text and the author are quoted. Free Republic is followed by different right-wing American politicians who share the link to the forum and to the original tweet through their Facebook pages. The Facebook posts are shared more than 5,000 times and more than 300,000 Facebook users share the link in their profiles.

Unluckily the tweet is based on a misinterpretation of facts. The buses *were* parked in Austin, the anti-trump protests *were* scheduled in Austin, but the two facts were wholly unrelated. The buses had transported conference delegates to a convention organized in Austin by a software producer, Tableau Software.

The diffusion of the tweet originates three communication flows: 1) direct communication: the manager of the bus company shown in the photo receives phone calls and mail seeking more information. 2) media communication: a Fox newsreporter asks the manager for an interview and reports her answer explaining the real reason for the buses' presence in Austin. A local news station does likewise. 3) social media communication: the spread of the information goes on especially on Facebook pages of right-wing groups (for example Right Wing News) and on righ-wing blogs (such as Gateway Pundit) Tucker's tweet is used as an original testimony. The original tweet is shared 5,000 times and the Gateway Pundit article is shared 44,000 times on Facebook. At the

[11] S. Maheshwari, "How Fake News Goes Viral: A Case Study", *The New York Times*, November 20th, 2016.

same time – though less diffusely – Eric Tucker answers negatively to direct tweets asking for proofs of his statements.

The divergence of communication flows: November 11th. On November 11th the different communication flows diverge definitively. The original tweet (and its mentions) spreads on social media. Media communication proceeds by interviewing interested parties (for example the manager of Tableau Software who organized the convention) and diffusing the interviews through local news stations (for example KVUE) or local online newspapers (for example American Statesman). Tucker and rumor debunkers online (for example Snoper) go public with corrections. Tucker shares the link to his blog on Twitter where the real event is described. He shares his original tweet with the overlapping text "FALSE" and on the evening of November 11th he cancels the original tweet, but he cannot stop its spread.

Communication flows proceed independently and with different success. The spread of Tucker's original tweet in the end reaches 16,000 retweets, 350,000 Facebook shares. The Tucker tweet correcting his misinformation has 25 likes and 27 retweets, and the debunk of the misinformation is shared 5800 times. At the end of the story Tucker says, "Anytime you see me in the future going out there where I think there's going to be a big audience, I can assure you I'm going to try my best to be balanced with the facts and be very clear about what is opinion and what is not".

The crucial aspects emerging from the story are: 1) the starting point was not an intentionally false piece of news, but a piece of unverified opinion; 2) the diffusion of the tweet originated a cascade on social media; 3) the original tweet was perceived as credible by social media users on different bases; 4) the information flows diverged and the diffusion of information could not be stopped by the traditional correction mechanisms and media communication.

Starting with these points, discussion will focus on certain characteristics both of information flows and trust in social media which may throw light on them.

3. THE DIFFUSION FLOWS IN SOCIAL MEDIA AND HOMOPHILY

In the case described, we can observe that the original tweet – posted by an ordinary user whom we cannot define as either an opinion leader or an influencer – spread online as a result of the interaction of social media logics (for example the popularity of the hashtag), the specificity of social media cascades, homophily as a specific feature of online social relations.

The first diffusion triggers are the hashtag #fakeprotests and #trump2016 which relate the tweet to a wider networked discourse. Furthermore, the hashtag #fakeprotest relates the original tweet to a polarized networked discourse. The audience imagined by Tucker (by his account 40 followers) collapsed in the wider audience following the trending topics of November 2016.

Some followers of the two hashtags shared the original tweet and triggered diffusion cascades. In some cases they belonged to inter-related groups; in other cases they were independent users.

Inter-related triggers are, for example, members of the Reddit group who are also members of the right-wing forum, and with a personal page on Facebook.

Independent triggers are users whose newsfeeds were reached by posts (or tweets) shared by a variety of profiles and pages and representing a significant part of the final 350,000 shares.

