Internet Governance in the "Post-Truth Era":
Analyzing Key Topics in "Fake News" Discussions at IGF

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Abstract

The governance of information sharing online is a complicated issue, especially in context of varying global perspectives on speech rights, freedom of expression, the role of news media, and core internet values. While discussions of misinformation/disinformation and their like have existed for millennia, 2016 marked a move into what some have called a "post-truth era," where information, both true and not, has become weaponized for political gain. This paper seeks to examine how discussions at the UN Internet Governance Forum unfold by analyzing transcripts of misinformation sessions from 2016 to present, asking (1) What key terms frequent these discussions? (2) Have and how have these frequent terms evolved over time? (3) To what an extent is the concept of a "truth" framework represented at IGF? Applying the CRISP-DM approach to text mining, I find that overall prominent terms are "internet" and "people," though the frequent terms vary differently when analyzed by year, showing an evolution of the discussion from 2016— "rights" and "journalists"—to 2019— "data" and "content." Finally, a "truth" model and a "fake" model show different focuses in approach in these discussions.

Introduction

Near the end of 2016, the Oxford English Dictionary declared "post-truth" as the word of the year. It is defined as: "relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief" (Oxford English Dictionary). According to the OED, the term's usage increased over 2000% since the previous year—most likely in relation to the UK's referendum to leave the European Union and the US Presidential election, both events which were shrouded in mis/disinformation and propaganda campaigns. Often used in the phrase "post-truth politics" to refer to the highly polarized and vitriolic political and public discourse of the recent years, the implication in the OED's definition and designation, is that we have entered an era where not only is truth hard to find, but even more worrisome, where truth has become irrelevant. Or in the words of an (in)famous 2018 sound bite from Rudy Giuliani, "Truth isn't truth" (Phillips 2018).

So then, in a "post-truth" global society where false reporting, propaganda machines, biased algorithms, malicious applications of artificial intelligence, weaponized social media bots, and deceptive information campaigns abound, how do we determine what is "true"? And how do we govern this "truth?" Should, and if so, how should the mass proliferation and dissemination of falsehoods be mediated and governed? One of the major internet governance policy issues today centers on this critical and urgent question of regulation and at what level: local, national, international. There are robust global policy implications in how "truth" and "fake news" is governed online, by whom, and what effect this may have on internet users and citizens alike.

In fact, the ability to make truth-claims is a fundamentally political process. "Fake news" is the new rhetoric of today, as it is wielded as a force through which leaders and governments can dismiss news media and/or silence speech online. The most recent iteration of "fake news" is as a rhetorical strategy to discredit and dismantle news media. Used in this way, politicians or leaders claim that any information or news reporting with which they disagree is "fake." When

calls of "fake news" are used against credible news sources following good journalistic practices to ensure accuracy and truth, this "fake news" rhetoric erodes the public's trust in news media, which can have profound consequences. While some might dismiss the labeling of "fake news" on journalists and news outlets as inconsequential political bluster, it is indeed as much a threat to democracy and an informed citizenry as disinformation and propaganda, as this rhetorical strategy undermines the news media, and more alarmingly, it obscures truth.

The overall issue is the expansive aspect of the "fake news" crisis, both in terminology and in application. For this reason, I use quotes to refer to "fake news," considering it a larger phenomenon, rather than a singular entity. "Fake news" has become an umbrella term to capture everything from targeted advertisements to propaganda campaigns to a news article with which a world leader does not agree. It is this expansive application of the term—which ropes in many similar, but separate subjects—that makes the study of discussions regarding "fake news" difficult. And further, at a higher scale, this expansive quality of the term makes it more difficult for policymakers and users to combat the growing problem.

The idea of reporting truth is, for many, the central purpose and goal of an impartial news media, which in turn helps inform the public, which in turn allows the public to hold those in power accountable. With this targeted approach on "truth" in "fake news" discussions, there is an opportunity to provide further insight into this "post-truth" era in order to help inform suggestions for policy regulation of information online. As such, this paper aims to help policymakers "see" and "hear" the key topics, themes, and words of "fake news" discussions at a global scale by analyzing transcripts from the Internet Governance Forum. In short, this paper aims to provide clarity in the dark umbra of "fake news" by beginning with a simple, but critical question: what do we really talk about when we talk about "fake news"?

