

POLICY NOTES

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Fake news, its dangers, and how we can fight it

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As the coronavirus disease 2019 (COVID-19) outbreak began to wreak havoc on the Philippines and across the globe, Tedros Adhanom Ghebreyesus, director-general of the World Health Organization, said at the 2020 Munich Security conference that the world is not just fighting a pandemic but also an infodemic (Lancet 2020). Ghebreyesus was referring to the barrage of false information that was spreading faster than COVID-19, undermining efforts to arrest the transmission of the deadly disease.

Infodemic is synonymous with misinformation and disinformation, two different yet related concepts more widely known as 'fake news' and part of the so-called 'information disorder'.

But what really are they? Why would people believe in fake news and share it? How has fake news affected the pandemic response? What has been the impact of fake news on the economy? How can it be controlled?

This *Policy Note* explains the phenomena of misinformation and disinformation, the dangers they pose, particularly in the context of the COVID-19 pandemic, and measures being implemented by the public and private sectors to curb the spread of fake news. It also provides some policy recommendations on how to fight fake news with more sustained and lasting results as the end goal.

Salient Points:

- Fake news existed even in the olden days. But what
 makes it different now is the ease with which it is
 produced, spread, and multiplied, given modern
 communication tools, particularly social media.
- The damage inflicted by fake news can be serious, and its ramifications far and wide, as news could travel more quickly on social media, especially sensational stories, which most disinformation producers invent in selling fake news.
- Increasing awareness of available tools for fact-checking, engaging citizens, educating children to be analytical early on in life, making media literacy part of the basic education curriculum, and viewing the fight against fake news as a civic and moral responsibility are crucial to combat the proliferation of fake news in a sustainable manner.

Fake news and the motivations behind it

There are two kinds of fake news: (1) misinformation or "the dissemination of false information, even if not deliberate or malicious, based on unsubstantiated conjecture and in light of various considerations" and (2) disinformation or "false information [that] is

spread deliberately and maliciously for personal gain or to cause damage to another party" (Schulman and Siman-Tov 2020, p.2). Examples of content that fall under disinformation are false context, imposter content, manipulated content, and fabricated content (Wardle and Derakhshan 2018). The distinction between misinformation and disinformation suggests that the spread of fake news may not be intentional, but its production could be deliberate or planned.

Belief in fake news

Cognitive psychology and behavioral research offer several explanations on why people would naively believe in false information. As can be gleaned from the summary of theories in Table 1, the reasons are linked to the perception of accuracy as a result of repeated exposure to the information (Vasu et al. 2018; Fazio et al. 2019); the perception of the source's credibility (Pornpitakpan 2004); the effect of delusion (Bronstein et al. 2019), ideological predispositions (Vasu et al. 2018), beliefs and values (Vasu et al. 2018), and religious orientation (Bronstein et al. 2019); indifference to truth, also known as 'bullshit receptivity' (Pennycook and Rand 2019); the tendency to overclaim one's knowledge of general information (Pennycook and Rand 2019); and the lack of reflective reasoning (Pennycook and Rand 2019).

Table 1. Why people believe in fake news according to cognitive psychology and behavioral research

Theory	Explanation
Illusory truth effect (Vasu et al. 2018; Fazio et al. 2019)	People tend to believe that the information is true when they are repeatedly exposed to it, increasing the perception of accuracy.
Source effect (Pornpitakpan 2004)	People tend to believe the information provided by those whom they perceive as credible.
Primary effect (Vasu et al. 2018)	People tend to form conclusive opinions as a result of information that they first acquired.
Ideology effect (Vasu et al. 2018)	People tend to believe in information that is aligned with their ideological predispositions.
Confirmation bias (Vasu et al. 2018)	People tend to seek or interpret evidence that is aligned with their beliefs and values.
Dogma or religion effect (Bronstein et al. 2019)	Dogmatic individuals and religious fundamentalists are more likely to believe false news.
Delusion effect (Bronstein et al. 2019)	Delusion-prone individuals are more likely to accept fake news because they have a low tendency to engage in analytic and open-minded thinking.
Lack of reflective reasoning (Pennycook and Rand 2019)	People who often fail to distinguish truth from falsehood often lack careful reasoning and relevant knowledge.
Bullshit receptivity (Pennycook and Rand 2019)	People who have no concern for truth are more likely to believe in fake news.
Overclaiming (Pennycook and Rand 2019)	People who tend to "self-enhance" when asked about their familiarity with general knowledge tend to believe in fake news.