In this case we can observe that – in line with what has been described in some studies on diffusion models on Facebook[12] – the cascade of information was triggered by publicly visible pieces of contents (tweets of posts) introduced into a particular network from many disconnected sources. This mechanism is peculiar to social media because traditional diffusion models assume that few and connected sources trigger the information cascades. The described case exemplifies that on Facebook (and in social media in general), information can spread through large-scale collision of short chains of adoption[13]. Tucker's original tweet (and its quotes) reached the social media user through different sources belonging to different personal social networks. As a result "a flurry of chains all started by many people acting independently, often merges together into one group of friends and acquaintances. For example this merging occurs when one person fans a Page after seeing two or more friends (who are on separate chains) fan that same page"[14].

As a consequence, as in the case of our story, it is very difficult to re-produce the same multi-triggered flow which led to the misleading information being spread and then to diffuse, through the same short chains of adoption, a message or a post correcting it.

Furthermore, there is another aspect of social media communication which influences the spreading of the original tweet: homophily.

Homophily has been described as the attraction between actors due to the similarity of shared attributes and the tendency of individuals to associate and bond with similar others[15].

A number of studies have demonstrated that in social media homophily often structures the ego-networks of individuals[16] and impacts their communication behavior[17], increasing the amount of communication between two (or more) actors which in turn increases their perception of homophily[18].

According to the distinction[19] between status homophily (based on ascribed status such as race, ethnicity, age, religion, etc.) and value homophily (based on values, attitudes, and beliefs), the latter has a greater influence on the ego-networks of individuals in social media and it has been shown to be a predictor of Facebook ties[20] and a generator of social influence (connected individuals influence each other and become more similar)[21].

[12] E. Sun, I. Rosenn, C.A. Marlow, T.M. Lento, "Gesundheit! Modeling Contagion through Facebook News Feed Mechanics of Facebook Page Diffusion", in *Proceedings of the 3rd International Conference on Weblogs and Social Media*, Palo Alto: AAAI Press, 2009: 146-153.

[13] *Ibid.*: 146-153.

[14] *Ibid.* (150).

[15] M. Mcpherson, L. Smith-Lovin, J.M. Cook, "Birds of a Feather : Homophily in Social Networks", *Annual Review of Sociology*, 27 (2001): 415-444.

[16] P. Barberá, "Birds of the Same Feather Tweet Together: Bayesian Ideal Point Estimation Using Twitter Data", *Political Analysis*, 23, 1 (2015): 76-91; E. Colleoni, A. Rozza, A. Arvidsson, "Echo Chamber or Public Sphere? Predicting Political Orientation and Measuring Political Homophily in Twitter Using Big Data", *Journal of Communication*, 64 (2014): 317-332; M. Conover, J. Ratkiewicz, M. Francisco, "Political Polarization on Twitter", *Icwsm*, 133, 26 (2011): 89-96.

[17] G.A. Barnett, G.A. Benefield, "Predicting International Facebook Ties through Cultural Homophily and Other Factors", *New Media & Society*, 19, 2 (2017): 217-239.

[18] *Ibid.*, 217-239.

[19] P. Lazarsfeld, R. Merton, "Friendship as a Social Process: A Substantive and Methodological Analysis", in *Freedom and Control in Modern Society*, edited by M. Berger, T. Abel, C.H. Page, New York: Van Nostrand, 1954, 18-66.

[20] Barnett, Benefield, "Predicting International Facebook Ties through Cultural Homophily and Other Factors", 217-239.

[21] L.M. Aiello *et al.*, "Friendship Prediction and Homophily in Social Media", *ACM Transactions on the*

In terms of the subject of the present article, homophily is relevant insomuch as it limits people's social worlds in a way that has powerful implications for both the attitudes they form and the information they receive[22] , including the social process of information diffusion in social media[23].

As described by danah boyd, "In a networked world […]. What flows across the network flows through edges of similarity. The ability to connect to others like us allows us to flow information across space and time in impressively new ways, but there's also a downside. [...] In a world of networked media, it's easy to not get access to views from people who think from a different perspective"[24].