This paper builds upon the work of Dr. Derrick Cogburn and uses as a model his text mining framework, where he makes the case for the application of text mining and big data analytics to internet governance (Cogburn 2019). He advocates for the methodological approach called the Cross-Industry Standard Process for Data Mining (CRISP-DM) for text mining, stating that since text mining "is still a relatively new and somewhat unstandardized field, the CRISP-DM approach can provide a well-understood, documented, and somewhat standardized process for executing and managing complex text mining projects" (Cogburn 2019). I agree that internet governance research can gain much from text mining studies and so, also apply the CRISP-DM methodology to this study. There are six stages to this methodology: (1) Determine the purpose of the study, (2) Explore the availability and nature of the data, (3) Prepare the data, (4) Develop and assess the models, (5) Evaluate the findings, (6) Deploy the results. For this study, the overall purpose is to shed insight on the major topics/priorities of addressing "fake news" in relationship to internet governance and specifically to shed insight on the frame and variables at play in the governance of truth.

Literature Review
From #Pizzagate to false reports of the Pope's endorsement of candidate Trump to conspiracy theories about Melania Trump's body double, "fake news" is indeed very real and on the rise. Granted, the stakes and consequences of the untrue information in each of the previous examples vary drastically, compounding the difficulty in formulating wide-scale policies addressing "fake news". Nevertheless, it is clear that there is an increasingly fraught relationship with facts, both in the news media and citizenry. The prevalence and pervasiveness of "fake news" contributes to a mis/disinformed public with very tangible effects in real life. In other words, the internet

phenomenon of "fake news" transcends the digital arena and leaps into the physical world when users take action in real life. This was the case with #Pizzagate: an armed gunman entered a crowded family restaurant because he had read a conspiracy online that claimed the restaurant was the site of a child trafficking ring (Fisher 2016). Even though these false claims have been repeatedly proven to be inaccurate, the #Pizzagate conspiracy has had remarkable longevity on social media, as again, nearly four years later, the conspiracy circulated on TikTok (Kang 2020). As the "fake news" crisis persists, so too does global leaders and governmental weaponization of "fake news" threats as a means through which to censor and discredit news media.

Truth and accuracy of the news are critical components in sustaining a democracy. To such an extent, in the United States, the First Amendment protects freedom of speech and freedom of the press. The various public values served by protecting speech are the dissemination of news, the ability of citizens to hold their government accountable, and availability/possibility of a marketplace of ideas (Franklin 2011). In particular, the principle of the marketplace of ideas comes from John Stuart Mill's theory that in a competition, truth will eventually win out over falsehoods, and that it is this very competition of ideas that will separate the truth from the lies (Mill 1859).

In today's online world, where people can share information via the internet and interact with others, the marketplace of ideas is larger and more active than ever. However, the technological affordances of this digital sphere introduce many new variables into the marketplace of ideas that previously did not apply. Two key factors are the speed and spread of information online (Nahon & Hemsley 2013). Or in contemporary lingo: virality. Even if one assumes that the marketplace of ideas still operates in a heavily networked society, its functionality has been subverted. Fake news and sensationalist news can spread faster, garnering more likes, shares, retweets, or hearts in filter bubbles than most investigative journalism (Vosoughli et al. 2018). Just as "fake news" is not a new phenomenon in itself, perhaps the truth will still win out eventually as Mill's market competition theory claims. But in today's fast-paced world, where real-life consequences can happen with the click of a button, "eventually" has dangerous, potentially life-threatening limitations.

Policymakers and technology companies need to account for the consequences of incredible speed and spread of information online, which is another complication in tackling the "fake news" crisis. Similarly, from a global perspective, many nations have vastly different perspectives on free speech and expression, and this greatly affects corresponding online speech policies as well as "fake news" policies (if any). The former brief consideration of the United States' First Amendment is simply one example of a country's consideration of freedom of expression.

Much of the dissemination of disinformation, propaganda, and general "fake news" takes place online on social media platforms such as Facebook, Twitter, WhatsApp, and others (Vaidyanathan 2018). A major concern regarding the "sharing" culture fostered and amplified by social media is the false or misplaced perception of credibility. If a family member posts something on social media, one might be more likely to believe or trust the post on its own as it came from a trusted source: family (Vaidyanathan 2018). Similarly, the amount of likes, hearts, follows, or other numerical quantification of a post can act as a false proxy for authority, credibility, and reliability of a source. In short, users are more inclined to trust posts with high engagement rather than fact checking or source checking on their own. This promotes an online culture of facticity, where filter bubbles and confirmation bias make things "feel" real and true. All of this compounded has created a robust breeding ground for sensationalistic "fake news" to

fester and spread, jumping from network to network, promoted alike by "trusted" sources like family and friends, and prioritized by technology companies' algorithms, which are designed to highlight content for engagement.

