

Anxiety disorder and consumption of social media in Brazil

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Abstract

Brazilian population spends a lot of time on social media. The average access from any device is 3 hours and 39 minutes (The Global, 2018). On the other hand, the country leads the numbers of anxiety disorder among the population. According to the World Health Organization, the incidence in the country is 9.3%, while the world average is 3.5%. This number is even higher in big cities, reaching 19.9% in the city of São Paulo (Horta, 2019). Possible causes are economic instability, social changes and violence (Horta, 2019). Add to that the political polarization in recent years and the intensive use of gadgets, private chat applications, such as Whatsapp, and social networks. In this work, we focus on the influence of social networks in the development of Brazilian anxiety. Our hypothesis is that the intensity of use reinforces the existence of other factors of anxiety increase (economy, violence, political division, etc.) through the sharing of news, besides adding others, such as self-display, performativity and the need of always being in evidence in social networks. As a method, we will work with content analysis (news and images) from the main social networking platforms used in Brazil.

Keywords: Brazil; anxiety; social media; technology.

1. Introduction

Brazilian population is among those that most suffers from anxiety and depression in the world. The country, in addition to leading the ranking in anxiety disorder, is in 5th place among the countries whose population most suffers from depression, with 5.8% according to WHO (World Health Organization). Still according to WHO, women in the country suffer more from anxiety: 7.7% are anxious and 5.1%, depressed. Among men, the number is 3.6% in both cases.

The numbers have been growing all over the world, but it is relevant to note why they are the largest in Brazil. Studies putting together all possible factors empirically haven't been published yet. There are only opinions of experts who seek to understand the social complexity of Brazil. For Dan Chisholm, a WHO specialist, for example, "the main risk factors that may weigh in the Brazilian case include the country's economic situation, levels of poverty, inequality, unemployment and recession. In addition, there are environmental factors such as lifestyle in large cities." (Chad and Palhares, 2017).

In this work, we observe these factors present in the socioeconomic condition of Brazil as preponderant elements to understand the global conjuncture in which there are structural forces anchored in post-capitalism and the economic fluidity that puts the country in a particular situation. Among these

factors, we list:

- Economic crisis that has lasted since the year 2014, which has generated, among other things, increased unemployment and underemployment of the population.
- Political and social instability, with the rise of the extreme right to power; increased police violence and carrying of weapons incentive .
- High rates of violence, with increased combat deaths and the number of thefts and robberies.
- Massive use of smartphones and social networks. The country is one of the leaders in the usage time rankings of the internet and smartphones.

Therefore, we will first make a bibliographical review that puts in dialogue several authors who understand the current phase of capitalism as a phase of uncertainties that places economy and labor in conditions more and more volatile, uncertain and precarious. Through global flows of income generation and knowledge, it is possible to note that the country is in a situation that does not put it as a pioneer in the new economy of technology and digital services.

We will start from Paul Mason's (2017) discussion of post-capitalism and then turn to specific questions of this phase from the view of Evgeny Morozov (2018), who discusses the risks of income concentration in Silicon Valley as a function of the existing technology conglomerates. Byung-Chul Han (2015, 2017) talks about the pathologies that current capitalism and technologies promote about the subjects, increasingly directed to construct "self-entrepreneurship" based on their abilities, but also on the degree of visibility and the way they behave socially.

Starting from this more general view, we will point out these factors to make the reading of condition in Brazil, in order to better understand it within a larger conjuncture. We observe how typically Brazilian factors are exacerbated in social networks, in order to reinforce certain narratives that contribute in the levels of anxiety and depression. Public opinion surveys, personal reports and amateur images also contribute to making sense of a networked imaginary about the country's vulnerability in various aspects, such as violence and unemployment. Still, other factors that afflict the world population as a whole should also be considered, such as consumption of perfect images and profile of celebrities that end up interfering in the self-esteem of Instagram users, for example.

2. Threats of post-capitalism

Paul Mason (2015) puts technology at the center of contemporary capitalism as a destabilizing agent of traditional economic forms. This implies a reorganization of the economy, more unstable and based on global capital flows. In addition, it acts strongly on the forms of work, with emphasis on the knowledge economy in detriment to traditional forms of work in industries and commerce. Finally, artificial intelligence already has an impact on jobs, in a wave already started by automation and that now reaches jobs with some level of expertise, such as telemarketing attendants and, soon, consultants and drivers.

The author states that "there is a growing body of evidence that information technology, far from creating a new and stable form of capitalism, is dissolving it: eroding market mechanisms, eroding property rights, and destroying the old wage relationship , work and profit. "(MASON, 2015, p 177).