Sources: Pennycook and Rand (2021) with additional references

In an interview, Jeff Hancock, a scholar at Stanford University, explained the connection between distressing situations, such as a global health emergency and the increased propensity to believe in fake news. According to Hancock, people are particularly drawn to false information unintentionally to ease their anxiety or feeling of insecurity (De Witte 2020).

Sharing of fake news

In terms of the motivations for sharing fake news, these can either be unintentional or deliberate. Again, drawing from cognitive psychology research, it can be the effect of bullshit receptivity or the "I don't care if it is true or not" attitude. Individuals who exhibit this behavior have no regard for truth and may readily share information regardless of whether they perceive it as truth or falsehood (Pennycook and Rand 2019).

Another explanation is the concept of virtue signaling or demonstrating one's good character by conveying opinions that will be acceptable to others, especially on social media (Cambridge Dictionary n.d.), or using 'moral talk' to enhance one's reputation (Westra 2021). When in excess, virtue signaling may lead one to make exaggerated claims to achieve status-seeking goals (Westra 2021).

Furthermore, both the production and dissemination of fake news can be intentional, as stated earlier, to cause harm (Wardle 2018) or for personal gain (Schulman and Siman-Tov 2020).

In addition, a study by Talwar et al. (2019) found several factors that determine fake news sharing on social media. These include high trust in the content on social media and openness to share information, even personal, online. Another predictor found is having a FOMO (fear of missing out) attitude, thus the desire to remain active online and be updated on the latest buzz, whether true or not. Finally, social media fatigue resulting from information overload can result in

physical and mental impairment and, consequently, less inclination to verify the information.

Moreover, Apuke and Omar (2021) analyzed the factors that led to the sharing of misinformation on COVID-19 in Nigeria. Their results showed that altruism or the desire to help others was the strongest predictor. Having a high altruistic attitude increases the propensity of sharing misinformation unknowingly to help others. This is consistent with the results of their earlier study in the same country, where they found that people unknowingly shared false information on the Ebola virus to offer a solution or provide a warning (Apuke and Omar 2020). Next to altruism, the desire to share information was the second strongest predictor. Other factors that they found were to build and keep social connections (heightened by the lack of face-to-face interaction during the pandemic), to seek information, and to pass the time.

Social media: A potent channel for spreading fake news

False information existed even in the olden times. It is as old as humanity. What makes fake news different now is the ease with which it is produced, spread, and multiplied, given modern communication tools, particularly social media. It is easy to disseminate information to a mass audience with social media, and it is also easy to access information.

Social media is also driven by the so-called "attention economy", whereby "anyone can become a vendor and profit from attention" (Ryan et al. 2020, p.8). First introduced by social scientist Herbert Simon, this concept treats human attention as a scarce commodity, with many information vendors vying for its attention. For example, in business, advertisers are usually sought to employ strategies to increase the audience's awareness of a brand and make them buy it repeatedly. The same is true with

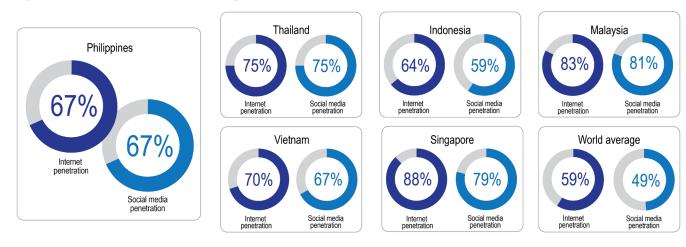
disinformation, whereby its producers' primary objective is to capture the audience's attention and manipulate them to spread false information by sharing it. Baccarella et al. (2018) said that what makes disinformation often appealing to many people is sensationalism. According to Petre et al. (2015), such a characteristic of disinformation is used by content producers to drive up web traffic for which they gain through advertising revenues.

