

On Reasoning Nature of Editorial Essay in Indonesian Newspaper

Sukarsono¹, Mohamad Jazeri² & Nursamsu³

¹ State Islamic Institute (IAIN) of Tulungagung, Indonesia

Correspondence: Mohamad Jazeri, State Islamic Institute (IAIN) of Tulungagung, Indonesia.

Received: February 8, 2021; Accepted: March 1, 2021; Published: March 3, 2021

Abstract

Reasoning ability is fundamental for college students as well as professionals since it reflects their intellectual quality. This paper is aimed at revealing the reasoning nature in the editorial essays in Indonesian prominent newspapers. The study is qualitatively approached, by employing Content Analysis, in which (i) the types of reason and (ii) the soundness of reasons the editorial essays are objectively, systematically, and generally inferred. The data collection was conducted by documentation technique, by which the researchers selected the online editorial essays in Indonesian prominent newspapers. The study revealed that types of reason found in the essay written by IW (Indonesian Writer) are (a) statement of *a means to an end*, (b) *a statement of cause*, (c) statement of *judgment based upon knowledge*, and (d) statement of condition while the most reasonings practiced by IW in their essays are logically sound.

Keywords: reason, logic, cause, argument, editorial essay

1. Introduction

Writing an essay is considered to be the most complicated skill to develop since it involves several integrated types of knowledge. A writer needs to be knowledgeable not only with what to write but also with how to write as well. Knowledge on what to write concerns with the selected topic, or the content of essay, in which the writer is interested. The broader and deeper his knowledge on the subject or topic he writes, the more enlightening and informative the composition he produces to readers.

The aspect of how to write involves the mastery of vocabulary and grammatical rules of the language in which the selected topic is accounted. The good understanding of various senses of words and the accurate employment of grammatical rules to determine the effectiveness of the communication of the topic's content being conveyed. It is impossible to produce an effective essay by the low language proficiency despite the writer's depth of knowledge on the topic (Farrier, 2014; Wingate, 2012).

In addition to knowledge on language components, a skillful writer is normally well-informed with what so-called rhetoric strategies, the skill in organizing or arranging the ideas systematically so that the goal of the communication is effectively achieved. Traditionally, such rhetoric strategies are broadly categorized as *descriptive, narrative, expository*, and *argumentative*. Among those four basic types, the argumentative essay is the most difficult to compose (Arnao, 2018).

The very essential element of argumentative essay is *reason*, a term of which has sounded very familiar to our ears. In our infancy, our mother would often question us with such lines as '*What's wrong with you?*', '*Why do you cry?*', '*Why is your toy broken?*', etc. Those questions demanded us to find reasons to base logical, or at least acceptable, explanations for the problems we have or for what had happened to us (Ricco & Overton, 2012). It is no doubt that the ability of 'reasoning' has been grown and trained by people around us to process our intellectual growth since we were a baby.

One of the intellectual skills that human has been equipped with is an ability to see cause-effect relation in their lives. There are so many things, phenomena, or events in our world's experience that can be causally related. For an example, *hunger* and *eating* can be of a cause-effect relation (Hitchcock & Pearl, 2001; Pearl, 2002). A full day school student might put them in an expression like '*I am hungry because I haven't eaten my breakfast yet*'. Similarly, an English teacher who might comment on her students' composition, '*I cannot understand this sentence because you don't use the right conjunction*' is also of a cause-effect relation. The ability to catch such a logical relation is very important for one's logic and intellectual growth. In academic as well as professional life, an ability to see causal relation between two things is very beneficial for a career climb-up in modern lives, in business,

professional, as well as in academic provisions. However, employing an ability of reasoning in writing an essay seems of a painstaking task for most college students in Indonesia.

In different contexts the term *reason*, as the response of the question *why*, has diverse meanings. According to Inman and Gardner (1979), there are at least six senses of the term *reason* as found in the following situations:

- (1) Why is the price of rice rising? Because a drought has made the paddy fields dry so that the production of rice decreased.
- (2) Why is John arrested by the police? Because he is suspected for homicide and his fingerprints were found on the murder weapon.
- (3) Why did Joshua steal bread? Because he was hungry.
- (4) Why do you study law? Because I want to be a lawyer.
- (5) Why should we not get a divorce? Because it is bad for our children.
- (6) Why did Professor Brown ask him to revise his thesis proposal? Because there are still several fallacies in his reasoning.