Even though different studies have demonstrated that homophily doesn't affect information access and diffusion as a whole[25], it has been shown that, in the case of unverified news or misinformation, the user's engagement on a specific content correlates with the number of friends having similar consumption patterns (defined as homophilous)[26]. For example, information is often taken by a friend having the same profile (polarization) and the selection of information is based on the coherence of the information with the shared system of beliefs or narratives, often triggering framing of narratives that are biased toward self confirmation[27]. Social media algorithms (for example the Facebook one) and the resulting programmability of social media communication[28] also contributes in creating a sort of "filter bubble'' in which content is automatically selected according to a viewer's previous behaviors and which increases homogeneous information consumption[29].

In the Austin story described at the beginning of the article, we can observe the interaction between the social media logic of programmability and the homophily of social media networks. First of all, the triggers of information cascades are often homogeneous networks: the group of Trump supporters on Reddit; the conservative forum FreeRepublic; the followers of politicians' Facebook pages; the group Right Wing News on Facebook and the right-wing blog.

The largest flow of information (the diffusion of the original tweet) spread alongside homophilous networks, where the diffusion is widespread and very rapid.

Conversely the correction of the original tweet does not spread alongside homogeneous groups (but on media channels) and is pushed only by individuals. The only exception is the rumor debunker site which has an homogenous group of followers sharing common values and which triggers the largest diffusion flow of original tweet corrections (5,800 shares).

Web, 6, 2 (2012): 1-33.

[22] W. Sherchan, S. Nepal, C. Paris, "A Survey of Trust in Social Networks", *ACM Computing Surveys (CSUR)*, 4, 4 (2013): 1-33.

[23] M. De Choudhury *et al.*, "Birds of a Feather": Does User Homophily Impact Information Diffusion in Social Media?", Arxiv Preprint, Cornell University, 2010.

[24] d. boyd, "Streams of Content, Limited Attention: The Flow of Information through Social Media", paper presented at *Web2.0 Expo,* New York, NY, November 17, 2009.

[25] J.L. Nelson, J.G. Webster, "The Myth of Partisan Selective Exposure: A Portrait of the Online Political News Audience", *Social Media + Society*, 3, 3 (2017): 1-13; C. Vaccari *et al.*, "Of Echo Chambers and Contrarian Clubs: Exposure to Political Disagreement among German and Italian Users of Twitter", *Social Media + Society*, 2, 3 (2016): 1-24.

[26] Bessi, "Viral Misinformation: The Role of Homophily and Polarization", 355-356.

[27] Del Vicario, "The Spreading of Misinformation Online", 554-559.

[28] Van Dijck, Poell, "Understanding Social Media Logic": 2-14; Van Dijck, *The Culture of Connectivity: A Critical History of Social Media*, 2013.

[29] E. Bakshy, S. Messing, L.A. Adamic, "Exposure to Ideologically Diverse News and Opinion on Facebook", *Science*, 348, 6239 (2015): 1130, 1132.

We can conclude that the case described shows how the different flows of information (the diffusion of the original tweet and its correction) do not cross and do not influence each other, due to the fact that they flow through different homophilous networks.

4. THE EVOLUTION OF ATTRIBUTION OF TRUST IN SM: SYSTEMIC, PERSONAL, AFFECTIVE

The Austin case is an example of the generation of a "shared and believable truth" in social media. Beside social media logics, and the homophily of social networks, trust and credibility are crucial in the process of truth generation. The information, to be shared, must be believable and therefore the process of trust attribution in the information sources is crucial. Furthermore, it has been observed that trust is strictly related to misinformation and its pervasiveness on social media, sometimes fostering a sort of collective credulity[30].

In the Austin story we can note the divergence of media communication and social media communication and the reduced influence that media channels have on information diffusion. At the same time we register a sharing process of the original tweet which scales up its credibility, regardless of the author.

In order to understand how trust and credibility are crucial in the building of a shared and credible truth, we have to consider how trust and credibility are attributed in social media communication. We shall first describe trust in social media and then credibility in publicly visible contents on social media.

Trust is basically defined, in sociology, as the measure of confidence that an entity or entities will behave in an expected manner. We will focus on a specific "expected manner" when providing and sharing a piece of information that is (belived as) true Trust is also supposed to have a consequence upon the action of individuals. In this case the actions are trusting the information, sharing and spreading it through social media.

