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Actor-Network Theory as a Supplement to Study News

ABSTRACT: This paper proposes to study ANT (Actor-Network Theory). The discussion will start with a short introduction to ANT, then focus on its contributions to news studies, and finally describe its implications for the methodology deployed in this research. By using the qualitative approaches and theoretical review, the findings show that the strength of ANT lies in the overall understanding of the social, as it is a method to study social sciences, rather than merely addressing specific issues in journalism studies. Despite several dominant paradigms in studying news, including political-economy approach, organisational and cultural studies, and their success in understanding news, the main criticism is on the ontology of understanding reality, where based on these paradigms, social actions are being aggregated rather than individually examined. Here, various actual actors that might contribute to the understanding of social actions would possibly be neglected. Besides that, another assumption is that reality is explained based on inherent social structure. Such ontological understanding leads to the act of categorising social actions based on certain structure, such as political, economic, and social structure. ANT also extended the status of object, where non-human actors are also considered in understanding a social phenomenon. With such strengths, I propose that ANT should be considered to be included as a supplement in studying news and to bridge weakness gaps facade by the dominant paradigms.

KEY WORD: Actor-Network Theory; Newsworthiness Construction; News Studies; Journalism Study Perspectives; Sociology of Associations.

RESUME: "Teori-Rangkaian Pelakon sebagai Tambahan untuk Kajian Berita". Makalah ini mencadangkan untuk mengkaji ANT (Teori Rangkaian-Pelakon). Perbincangan akan bermula dengan pengenalan ringkas kepada ANT, kemudian memberi tumpuan kepada sumbangannya kepada kajian berita, dan akhirnya menerangkan implikasinya untuk metodologi yang digunakan dalam penyelidikan ini. Dengan menggunakan pendekatan kualitatif dan kajian teori, dapatan kajian menunjukkan bahawa kekuatan ANT terletak pada pemahaman keseluruhan tentang sosial, kerana ia adalah kaedah untuk mengkaji sains sosial, bukan sekadar menangani isu-isu tertentu dalam kajian kewartawanan. Walaupun beberapa paradigma dominan dalam mengkaji berita, termasuk pendekatan politik-ekonomi, kajian organisasi dan budaya, dan kejayaan mereka dalam memahami berita, kritikan utama adalah pada ontologi pemahaman realiti, di mana berdasarkan paradigma ini, tindakan sosial tengah diagregasi dan bukannya secara individu diperiksa. Di sini, pelbagai pelakon sebenar yang mungkin menyumbang kepada pemahaman tentang tindakan sosial nampak akan diabaikan. Di samping itu, satu lagi anggapan ialah realiti dijelaskan berdasarkan struktur sosial yang wujud. Pengertian ontologi seperti ini membawa kepada upaya mengkategorikan tindakan sosial berdasarkan struktur tertentu, seperti struktur politik, ekonomi, dan sosial. ANT juga memperluaskan status objek, di mana pelakon bukan manusia juga dipertimbangkan dalam memahami fenomena sosial. Dengan kekuatan sedemikian, saya mencadangkan bahawa ANT harus dipertimbangkan untuk dimasukkan sebagai tambahan dalam mengkaji berita dan untuk menjembatani fasad jurang kelemahan oleh paradigma dominan.

KATA KUNCI: Teori Rangkaian-Pelakon; Konstruksi Maklumat Baru; Pengajian Berita; Perspektif Kajian Kewartawanan; Sosiologi Persatuan.

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INTRODUCTION

As media scholars, our most pressing challenge is to provide comprehensive analyses of the current dynamics of news production, circulation, and use in the digital public sphere. Journalism studies struggle to capture the diversity of actors, discourses and relationships, and evaluate their implications for the future of professional news production and the quality of public communication (Domingo, Masip & Meijer, 2014:1; Gecer, 2017; and Othman *et al.*, 2018).

One of the most well-known ways of understanding news is deploying news values theory, which refers to criteria in events that make news. This approach, however, is not without critique. Among others, it is criticized to decontextualize the understanding of news, leaving out external factors that highly influence news, such as *organisational* (Schlesinger, 1978; and Gans, 1979), *politics and economics* (Murdock & Golding, 1973; McManus, 1994; Herman, 2000; McChesney, 2000; and Curran & Seaton, 2009), and *impact on news making and cultural impact* (Halloran, 1977; Fishman, 1980; Hall, 1980; Breed, 1995; Ang, 1996; Chalaby, 1996 and 2008; and Cottle, 2003).

All approaches have been extensively deployed to study news, including to understand newsworthiness construction. Although they have contributed a lot in news studies, and in fact become dominant perspectives in journalism scholarship, major critique on such approaches is their tendency to assume cultures “out there” and ready to “help” explaining social actions. Furthermore, D. Domingo, P. Masip & C.I. Meijer (2014) observed that journalism studies is lacking of comprehensive theoretical tool to investigate news making and various actors involved in the process (Domingo, Masip & Meijer, 2014). Journalism studies also cannot be investigated as an isolated study, it has to incorporate various elements besides the newsroom as a research object, that contributes to the process of journalism and related actors (Lewis, 2012; Bivens, 2015; and Othman *et al.*, 2018).

Besides that, it leads to some obvious limitations stemming from the fact that many researchers rely on extensive contextualisations, which a prior separate and segment knowledge about what news is. It has the tendency to focus on the “bigger picture”, but leaving the technicalities and real practices and processes of newsmaking to the new workers whilst ignoring their knowledge about what newsmaking is (Hemmingway, 2007; Lewis, 2012; and Othman, 2012). Thus, a supplement of these inherent paradigms must be seen as important to the whole development of new studies itself.

In this paper, by using the qualitative approaches and theoretical review (Hsieh & Shannon, 2005; Bowen, 2006; Jabar *et al.*, 2009; Gentles *et al.*, 2015; and Mohajan, 2018), I will introduce an approach that can serve as a supplement to the dominant paradigms of studying news. It is derived from ANT (Actor-Network Theory) and proposes a method for examining taken-for-granted and micro processes involved in the making of a news production. It is, however, not intended to replace other paradigms in understanding newsworthiness, but instead offers an empirical focus that remains closely attached to the everyday knowledge of newsmaking by news workers (*cf* Hemmingway, 2004 and 2007; Loon, 2008; Othman, 2012; and Othman *et al.*, 2018).