From those given contexts, we find that the term reason may refer to different concepts or meanings. For the context as given in number 1, the reason refers to a statement of *cause* or *factor*, i.e. *drought*, that necessarily makes the production of rice decreased. In situation number 2, the reason refers to a statement of *circumstantial evidence*, by which John is arrested because of an evidence of his fingerprints available on the murder weapon. In number 3, the reason points to a statement of *justification*, that is being hungry that made Joshua steal the bread. In number 4, the reason points to a statement of *a means to an end;* that is *studying law* is used as *a way* to achieve *goal*, i.e. *being a lawyer*. In the last two numbers, 5 and 6, the reasons express statement of *judgment*, specifically based on *value* and on *knowledge* (Gardner, 1979). The former reveals a value that divorce is *bad* for children so that it shouldn't be done while the latter reveals the reason why his thesis proposal needed revision since, according to a study of logic, it still contained fallacies.

In short, a reason can be of *a cause*, *circumstantial evidence*, *a justification*, *a purpose*, *a value judgment* or a *knowledge based judgment*. It is used to respond the question *why* and is thus very essential in developing an argument, i.e. a discourse produced to explain a 'why' aspect of a topic in an argumentative essay.

A very similar term to the word *reason* is the word *cause*, which is also vital in academic essay, which demand them to make logical and sound argument. In several occasions, both terms are used in a closely related sense, but in fact the latter is a more precise than the former. Such a basic element of argument skill has several distinctive meanings in cause-effect relationship (Pearl, 2002). *Firstly*, in a particular context, it could mean *necessary cause*, that is 'a condition without which an effect cannot under circumstances occur'. For instance, when there is a plane crash, we can infer for certainty that the cause of the accident is a *gravitation force*. Such a cause is the absolute factor of the accident. Another example is when a patient dead, the very necessary cause is the heart stops beating. Hence, the necessary cause is generally related to the systemic or natural factor.

Secondly, a cause may refer to a *sufficient* cause, that is the circumstances that enable the necessary cause to work. In our example, it could be in the form of the leakage of plane's fuel tank, engine failure, or other circumstances that make the gravitation force causes the plane falls downward to the earth. In the case of patient's death, the sufficient cause could point to an extreme high blood pressure, triggering the heart failure.

Thirdly, a cause can point to a *proximate cause*, i.e. a circumstance making the *sufficient* cause to exist. The engine failure or oil leak causing the plane crash can be generated by the *violation of the mechanic on maintenance procedure*. Likewise, the extreme high blood pressure can be triggered by *the patient's fondness of eating salt and fat*. Both *violation of maintenance procedure* and *fondness of eating salt and fat* are the examples of proximate cause in our two previous examples.

At last, a cause could mean a *remote* cause. This cause explains why the proximate cause could occur. Again, in our two examples, *violation of the mechanic on maintenance procedure* may be due to the fact that the mechanic came late on that day so that he carelessly checked out the plane's machinery. His coming late is then a remote cause of the plane crash. Meanwhile, in the case of the dead patient, *the patient's fondness of eating salt and fat* may be formed by *his hobby of eating outside*, which is a *remote* cause of the death.

As we have seen throughout the various accounts of its meanings, a cause is not of unitary concepts. This baffling meanings must make us critical and precise in identifying which meaning fitting the case of causal relationship we are analyzing. Otherwise, our reasoning can be unsensible and misleading.

In the perspective of logic, every sentence, particularly its proposition, is accounted as to have a truth value, either true or false (Jeffrey, 1967). Hence, as a set of sentences are related, they make what so called *truth-functional relationship*, which is of the provision of the study of logic (Chapman, 2000). It primarily deals with formal relations involving constants and variables. Such relationships can cover such definition as *entailment*, *presupposition*, *formal logic* and *predicate logic*. For the sake of being relevant to the topic of this paper, my review concentrates on formal logic, especially *condition*, which pertain to cause-effect relation of a set of propositions.