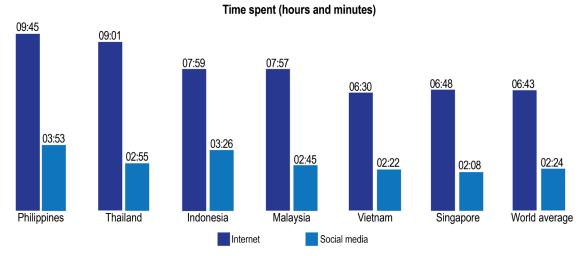
Finally, the ubiquity and accessibility of social media make it a potent channel for spreading fake news. Based on statistics compiled by We Are Social and Hootsuite, out of a total global population of 7.75 billion in 2020, 49 percent are active social media users, 59 percent have access to the internet, and 67 percent have access to a mobile phone. Zeroing on the Philippines, while it may not have the highest internet and social media penetration rates in Southeast Asia, Filipinos spend the longest hours online (Figure 1).

Fake news and COVID-19

Based on false information monitored by the International Fact-Checking Network (IFCN), an entity under the journalism research organization

Figure 1. Internet and social media penetration and use in selected Southeast Asian countries, 2020





Source: We Are Social and Hootsuite (2020)

Poynter Institute, Dang (2021) classified the content of fake news about COVID-19 circulating in several Southeast Asian countries as of May 25, 2020. As shown in Figure 2, most false information on COVID-19 circulating in the Philippines, Thailand, and Myanmar was about symptoms, diagnosis, prevention, and treatment measures, which comprised 32–46 percent of the fake news detected by IFCN in these countries. In contrast, the topmost content in Indonesia was political, religious, and ethnic-targeted fake news. False information related to the government's actions and regulation was the second most prevalent fake news monitored in the four

Southeast Asian countries, with the addition of false and misleading statistics in Thailand. Table 2 shows some examples of myths that have circulated about COVID-19.

It is not easy to quantify the impacts of false information, but one thing is certain, its ramifications are serious, and the effects are far and wide since news could travel more quickly on social media. In addition, sensational stories, which most disinformation producers invent in selling fake news, have a mass appeal, explaining why fake news could travel faster than real news.

Symptoms, diagnosis, 46% prevention, and treatment measures Government's actions 15% and regulations 10% 11% False and misleading 11% statistics Focusing on public 4% figures/influencers Political, religious, 10% 4% and ethnic-targeted fake news 4% Social, environmental, economic, and health impacts Origins Others 0 10 20 Philippines Thailand Indonesia Myanmar

Figure 2. Fake news detected in selected Southeast Asian countries, 2020 (% by type of content)

Source: Dang (2021)

Table 2. Examples of myths related to COVID-19

Category	Example
Prevention or treatment	Drink alcohol and alcohol-based cleaning products, bleach, and disinfectant
	Gargle with warm saltwater
	Inhale hot air from a hairdryer
	Eat ginger
	Use vitamins, teas, and essential oils
	Eat less meat and follow a vegetarian diet (India)
	Sit in the sun
Nature of COVID-19	Cannot withstand high temperatures
	Cannot live in hot or temperate regions
Conspiracy theories	The Chinese created the virus
	The United States created the virus to undermine the Chinese
	COVID-19 is a biological weapon
Vaccine side-effects and efficacy	Toxic and can cause death
	Can cause certain illnesses
	Can alter human DNA
	It is better to develop immunity by getting the disease than by getting vaccinated

Source: Author's compilation

Fake news about COVID-19 can expose individuals and communities to further health risks from not following the health protocols and not getting vaccinated. Likewise, it can instigate public panic, fear, and anxiety, creating a host of mental health issues.

In the United States (US), anti-ethnic sentiments against Asians linking them to COVID-19 have stimulated racial tensions and fueled xenophobic violence and discrimination (BBC 2021). In the early days of the pandemic, when little was known about COVID-19 and a lot of false information was circulating about prevention and treatment measures, there had been news of people drinking bleach or rubbing alcohol (Reimann 2020). A BBC article in August 2020 reported that based on a study published in the American Journal of Tropical Medicine and Hygiene,

around 5,800 people in the US had been hospitalized due to false information on social media, with many dying from consuming methanol or alcohol-based cleaning products (Coleman 2020).