The discussion will start with a short introduction to ANT, then focus on its contributions to news studies, and finally describe its implications for the methodology deployed in this research.

FINDINGS AND DISCUSSION

Background of ANT (Actor-Network Theory). The ANT is a method of study introduced by M. Callon & B. Latour (1981); M. Callon & J. Law (1997); M. Callon, J. Law & A. Rip (1986); and others, from the field of STS or Science and Technology Studies (Callon & Latour, 1981; Callon & Law, 1997; Callon, Law & Rip, 1986; Cressman, 2009; and Zeng, Kloet & Poell, 2014). However, the name of ANT is perhaps confusing,

because ANT it is not a theory.

The confusion through the name “Actor-Network Theory” has been raised by B. Latour (2005) himself in a workshop on “Actor Network and After” that later resulted in the publication of a book entitled *Actor-Network Theory and After*, in 1999, edited by John Law & John Hassard, whereby B. Latour (2005) noted that the words “actor”, “network”, “theory” and the hyphen did not describe ANT at all, or ANT was originally written as “Actor-Network Theory”. However, later, B. Latour (2005) countered himself by reintroducing the terms including the hyphen (cf Law & Hassard eds., 1999; Latour, 2005; Cressman, 2009; and Othman, 2012).

In this context, J. Law (2007), then, describes ANT as following here:

ANT is a disparate family of material-semiotic tools, sensibilities, and methods of analysis that treat everything in the social and natural worlds as a continuously generated effect of the webs of relations within which they are located. It assumes that nothing has reality or from outside the enactment of those relations. Its studies explore and characterize the practices and webs that carry them (Law, 2007:141).

In *Reassembling the Social*, which is one of the most important and authoritative introductions to ANT (Actor-Network Theory), B. Latour (2005) criticises what has been called “the social”, by arguing that there is no “social” context “out there”, as such that can simply explain non-social activities, but rather, what exist are the *associations* of various actors that make up realities. It is, as B. Latour (2005) sees it, a different way of seeing reality that can bring about an alternative view of understanding “black-boxing” phenomena (Latour, 2005).

Sociologists of the Social, as B. Latour (2005) calls them, refer to the “social” as a phenomenon as such. By shifting attention to the social as a substance, inputs (into processes of things becoming social) are hidden from the process by the final product of the output (the social as “always-already there”). As a result, social reality is seen as something that inherently exists

for social scientists to study and explain “socially” (cf Latour, 2005; Stavrakis, 2009; and Benzon, 2011).

This is an example given to illustrate what the “sociologists of the social” always performed in their “social” studies, which is to deploy the “social” to explain reality. As an alternative to this, B. Latour (2005) proposes to sociologists a “Sociology of Associations”, which depicts reality as shaped by “controversies”, rather than a notional reality that already exists out there, as shaped by external contexts such as the social structure. It is by studying controversies that we can explain how the social is being created (Latour, 2005; Benzon, 2011; and Jakobsen, 2017).

There are five “sources of uncertainties”, which generate controversies, which are key to the Sociology of Associations. In general, B. Latour (2005) proposed five ways of deploying controversies: *the nature of the group*;¹ *the nature of actions*;² *the nature of objects*;³ *the nature of facts*;⁴ and, the fifth

¹This relates to the uncertainty of what has been gathered as a collective. The starting point is the axiom that there is no group without group-formation. That is to say, collectives are the product of work. In the Sociology of the Social, a group is formed around an essence or identity that creates the difference between members and non-members. Whereas for the Sociologist of the Social, this identity is derived from the “social” itself and is always-already there in essence. B. Latour (2005) asks us to consider how the process of identification of membership takes place, that is the work of forming collectives. The Sociologists of Associations argue that groups are formed only through performative acts of gathering and linking objects. That is for groups to durably exist, they need to engage with objects, e.g. technologies, buildings, and artifacts (Latour, 2005).

²Whereas for the Sociologist of the Social, action is derived from a subject who links motivations to intentions in consciousness, for ANT (Actor-Network Theory) action is always overtaken. There is always something beyond the motivation that appears to be initiating conscious and intentional action. This means the second controversy generates questions of what is acting and what has made it possible for it to act? In this context, B. Latour (2005), rather than to determine the absolute cause or origin of action, as for example in terms of a predefined “context” that can be analyzed independently from the particular phenomenon or event of action (Latour, 2005:60).

³The third controversy is perhaps the most famous in terms of popular understandings of ANT (Actor-Network Theory) as it concerns the nature of objects. For ANT, objects play a pivotal role in the emergence and stabilization of networks. This means that non-human objects can also act and perform; the capacity to act is not limited to human actors alone (Latour, 2005).

⁴The fourth controversy is the nature of facts. It is of huge significance not just for scientists, but also for

and final controversy concerns, *the rendering of accounts*;⁵ which themselves shape the objects of which accounts are being made (Latour, 2005:27).

Thus, ANT is interested in examining how objects come into being. The collective assembled together is the effect of stabilisation and objects play a major role in this, because they are not easily explained away. However, the closure is temporary, because the network can always be interrupted by any other actant (Latour, 2005; Cressman, 2009; Benzoni, 2011; and Jakobsen, 2017).

An actant is a concept derived from A.J. Greimas (1986)'s actantial model of studying narratives and literary works. The identity of an actant is not predetermined, but rather "collected" from what it does through a series of actions. Thus, the term actant is relational, because the identity of an actant must always include modifying another actor, whether human or non-humans. This suggests that scientific facts are constructed through the formation of networks, rather

than through external forces, or "context", that "shape" objects (cf Greimas, 1986; Herman, 2000; and Hebert, 2017).

The significance of such a proclamation by ANT proponents could be traced from the history of ANT and early writings about ANT. The ANT was started by the establishment of the ethnography of science, which was introduced by B. Latour & S. Woolgar (1979), through the publication of *Laboratory Life: The Construction of Scientific Facts*. The authors observed arguments among the scientists in the Salk Laboratory in California USA (United States of America) without any prior knowledge about the scientists' works and routines. They observed new and invisible "social actions" and explained these, so they could be understood by outsiders who were non-scientists. Here, the notion of *cycles of credit* is introduced, by demonstrating that fact production should not be separated from the *product* itself (Latour & Woolgar, 1979).