Logical condition is indicated by natural language *if* ... *then*, in which two simple propositions, p as an *antecedent* and q as *consequent* are joined, resulted in *if* p *then* q. Symbolically, it is visualized as $\lceil Cpq \rceil$. *Condition* is put in the truth table as follow.

| р | q | [Cpq] |
|---|---|-------|
| Т | Т | Т |
| Т | F | F |
| F | Т | Т |
| F | F | Т |

As seen on the table, the truth value of consequent is the most determinant in condition. The value of $\lceil Cpq \rceil$ is always true if the consequent is *true* and both antecedent and consequent are false. Suppose that we make a compound sentence 'If you can answer the questions correctly, you will pass the exam'. This sentence is true unless the proposition of you can answer the questions correctly is true but the proposition of you will pass the exam is false. In other words, it is illogical to say that if you can answer the questions correctly, you <u>will not pass</u> the exam'. This logic is closely related to cause and effect relationship in natural language. Thus, the conditional, 'If you can answer the questions correctly, you will pass the exam', is equal to 'Because you can answer the questions correctly, you will pass the exam in natural language. Hence, you can answer the questions correctly is the cause or reason, and you will pass the exam is the effect. In relation to the topic discussed in this paper, this logical condition is important for the process of inductive reasoning.

As to raise sound reasons in our essay, a writer must make efforts in underlying our argumentation with what socalled *necessary* or, at least, *sufficient* cause. Identifying those types of reasons are very important in scientific work, like discovering bacteria that cause a disease, or a vital investigation like an engine failure the causes of airplane crash. As such, an ability to determine *necessary* or *sufficient* cause is very fundamental in composing a qualified argumentative essay. We have previously pertained to an inductive reasoning process in order to determine hypothetical cause of a certain effect. As the general rule, an effect is of observable facts while a cause is an inferred hypothesis.

Necessary and sufficient causes can be established by inductive reasoning, that is moving from facts observed to a conclusion (Hayes, Heit, & Swendsen, 2010). However, in the process of inductive reasoning to arrive at a conclusion, the employment of a deductive logic, i.e. conditional syllogism is of worthwhile tool, despite the use of a pure inductive reasoning.

In inferring a hypothesis of a cause, we basically observe different factual characteristics other than the same characteristics, as done in drawing a generalization. Both processes of inductive reasoning need familiarity to the relevant facts, knowledge and experience that become the material of an induction (Hayes et al., 2010). Suppose, in seeing a flying plane, we catch several facts concerning with the plane like: (a) it is exhausting black smoke, (b) losing altitude, (c) circling back, and (d) decreasing its speed, and thus from such characteristics as a, b, c, and d, we can draw a hypothesis that the probable cause is a *power failure*. This conclusion is an example of inductive reasoning resulting in an *hypothesis*.

On other hand, an inductive reasoning resulting in a *generalization* needs an observation focusing on the same characteristics given by different subjects. For instance, if planes x, y, z, and so on show the same characteristic, that is leaving white smoke track as they are flying in the sky, then we can draw a *generalization* that '*Most planes produce white smoke as they are flying*'.

Doing an inductive processing to come to a hypothesis cannot pertain to deductive reasoning, specifically syllogism, i.e. reasoning from a premise to a conclusion according to established rules of validity (Bird, 1969; Mody & Carey, 2016; Morreau, 2009). In conditional syllogism, the relationship between a sufficient cause and its effect can be formulated as follow.

If there has been a power failure, the plane will lose its altitude.

There has been a power failure. (antecedent)

:. The plane is losing its altitude. (*consequent*)

The rule of logic in conditional syllogism tells us that if the *antecedent* is affirmed then the *consequent* must be true. Put it simple, the *consequent* must always follow the *antecedent*; in ordinary language it equals to *the effect is likely to follow the cause*. Thus through conditional syllogism above, we can infer that since we catch the fact that *the plane is losing its altitude*, while we have knowledge or experience that tells '*If there has been a power failure, the plane will lose its altitude*', then our logic infer that the probable *cause* of *the plane's losing altitude* is *a power failure*.