Further, an information paradox has emerged from the internet user: as technological advancements continue to increase, an interesting phenomenon has emerged: the more access we have to information and availability of fact-checking software, the more fake news and varying types of falsehoods emerge. A recent study found that "fake news headlines fool American adults about 75% of the time" (Silverman 2016). Reconcile this with the idea that approximately 70% of Americans also believe that they are not fooled by fake news (YouGov 2016). There is a stark discrepancy between the public's perception of the effectiveness of "fake news" in misleading readers versus the reality of how "fake news" can slip by unrecognized so often. This is a large part of the problem as it becomes very easy to dismiss the concern of fake news as being overly conflated. In an ironic twist, a 2017 viral study--which received wide-spread coverage in many reputable publications--that investigated how fake news goes viral was retracted two years later for being false, due to two errors in analyzes (Qui et al. 2019). This meta-analysis of "fake news" exemplifies some of the challenges in studying this phenomenon.

Social media companies have attempted to respond to the public backlash regarding the pervasiveness of fake news in various ways. For example, Facebook removed 1.5 billon fake accounts in 2018 alone and has implemented a background information button that allows users to "check" the publishers of a source posted from a friend (Wang 2018). Facebook's CEO, Mark Zuckerberg authored a piece in *The Washington Post* advocating new rules for the Internet, suggesting greater governmental oversight and involvement. Twitter has also removed millions of "fake" accounts and continues to monitor bot and fake account creation. Overall though, many are unsatisfied with the progress made by social media companies to check the rise of "fake news" and its like. The results are frustrated social media companies alongside frustrated and vulnerable users.

When it comes to moderating content such as "fake news" online, one concern is that the fear of the harms of censorship far outweigh the benefits of curbing speech's harms (Strossen 2016). As such, the role and responsibility of governing speech online has fallen to (or been pushed upon) the private platforms, as they each individually create and enforce their own speech standards. As legal scholar Kate Klonick argues, the best way to understand online speech is to "abandon traditional doctrinal and regulatory analogies and understand these private content platforms as systems of governance" (Klonick 2017). So, while Facebook founder Mark Zuckerberg may claim that he is not an "arbiter of truth," with the immense power of governing the content on their sites, the tech giants are indeed "The New Governors" of the online realm. Further, content moderation policies and guidelines and their enforcement are more than just a policing of speech online, these policies can fundamentally shape the content and form of speech online, and so content moderation policies are a critical component to examine in discussions of online speech and internet governance (Gibson 2019; Gillespie 2018).

One example of "fake news" content moderation: on May 26, 2020, President Donald Trump tweeted twice that mail-in ballots would lead to widespread voter fraud. Twitter, in an unprecedented move, labeled both tweets as "potentially misleading," adding a "get the facts about mail in ballots" option beneath each tweet, and linking to a fact-check list of news articles refuting the false claim (Fung 2020). This is the first time any major social media platform labeled a politician's posts as potentially untrue. Twitter emphasizes that its labels are to help provide "context" for information shared on its platform; further, instituted on May 11, 2020, the

misleading information label is just the latest of a series of updates this year to Twitter's approach to "misleading information," prompted by a blast of mis/disinformation shared on their platform during the coronavirus pandemic (Roth and Pickles 2020). Of note, President Trump promptly responded to Twitter's action by issuing the Executive Order on Preventing Online Censorship (White House 2020). This example demonstrates the challenges social media companies have in establishing their own mis/disinformation policies and resultant tensions with users, which in this case happened to be a government official.

One aspect of implementing "fake news" policies is that definitions of what actually constitutes "fake news" are widely varied, which complicates the discussion and consideration of the impact of "fake news." Further, the concept of fake news is not new and has a long history (Posetti & Matthews 2018). One of the most rigorous attempts at definitively classifying "fake news" was a 2017 study, which attempted to clarify confusion by examining how the term "fake news" was operationalized in academic articles from 2003 to 2017 to create a typology of the types of "fake news": news satire, news parody, fabrication, manipulation, advertising, and propaganda (Tandoc et al. 2017). Tandoc et al. focused their analysis of "fake news" by the author's intent to deceive and the level of facticity (the degree to which the "fake news" relies on facts). This typology indicates the nuanced variations of "fake news" and implies that a care should be taken in discussions of the "fake news" crisis, as there are key differences in intent, truth, and consequently, legal protections. Further, this study showed that despite efforts to study the same phenomenon of "fake news," there is a clear disparity even amongst scholars and researchers on what exactly constitutes "fake news" and what are the concerns and issues at stake.