In another influential book by B. Latour (1987), entitled *Science in Action: How to Follow Scientist and Engineers through Society*, he added that the study of science and technology should be conducted empirically when it "happens". Due to the demanding complexity of science procedures themselves, there is a need to study the discoveries of science when it is "in action" or while it is "in the making" which explains the focus of "performativity" in ANT. The notion of studying action is pertinent and has benefited various empirical studies, including journalism, because it opens up new opportunities for researchers to discover the *exact* practices of journalists, while constructing news. This is also crucial for the fact that the discoveries mean that journalism practices which are seen as "normal" or "ordinary" and have been taken for granted, or long been "black-boxed", are opened again by the researchers (cf Woolgar & Latour, 1979; Latour, 1987; and Anderson & Maeyer, 2015).

The opening of the black box, from the ANT perspective, can be performed when scientists start to scrutinise a social action

journalists. This controversy is generated by uncertainties over matter itself. When something is referred to as "a matter of fact", it means that one is being invited to take it for granted. The controversy is deployed to shift attention away from the product and back to the process of how facts come into being. The Latin root of "fact" refers to doing or making, as in a factory; hence, facts are "made" and not given. It is for this reason that B. Latour (2005) suggests that rather than matters of fact, we should focus on matters of concern. This point, in turn, relates to another famous and much-criticized axiom of ANT (Actor-Network Theory), namely that there is no divide between the "natural" and the "social" (Latour, 2005:114).

⁵A good account for B. Latour (2005), "*will perform the social in the precise sense that some of the participants in the action – through the controversial agency of the author – will be assembled in such a way that they can collect together*" (Latour, 2005:138). An account is, thus, the product of a gathering; and this controversy is, thus, connected to the first. However, the fifth controversy is also about the method. Key to ANT (Actor-Network Theory) is the statement that actors can articulate their matters of concern very well themselves. They do not need academics to replace them with "social explanations". Instead of social explanations, an ANT method should work with the way in which actors themselves articulate their matters of concern and, thus, construct their social reality. For example, an interview should not be seen as a means to extract information from informants and distill a social reality as such, but a move towards rendering an account, by holding the actor accountable to his/her matter of concern. This is what B. Latour (2005) calls "risky accounts", because in the end, things might not add up and, then, the gathering will fall apart (Latour, 2005).

from the processes of translation. In this context, J. Law (1994) defines “translation” as following here:

[...] process by which putative agents attempt to characterise and pattern the networks of the social: the process in which they attempt to constitute themselves as agents. Thus, an agent is a spokesperson, a figurehead, or a more or less opaque “black box” which stands for, conceals, defines, holds in place, mobilises and draws on, a set of juxtaposed bits and pieces (Law, 1994:101).

Translation is a central concept in ANT (Actor-Network Theory) and also an important concept in this study, because every change/transformation that occurs involves translation. Translation emphasises the importance of scientists analysing each moment involved in the series of translations. This means, each of the moments needs to be taken into consideration, thus nothing can be taken for granted. The moments of translations are identified by M. Callon (1984), in his study of scallop conservation at St. Brieuc Bay in France. Together with three marine biologists, M. Callon (1984) discovered how scallops would enter the anchorage willingly so more scallops could be collected and preserved. M. Callon (1984) discerned four “moments” of translation, which comprises: *problematization; interessement; enrolment; and mobilisation* (Callon, 1984). M. Callon (1984) defined also these moments as following here:

Problematization (or how to become important thus needs to be researched): the researchers sought to become indispensable to other actors in the drama by defining the nature and the problems of the latter and then suggesting that these would be resolved if the actors negotiated the “obligatory passage point” of the researchers’ programme of investigation;

Interessement (how the allies are locked into place): a series of processes by which the researchers sought to lock the other actors into the roles that had been proposed for them in that programme;

Enrolment (how roles are defined in relation to each other): a set of strategies in which the researchers sought to define and interrelate the various roles they had allocated to others;

Mobilisation (actors transformed into manageable entities): a set of methods used by the researchers to ensure that supposed spokesmen for

various relevant collectivities were properly able to represent those collectivities and were not betrayed by the latter. This is where the formation of a group occurs (Callon, 1984:1).

In the process of translation, actors can engage in the networks through these processes. A network, in B. Latour (2005)’s words, is following here:

[...] a concept, not a thing out-there. It is a tool to help describe something, not what is being described [...] a network is not what is represented in the text, but what readies the text to take the relay of actors as mediators [...] whatever the word, we need something to designate flows of translations (Latour, 2005:131).

This involves the transformation of interests among actants included in the course of an event. At the moment of enrolment, a particular interest that wins over other interests “wins” the competition and, then, later characterizes the roles of particular actors and defines their identities (Law & Callon, 1982; Heeks & Stanforth, 2015; and Gond & Nyberg, 2016). Within the process, whatever is being translated (and then mobilised) includes *both heterogeneous human and non-human actors* (Law, 1987); such as *photograph, print media, maps, and scientific instrument* (Latour, 1987); *words and things* (Loon, 2017), and *Facebook page* (Unsold & Loon, 2014); hence, the inclusion of non-human actors in analysing social phenomenon, including in *media studies* (Couldry, 2008).

Thus, what is being translated, the translator and the medium of translation all become both the “practice” and the “outcome” of a network (Latour, 2005). A successful translation generates the shared space, equality, and commensurability of a network. On the other hand, a failed translation makes the whole network weak or allows it to disintegrate (Callon, 1991; Cressman, 2009; and Braga & Suarez, 2018).

The idea of translation relates directly with B. Latour (1987)’s objection to reductionism, where B. Latour explained, based on his observation of the process of scientific experiments during the pasteurization of France, what he called the

“principle of irreducibility”.⁶

Among ANT (Actor-Network Theory) theorists, every action is “always overtaken” as stated in the Second Controversy; thus, the importance of recognizing that a series of translations occur in the course of action, including in the process of the establishment of fact. Thus, actions from ANT perspective is always an “effect” rather than the initiator, forming assemblages that can be called “action-net-work” (Loon, 2017), that all social actions are the result of other actions performed by “both human and non-human actors” (Latour, 2005).

This turns ANT, among its strong proponents, not merely a supplement in social science studies, but presenting ANT in the context of media studies. In this context, J. Van Loon (2017) argued that its “theoretical implications [...] are huge; they involve nothing less than entire paradigm shift” (Loon, 2017:59).