However, the possible cause, i.e. *a power failure*, will soon be in question as our logic tells us that the plane's losing attitude can also occur when the pilot intentionally change the altitude itself. Thus, to determine a cause based on one observable fact is not valid. We can increase the validity of our conclusion by obtaining more observable facts such as the plane *is exhausting black smoke*, *circling back*, and *decreasing its speed experience*. Based on our knowledge and experience, those three different facts can also follow plane's power failure. Thus we can obtain similar formulations of conditional syllogism as follow:

If there has been a power failure, the plane will exhaust black smoke,

If there has been a power failure, the plane will circle back, and

If there has been a power failure, the plane will decrease its speed,

Since all different *consequents* or *effects* follow the same *antecedent* or *cause*, i.e. power failure, then degree of certainty of our conclusion is increased. Therefore, determining a *sufficient cause* of an effect can be done by observing more factual effect or consequent which also follows the same antecedent. To be noted here that the sufficient cause we have inferred here is merely of a high probability, not a certainty.

This paper is aimed at investigating how Indonesian writers, especially professional newspapers' editors employed their reasonings in their essays. Our choice of this study topic was motivated by the fact that I have frequently found weak reasoning during my readings on students' essay or thesis, as their thesis supervisor. And so are similar complaints from my colleagues on their thesis advisees' arguing skills. By studying this issue, we hope that the study result can be of an inspiration or a 'model' on how to reason well in their writing academic activities. Thus, they are expected to have a better basis of reasoning skill after reading such a study report.

2. Method

The approach which based this study is qualitative, by applying Content Analysis. Content Analysis is a technique to make inferences by identifying various specific characteristics of a text or message objectively, systematically, and generally (Krippendorf, 1989, 2009; Neuendorf, 2020; Parker & Holsti, 1970).

The data collection was conducted by documentation technique, by which the researchers selected the online editorial essays in Indonesian prominent newspapers. The data which have been collected were then analyzed based on the theoretical framework. The analysis is focused on discovering (i) the types of reason and (ii) the soundness of reasons employed by Indonesian writer (IW) in their essays. The former focused analysis was based on the theory of types of reasons by Inman and Gardner (1979) while the latter was based on the theory of formal logic (Jeffrey, 1967; Nolt, 1989).

3. Findings and Discussion

3.1 Types of Reasons Employed by Indonesian Writers

As to clarify, the term reason discussed here particularly refers to the basic element of argumentative essay, namely the writers' statements answering the question *why* in discussing the issue being discussed. As such, the terms *reason* and *cause* are commonly used in a closely related sense even though the latter is considered more precise one than the former in the account of the logic of causal relationship (Pearl, 2002).

From result of our data analysis, we found that there are four types of reason employed by Indonesian writers (IW) are (a) statement of *a means to an end*, (b) *a statement of cause*, (c) statement of *judgment based upon knowledge*, and (d) statement of condition.

The first type of reason found in the essay written by IW is statement of *a means to an end*, as discovered in the statement below.

(1) Dengan mencabut paspor tersebut, maka <u>warga Indonesia yang terlibat dalam kelompok ISIS tidak lagi berhak</u> <u>atas kewarganegaraannya di Indonesia</u>. [PIKIRAN RAKYAT, 5 Februari 2020].

In datum (1), there are two propositions whose logical relation is cause-effect. The bold-typed phrase, i.e. *Dengan mencabut paspor tersebut* 'By withdrawing the passport', is the proposition of reason or *antecedent* while the underlined clause, namely *warga Indonesia yang terlibat dalam kelompok <u>ISIS</u> tidak lagi berhak atas kewarganegaraannya di Indonesia* 'The Indonesian citizens who got involved in ISIS have been no more entitled to be Indonesian citizens' is the effect or consequent. The reason lies within datum 1 belongs to statement of a means to an end, which means that antecedent, i.e. withdrawing the passport, functions as a tool to achieve the goal as lying in the consequent, that is invalidating the Indonesian citizenship of those who got involved in ISIS. Therefore, those who got involved in ISIS are no more Indonesian.

The employed reason of *a means to an end* is also realized in two propositions which are accommodated in two sentences like datum (2).