Even though there are discrepancies on what exactly constitutes "fake news," there has been a clear global effort towards combatting the "fake news" epidemic in the past few years alone. A 2018 NATO Stratcom report details "Government Responses to the Malicious Use of Social Media" (Bradshaw et al. 2018). The report identified that since 2016, forty-three countries have proposed or implemented regulations that are "specifically designed to tackle different aspects of influence campaigns, including both real and perceived threats of fake news, social media abuse, and election interference" (Bradshaw et al. 2018). The approach, implementation, efficacy, and threat to human rights varies drastically by country, revealing that there is not yet a global consensus on how to confront the "fake news" crisis, and this further contributes to confusion and disagreement on how to govern truth online in a post-truth world.

Materials and Method
Text mining and big data analytics provide a robust and powerful opportunity for advancing research on internet governance. Additionally, now is a particularly ideal time to engage in big data studies because every moment enormous amounts of data are created, in many different forms, all of which offer opportunities for future study. To be clear, as big data analytics and text mining progresses, there needs to be a consideration of the ethics in such study— simply because data exist, does not mean that it should be used. Moreover, it is important to reminder that conceptually, big data is relative. That is to say, there is no magical number that once reached, data becomes officially classified as "big." Rather, when considered big data, researchers need to consider the three "V's" of big data: volume, variety, and velocity. Some data analysts also add an additional three considerations: veracity, value, and variability.

There are two main approaches to text mining: (1) statistical and (2) natural language processing (NLP). This paper uses the statistical approach, which is based on the "bag of words"

assumption, which assumes "there is value in the words themselves and does not require the analyst to understand the syntax of the words" (Cogburn 2019). The statistical approach employs both inductive and deductive methodologies/techniques. Inductive techniques allow for exploratory questions of a dataset whereas deductive techniques are confirmatory (Cogburn 2019). This study makes use of both inductive and deductive approaches to text mining.

This paper considers the Internet Governance Forum (IGF) as a case study for global discussions of "fake news," and mis/disinformation. IGF was mandated by the UN and since 2006 has held an annual convention, in various and changing locations across the globe. According to the IGF mission statement, the IGF "serves to bring people together from various stakeholder groups as equals, in discussions on public policy issues relating to the Internet. While there is no negotiated outcome, the IGF informs and inspires those with policy-making power in both the public and private sectors" (About IGF).

While there are several other global organizations, conventions, and initiatives that deal with internet governance issues, IGF is one of the foremost and largest. Of particular interest to this paper, is IGF's commitment to participation and involvement from the various members of the multistakeholder model of internet governance. Consequently, the annual conventions hold— as best as possible considering travel, financial, logistical, and time restraints—a well-rounded perspective of the varying interests of all those involved and interested in internet governance. For example, at the most recent IGF convening in Berlin in 2019, participants from the following stakeholder groups were present: civil society, government, press/media, technical community, private sector, legislators, and intergovernmental organizations. Moreover, over the five days of the conference, 3,679 delegates participated on-site with over 3,000 participants online, with delegates from over 161 countries (IGF 2019 Programme). In addition to making the conference available to attend online, IGF is working on increasing accessibility by publicly making available on their website the transcripts for all sessions, panels, workshops, and other events associated with IGF. In the most recent years, these transcripts have also been accompanied by video recording of many of the sessions. In this sense, the accessibility, inclusion, comprehensiveness, and diversity of IGF make it an ideal case to study as it provides one of the best opportunities available to analyze topics from a global perspective.

Research Questions
The purpose of this paper is to examine and analyze the major concerns/priorities in discussions of "fake news" in relationship to internet governance. Further, this paper contributes to the field a previously unexamined focus on the frame of "truth" as a novel approach to the "fake news" crisis. The research questions for this study are two inductive questions and one deductive question:

> RQ1: Overall, in this "post-truth" era (2016 onward) what key terms frequent internet governance discussions at IGF of mis/disinformation, "fake news," propaganda, and their like?
> RQ2: Since 2016, how have the terms and topics regarding "fake news" governance evolved or remained the same each year?
> R3: To what an extent is the concept of a "truth" framework represented at IGF?

Methodology

This paper applies the CRISP-DM methodology. In the second step of the CRISP-DM methodology, it is important to establish the availability and the nature of the data to be analyzed. In this case, as part of its commitment to transparency and inclusion, the IGF posts all of the transcripts from the annual conventions directly to the IGF website. As a result, the full text transcripts, and in some cases video with captions, are available for nearly every presentation from each annual convention. Further, all of the transcripts are organized by year, session, and title, making navigation of the transcripts very accessible.