The Contributions of ANT to News Studies. Generally, in media studies, ANT (Actor-Network Theory) has been applied widely to study innovations in science and technology, including examining the adoption of digitalization in newsrooms. Besides, it is also used to study associations among actors and translated process involved (Couldry, 2008; Domingo, Masip & Meijer, 2014; and Bencherki, 2017). S.C. Lewis (2012) argued that one of the opportunities opened by ANT in journalism studies is to trace a news network that opens various research opportunities in the field (Lewis, 2012). Hence, it might not be strange to find that ANT is observed as becoming a popular approach in media studies in the last two decades (Spohrer,

2017). In fact, in Germany, there is an effort of studying media deploying ANT and being labeled as AMT or Actor-Media-Theory (Couldry, 2008; Thielmann & Schuttpelz, 2013; and Priyatma, 2017).

Why do we need a supplement in studying news, what is the problems researchers are facing now? The problem with journalism studies is, too often, journalism scholars treat the theories in isolation, or worse, as in antagonism to one another (*cf* Benson, Surya & Eys, 2014; Tandoc, Jr. & Duffy, 2016; and Ryfe, 2017). Meanwhile, R. Benson (2004, 2005 and 2006)’s observation is in line with previous observations by S.C. Lewis (2012); Siti Suriani Othman (2012); D. Domingo, P. Masip & C.I. Meijer (2014); and C.S. Lewis & O. Westlund (2015). The fact that ANT enables the study of various actors in a process examined making it a holistic approach to study a phenomenon in a complex news network (*cf* Benson, 2004, 2005 and 2006; Lewis, 2012; Othman, 2012; Domingo, Masip & Meijer, 2014; and Lewis & Westlund, 2015).

A news network is a complex, much complex than before, as defined by E. Hemmingway (2007), as following here:

The news network incorporates all of the traditionally defined internal and external realities [to a newsroom], and dismantles the concept of internal and external substituting these for a network of translations, practices, and actors that in and by itself constitutes the reality of news (Hemmingway, 2007:27).

News network is a notion that attempts to embrace the practices and discourses that *people* (journalists, managers, activists, public relations practitioners, and citizens), *perform to produce, circulate, and use news* (collections of ideas, facts, and points of reference about matters of common concern in society, such as reportages, articles, comments, pictures, etc.), *considering professional ideals* (autonomy, quality, transparency, democracy, public sphere, etc.), *symbolic constructions* (newsworthiness, shares, ratings, etc.), and *material artefacts* (technologies, tweets, newspapers, newsrooms, etc.) as elements that are all

⁶This idea, which he raised in his “principle of irreducibility” includes: (1) No prior idea of what makes forces, the reducible and irreducible need trials, there are no other ways; (2) There is no pre-determination of what is “real” and “unreal”, “real” and “possible”, and “real” and “imaginary”; (3) Nothing is already known, everything is realized; (4) Nothing is ordered or disordered, never by itself, but always through the associations with others; (5) The number of actants involved, and will involve, is never pre-determined, where actants to be found are also unknown; (6) Actants are neither “wholes” nor “parts”; and (7) No external or internal references to the forces involved in the process of associations (Latour, 1987:158-236).

important in the process (Couldry, 2008; Domingo, Masip & Meijer, 2014:4; and Othman *et al.*, 2018).

With such complexity, it is pertinent to focus on practices and diversity of actants involved in news-making: witnesses, aggregators, social media platforms, activists, politicians, involved citizens, journalists, content management systems, journalistic principles, and casual readers of journalistic products or receptionists (Domingo, Masip & Meijer, 2014:8; Montenegro & Bulgacov, 2014; and Chandler, 2019).

Its ontology of understanding reality also differs than the usual way of understanding reality. Reality is made of associations, and not exist "out there" leads U. Plesner (2010) to argue that media logic should not be seen as already existing "out there" as it is usually deployed by journalism studies scholars to explain how news angles are related with what becomes news in different media organizations. Instead, media logic is seen in her study *"as a set of stories of how actors turn particular concepts into actants as they navigate within this profession"* (Plesner, 2010:3). With such ontology, more traces of news network may be identified and reality is not explained via causal-effect simplified explanations (Plesner, 2010; Othman, 2012; and Priyatma, 2017).

N. Couldry (2008) sees ANT (Actor-Network Theory) as being useful in media studies as a general theory that provides insights on the general view about the media (Couldry, 2008). By this, it might be influenced by the fact that ANT itself is a radical "theory" that criticizes the usual way the "social" has been understood, which also is against the separation of the hard sciences and the social sciences (Latour & Woolgar, 1979; Latour, 2005; and Elder-Vass, 2015). In this sense, it makes sense that ANT can be taken as a whole, as a "theory" that can be used to scrutinize the "social" in general.

U. Plesner (2009), however, argues that ANT does not limitedly contribute to the general theorizing of the media. It is

rather *"an analytical sensibility towards the complexities of actual practices and association"* (Plesner 2010:616). It is here that the complementary role of ANT in news studies can be appreciated. While most journalism studies explain news as the product of social actions, whose sense is derived from the political, economic, cultural, and organizational contexts of news production (Domingo, Masip & Meijer, 2014); there remains a lack of a sense of the density of practical concreteness: social explanations have to be "distilled" by purifying the empirical (Othman, 2012; Umans, 2016; and Krieger & Belliger, 2017).

While it is beyond doubt that understanding media through such contexts has strong merits and without it seems reality at odd (Vass, 2014/2015); it is also crucial to comprehend media processes from a more "intrinsic" perspective (Strathern, 2002), that always take into account taken-for-granted actions. Thus, this thesis seeks to establish a balance between extrinsic and intrinsic contextualization's, and for the latter, the inspiration from ANT remains highly relevant (Strathern, 2002; Othman, 2012; Vass, 2014/2015; and Krieger & Belliger, 2017).

Besides that, ANT can also contribute to media studies by avoiding generalization in its findings. In her study about the usage of ICT among journalists, U. Plesner (2009) observed that ANT does not lead to data generalization. Rather, the meanings of social actions *"[...] emerged from the empirical material and it is basically their very specific stories which are rendered into my account"* (Plesner, 2009:611). This, U. Plesner (2009) continues, *"avoids building explanations into the research design but gives actors a say regarding what is important"* (Plesner, 2009).