In the so-called "cognitive capitalism," the main production is linked to knowledge and information, "it is

based on global markets, financialized consumption, immaterial labor, and intangible capital" (Mason, 2015, p. 214). In it, the idea of "class" or "categories" of workers is supplanted, having as main element the figure of the unions.

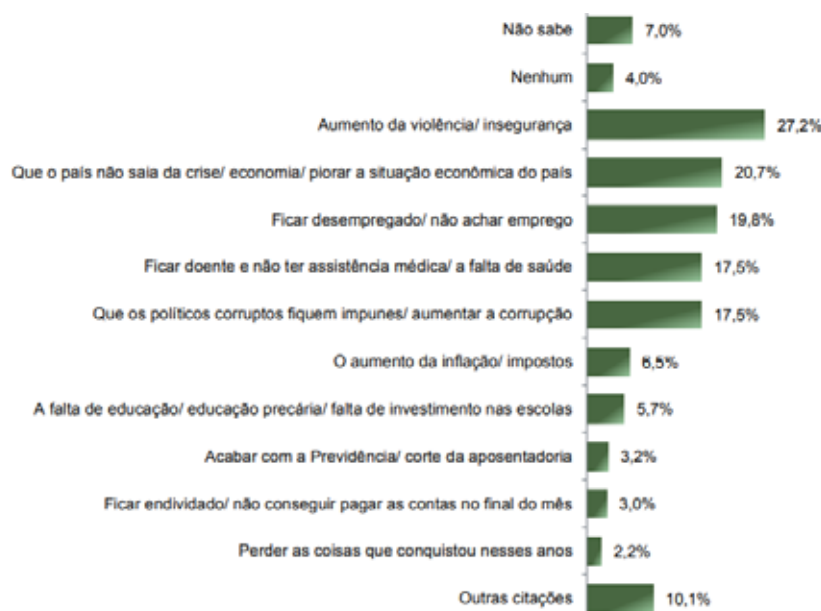
Investment in education and also in a type of knowledge production that is no longer linked to a company/factory, but to a type of skilled service that can be done from anywhere. The transformation of the self-entrepreneur, an idea presented by Foucault and taken up by Paul Mason and others, directs to self-based efforts on a registered job or through entrepreneurship. This given, the idea of class as representative of a large number of workers is in crisis. With the rise of values aimed at self-investment, success depends on personal effort. In other words, in an economy whose labor power is less dependent on industrial production, the ties and feeling of belonging to certain categories of labor are beginning to be lost. As Morozov puts it, "it is very difficult to preserve values such as solidarity in a technological environment that thrives on personalization and unique and individual experiences" (Morozov, 2018: 47). The "freedom" offered by cognitive capitalism carries with it the insecurities of economic instability as well as greater weight on the paths to be taken. It is necessary that new types of elements arise that meet the need for links between people, albeit in a fictitious way.

Still in relation to cognitive capitalism, Evgeny Morozov (2018) draws attention to the enormous concentration of income driven by the main players in Silicon Valley, technology companies that have dominated the commercial space of the Internet. Among the main ones are Amazon, Google and Facebook. The author shows how the world economy will become increasingly dependent on these companies and, moreover, how it exhibits the imbalance between the northern and southern hemispheres that remain with this new economy. The north being the supplier of knowledge, technology and scientific production. At south, data supplying populations and consumers of new business models globally offered by these companies.

The author also bets that these business models, based on informality, sharing and dispossession of companies such as Airbnb and Uber, also impact on social welfare policies, which are increasingly in charge by the user himself. The author speaks of replacing them with "leaner, faster and more cybernetic alternatives" (Morozov, 2015, p.26) and also in a strong impact on the de-standardization of free circulation of data provided by these companies. This creates control devices that assist in regulating the state when, for example, individuals are encouraged to monitor their physical activity in order to get discounts on their health plans. Or, a proactive vehicle tracking that can act in the pricing of car insurance. Furthermore, data generated by private transport applications can be useful for the reformulation of roads in large urban centers. These are examples of actions of these companies on matters of public order. There is precisely a question of private interference on issues that concerns (or at least should) the State. Such a perspective adds new factors to the role of government and social welfare that, by contract, should be guaranteed to us. In the rearticulation of the place of the state, governability is restricted to a role that acts less and less in the economy, in commerce and now also in social welfare. The problem for the author is that injustices can not be measured by applications, which means that a considerable part of the population's needs are not represented by the data flows offered for "connected" public management. This is, in the author's definition, an "apolitical politics".