News about the supposed health benefits of certain plants, such as ginger, in preventing COVID-19 infections also triggered an artificial spike in their prices, causing a global shortage (Nichols 2021). However, this sudden increase in world market demand has been beneficial for ginger farmers, as shown in a study in Northeast Thailand, although this good fortune has been constrained by transportation restrictions that affected input supply chains during the lockdowns (Wannaprasert and Choenkwan 2021). The opposite, however, happened in India. Its meat traders, particularly

poultry producers and sellers, were seriously affected by false claims circulated in April 2020 that eating vegetarian food and eliminating meat from the diet can prevent COVID-19 infections. According to Indian authorities, this misinformation contributed to losses of up to INR 130 billion or USD 1.8 billion to India's poultry industry (Menon 2020).

False information on social media could also cause unnecessary hoarding and panic buying. The usage of social media platforms was positively correlated with panic buying in a study by Arafat et al. (2021). In the health supply chain, Besson (2020) noted that the sudden increase in the demand for health supplies, such as masks and protective equipment, has disrupted the local and global supply, resulting in a market failure. It has become a seller's market where sellers and distributors dictate the prices and conditions. This situation, he explained, has reduced access to health supplies for low- and middle-income countries. The same can be said for the poor and marginalized groups within a country.

Before the pandemic, a study estimated that the global economy loses USD 78 billion each year from fake news circulating in the financial, public health, and business sectors, and politics (University of Baltimore and CHEQ 2019). Public health misinformation has cost the US alone USD 9 billion due to false information about vaccines and vaccine-preventable diseases.

What is being done to control fake news

In the area of regulation, the Revised Penal Code of the Philippines (Republic Act 10951) stipulated that the publication by any person of "false news which may endanger the public order, or cause damage to the interest or credit of the State" is punishable by law (Article 154, item 1).

Moreover, the *Bayanihan* to Heal as One Act, which already expired, had a fake news provision. It was absent in the succeeding Bayanihan law.

Before the pandemic, several pieces of legislation to fight misinformation were filed in Congress, such as House Bill 6022 and Senate Bill 1492. However, these did not gain traction in the legislative mill. Globally, regulations purportedly against misinformation remain contentious and controversial, given arguments that a fake news law could give the government too much power over free speech.

In terms of COVID-19, there have been websites dedicated to COVID-19 information resources or a special section on COVID-19 on the official websites of government agencies, international organizations, and the academe.

Moreover, fact-checking initiatives of local and international media organizations are also on the rise. Among these initiatives are those of the IFCN (https://www.poynter.org/ifcn/), Google (https://toolbox.google.com/factcheck/explorer), Factcheck.org (https://www.factcheck.org/), Facebook (https://www.facebook.com/journalismproject/programs/third-party-fact-checking/how-it-works), Rappler (https://www.rappler.com/moveph/webinar-fact-checking-coronavirus), Vera Files (https://verafiles.org/specials/fact-check), and FactRakers (https://www.factrakers.org/).

RAND Corporation has a comprehensive list of disinformation tools, such as fact-checking websites, applications, and browser extensions, that are publicly accessible (see https://www.rand.org/research/projects/truth-decay/fighting-disinformation/search.html).

What more can be done

Current interventions, particularly fact-checking initiatives, are undeniably helpful. However, more can be done to ensure sustained and lasting results.

 Increase awareness of available tools for fact-checking. While online fact-checking tools are available for free, familiarity and understanding

- of these tools are still low. Government agencies, academic institutions, and media networks should help in promoting them.
- 2. Strengthen citizen engagement. Misinformation is a whole-of-society problem. It is everybody's concern. It is not just an issue for the government to solve or for the tech companies to address. As such, it is vital to engage citizens in fact-checking. Capacitating citizens in fact-checking through continuous training and education is critical in sustaining the engagement.
- 3. Train children to be analytical early on in life to build a solid foundation. Based on cognitive psychology, the propensity to fall prey to fake news is linked to poor analytical thinking and reflective reasoning. Therefore, developing critical thinking skills among children and teaching them basic digital intelligence is essential. These should begin at a young age, both in the home and at school.
- 4. Make media literacy part of the basic education curriculum. Four bills have been filed in the Congress related to this, including House Bill 3986 (Life Skills Act), HB 4648 (Social Media Awareness in Schools and Universities Act), HB 5924 (Social Media Awareness Education), and HB 9482 (Media and Information Literacy Act). While there is a subject called Media and Information Literacy in the Senior High School program, it is a general course and not focused on developing media literacy skills.
- 5. View the fight against disinformation and misinformation as a civic and moral responsibility of all citizens. Everybody has a role to play in combatting fake news regardless of profession, socioeconomic status, and role in the home and community.