It is here that we can see further how ANT assists in bridging the gap I mentioned earlier, and sheds light on the understanding of the practice of the journalists in their real working world (*cf* Hemmingway, 2004 and 2007; Hemmingway & Loon, 2005 and 2011; Turner, 2005; Plesner, 2009; and Othman, 2012). Through intensive contextualization

that avoids generalization, it is important to treat ANT as a useful method to be considered by media researchers to supplement the weaknesses of other research paradigms.

In a paper entitled "The Silent Heart of News" (which incidentally does not draw on ANT at all), E. Hemmingway (2004) has produced an example of a more traditional form of media analysis, which nevertheless is fully compatible with ANT, by virtue of its intrinsic contextualization (Hemmingway, 2004). It can be seen as an early empirical analysis that is based on thinking similar to ANT. The study examined the relationship between an "event" taking place "in the world" and the production processes that enable events to become news by deploying Mikhail M. Bakhtin (1990)'s literary device of the chronotope. Such an approach, if taken, is driven by the observation that, in television news studies, cultural studies have not been able to explain how exactly an event becomes news (Bakhtin, 1990; Hemmingway, 2004; and Bemong *et al.* eds., 2010).

By taking an organisational approach, E. Hemmingway (2004) characterised three different stages of the "real" in news production that she termed "world of the news", "world itself", and "world in news". "World of the news" is referred to as the world of news production in a news organization, in this study is the BBC (British Broadcasting Corporation), which includes the combination of the newsgathering zone and output zone. E. Hemmingway (2004) concluded that what audiences receive from television news may be presented as a "single" reality, but this is only possible by being a heterogeneous product of spatiotemporal arrangements whose differences are blended out by the technological competencies of news making. E. Hemmingway (2004) observes that it is only when the nouse of news possessed by a particular editor in the newsgathering zone is known to the output zone that a story becomes news. This is so trivial for the audience to know, and

studies in other paradigms similarly do not acknowledge the importance of such an action (*cf* Hemmingway, 2004; Westerman, 2011; and Kanger, 2017).

If E. Hemmingway (2004) provides empirical data that can be closely related to ANT based on the British context, F. Turner (2005) has become one of the earliest Americans to discuss the usability of ANT in news studies. Besides noting the fact that the dominant paradigms of news studies have the tendency to separate "*what is going on in news production*", such as separating news and its makers, reporters, audience and news, and the political context, ANT should be seen as able to bridge such gaps (*cf* Hemmingway, 2004; Turner, 2005; and Othman, 2012).

F. Turner (2005) took the example of Jim Romenesko, a columnist for *Poynter Online*, who has become a high reputation blogger and who has an impact on the news agenda of many large news organizations. Jim Romenesko uses his own camera, gathers and reports news, and publishes the videos online. In this way, he has become popular among professional journalists and his news can even start the spark for professional journalists to cover certain events. Here, F. Turner (2005) sees it from an ANT perspective, that Jim Romenesko and his technology have able to translate news into something new, in a shape that was mainly thought of as "impossible" before (*cf* Turner, 2005; Peters, 2011; and Othman, 2012). In ANT, it views the new media "*as human partners [that] collaborate in the creation of new socio-technical formations*" (Turner, 2005:323).

E. Hemmingway (2005) extends the status of technology in her news study on PDP (Personal Digital Production), entitled "PDP: The News Production Network and the Transformation of News". Here, the article suggests that she has made her way into ANT by similarizing *newsroom* for *laboratory*, and *news* for *scientific* (outputs from the laboratory). She contends that, by taking B. Latour & S. Woolgar (1979)'s approach to the laboratory, ANT can "*accurately inform the study of the news*

process as a network of actors all negotiating with and for and against one another in a complex network which is the newsroom" (Hemmingway, 2005:10). Thus, she adds, what is happening in the newsroom is better understood as "associations" rather than being affected by the grander social context (Latour & Woolgar, 1979; Hemmingway, 2005; and Latour, 2005).

E. Hemmingway (2005) studied how innovations of technology had an impact on news. With the emphasis on the role of technology based on BBC Nottingham and BBC Newcastle, she found that the introduction of PDP – where all journalists and technical newsroom workers should find, develop, and own their stories all by themselves – led to changes in news agenda among journalists (Hemmingway, 2005). This study, thus, demonstrates that the technological role is pertinent and does have an effect on journalism practice. This study is an example of how ANT can be used as a supplement to tackle a lacuna in media studies that generally focus more on the external forces that shape news, rather than more intrinsic factors such as technology, but based on the practice of the journalists who really undergo innovations related to recent development and policy in their newsrooms (*cf* Hemmingway, 2005; Couldry, 2008; Othman, 2012; Braga & Suarez, 2018; and Othman *et al.*, 2018).

This relates to E. Hemmingway & J. Van Loon (2005)'s analysis of technology translation, when they combined M. McLuhan (1965)'s Medium Theory and ANT to analyze the failure of newsroom innovation of Bi-Media, in this study it is referred to as the *Big Idea*, to distinguish it from the general practice of Bi-Media in the journalism field which was introduced over 40 years ago, in BBC Nottingham (McLuhan, 1965; and Hemmingway & Loon, 2005). Bi-Media is a newly-introduced innovation in news practice, where journalists gather and write stories for both television and radio production (McLuhan, 1965; Hemmingway & Loon, 2005; and Couldry, 2008).

In this study, E. Hemmingway & J.

Van Loon (2005) argued that the identity of the news organization is the result of the reification of three elements: (1) media practices; (2) technology; and (3) actual organization and identifications. It is from here that, they argued further, a news organization begets a life of its own, because they are technologically mediated. The technological embodiment of the organization and cultural engineering become the identity which each of the members of the organization depends on. This study reflects the ontology advocates by ANT, which structure (in this study identity) is reified from practices and associations, rather than given out there to be studied (Hemmingway & Loon, 2005; Cressman, 2009; and Braga & Suarez, 2018).