This study analyzes all the transcripts from 2016 (the start of the "post-truth" era) to 2019 (the most recent IGF convention at the writing of this paper). To focus the study on discussions of "fake news" and related terms, the corpus of this study selected transcripts for sessions/panels/meetings on the following topics: misinformation/disinformation, "fake news," freedom of expression online, journalism online, internet policy and values, opening/closing statements, and organizational sessions. These transcripts were selected to gather all the available data on discussions of "fake news," its significance, and its repercussions at IGF conventions. In this sense, this data considered "big data" because it includes all the available data on the subject of study.

After selection, the corpus included a total of 81 transcripts of sessions/panels/meeting over the span of four annual conventions: 2016-2019. The total number of available IGF transcripts during this same time period was over 900. The breakdown of transcripts by year is represented in the table below:

Year	No. of Transcripts
2016	25
2017	25
2018	19
2019	12

Moving to step 3 of the CRISP-DM methodology, it is necessary to prepare the data. In order to analyze the "big data" set of these four years of IGF transcripts, I used R and R Studio to prepare, process, analyze, and visualize the data. There are other commercial tools available, as well as other open source tools that can be used for this type of analysis. R is one of the most popular tools as it is "free," has cross-platform capabilities, is extensible, and has a thriving community of users, practitioners, scholars, and programmers.

In order to use R and R Studio for text mining, first, the transcripts needed to be imported into the program and prepared in a manner conducive for text mining. While it is possible to use third-party extensions such as Selector Gadget or Site Sucker to download entire webpages or websites, for this study, to ensure accuracy, each individual transcript from the IGF website was manually downloaded as a txt file. Then, collectively, the txt files were read into R Studio and used to build a corpus, which involves converting the text data into numerical data. For this study, I used the tidyverse package, which is an increasingly popular collection of R packages designed for data science (Tidyverse). Once the corpus is built—meaning the transcripts have been imported and converted into tibbles, the tidyverse required format—then the data can be further prepared by "cleaning" the data for stop words, which are words that appear with high frequency, but have little significance in this study (e.g. "and," "the," "of," etc.).

To answer the R1 and R2, our two inductive questions, I employed a term frequency analysis. First, to the overall dataset of the four years of transcripts, and then secondly, I applied a term frequency analysis by year to determine changes in key terms, if any. This "count-based evaluation" is a common and often used approach to determine key terms of significance in a corpus.

To answer R3, the deductive research question, I applied categorization modeling, which is also referred to as dictionary development (Deng et al. 2017). In effect, "dictionary development requires is to develop a semantic structure that represents the concept one wants to explore within the dataset" (Cogburn 2019). Dictionaries can become quite complex as they can involve primary categories, sub-categories, and sub-sub- categories. As such, categorization modeling and dictionary development "is a very powerful technique to identify to the extent to which a specific concept the researcher is interested in exploring is either present or absent in the dataset" (Cogburn 2019).

For this study, I developed two categorization models: one for "truth" and one for "fake." In terms of categorization models, these were relatively simple dictionaries with just one level of categorization. However, each dictionary was thoroughly built for each of those concepts. For example, in building the "truth" dictionary, I engaged in an iterative process of searching the Oxford English dictionary for synonyms of "truth," the grammatical variations of these synonyms, and then proceeded to search for synonyms of the original synonyms and their grammatical variations, and continued until no new terms appeared. The same process was applied for the "fake" dictionary. Each dictionary is currently comprised of approximately 50 words. Both of these dictionaries were applied to the overall four-year dataset.

Limitations

While this study aimed to be as comprehensive in its relative scope as possible, there are limitations. This study focused on the sessions/panels/meetings that were dedicated to misinformation, disinformation, freedom of expression, and internet values and policies. It is likely that discussions of these topics are not limited to the focused thematic panels selected for this study, and key discussions on these topics may have arisen tangentially in other sessions, and so certain perspectives may have been missed in this study. Additionally, for technical reasons, some important discussions may not have been included in the transcripts available publicly on the IGF website. Lastly, this study focused on the "post-truth era," rather than the entire corpus of IGF annual conventions; future research may wish to investigate the overall evolution of "fake news" since the first IGF meeting in 2006.