References

- Apuke, O.D. and B. Omar. 2020. Fake news proliferation in Nigeria: Consequences, motivations, and prevention through awareness. *Humanities and Social Sciences* 8(2):318–327.
- ———. 2021. Fake news and COVID-19: Modelling the predictors of fake news sharing among social media users. *Telematics* and Informatics 56:101475.
- Arafat, S.M.Y., A.R. Ahmad, H.R. Murad, and H.M. Kakashekh. 2021. Perceived impacts of social media on panic buying: An online cross-sectional survey in Iraqi Kurdistan. *Frontiers in Public Health*, May 10. https://www.frontiersin.org/articles/10.3389/fpubh.2021.668153/full (accessed on August 5, 2021).
- Baccarella, C.V., T.F. Wagner, J.H. Kietzmann, and I.P. McCarthy. 2018. Social media? It's serious! Understanding the dark side of social media. European Management Journal 36(4):431–438.
- Besson, E.K. 2020. COVID-19 (coronavirus): Panic buying and its impact on global health supply chains. https://blogs.worldbank.org/health/covid-19-coronavirus-panic-buying-and-its-impact-global-health-supply-chains (accessed on August 5, 2021).
- British Broadcasting Corporation (BBC). 2021. Covid 'hate crimes' against Asian Americans on rise. https://www.bbc.com/news/world-uscanada-56218684 (accessed on August 5, 2021).
- Bronstein, M.V., G. Pennycook, A. Bear, D.G. Rand, and T.D. Cannon. 2019. Belief in fake news is associated with delusionality, dogmatism, religious fundamentalism, and reduced analytic thinking. *Journal of Applied Research in Memory and Cognition*, 8(1):108–117.
- Cambridge Dictionary. n.d. Virtue signaling. https://dictionary.cambridge.org/us/dictionary/ english/virtue-signalling (accessed on August 4, 2021).

- Coleman, A. 2020. 'Hundreds dead' because of COVID-19 misinformation. https://www.bbc.com/news/world-53755067 (accessed on August 5, 2021).
- Dang, H.L. 2021. Social media, fake news, and the COVID-19 pandemic: Sketching the case of Southeast Asia. *Austrian Journal of South-East Asian Studies* 14(1):37–57.
- De Witte, M. 2020. People's uncertainty about the novel coronavirus can lead them to believe misinformation, says Stanford scholar. https://news.stanford.edu/2020/03/16/fake-news-coronavirus-appealing-avoid (accessed on April 15, 2020).
- Fazio, L.K., D.G. Rand, and G. Pennycook. 2019.
 Repetition increases perceived truth equally
 for plausible and implausible statements.

 Psychonomic Bulletin and Review 26:1705–1710.
- House Bill 3986. 2019. An act to include in the curricula of all public and private high schools and colleges a course on necessary life skills. Quezon City, Philippines: House of Representatives.
- House Bill 4648. 2019. An act incorporating the value of responsible, fair, and truthful usage and enjoyment of social media in schools and universities and for other purposes (Social Media Awareness in Schools and Universities Act of 2019). Quezon City, Philippines: House of Representatives.
- House Bill 5924. 2020. An act incorporating the value of responsible, fair, and truthful usage and enjoyment of social media in schools and universities and for other purposes (Social Media Awareness Education Act). Quezon City, Philippines: House of Representatives.
- House Bill 6022. 2017. An act prohibiting the creation and distribution of false news (Anti-Fake News Act of 2017). Quezon City, Philippines: House of Representatives.

- House Bill 9482. 2021. 2021. An act integrating media and information literacy in basic education curriculum (Media and Information Literacy Act).