E. Hemmingway (2007), further, attempted a comprehensive study on "certain media practice" by the mechanics of ANT in her book entitled *Into the Newsroom: Exploring the Digital Production of Regional Television News* (Hemmingway, 2007:19). The research is based on newsroom ethnography and interviews at the BBC Nottingham newsroom. The study is developed from B. Latour (1987)'s technogram and sociogram; and E. Hemmingway (2007) developed the third axis of positioning actors in a network that is called the "chronogram" (*cf* Latour, 1987; and Hemmingway, 2007).

This detailed study starts with the exploration of an object, which is the media hub in the newsroom, which is always seen as a silent object that does not have the ability to "talk"; hence, the abandonment of their voices. In the exploration, E. Hemmingway (2007) shows that the media hub is an example of a black box that serves as the OPP (Obligatory Point of Passage), because all stories need to go through it before it can be processed and transmitted (Hemmingway, 2007).

In ANT, the black box is the situation where all the detailed processes are rendered invisible and usually taken for granted but only the output is visible. This is where ANT becomes useful, because it enables complete descriptions about the processes

to be made visible and in the newsroom itself, as E. Hemmingway (2007) found, there are too many invisible nodes that link the production of news that researchers would have the tendency to ignore (Hemmingway, 2007; Venturini, Munk & Jacomy, 2015; and Braga & Suarez, 2018).

It is by examining the media hub from the exact process involved that E. Hemmingway (2007) is able to demonstrate that such a media hub is not a “smooth” output machine. Rather, there exists resistance among the media hub operators in terms of the usefulness and the practicality of the technology. This approach, which is coined as the “internal news episteme” echoes M. Strathern (2002)’s intrinsic contextualization (*cf* Strathern, 2002; and Hemmingway, 2007:41). The importance of such a discussion enables us to accurately define, as E. Hemmingway (2007) states following here:

[...] the interiority of the network within the newsroom, and further interiorization of that network by the different actors positioned within it (Hemmingway, 2007:66).

However, it also at the same time explains the “external” because, in the case of the media hub, the external appears when the hub plays recorded material and digitized pictures. This echoes J. Law (1994)’s “method assemblage” rather than the inherent existence of reality “out there” (Law, 1994). Thus, E. Hemmingway (2007) states as following here:

[...] we have just begun to describe the news network, to map out the complex configuration of actors, the positions that they occupy, and the social and technical contexts that make these positions stable or unstable (Hemmingway, 2007:68).

If we come back to E. Hemmingway (2007)’s early discussion on PDP (Personal Digital Production), she first demonstrates how the PDP enters the news network at the BBC (British Broadcasting Corporation) Nottingham newsroom, and shows that the introduction of PDP brings radical

translations to the whole news production network, because it causes disruption to the network that was once seen as stable and in the condition of the black box, because it can keep producing news on time, without any problem (*cf* Hemmingway, 2007; Couldry, 2008; and Mitev, 2009).

However, when the investigation was conducted at the PDP training centers among the trainees, E. Hemmingway (2007) found that when the translation was brought back to the Nottingham newsroom, the results were quite devastating. Many journalists felt that single-authored news was not a good decision, in fact, it decreased the different expertise needed in different stages of news production, thus failing to recognize the professional level required to achieve certain news production processes (*cf* Hemmingway, 2007; Othman, 2012; and Zangana, 2017).

This is an example of how a radical alternation occurs in a journalist’s chronogrammatic axis in news production. Therefore, to stabilize the translation, the news grid is introduced in the newsroom, which is pasted on the wall, so all journalists can write their ideas on it and how many stories they are planning to do. This is an example of an *inscription device*, where it has the ability to translate other actors. It is from here that journalists know who is doing what, and they do so based on what is written on the grid. However, after six months, the grid is not needed anymore, and all the journalists seem to know how to handle their own stories. This shows that despite various translations that happened, stabilization is achieved in the introduction of PDP in the newsroom, but not without additional help! (Hemmingway, 2007; Cressman, 2009; and Priyatma, 2017).

E. Hemmingway & J. Van Loon (2011), further, developed B. Latour (1987)’s concepts of sociogram and technogram, and introduced the concept of chronogram, where actors in a network can be mapped to analyze the specificity of its chronotopical position in a network and thus obtain stability (Latour, 1987; and Hemmingway & Loon, 2011). With B.

Latour (1987)'s concepts of the technogram and the sociogram, it became possible to separate the operational and functional aspects of workflows as the former refers to the description of technological and operational dependencies and relationships, whilst the latter later refers to "social interactions", or functional associations, among actors. A network is tied together through a combination of these two systems and includes both technological and human actors, and both are interrelated with each other to overcome each other's weakness, although usually they are explained separately (Latour, 1987; Cressman, 2009; Hemmingway & Loon, 2011; Montenegro & Bulgacov, 2014; and Monteiro & Hanseth, 2018).

In this study, E. Hemmingway & J. Van Loon (2011) specifically examined the release of Alan Johnston (2007), a BBC reporter, after being taken hostage in Gaza, Middle East. They showed that live news, as received by the audience, is usually perceived in its singular form. However, nothing really exists alone, or rather, nothing ever "is" alone. "*To be is to be related*" (cf Johnston, 2007; Hemmingway & Loon, 2011:158; and Othman, 2012).

Thus "*the 'live' technology remains a technological accomplishment and, hence, engages a multiplicity of time frames*", i.e. the chronogram (Hemmingway & Loon 2011:157). They suggest that events, as they happen, are the product of assembling a "present-presence", not "the" present or simply "presence", by a multiplicity of mediators in the process of production is representation, whilst the enactment of the news and the audience as co-present in a unity of space and time is re-presentation (Mol, 2002; Hemmingway & Loon, 2011; and Othman, 2012).

These detailed studies by E. Hemmingway (2007) and E. Hemmingway & J. Van Loon (2011) are an example of the kind of research that J. Van Loon (2008) advocates in his book entitled *Media Technologies: An Introduction to Media Analysis*. For J. Van Loon (2008), media

scholars need to change the way they study the media, which has been continuously dependent on the separated research paradigms that produced segmented knowledge about media and its mediation process derived from preconceived ideas of relevant contexts. According to J. Van Loon (2008), media must be studied as "networked", or as he prefers to call it, mediation is a process of *networking*. In most paradigms, mediation processes are black boxed, because they are usually (and limitedly) explained on the basis of political, cultural, and organizational "point of views", what B. Latour (2005) calls "social explanations" (cf Latour, 2005; Hemmingway, 2007; Loon, 2008; and Hemmingway & Loon, 2011).

