

## **Actor Network in Technology-Mediated Communications Network: A Study of News Gathering Network by Journalist**

Roswita Oktavianti and Irwansyah

Department of Communication Science, Universitas Indonesia, West Java, Indonesia

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**Abstract:** This study focuses on technology-mediated communication network used by journalists to gather news. In the Actor-Network Theory, technology is given the role as non-human actors forming the network. Roles are taken into account, like that of the human actors. The process by which an actor joins the network is seen as a translation, a process of assembling human actors and non-human actors. Translation assigns the role of each actor, it may fail or succeed. The success of translation is characterized by a network that is stable and lasting. This qualitative research with case study of the network of journalist community mailing list is to find out how journalists construct a network as well as the reasons for assembling and maintaining relationships. The study then found out not only about the actor network, but also the actor-sharing network and a network that can not be dissolved, or irreversible.

**Key words:** Technology-mediated communications network, newsgathering, Actor-Network Theory, translation, actor-sharing network

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### **INTRODUCTION**

The history of journalism in many ways is illustrated by changes in technology. The new media, such as the Internet, the World Wide Web and digital video, are striking examples of the technology that transform journalism (Pavlik, 2000). It is considered as another type of change, marking a 'new time' or 'new era', a part of the new technoculture (Lister *et al.*, 2009). The characteristics of the new media are digital, interactive, hyper-textual, virtual, network and simulation (Dahlan, 2012).

The development of new communication technology leads to more and more group interactions that take place through mediated channels (Ruben and Stewart, 2006). In Actor-Network Theory, mediation is conducted by human actors and non-humans assigned with agency. Non-human actors are in the form of technology, text and other material artifacts (Ballantyne, 2015).

Journalists use technology to accelerate and improve news gathering, to expand resources (Bivens, 2008). Advances in communications technology, such as instant communications, the Internet and social media that leads to a constant exchange of online/offline information. It allows a wide range of actors and resources for journalists (Archetti, 2013).

A study of 29,000 journalists in 31 countries (including Indonesia) or districts between the years of 1996 and 2011, found that the Internet and social media make it easier for journalists to research and report the

news. The reason being that now journalists are required to write a story, as well as taking pictures or video and then edit their own work to a variety of media platforms.

Journalists then create groups or communities to help communicate and gather news. In Indonesia, there is often appeared news of journalist community based on its geographic and areas of coverage such as an Surabaya online journalist community, Bogor journalist community, the community of presidential journalist, a forum of economic journalists, etc. These communities are often the source of news for journalists (Berkowitz and TerKeurst, 1999).

The study on journalists work so far is still at the stage of how new media technologies becomes a tool for journalists to gather information and news (Bivens, 2008; Artwick, 2013; Bolin, 2012). It has not yet focused on how journalists use the network among journalists or communities, as a medium for news gathering in the sense of constructing, establishing or assembling and maintaining these relationships for the interest of news gathering.

The questions in this research are how journalists construct technology-mediated communication network to gather news and why do journalists assemble and maintain these relationships.

**Construction and translation in actor network: a network of news gathering:** In the Actor-Network Theory, viewing a construction is to see how the world of actor is

constructed through definition of identity, role, the characteristic of the ties, its extent and its history (Callon *et al.*, 1986). A construction is viewed from its origin (Latour, 2007), also from the process of assembling through moments of translation (Callon *et al.*, 1986). A translation is a process in which an actor joins the network or moves from one status to another to align interests. Translation includes problematization, intersement, enrollment and mobilization (Callon *et al.*, 1986).

In problematization, the focal actor identifies the issues faced by potential actor and suggests something as a solution. Intersement is then conducted by the focal actor by ascertaining the advantages of a networks as the solution to the problems they are currently facing (Wang *et al.*, 2015). If successful, intersement will lead to enrollment in the form of admission into the network (Callon *et al.*, 1986). Actors in the network are mobilized, in the sense that they are transferred and silenced. Then their interests are translated by a spokesman. In other words, the network relationship is established and actors network becomes stable (Ballantyne, 2015).