Results

To answer the first research question, "In this "post- truth" era (2016 onward) what key terms frequent internet governance discussions at IGF of mis/disinformation, "fake news," propaganda, and their like?" I used a term frequency analysis to determine the most frequent words across all four years in the post-truth dataset. Figure 1 below represents the top twenty most frequent terms in sessions on misinformation/disinformation, "fake news," freedom of expression, and internet policy/value from IGF 2016-2019.
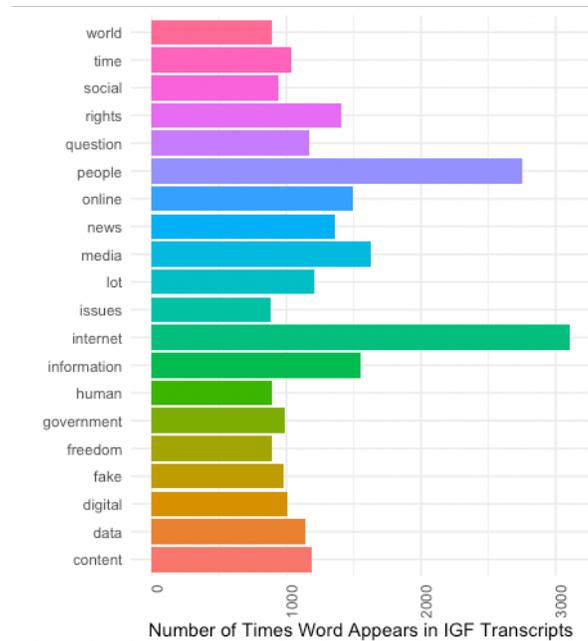
Figure 1. Key Terms from IGF 2016-2019

Here we see that, by far, the most frequent terms are "internet" and "people." The next most frequent terms respectively are tightly clustered: "media," "information," "online," and "rights."

Moving on to the second research question, "How have the terms and topics regarding "fake news" governance evolved or remained the same each year?" I examined the IGF dataset longitudinally by each year. The top 20 most frequent terms were identified for each year. Figures 2-5 represent the top terms for each year.
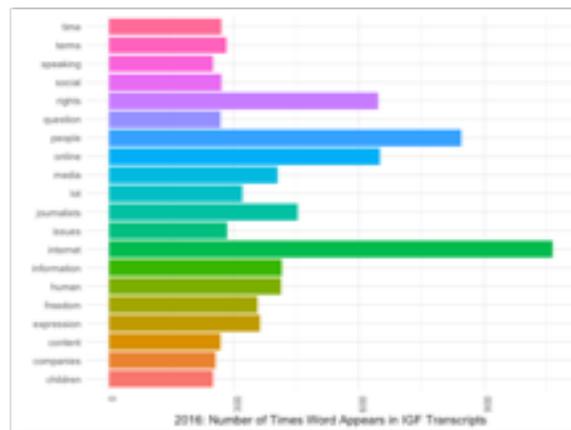
Figure 2. IGF Top Phrases 2016

In 2016, "internet" and "people" appear again as the top results, corresponding to the overall 2016-2019 term frequency analysis. The next most frequent terms are "rights," followed by "online" and "journalists." Of note is that the term "journalists" is not represented in the overall top terms at IGF and also, "journalists" does not appear again as a top term until 2019, where it is the twentieth most frequent term. Also of interest, the term "fake" does not appear in 2016,

though this is likely due to the fact that presentations for IGF would have needed to have been proposed prior to the surge in popularity of the "fake news" rhetoric.
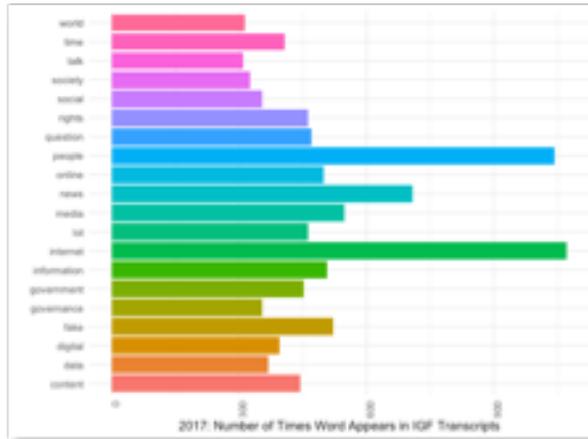
Figure 3. IGF Top Terms 2017.

In 2017, again "internet" is the top term, but "people" has jumped up and much more closely ranks second. The following top terms seem to mirror the surge in "fake news media" rhetoric during and following the 2016 election: "news," "media," "fake," and "government."
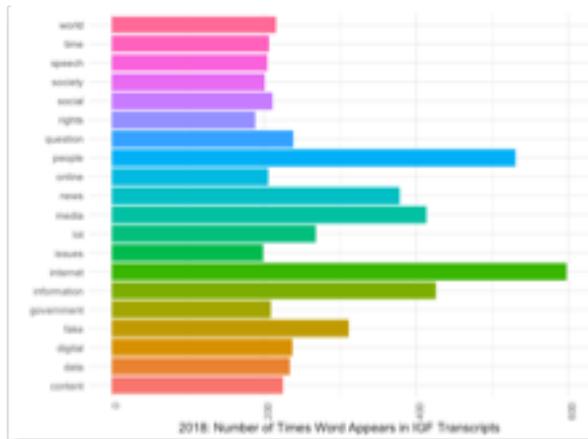
Figure 4. IGF Top Terms 2018