J. Van Loon (2008) emphasizes, however, that this view is not to denounce other types of media studies as wrong, but to identify there is a need for studies that pay attention to mediation processes, which are supposed to be at "the heart of media studies" (Loon, 2008:4). Media studies have been preoccupied too much with establishing abstract relationships between contexts and products, and have placed too much exclusive emphasis on the human actors that are supposed to be mediating between them, either as producers or as consumers. A process-oriented approach to mediation, however, focuses on translations (cycles of credit) between different "moments" of assembling media products, as objects of production as well as of consumption (Couldry, 2008; Loon, 2008; and Wajcman & Jones, 2012).

Deploying ANT (Actor-Network Theory), J. Van Loon (2008) demonstrates that M. McLuhan (1965)'s Medium Theory that assumes media are an extension of humans (and humans are extensions of media) can be empirically generated in much more detail, as ANT allows the investigation of how coalitions are created between humans and technologies in producing a temporary stable network (McLuhan, 1965; and Loon, 2008). Thus, ANT shifts the emphasis to the *form* of media and urges researchers to become

more sensitive toward the phenomena under investigation rather than limitedly focusing on the content of the media, such as content analysis to find out which account will become *history*. Instead, with ANT, every action can become a history as long as it is formed from traceable associations rather than pre-established social contexts (Couldry, 2008; Loon, 2008; and Alexander & Silvis, 2017).

At the same time, ANT allows media analyses to become receptive towards the *culturally embedded* sensitivities of mediation, because culture itself suggests that meanings are embedded in practices of sense-making and do not simply exist “out there”. Finally, ANT urges media analyses to take account of *embodiment* and *disembodiment*. Media technologies are always formed as “objects” that manifest themselves in embodied forms, as well as subjects that require practices of disembodiment. This helps us to identify which actants are involved and what are not actants. Non-actants are entities that do not make a difference because they do not act (Loon, 2008; Mol, 2010; and Gonzalez, 2013).

In her study on “An Actor-Network Perspective on Changing Work Practices: Communication Technologies as Actants in Newswork”, U. Plesner (2009) analyses how new ICTs (Information and Communication Technologies), such as e-mail work in the ever-changing, practice of newswork. While U. Plesner (2009) found that the state of “normalization” happened in the process (where journalists do not even realize how an ICT has changed their news-making approaches), what is interesting is the seamlessness of the network established by the new media (Plesner, 2009). In discussing this, ANT posits that it is the object that assists in understanding how e-mail can become an actant in a particular network – this means, how e-mail can translate events to become news (Cressman, 2009; Plesner, 2009; and Cavalcante *et al.*, 2017).

U. Plesner (2009) demonstrates that e-mail is an actant, because it enables the connection between other actants, such as

the deadline and actuality. It is here that, U. Plesner (2009) added, e-mail becomes the mediator by “*changing their relations while connecting journalists and researchers*” when it is from an e-mail that a journalist gets suggestions from the news sources of when they hope the story will get published or deadline (Plesner, 2009). The news source also explains what she thinks is vague in the story and, then, after the story is re-edited by the journalist, it is sent to the editor on the same evening or actuality (*cf* David, 2007; Couldry, 2008; Cressman, 2009; Plesner, 2009; and Srivatsav, 2014).

Other than e-mail, Google and telephone are actant in news-making process supporting E. Sayes (2013/2014)’s argument that ANT is a coherent method to incorporate non-human actors in journalism studies. Here, non-human actors act as a bridge to increase the possibility to understand the complexity of reality; hence, becomes “*necessary stabilizers of the human collective*” (Sayes, 2013/2014:137), as mediators and as members of moral and political associations.

For example, the role of the seatbelt that transports human morality (Latour, 1987; Latour, 1992; and Ghaffari *et al.*, 2018); thus, ignorance to human-human actors in social studies is missing important factors that contribute to durability and stability of social events. Other non-human actors mentioned in ANT studies include *things*, *objects*, and *beasts* (Latour, 1993:13); and *microbes*, *scallop*s, *rocks*, and *ships* (Latour, 2005:11).

ANT, at the same time, also include the smallest and taken for granted thing into an important research finding that influence a study, as M. Schudson (2014) demonstrates even a box may become an actant, as he articulated as following here:

[...] ANT allows us to see some things that we could not have seen so well without it; and it may allow us to say some things we could not have said so well or so economically without it (Schudson, 2014:2).

Thus, E. Sayes (2013/2014) also argued ANT (Actor-Network Theory) as following here:

[...] provides a useful starting point for providing a proper rendition of the complexity of the associations we form with others and with nonhumans (Sayes, 2013/2014:145).

In studying convergence in newsrooms, ANT (Actor-Network Theory) and the CoP (Communities of Practice) are deployed by D. Domingo & S.A. Weiss (2010) to explain the dynamics of online production in four American and Spanish newspapers (Domingo & Weiss, 2010). Specifically, in this study, ANT is used to map the positions of members in the newsroom, their distinct roles, and tasks in relation to innovation. They argue that ANT is useful to trace power relationships between different actors involved in an innovation in a newsroom, the conflicts revolving around the new technology, and the tracing of the process of reaching closure. Here, ANT is deployed to identify the role of the journalists in either hindering or contributing to the development of innovations (Latour, 2005; Domingo & Weiss, 2010; and O'Connell, 2014).

To the journalists, small problems should not be made known to the developer as she/he needs to think of new features in the website, and that is more important to the success of the newspaper. However, at the same time, breaking news reporters feel that the production team are not helpful enough to them, and usually do not pay much attention to their suggestions (Couldry, 2008; Cressman, 2009; and Zangana, 2017). Such conflict led D. Domingo & S.A. Weiss (2010) to conclude that these hindered innovative ideas for both parties, because both of them are the *obligatory point of passage*, which is not heard in terms of: (1) the ideas of the breaking news as often being neglected; and (2) web developers limit themselves to online editors' instruction rather than, for example, graphic designers (Domingo & Weiss, 2010).