(2) Namun, <u>mengantisipasi hal yang lebih buruk</u>, Senin (3/2/2020), Menteri Pertanian Agus Suparmanto, saat berada di Pasar Senen, Jakarta Pusat, menegaskan, membatasi impor sejumlah barang konsumsi dari China. Langkah ini diambil untuk mengantisipasi penyebaran virus korona. [Kompas, 5 Februari 2020]

Datum (2) shows three propositions of cause-effect which are linguistically realized in two sentences. The first sentence contains the antecedent that is the bold part as well as the consequent (the underlined part) while the second sentence is entirely the consequent. The antecedent or the reason is a type of statement of *a means to an end*. As such, the reason points to a measure taken by Indonesian government, i.e. screening a number of consumed goods imported from China prudently as a way to achieve two goals, namely (a) anticipating the worse situation, and (b) anticipating the spread of Corona Virus.

The next type of reason found in the essay written by IW is statement of *cause*, that is the antecedent is of an entity which directly or indirectly gives an impact to another one (Pearl, 2002). Such a type of reason can be discovered in a simple cause-effect relation as found in datum (3), in which the relation is realized in a single sentence. It contains two propositions, the antecedent (the bold-typed part) and the consequent (the underlined part). The writer argue that as given in the antecedent, i.e. 'the corona virus is massively and swiftly spread out', and such a situation will bring about ' a negative effect on global economy', as stated in the consequent.

(3) Virus korona yang lebih masif dan cepat penyebarannya, dipastikan berdampak <u>pada perekonomian global</u>.[Kompas, 5 Februari 2020]

Another type of reason containing a statement of cause is found in datum (4). As shown in the proposition of antecedent (the bold-typed clauses) is 'the outburst of the new corona virus 2019-nCOV reaches as many as 17,391 cases found in 24 countries and the majority is found in china as many as 17,238'. This outburst, as stated in the consequent which is underlined, causes 'serious health diturbances as many as 2.296 cases and deaths as many as 361 cases'.

(4) Berdasarkan data WHO per 3 Februari 2020, penyebaran virus korona tipe baru 2019-nCOV yang terdeteksi positif mencapai 17.391 kasus di 24 negara. Sebanyak 17.238 kasus terjadi di China. <u>Rinciannya, 2.296 orang mengalami gangguan kesehatan serius, 361 orang meninggal, dan sisanya positif terjangkit virus.</u> [Kompas, 5 Februari 2020]

Still another type of reason containing a statement of cause is found in datum (5).

(5) Kebijakan China memperpanjang libur Imlek hingga 2 Februari 2020 dipastikan <u>mengganggu kegiatan</u> <u>produksi barang</u>. Kekhawatiran ini semakin serius karena Suzhou, kota industri utama seperti Wuhan di dekat Shanghai, memperpanjang liburan hingga 8 Februari, sehingga jika pabrik di China tertatih-tatih, <u>dunia akan</u> <u>terdampak</u>. [Kompas, 5 Februari 2020]

Datum (5) shows the cause-effect relations of three propositions of antecedents (the bold-typed parts), namely (a) The China's policy which prolongs the *Imlek* holiday schedule up to February, 2, 2020, and (b) China's main city like *Suzhou*, as the main industry and located near by *Shanghai*, also prolongs the holiday schedule until February, 8. This China's policy will affect the world's business in general as stated within the consequent (the underlined part).

The next reason of *a statement of cause* employed by IW is sometimes realized in more complicated cause-effect relationship like datum (6). The cause-effect in (6) shows relations of two propositions of antecedents (the bold-typed part) with three propositions of consequents (the underlined part). Here, the essayist argues that the two measures taken by the Indonesian foreign minister and government, namely (a) closing the flight from and to China

and (b) temporary withdrawal of free Visa from China will affect (a) the tourism performance of Indonesia, (d) global economy, and (e) the delay visits of about 3.400 tourism from China. The antecedents are reasons of *a statement of cause*, which mean the taken measures of Indonesian government potentially makes some effects as given in the consequents.

(6) Menteri Luar Negeri Retno LP Marsudi, Minggu (2/2/2020), di Bandara Halim Perdanakusuma, Jakarta Timur, menegaskan, terhitung sejak Rabu (5/2/2020) pukul 00.00, menutup penerbangan langsung dari dan ke China. Pemerintah Indonesia juga mencabut sementara fasilitas bebas visa dari China.

Hal ini diperkirakan bisa membawa dampak pada kinerja pariwisata. Berkaca pada wabah SARS-CoV dan MERS-CoV yang pernah terjadi pada 2002, virus korona yang lebih masif dan cepat penyebarannya dipastikan berdampak pada perekonomian global, termasuk pariwisata.