The 2018 top terms are similar to the 2017 results in that "internet" and "people" appear starkly above the other top terms. The next top terms are "information," "media," "news," and "fake." The other top 15 terms are very closely clustered together and have fairly equal representation in this 2018 analysis, which serves to highly the usage of the most frequent terms.
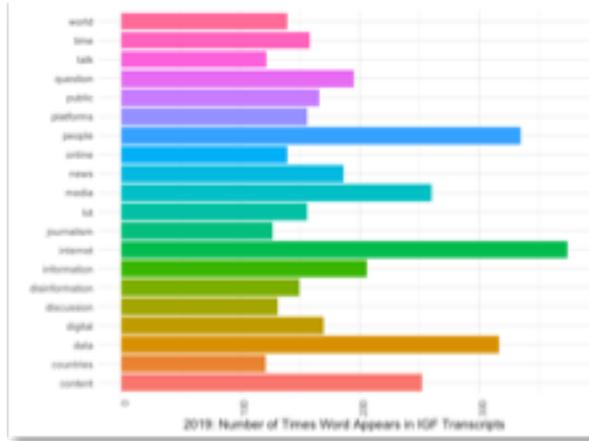
Figure 5. IGF Top Terms 2019

In 2019, again "internet" and "people" appear as the most frequent terms. However, "data" appears as a comparatively close third top term, which across all the years, is the term that has most closely been associated with the consistent top terms of "internet" and "people." The fourth and fifth key terms are "content" and "media" respectively. Also of interest as a top term is the return of "journalism." Additionally, "disinformation," "countries," "platforms," and "public" make their first appearance as top terms, marking not only a shift from the previous year, but since 2016. In relation to the previous years, the 2019 top terms seem to indicate a sharp refocusing of the "fake news" conversation, in particular to the stakeholders involved and to the issues addressed.

Next, to address the third research question, "To what an extent is the concept of a 'truth' framework represented at IGF?" I applied a categorization model, also called a "dictionary," that captured the primary categories of a "truth" model and also of a "fake" model (in practice, the "fake" model is more a representation of the opposite binary of truth, which is "lie/falsehood"). This study will allow us to see how the different models of misinformation/disinformation discussions are framed by focus on either truth or on lies. Epistemologically, these are very different concerns and approaches to this major topic, as upholding accurate and factual information sharing is aligned with, though different to, the concern with the dissemination of false and misleading information.
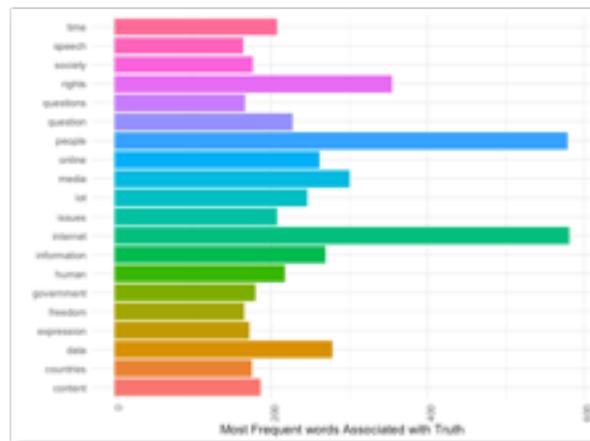
Figure 6. Top Terms in the "Truth" Model.

Most Frequent words Associated with Fake
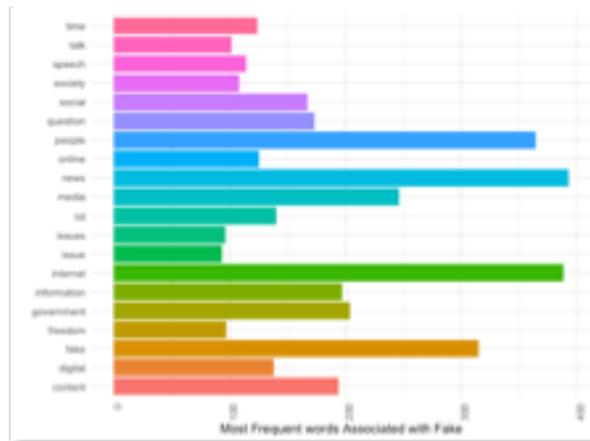
Figure 7. Top Terms in the "Fake" Model.