Human and non-human actors may take the role of an intermediary and a mediator. An intermediary is everything that passes from and stands among one actor to another. It transports meaning without transformation, thus it is passive and predictable. A mediator conducts transformation, translation, distortion and modification of the meaning of the elements that it would have brought. So, an actor may be an intermediary in a network, time and place and it may also be a mediator at the same time.

Journalists construct communications network to facilitate their work of news gathering in the field. Aided by digital tools, journalists deploy 'observers' into a community to record local events and send video and audio to the headquarters where editors or writers stitch pieces together into an article (Cohen, 2015).

Journalists form a communication network mediated by technology such as instant messaging, e-mail, mailing-list to facilitate the exchange of information and even news items. Electronic mail or e-mail is a way of sending messages between individuals or computers that are separated by distances. Meanwhile, the mailing list is known as a mail reflector that can send an individual's original messages to multiple addresses in the internet (Eddings, 1994).

## **MATERIALS AND METHODS**

This study uses a qualitative approach to understand or explain the behavior and beliefs, the process of identifying and understanding the context of people's

experience. The case study is carried out on the presidential journalist of the Republic of Indonesia mailing list network. Five journalists as informants are involved in this study. Each interview was lasted for about two hours and the interviews were recorded and transcribed later. With cross-case analysis, the case of each informant will be dispersed to each chapter or section, according to the research question (Yin, 2003).

In this study, the explanation of five informants as primary data is used for answering how journalists construct a network, the reason for assembling and maintaining relationships. Informant 1, a print media journalist, as the administrator of the mailing list, is the source to understand about the main actor, the human actors and non-humans in the network. Informant 2, a foreign media journalist, as the longest presidential journalist and still active, is the source to understand the origin of the formation of newsgathering network. Informants 3 and 4 are journalists of converged media that is considered the most influential with the new communication technologies. Informants 5 of foreign television media is the second longest presidential journalists after informant 2. Information from informants 5 is supplementary to complete Informant 2.

## **RESULTS AND DISCUSSION**

From the interviews, concerning how journalists construct technology-mediated communication network in newsgathering by viewing its origins is only applied to informants 2 and 5. The two journalists serve in the Presidential Palace in the Republic of Indonesia since the era of President Soeharto to President Joko Widodo. Both of them explained, newsgathering by way of networking has been done since long ago, even before the Internet entered the newsroom.

In the Soeharto era, the network was formed because of the tight access for coverage in the palace. This led to strong solidarity between journalists who had access and those who had not had the coverage access. In addition, the similarity of news informants and the many sources at the palace environment also led to the formation of a network. Journalists helped each other, worked together and shared transcripts or the verbatim record of interview with sources to alleviate the job.

In terms of the technology used, in the 90s, journalists formed a network of face to face communication. That is, transcript of interview was distributed only to journalists present in the press room. The devices of technology used were tape recorders, typewriters, printing machines/copiers and papers. The technology only acted as intermediary. Whereas in the

beginning of 2010, journalists formed a mailing list network through the process of assembling. The technology used in the network is more sophisticated and diverse.

To become a member of the mailing list, a presidential journalist must meet certain criterias. Those criterias include: the journalist is of the print, online and radio variety; the person must be present every day in the palace; the person actively conducts interviews and typing the results and the person can establish friendships with other fellow journalists at the location.

News material in the form of transcripts of interviews and other digital content, was distributed to journalists who became members of the mailing list. Therefore, journalists who are not able to reach the location or the press room, they could use the news material in the mailing list as long as they were listed as members.

This condition results in news without the presence of journalists; news without the presence of journalists is broadcasted first (though online media) than news by journalists present at the site; journalists are not challenged in finding the source of the news; laziness of the journalists (late attendance, only sit and wait, even members of the network simply send news material or transcript of the interview on the mailing list to the office without processing them into articles); dependence in the news materials; news without directly observing the reaction of the sources or conditions in the field; no correction or reciprocity with other sources or fellow journalists; news errors; news materials shared are not valid and the potential of news cloning.