Trust in social media has been described in conjunction with the evolution of communication models in contemporary societies, based on the hypothesis that societal communication and trust models co-evolve[31]. According to Quandt[32], in contemporary societies we can observe a contradiction between mistrust in media-reported reality and trust in network and communities sources.

The aforementioned contradiction has been explained by the fact that the hyper-complexification of societies produces more fragmentation; the number of networked and segregated sub-groups increases and the significance of a larger unified core of (mainstream) opinions decreases.

As a consequence, some aspects of mainstream media appear to be critical: for example the fact that media journalism might not serve all parts of society, and in particular might neglect the interests of the whole number of networked sub-groups, by seeming focused on political and economic elites. Therefore systemic trust in the media

[30] D. Mocanu *et al.*, "Collective Attention in the Age of (Mis)information", *Computers in Human Behavior*, 51 (2015): 1198-1204.
[31] T. Quandt, "What's Left of Trust in a Network Society? An Evolutionary Model and Critical Discussion of Trust and Societal Communication", *European Journal of Communication*, 27, 1 (2012): 7-21; A. Kunnel, T. Quandt, "Relational Trust and Distrust: Ingredients of Face-to-Face and Media-Based Communication", in *Trust and Communication in a Digitized World*, edited by B. Blöbaum, Berlin-Heidelberg: Springer, 2016: 27-49.
[32] Quandt, "What's Left of Trust in a Network Society?, 7-21.

institutions (the belief in the general functioning of the whole network, its rules and its actors) decreases.

In this context, social media (and the internet) provide a different information system where local interests can be better represented by personal and bottom up sources.

Instead of the systemic trust, typical of mainstream media, social media offer the framework for the increasing relevance of personal trust – inspired by the trust model of pre-modern societies – based on "individual features of trustee and trustor, and their personal relationship"[33].

In the Austin example, we face a divergence of communication flows due also to a divergence between systems trust (in mainstream media) and personal trust (in social media), the latter being more relevant in communication through digital platforms.

Furthermore two aspects of trust in social media are relevant: the pervasiveness of relational trust in social media (including personal trust); the distinctive features of credibility attribution in social media.

Social media have been described as characterized by relational trust. This has been defined as trust built over time as a result of repeated interactions between the trustors and the trustees and based on information available to the trustor on the trustee[34]. In social media these features are supported by mutual likes, comments, sharings and by personal profiles, but also by the popularity of individuals on social media, defined by the number of likes, comments and sharings they accumulate over time. Popularity is a crucial feature of social media communication. In describing the social media logics, Van Dijk defines popularity as the effect of the interaction between social activities (like and dislike) and the algorithms of social media platforms, pushing popular post and people in users' newsfeed. Popularity has also been described as often equated with values such as truth, trust, objectivity or quality[35].

In defining relational trust, Kunnel and Quandt introduce a further relevant element. Relational trust is defined as "a multi-dimensional, meta-cognitive but social process that constitutes human relationships by giving both sides the individual assumption of a 'shared identity'"[36].

Individuals connected by multiple interactions through mediated co-presence or social presence[37] build the sense of "shared identity". As a consequence, in social media we can observe a network trust based on an accumulated perception of 'personalized', individual trust[38], long-term relationships that have developed a sense of familiarity[39], and a constant, ongoing social identification process that "involves not only personal identities, but also collective identities"[40]. We can recognize within these groups the

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[33] *Ibid.* (9). Quandt emphasizes that mediated interpersonal communications are often not based on long-term relationships between truster and trustee and that the contextual information is weaker than in interpersonal face-to-face communication.

[34] D.M. Rousseau *et al.*, "Not so Different after All: A Cross-Discipline View of Trust", *The Academy of Management Review*, 23, 3 (1998): 393-404

[35] Van Dijck, *The Culture of Connectivity: A Critical History of Social Media*, 2013.

[36] Kunnel, Quandt, "Relational Trust and Distrust: Ingredients of Face-to-Face and Media-Based Communication", 27-49.

[37] A type of co-presence that is perceived not directly but through mediated communication. Kunnel, Quandt, "Relational Trust and Distrust: Ingredients of Face-to-Face and Media-Based Communication", 27-49.