3. Brazil and post-capitalism

In a very turbulent pre-election period, Paraná Pesquisas (Brazilian Research Institute) conducted a survey of 2.002 Brazilians nationwide in August 2018 and evaluated what their greatest fears were at that time. Having as aim the gathering of information for the elections, the research, however, revealed the instability present in many themes present in the population's imagination.



Graphic 1. Brazilians greatest fears about the future (Source: Pesquisa, 2018)

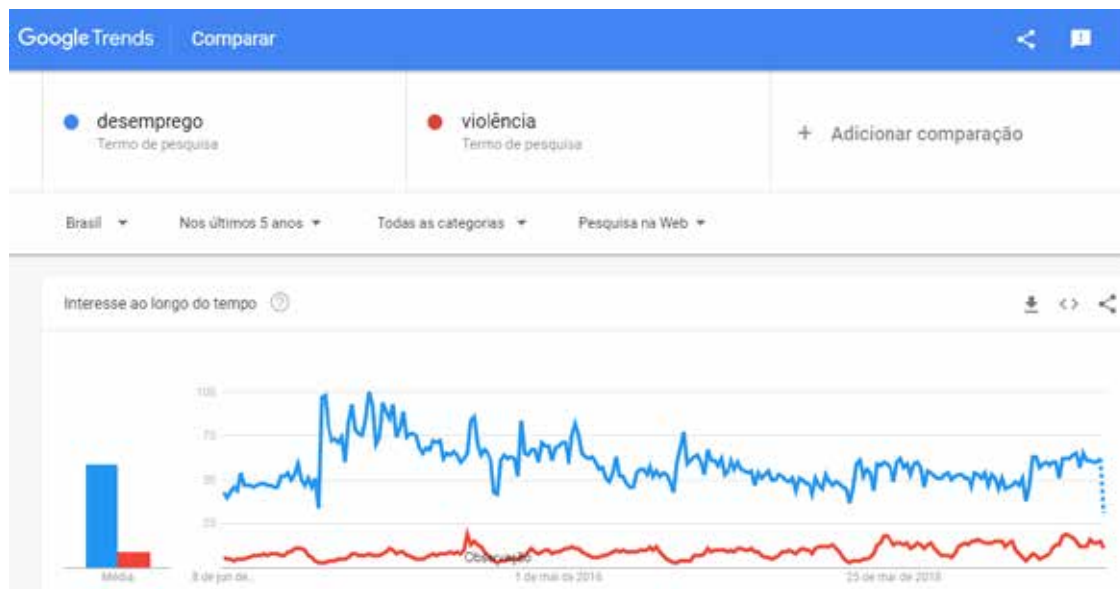
As shown in graphic 1, the greatest fears are the increase in violence and insecurity (27.2%), economic crisis (20.7%), unemployment (19.8%), lack of medical care (17.5%) and increase in corruption (17.5%). The scenario describes a situation of public opinion that shows that the greatest fears of Brazilian citizens are linked to longstanding local problems, but that they have grown in importance in the news and also in the political debates. In a way it also illustrates a panorama that reflects locally economic issues present worldwide. It is a feeling of generalized instability that is directly linked to the present moment of post-capitalism.

Faced with these facts, issues related to social well-being appear as an important part of the population's concerns. With respect to health, the country has its peculiarities, since the SUS (Unified Health System) is considered poor by the population, but three quarters of it depend on this gratuitous system offered by the government. The other 25% have private health plans, of which 62% are corporate, in other words, directly linked to the employment relationship. Losing the job, therefore, means for many to lose private health plan coverage.

Economic crisis and violence are two factors that indicate a fragile state that can not supply its population with basic indices of employability and security.

In a simple research made in Google Trends held in June 2019, we observe the evolution in the search for the terms "violence" and "unemployment" in Brazil in the last five years. As can be seen in the graphic 2 below, while the term "violence" remains within a pattern with little variation in popularity, the term

"unemployment" has increased in demand from the end of 2014, the beginning of a turbulent political-economic phase in the country that coincides with the beginning of the second warrant of the formal president Dilma Rousseff. While the search for "unemployment" has similar distribution across the country, the issue of "violence" is of greater interest in the North and Northeast regions, the two with the highest rates of poverty and social problems.



Graphic 2. Comparison between the terms "unemployment" (in blue) and "violence" (in red) in the last five years (Source: Google Trends)

In the same direction in which concerns about unemployment increase, Brazil has become one of the main markets for Uber. As revealed by the website DriverMachine, based on official data of the company, the country occupies the second world market, losing only to the United States. There are more than 600 thousand drivers partners and more than 22 million users (data from September 2018). São Paulo is the city with the largest number of races in the world (Brazil, 2019).