Indonesia mulai merasakannya. Indikasinya, Asita Bali melaporkan, sekitar 3.400 turis asal China batal berwisata ke Bali. [Kompas, 5 Februari 2020]

The last reason of *a statement of cause* found also shows more complicated cause-effect relation than found in datum (6). See datum (7) below.

(7) ¹Melihat perkembangan epidemi virus korona, <u>pemerintah terus memonitor dan mewaspadai perkembangan penyebaran virus</u>. ²Wabah ini dapat mengakibatkan <u>perlambatan pertumbuhan ekonomi China</u> sehingga harus diantisipasi *spill over* (perembesan) ke dalam negeri. ³Oleh sebab itu, jika kondisi itu terjadi, akan berpotensi menekan permintaan China terhadap ekspor Indonesia. [Kompas, 5 Februari 2020]

In datum (7), formally we can identify 3 sentences. The first sentence contains two propositions, i.e. : (a) 'the current state of corona virus epidemy' and (b) 'the Indonesian government keeps alert on the epidemy'. We can discover cause-effect relation in this sentence, that is proposition (a) is the antecedent of proposition (b). Next, the second sentence contains two propositions, namely (c) 'corona virus epidemy makes China economy sluggish' and (d) 'Indonesian government must anticipate the spill over of China's economic sluggishness'. Up to this point, we found that there two cause-effect relations. The first relation is between propositions (a) and (c) while the second is the relation between propositions (c) and (d). Thus, proposition (c) here has two functions, as the antecedent and the consequent as well. The last sentence contains one proposition, namely (e) 'The potential spillover of China's economic sluggishness may squeeze the China's demand on Indonesian export. Here, we can see a cause effect relation of propositions (d) and (e).

The next type of reason discovered in the essay written by IW is statement of *judgment based upon knowledge*, whose antecedent expressing a judgment, specifically based on knowledge.

(8) Terhitung sejak 30 Januari 2020, Organisasi Kesehatan Dunia (WHO) resmi menyatakan virus korona sebagai darurat internasional. Virus ini dinilai telah menjadi ancaman serius dalam kesehatan publik global dan <u>WHO</u> <u>menyiapkan langkah penanganan lebih lanjut</u>. [Kompas, 5 Februari 2020]

Datum (8) contains two sentences which contains three propositions, two of which are the antecedents (the boldtyped part) and the other is the consequent (the underlined part). Both antecedents, (a) 'WHO officially declares Corona virus as an international emergency' and (b) 'This virus has been a serious threat for global public health', are of reasons which are the statements of judgment given based on knowledge. The judgements were issued by a commission whose members are experts who have strong basis of sciences of health and pathological diseases. Because of such global emergency and threat, 'WHO prepare some prospective measures to overcome the virus problems', as stated in the consequent.

The last type of reason discovered in the essay written by IW is statement of condition as found in datum (9).

(9) WNI memang dilarang ikut dalam perang untuk kepentingan negara lain, jadi kalau ada WNI ikut perang dengan sukarela, <u>itu bisa terancam kehilangan paspor</u>. [PIKIRAN RAKYAT, 5 Februari 2020]

The reason or antecedent in datum (9) refers to a statement of a condition of law which must be fulfilled by the Indonesian citizen, that is they are not allowed to a combatant for the other countries' interests. As the consequent, 'if such a rule is violated, the violator will lose his passport'.

3.2 The Soundness of Reasoning Made by Indonesian Writers in Their Essays

The soundness of reasoning in this study refers to the truth values lying in the statements or propositions which are intentionally interrelated as a cause-effect relation by the IW. In formal logic, a cause-effect relation is formally equivalent to logical condition, indicated by natural language *if*... *then*, in which two simple propositions, p as an *antecedent* and q as *consequent* are joined and symbolically visualized by $\lceil Cpq \rceil$ (Jeffrey, 1967; Pearl, 2002).