[38] *Ibid.*, 27-49.

[39] Rousseau *et al.*, "Not so Different after All: A Cross-Discipline View of Trust": 393-404 (393).

[40] G. Mollering, "Process Views of Trusting and Crises", in *Handbook of Advances in Trust Research*, edited by R. Bachmann and A. Zaheer, Cheltenham: Edward Elgar, 2013, 285-306.

presence of a form of relational trust that influences the perceived credibility of each member, also when sharing a piece of information.

The relational trust characterizing social media can contribute to understanding the peculiarities of the individuals who trigger the dissemination of the original tweet. In some cases they are popular not only online, but also offline (for example the right-wing politicians) and can benefit from the social activities of liking their post but also from the algorithms pushing their posts towards other users' newsfeed. In some cases they belong to a network where repeated interactions build a shared relational trust (for example Right wing news or Free republic). In this case, beside homophily, the accumulated perception of 'personalized', individual trust contributes to building the credibility of individuals belonging to the group.

Credibility in social media is a further relevant topic to be explored because it is strictly related to trust – credibility and trust have been described as being at either end of relational trust[41] – and because it is involved in the process of sharing what we have called a "believable trust", and in its dissemination along social networks. When discussing credibility and trust, then, we also have to take into account the shareability of information.

As described by John, "sharing is the fundamental and constitutive activity of web 2.0, in general, and in social network sites in particular"[42]. Shareability of information is also defined as a crucial affordance of social networks "as it constitutes an architectural feature of networked structures that encourages sharing over withholding information"[43]. Sharing information is both an affordance (sharing buttons) and a social process (sharing is caring for friends in social networks). As a consequence of the pervasiveness of sharing in social media, information flows along networks of friends, in most cases it reach social network users as shared by friends, or friends of friends, and the original source (author) of the information is often difficult to detect.

Furthermore, the life cycle of a piece of information in the newsfeed (or in a twitter hashtag) is very short and users are invited to express their like or dislike very quickly. As pointed out by Van Dijk, "Facebook's Like-scores automatically select emotive and positive evaluations of topics, rather than asking for complex assessments"[44].

During the very quick decision-making process whether to like or share (like or retweet) a single piece of information, the crucial issue is the credibility of the friend (or social media contact) who shared it. The credibility of the friend or social contact can be based on one of the three roots of credibility described in literature: cognitive (based on the competence of the source), normative (based on the desirability of the values expressed by the source) or affective (based on an affective tie with the source).

The cognitive root of credibility can come into play when the information sharer[45] is considered an expert on a specific topic[46]. In some cases competence is based on a specific role (a profession or a public office); in many cases it is based on local expertise

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[41] G. Gili, *La credibilità. Quando e perché la comunicazione ha successo*, Soveria Mannelli: Rubbettino, 2005.

[42] N.A. John, "Sharing and Web 2.0: The Emergence of a Keyword", *New Media & Society*, 15, 2 (2012): 167-182 (167).

[43] Papacharissi, Gibson, "Fifteen Minutes of Privacy: Privacy, Sociality, and Publicity on Social Network Sites", 75-89.

[44] Van Dijck, Poell, "Understanding Social Media Logic": 2-14.

[45] We use the term information sharer to indicate the friend (or friend of friend) or social media contact who is visible in the user newsfeed as the person who shared the post or tweet. We use this term to indicate that he/she does not correspond necessarily to the author of the tweet.

[46] Gili, *La credibilità. Quando e perché la comunicazione ha successo*, 2005.

recognized within a group of friends or contacts, for example because an individual is well-informed on a specific topic.

The normative root of credibility come more often into play in cases when the information sharer is trusted because he/she expresses beliefs and values similar to the user who decides to like or share the information. In this case, homophily and credibility are strictly linked.

In many cases, affective credibility come also into play when information is shared because the user perceives an affective proximity with the information sharer. For example, especially in social media "if the other side is or includes a friend of a friend it will be easier for us to assume convergent expectations [...] based on the emotional intensity of the tie"[47].