Thus, the mailing list technology did not only act as an intermediary, but also act as a mediator. Technology modifies, distorts and leads to transformation. This raises a number of considerations or forces involved in technology-mediated communication network rather than face-to-face network.

At this time, the mailing list network is formed not only because of the similarities of speaker and the many resources at the palace but also due to other factors. Such as the rise of online media with the demands of rapidity and productivity with the standards of news quotas, as well as the president's unpredictable agenda. Nevertheless, journalists want technology-mediated communication network for newsgathering to keep up to date. Mailing list is considered useful to assist the work of journalists. Mailing list containing news items allow journalists to be able to monitor the development of the latest information at the presidential palace, to create news sources and more diverse viewpoints, as well as enable faster information broadcast to the audience.

Mailing list network applies the "sharing" behavior of the mailing list members. Sharing is a part of social life, it plays a very important role in forming and maintaining relationships. Every human is being shared with one another to develop the expectation of prosocial behavior of others (Paulus and Moore, 2014). Prosocial behavior is the behavior intended to benefit another person. This behavior can be done by someone because of demand. It is spontaneous and internalized in norms/principles and sympathy (Carlo and Randall, 2002).

Mailing list is a medium for content sharing (Tohari *et al.*, 2014). In this study, mailing list is used to share news items with the goal of alleviate the job. Sharing tasks means being responsible for tasks in a relationship. Sharing process is done through four 'moments' of translation (Callon *et al.*, 1986) or the stages of network behavior (Wang *et al.*, 2015) which are problematization, intersement, enrollment and mobilization.

In problematization, active mailing list member is a dominant member or focal actor who recognized the problems in the presidential journalist community and suggested mailing list as a solution. Problems that occur in the network are in the form of free-rider that causes mistakes in news, as well as the absence of a network administrator in previous mailing list. A free rider is someone who takes advantage of a shared public resource without contributing to its maintenance (Chidambaram and Tung, 2005).

After identifying the nature and the issue, the focal actor chooses the human and non-human actors. The non-human actors, other than the mailing list, are the technology used to gather news, such as smartphones, computers, laptops, tape recorders, the Internet network in the form of data plans and wifi, as well as data storage. Technology, text and other material artifacts become actors that act as intermediary as well as mediator (Sayes, 2014).

The focal actor then conducts intersement by ascertaining the advantages of the network (Wang *et al.*, 2015). A number of community members then enroll in the network. The actors who are admitted, are mobilized to send results of interviews, recording files, documents, press releases and photos into the mailing list. In this stage, there is a process of discussion or negotiation between human actors as it flows in the non-human actors. Journalists get benefit from news gathering network and continue to shape the network every year.

Thus, network relationship has been established and actor network becomes stable (Berkowitz and TerKeurst, 1999). A long-lasting network is understood as a persistence or 'irreversibility', a characteristic of an actor network actor that is difficult to unpick and return to a situation where the translation that created.

## CONCLUSION

Technology-mediated communication network is established because of the desire to share amid the growing number of human actors and non-human actors (technology, text, desire, feelings), agency (that which makes actors act) and uncertainty in the network. This study is not just about actors network but also actor-sharing network.

In the Actor-Network Theory, translation process is conducted by the main actors to achieve the interests of the main actors. While in the actor-sharing network, translation process is conducted by key human actors to achieve the benefit of the entire human actors in it.

Humans and non-humans actors in a sharing network, on the one hand increases the effectiveness of the network, but on the other hand has a negative effect in the form of the destruction of human and non-human actors themselves. This becomes the human actors consideration to maintain the relationship then. They establish new technology-mediated communication network (with new configuration) through the process of translation, or without translation. If without translation process, then the relations or interactions are conducted face to face, or through off-line and on-line interactions. This is because there are limitations in mediated communication network that can only be completed with face-to-face relationships.

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