In this study, the soundness of the IW's reasoning was determined by inferring whether the value of $\lceil Cpq \rceil$ is true or false. When its value is true, then the reasoning is considered being sound, and not when the other way round. Seeing the table of truth values of *conditional logic*, the decision of the truth value of $\lceil Cpq \rceil$ was made. Since the soundness of argument in this study is perceived logical view, thus the analysis merely confined to the data of cause-effect relations whose statements are factual rather than inferential. The data are those whose reasons are *a statement of cause* and *a statement of judgement based on knowledge*. The results of analysis is presented in table 1.

As we see in the table, most reasonings of the cause-effect statements made by IW in their essays are sound, considering that 9 reasonings underlying the cause-effect relations made by IW are undoubtedly sound since their truth values of the logical condition $\lceil Cpq \rceil$ are derived from the antecedent and consequent whose values are true. As seen on the truth table, the truth value of $\lceil Cpq \rceil$ is always true if the antecedent is *true* and the consequent is also *true* (Hitchcock & Pearl, 2001).

On other hand, the soundness of reasonings used in data 3, 5b, and 7d cannot be determined because their consequents are respectively non-factual statements. Therefore, their truth values cannot be determined. However, it does not mean that there are reasoning errors lying within them since the antecedents' truth values are true. Referring to the truth table, we know that value of $\lceil Cpq \rceil$ is false when the consequent is also *false*. Since the consequents could be potentially true or false, then the logical condition $\lceil Cpq \rceil$ still has a chance of being true.

| Table 1. The Truth Values of Antecedent (p), Consequent (p), And Condition | Cpq | of the Cause-Effect Statements |
|--|-----|--------------------------------|
| made by IW | | |

| Datum | Value of p | Value of q | Value of $\lceil Cpq \rceil$ |
|-------|--|---|------------------------------|
| 3 | Virus korona yang lebih masif dan cepat penyebarannya (T) | lan cepat Ia berdampak pada perekonomian global (?) | |
| 4 | a) Penyebaran virus korona tipe baru 2019- nCOV yang terdeteksi positif mencapai 17.391 kasus di 24 negara. (T) | Rinciannya, 2.296 orang mengalami gangguan kesehatan serius, 361 orang meninggal, dan sisanya positif terjangkit virus. (T) | (T) |
| | b) Sebanyak 17.238 kasus terjadi di China. (T) | | (T) |
| 5 | a) Kebijakan China memperpanjang libur Imlek hingga 2 Februari 2020 (T) | a) Perpanjangan libur mengganggu kegiatan produksi barang. (T) | (T) |
| | b) Suzhou, kota industri utama seperti Wuhan di dekat Shanghai, memperpanjang liburan hingga 8 Februari (T) | b) dunia akan terdampak. (?) | (?) |
| 6 | a) Menteri Luar Negeri Retno LP Marsudi, Minggu (2/2/2020), di Bandara Halim Perdanakusuma, Jakarta Timur, menegaskan, terhitung sejak Rabu (5/2/2020) pukul 00.00, menutup penerbangan langsung dari dan ke China. (T) | a) Hal ini diperkirakan bisa membawa dampak pada kinerja pariwisata. Berkaca pada wabah SARS-CoV dan MERS-CoV yang pernah terjadi pada 2002, virus korona yang lebih masif dan cepat penyebarannya dipastikan berdampak pada perekonomian global, termasuk pariwisata. (T) | (T) |
| | b) Pemerintah Indonesia juga mencabut sementara fasilitas bebas visa dari China. (T) | b) Indonesia mulai merasakannya. Indikasinya, Asita Bali melaporkan, sekitar 3.400 turis asal China batal berwisata ke Bali. [Kompas, 5 Februari 2020] (T) | (T) |
| 7 | a) Epidemi virus korona berkembang (T) | ke Bali. [Kompas, 5 Februari 2020] (T) a) pemerintah terus memonitor perkembangan penyebaran virus. (T) | (T) |
| | b) Epidemi virus korona berkembang (T) | b) Pertumbuhan ekonomi China lambat (T) | (T) |
| | c) Pertumbuhan ekonomi China lambat (T) | c) Pemerintah harus diantisipasi spill | (?) |

| | | <i>over</i> (perembesan) ke dalam negeri. (T) | |
|---|--|--|-----|
| | d) Pemerintah harus diantisipasi <i>spill over</i> (perembesan) ke dalam negeri. (T) | d) permintaan China terhadap ekspor Indonesia bisa tertekan (?) | (T) |
| 8 | Terhitung sejak 30 Januari 2020, Organisasi Kesehatan Dunia (WHO) resmi menyatakan virus korona sebagai darurat internasional. Virus ini dinilai telah menjadi ancaman serius dalam kesehatan publik global (T) | WHO menyiapkan langkah penanganan lebih lanjut.(T) | |