In the "Truth" model, we see the recurrent "internet" and "people" as top terms. The next top terms in the "truth" model are "rights," "media," "data," and "information." The top terms are also more closely clustered together in quantity. Of note, "truth" or a grammatical variation of the word, does not appear in the top terms. That is to say, even within the "truth" framework, the actual term of truth did not rank high in discussion.

Moving next to the "fake" model, the top terms results are more drastically varied with several terms appearing much more frequently than others. In this analysis, "news" appears as the top term, closely followed by the consistent "internet" and "people" terms. The next most frequent terms are "fake," "media," "government," and "information."

Discussion

In this study, I have sought to provide an analysis of the top frequent terms used in "fake news" discussions at IGF from 2016 onward, in this "post-truth era." The top most frequent terms overall, "internet" and "people," while broad in scope do suggest a high attention during discussions on the human aspect and impact of the "fake news" crisis, be it as users, consumers, producers, sharers, or some other role. And as expected at the *Internet* Governance Forum, much of this information sharing is online on the internet, which is indicated by the frequency of "internet" in these discussions. As such, the focus in discussion on the technology communication medium and the "people" using this technology are expected.

While not a component of the original research questions, the yearly breakdown of the corpus itself reveals an interesting trend in "fake news" discussions at IGF. Both 2016 and 2017—the de facto beginning of the "post-truth" era—had 25 transcripts in their data sets, suggesting that both years at IGF had a strong focus on "fake news" topics. However, surprisingly, just one year later in 2018, the quantity of transcripts on "fake news" topics dropped to 19, even though the overall number of panels presented at IGF stayed approximately the same. And in 2019, at the most recent IGF, there were just 12 transcripts in the data set. In short, within just two years, the number of sessions dedicated to "fake news" and mis/disinformation had halved. It will be important to note the quantity of sessions on mis/disinformation in 2020 and 2021, to see if the surge in the mis/disinformation spread via the

internet regarding coronavirus pandemic affects the composition and focus in the coming years at IGF.

Of particular interest to this study are the results from R2, which is a term frequency analysis across each of the four years. Specifically, the marked shift in frequent terms from 2016 to 2019 show a clear progression in the focus of "fake news" discussions, even within such a short timeframe. Further, the term frequency of "fake" produced surprising results. Despite the seeming colloquial popular of the expression "fake news" and is wide-spread use by some world leaders, "fake" is not the most frequent term, though it does rank in the top 20 for 2017 and 2018. For 2017 and 2018, this surge is expected due to the surge in a "fake news" media rhetoric. Surprisingly though, "fake" disappears entirely as a top term by 2019 and as such is not a key topic in 2019 by that terminology.

The starkest distinction however is in comparing the first year (2016) to the most recent year (2019). In 2016, the top terms included "rights" and "journalists" whereas in 2019, the top terms included "data" and "content." Further, new top terms were introduced in 2019, including "disinformation," "countries," "platforms," and "public," marking a drastic and novel shift in the frequent rhetoric used to address issues of "fake news" and the like. In particular the "data" and "platforms" as top terms in 2019 hint at the growing global concern with big data and surveillance as well as the growing attention on the role of private platforms on the issue of mis/disinformation and content moderation. These top terms also suggest that the power structure may have shifted from traditional news sources and journalists to platforms and data.

These results also suggest that high-level discussions of mis/disinformation, such as the presentations at IGF, may be more attuned to specific and more accurate rhetoric to discuss this global phenomenon, rather than bandying about the buzz phrase, "fake news," which many scholars have identified as problematic terminology. Further, the results of this study show that the rhetoric of misinformation/disinformation/" fake news" has evolved over the years, revealing how the major concerns and effects of the "fake news" crisis have changed. As technology continues to advance and as government and technology companies attempt to make policy changes, the key terms and topics will also likely refocus on the major issues at stake.

Conclusions

In this analysis of IGF transcripts, I have found and determined the key frequent terms in internet governance discussions of misinformation, disinformation, "fake news," freedom of expression, and internet policies and values. It is clear that even in such a short time as a few years, the conversations and focus on these topics have evolved and shifted. Particularly in 2019, we see the clear emergence of new key concerns involving data, content, platforms, government, and information.

Future research could continue to follow the evolution of these emerging topics/terms. Additionally, further research could track changing key terms along topics other than mis/disinformation to see if the emerging focus on data and content crosses topics, and if so – which is likely—which topics are most concerned and connected to these emerging focuses on "data." Further research could also look into the various stakeholders and their positions to see if stakeholders have grouped or similar interests/concerns in "fake news" governance. And lastly, further research could investigate other internet governance organizations or organizations speaking on these topics such as ICANN, IETF, EFF, IANA, and even nation states.

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