 Quezon City, Philippines: House of Representatives.
- Menon, S. 2020. Coronavirus: The human cost of fake news in India. https://www.bbc.com/news/world-asia-india-53165436 (accessed on August 5, 2021).
- Nichols, J. 2019. Ginger prices skyrocket to record highs amid worldwide shortage. https://www.abc.net.au/news/rural/2021-02-07/covid-19-ginger-shortage-drives-prices-to-record-highs/13124794 (accessed on August 5, 2021).
- Pennycook, G. and D.G. Rand. 2019. Who falls for fake news? The roles of bullshit receptivity, overclaiming, familiarity, and analytic thinking. *Journal of Personality* 88(2):185–200.
- ———. 2021. The psychology of fake news. *Trends in Cognitive Science* 25(5):388–402.
- Petre, C. 2015. The traffic factories: Metrics at Chartbeat, Gawker Media, and The New York Times. New York City, NY: Tow Center for Digital Journalism, Columbia University. https://academiccommons.columbia.edu/ doi/10.7916/D80293W1 (accessed on August 4, 2021).
- Pornpitakpan, C. 2004. The persuasiveness of source credibility: A critical review of five decades' evidence. *Journal of Applied Social Psychology* 34(2):243–281.
- Reimann, N. 2020. Some Americans are tragically still drinking bleach as a coronavirus 'cure'. https://www.forbes.com/sites/nicholasreimann/2020/08/24/some-americans-are-tragically-still-drinking-bleach-as-a-coronavirus-cure/?sh=f190276748d9 (accessed on August 5, 2021).
- Republic Act 10951. 2017. The revised penal code, as amended. Manila, Philippines: Republic of the Philippines.
- Ryan, C.D., A.J. Schaul, R. Butner, and J.T. Swarhout. 2020. Monetizing disinformation in the attention economy: The case of genetically modified organisms (GMOs). *European Management Journal* 38:7–18.

- Schulman, R. and D. Siman-Tov. 2020. From biological weapons to miracle drugs: Fake news about the coronavirus pandemic. INSS Insight No. 1275.

 Tel Aviv-Yafo, Israel: Institute for National Security Studies. https://www.jstor.org/stable/resrep23529 (accessed on April 8, 2020).
- Senate Bill 1492. 2021. An act penalizing the malicious distribution of false news and other related violations. Pasay City, Philippines: Senate of the Philippines.
- Talwar, S., A. Dhir, P. Kaur, N. Zafar, and M. Alrasheedy. 2019. Why do people share fake news? Associations between the dark side of social media use and fake news sharing behavior. *Journal of Retailing and Consumer Services* 51:72–85.
- The Lancet. 2020. Editorial. https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30565-X/fulltext (accessed on August 4, 2021).
- University of Baltimore and CHEQ. 2019. Economic cost of bad actors on the internet. https://s3.amazonaws.com/media.mediapost.com/uploads/EconomicCostOfFakeNews.pdf (accessed on August 5, 2021).
- Vasu, N., B. Ang, T-A Teo, S. Jayakumar, M. Faizal, and J. Ahuya. 2018. Human fallibility and cognitive predispositions. In *Fake news: National security in the post-truth era*. Singapore: S. Rajaratnam School of International Studies, Nanyang Technological University.

- Wannaprasert, P. and S. Choenkwan. 2021. Impacts of the COVID-19 pandemic on ginger production: Supply chains, labor, and food security in Northeast Thailand. *Forest and Society* 5(1):120–135.
- Wardle, C. 2018. Information disorder: The essential glossary. Cambridge, MA: Harvard Kennedy School. https://firstdraftnews.org/wp-content/uploads/2018/07/infoDisorder_glossary.pdf?x30563 (accessed on July 25, 2021).
- Wardle, C. and H. Derakhshan. 2018. Module 2.

 Thinking about 'information disorder':

 Formats of misinformation, disinformation, and mal-information. In *Journalism*, 'fake news', and disinformation. Paris, France: United Nations Educational, Scientific and Cultural Organization. https://en.unesco.org/sites/default/files/journalism_fake_news_disinformation_print_friendly_0.pdf (accessed on August 8, 2021).
- We Are Social and Hootsuite. 2020. Digital 2020: Global digital overview. https://datareportal. com/reports/digital-2020-global-digital-overview (accessed on July 25, 2021).
- Westra, E. 2021. Virtue signaling and moral progress. https://www.researchgate.net/publication/348818977_Virtue_Signaling_and_Moral_Progress (accessed on August 8, 2021).

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