4. Conclusion

The professional writers must have unique reasoning skill in creating a strong argument in their commercial essays. Thus, such a study attempts to reveal their unique ways to reason. The analysis is focused on discovering (i) the types of reason and (ii) the soundness of reasons they employed. The types of reason found in the essay written by IW are (a) statement of *a means to an end*, (b) *a statement of cause*, (c) statement of *judgment based upon knowledge*, and (d) statement of condition. Meanwhile, the soundness of most reasonings of the cause-effects made by IW in their essays is logically good.

Conducting an analysis on the reasoning element of the editorial essays made by professional writers could be beneficial for those who teach writing as well as for those who learn to write. The teacher can reap strategies of reasoning from those skilled writers that can be a practical learning source for the learners. It is expected that such a practically reasoning strategies of the professional indirectly affect the writing beginners' reasoning skill development, which is vital in producing a profoundly reasoned essay.

References

Arnao, D. (2018). Essay Structure. Universidad de La Sabana.

- Bird, O. (1969). Aristotle's Theory of the Syllogism. *Philosophical Studies*. https://doi.org/10.5840/philstudies196918065
- Brachman, R. J., & Levesque, H. J. (2004). Knowledge Representation and Reasoning. In *Knowledge Representation and Reasoning*. https://doi.org/10.1016/B978-1-55860-932-7.X5083-3
- Chapman, S. (2000). Philosophy for Linguists: An introduction. London & New York: Routledge.
- Essay Writing. (2012). In Media Law. https://doi.org/10.4135/9781446212592.n20
- Farrier, D. (2014). Writing an essay. In *The Edinburgh Introduction to Studying English Literature: Second Edition*. https://doi.org/10.1007/978-1-349-14750-2_7
- Gardner, I. (1979). Aspects of Composition. Ney York: Harcourte Brace Jovanovich.
- Hayes, B. K., Heit, E., & Swendsen, H. (2010). Inductive reasoning. *Wiley Interdisciplinary Reviews: Cognitive Science*. https://doi.org/10.1002/wcs.44
- Hitchcock, C., & Pearl, J. (2001). Causality: Models, Reasoning and Inference. *The Philosophical Review*. https://doi.org/10.2307/3182612
- Jeffrey, R. (1967). Formal Logic: Its Scope and Limits. In Formal Logic: Its Scope and Limits.
- Krippendorf, K. (1989). Methodology, Content Analysis: An Introduction to its. International Encyclopedia of Communication.
- Krippendorf, K. (2009). Testing the Reliability of Content Analysis Data: What is Involved and Why. In *The Content Analysis Reader*.
- Mody, S., & Carey, S. (2016). The emergence of reasoning by the disjunctive syllogism in early childhood. *Cognition*. https://doi.org/10.1016/j.cognition.2016.05.012
- Morreau, M. (2009). The hypothetical syllogism. *Journal of Philosophical Logic*. https://doi.org/10.1007/s10992-008-9098-y
- Neuendorf, K. A. (2020). The Content Analysis Guidebook. In *The Content Analysis Guidebook*. https://doi.org/10.4135/9781071802878

Nolt, J. (1989). Formal Logic. Teaching Philosophy. https://doi.org/10.5840/teachphil1989124112

- Parker, E. B., & Holsti, O. R. (1970). Content Analysis for the Social Sciences and Humanities. *American Sociological Review*. https://doi.org/10.2307/2093233
- Pearl, J. (2002). Reasoning with cause and effect. AI Magazine.
- Ricco, R. B., & Overton, W. F. (2012). Reasoning. In *Encyclopedia of Human Behavior: Second Edition*. https://doi.org/10.1016/B978-0-12-375000-6.00300-1
- Wingate, U. (2012). "Argument!" helping students understand what essay writing is about. *Journal of English for Academic Purposes*. https://doi.org/10.1016/j.jeap.2011.11.001

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).