We can say, then, that in social media, posts and tweets are often shared on the basis of a credibility involving the normative or affective roots and based on the emotional intensity of the tie between the trustor and the trustee.

The shareability of information and the relevance of affective credibility in social media impact also on a specific characteristic of trust: propagation[48]. Propagation of trust along social network chains "is similar to word-of-mouth" propagation of information"[49] and includes the accreditation which occurs when an individual lends credibility to another. In fact, typical of the accreditation process is the "presentation" of a friend, including the transfer of part of one's own credibility to another[50].

In social media the typical example of propagative trust is the friends of friends (FOAF) trust chain. Social media users can accord a certain amount of trust towards people they do not know and with whom they do not have any direct interaction, on the basis of how many friends trust them. As – also in social media – the foundation of friendship is trust, friendship chains are perceived as trust chains, and in FOAF relationships trust is assumed as implicit[51]. In social media trust is also composable. A member of a social network can form some some degree of trust in a member not directly connected, based on recommendations from several chains. In this case, trust is composed by combining different trust chains. And this is encouraged by the propagation of information model that has been described on Facebook where information is propagated through different short chains. This means that people can be reached by information provided by different sources and this increases the perceived truth of the information because trust is built by composing trust in different sources or in friends of friends[52].

In the Austin example, we cannot directly observe the process of credibility attribution due to the lack of any social network analysis of the nodes (or social media users) involved in the dissemination of the original tweet, but we can see that the credibility chains are not based on the specific characteristic of the original source (Ervin Tucker) who had neither popularity, nor a specific competence, nor a particularly normative profile. We can describe the spreading of the original tweet as based on trust and credibility chains, originated by either a normative root (the right-wing forums and Facebook pages) or by credibility chains of friends of friends.

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[47] Kunnel, Quandt, "Relational Trust and Distrust: Ingredients of Face-to-Face and Media-Based Communication", 27-49 (37).
[48] Sherchan, Nepal, Paris, "A Survey of Trust in Social Networks", 1-33; Gili, *La credibilità. Quando e perché la comunicazione ha successo*, 2005.
[49] Sherchan, Nepal, Paris, "A Survey of Trust in Social Networks", 1-33.
[50] Gili, *La credibilità. Quando e perché la comunicazione ha successo*, 2005.
[51] Sherchan, Nepal, Paris, "A Survey of Trust in Social Networks", 1-33.
[52] *Ibid.*, 1-33.

5. CONCLUSION: THE TRUTH AND SOCIAL MEDIA

In 2016 a case history described by *The New York Times* presented an example of how a "shared and believable truth" based on an unverified piece of content can be built by users of digital platforms and social media.

The analysis of the case history, in the light of the existing literature on information diffusion and on trust and credibility in digital media, shed light on some crucial aspects.

The building of a "shared and believable truth" is reinforced by some mechanisms typical of social media communication (and social digital platforms such as blogs or forums). First of all, the information flows are triggered by information introduced into a particular network from many disconnected sources. Social media users can be reached by the same information originating from different sources and, as a consequence, perceive an increased relevance and credibility in it.

Second, homophilous social networks, typical of polarized groups, foster the credibility of the unverified information due to: the richness of communication flows that characterizes them; the mutual sharing of contents and the programmability of social media, based on the algorithms managing the visibility of contents.

Running parallel to this, the correction of the non verified information often flows through different networks and often suffers from the disconnection between the circulation networks of the misinformation and the circulation networks of the correction. Furthermore, when it is diffused by mainstream media, the correction of the non verified information is also hampered by the crisis of the system trust in mainstream media and its competition with the relational and affective trust typical of social media.

The building of a "shared and believable truth" is also based on the specificity of trust and credibility on social media. Information which flows among networks of friends who communicate frequently on social media (like, comment, share each other) can benefit from the relational trust and the perception of being part of a shared identity which characterize them. Furthermore the friends of friends chains, based on affective or normative credibility, when supporting the flow of pieces of information, lend to the information the credibility of the chain and thus contribute to its perceived truth.

At the end of the process, an unverified piece of content is converted into a "shared and believable truth", difficult to correct.