A different situation is found by D. Domingo & S.A. Weiss (2010) at the news website of a public broadcaster of CCMA (*Corporacio Catalana de Mitjans Audiovisuals* or Catalan Corporation of Audiovisual Media) in Catalonia. There

is a lack of communication between the online newsroom and the technical staff. In producing online news, members of the technical staff feel that their decisions are too much influenced by journalists. On the other hand, reporters feel that they are too rigidly influenced by the technical staff, especially to comply with the pre-decided designs for their stories. This suggests the use of deploying ANT in such a study, which enables the identification of "*conflicts and contradictions in the processes of innovation*" (Domingo & Weiss, 2010:1168).

The ANT and its Implications Currently.

This paper discusses the strength of ANT (Actor-Network Theory) and suggested that it be utilised as a *supplement in news studies* (Lewis, 2012; Othman, 2012; Sayes, 2013/2014; Schudson, 2014; and Monteiro & Hanseth, 2018) to provide a *holistic framework* (Cressman, 2009; Lewis & Westlund, 2015; and Braga & Suarez, 2018). Thus, to counter the weaknesses of dominant studies paradigms and of relying on invisible contexts to explain social actions and ignoring real news-making practice in understanding news making (Hemmingway, 2007; Couldry, 2008; Othman, 2012; Domingo, Masip & Meijer, 2014; and Yusuf, 2017).

ANT sees that reality can be understood from five controversies that include the different ways of understanding the establishment of reality and that stress that *an object does not already exist* (Latour, 2005; Loon, 2017; and Priyatma, 2017); *but rather through the process of performative enactment comes into being* (Law, 2007; Cressman, 2009; and Ryfe, 2017); *actions are not pre-determined by the actors, but can change unpredictably* (Fenwick & Edwards, 2011; London & Pablo, 2017; and Braga & Suarez, 2018); *objects also "act" in the process of composing reality* (O'Connell, 2014; Schudson, 2014; and Othman et al., 2018); *that there are heterogeneous actors involved* (Law & Callon, 1982; Law, 1987; and Hassard & Law, 1999); and *facts must always be under investigation, or matters of concern, and the rendering of accounts must take into account how the objects have been made* (Cressman, 2009; Westerman,

2011; and Venturini, Munk & Jacomy, 2015).

This suggests that societies are the result of a reification of “practice” rather than existing as such. This can also be related to the philosophy of a French philosopher that has a heavy influence on ANT. Gabriel Tarde (1969, 1999a and 1999b) views society as being formed by irreducible entities that associate with each other to realize their existence (Tarde, 1969, 1999a and 1999b). This is opposed to Emile Durkheim (1938 and 1951)’s view that societies exist “as such” and are composed of fixed “social aggregates” (Durkheim, 1938 and 1951). Instead, we always need to be mindful of how associations are being performed and ask what allows them to become durable (cf Smith, 1992; Latour, 2002; and Albertsen & Diken, 2003).

Albeit ANT has strengths, as discussed, generally ANT is not yet widely-accepted in media studies, as U. Plesner (2009) observed. In fact, there are many media scholars who are hostile to using ANT to study media, and those who are interested have even experienced the rejection of their research proposal by the anonymous reviewers (cf Couldry, 2008; Loon, 2009; Plesner, 2009; Westerman, 2011; Orticio, 2013; Bird, 2014; and Vega, 2017). In the reviewer’s comment, he/she states clearly that the rejection is directed straight to the “sin” of deploying ANT in the study:

ANT is clearly unsuited to the field of journalism studies; in fact, journalists themselves will find it strange [...]. This theory is clearly out of place in trying to explain and explore the cut and thrust of newsroom dynamics (cited in Loon, 2009).

This is an example of a priori and dogmatic rejection of ANT (Actor-Network Theory) within the domain of media studies in the UK (United Kingdom). J. Van Loon (2008, 2009 and 2017) demonstrates how ANT, as structuring a method of analysis, has been poorly understood by reviewers, who misunderstand it as a theory (cf Law & Callon, 1982; Callon & Bruno, 1992:356; Hassard & Law, 1999; Latour, 2005:142; Law, 2007:141; and Loon, 2008, 2009 and 2017). Moreover, J. Van Loon (2008,

2009 and 2017)’s own experience is that practitioners find it completely acceptable that their accounts of reality should be taken as the starting point of trying to understand the practices of news-making, rather than an assumption that these accounts need to be translated into “social explanations” (cf Loon, 2008, 2009 and 2017; Westerman, 2011; Othman, 2012; Orticio, 2013; and Ahva, 2016).

In this respect, J. Van Loon (2008, 2009 and 2017) stresses the strengths of ANT as an approach for understanding media that is entirely empirical and practice-based and object performativity (Pels *et al.*, 2002; Loon, 2008, 2009 and 2017; and Ryfe, 2017). Indeed, ANT enables the study of complex realities (as constructions, but not social constructions) by following the actors and by recognizing the pivotal status of objects to study exactly what is happening in newsrooms. Journalistic performance research has also been scarce and ANT may greatly contribute to this (Zeng, Kloet & Poell, 2014; Ryfe, 2017; and Othman *et al.*, 2018).

CONCLUSION ⁷

This paper, as summarized, proposes to study ANT (Actor-Network Theory). The discussion was started with a short introduction to ANT, then focus on its contributions to news studies, and finally described its implications for the methodology deployed in this research. The findings showed that the strength of ANT lies in the overall understanding of the social, as it is a method to study social sciences, rather than merely addressing specific issues in journalism studies.

Despite several dominant paradigms in studying news, including political-economy approach, organisational and cultural studies, and their success in understanding

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news, the main criticism is on the ontology of understanding reality, where based on these paradigms, social actions are being aggregated rather than individually examined. Here, various actual actors that might contribute to the understanding of social actions would possibly be neglected. Besides that, another assumption is that reality is explained based on inherent social structure. Such ontological understanding leads to the act of categorising social actions based on certain structure, such as political, economic, and social structure.

ANT also extended the status of object, where non-human actors are also considered in understanding a social phenomenon. With such strengths, I propose that ANT should be considered to be included as a supplement in studying news and to bridge weakness gaps facade by the dominant paradigms.⁸

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- ⁸**Statement:** Herewith, I affirm that this article is my original work and not a product of plagiarism, and that the article has not been submitted, reviewed, or published by another scholarly journal. Upon acceptance for publication, I will not withdraw my article from the *SOSIOHUMANIKA* journal published by Minda Masagi Press owned by ASPENSI (Association of Indonesian Scholars of History Education) in Bandung, West Java, Indonesia.
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