In the Uber company's own website there are studies that show a relationship between the most vulnerable areas of a city and the adherence of new drivers partners. In the vision offered by the company, it helps to create income for the most needy areas. In the Brazilian case specifically, the staggering economy has pushed a significant number of people to provide this type of service, which makes the country's numbers so significant. Adding to the shortcomings of public transportation and the high dependence on road transport, we have an optimistic scenario for Uber's business.

4. Fatigue, performance and social networks

Self-entrepreneurship brings out a host of symptoms that reflect on people who are always looking for self-improvement. The society of fatigue presented by Byung-Chul Han (2015) is characterized by neuronal diseases such as depression and Burnout Syndrome (SB) and are caused, in the author's view, not by a scenario of pessimism, but by the excess of positivity. Such a scenario is a reflection of the lack

of alterity and strangeness in the contemporary world, where everything is very positive and similar. "Violence of positivity", which "results from overproduction, super-performance or super-communication" (Han, 2015, p.16) is present in this sense.

If in the recent past the disciplinary society kept individuals in control, with the "performance society," control is generated internally by individuals who charge for better results, which ends up overwhelming them. If the negativity of the disciplinary society generated "madmen and delinquents," the positivity of the performance society produces "depressives and failures" (Han, 2015, p.25).

The same author speaks of the transparency to which we are all subjected in the daily delivery that we make of our personal data, in the behavior of navigation and information on purchases, in a process of elimination of private life. This openness to the private world takes away the depth and interest in the mystery of relationships, makes the world pornographic, by opening up and diminishing the distances of one's private life. However, transparency does not give rise to pain, since the space of the exhibition exists only for positivity and happiness, making the places of sharing of pain inaccessible and undervalued. Finally, transparency also contributes to the status quo by depoliticizing the public sphere. For Han:

Coercion by transparency stabilizes the existing system in a very effective way. Transparency itself is positive. Within it is not found any negativity that could call into question the current political-economic system; it is blind to the outer side of the system; simply confirms and optimizes what already exists. (HAN, 2017, 24)

Positivity and transparency are added to an acceleration and an indifference towards a temporality that marks actions in the time and space of individuals. Post-capitalism in its current phase fuses temporalities, in such a way that by being connected it is possible to work, rest, relate and shop all the time, without distinction of time and place. Equality also extends to temporality, which transports the subject to a permanent state of alertness, attention and desire. For Jonathan Crary, "time 24/7 is a time of indifference, to which human fragility is increasingly inadequate, and where sleep is neither necessary nor inevitable" (Crary, 2016, 19).

In consonance with the other authors, Crary also believes that focusing on individual goals also engenders self-centered, self-reliant fatigue, which reflects contemporary values. "24/7 is structured around individual objectives of competitiveness, promotion, acquisition, personal security and comfort at the expense of others" (Crary, 2016, p.50).

The game of positive images to which millions of people who browse websites and social networks is in full dialogue with this scenario. Thus, the landscape of the digital world transposes such values in a positive way, as Han wants, imperceptible, but still rather coercive. In this sense, understanding the implications in the use of smartphones and social networks is the last step to a better understanding of the scenario of neuronal diseases present with high indexes in the case of Brazil.

5. Excesses in social networks and smartphones

If positivity reflects and intensifies in online behavior, it is to be expected that the academy has been concerned about the relationship between the use of social networks with diseases such as anxiety and depression.

The term most commonly used by researchers is "social media fatigue" and defined by Dhir et al (2018: 141) as a situation in which users "suffer from mental exhaustion after experiencing various technological, informative, and communicative overloads through their participation and interactions on the different online social media platforms ". There is a relationship with anxiety and depression, according to a study of young people in India. The same work points to little literature in developing countries, with studies concentrated in West and East Asia. In the vast literature consulted by the authors, there is a relationship between the compulsive use of social media and mental fatigue. Like other types of compulsive behavior, excessive use of the internet and social networks is linked to various physical and mental problems, such as emotional exhaustion and falling incomes at work. In the case of smartphones, compulsive use can generate the fear of running out of the device, a syndrome called nomophobia.

There is also the phenomenon called FoMO (fear of missing out), defined by the authors as "an apprehension or concern of being disconnected, absent or missing an experience which others (i.e., peers, friends, family) might receive or enjoy." (Dhir et al, 2018, p.143). Such feeling is linked to an emotional need that is greater among people with higher anxiety level. Still in the same study, the authors will point out that anxious people tend to use more social media to mitigate their unfavorable emotions, seek attention, support, and sense of belonging. In an Instagram-specific study of 18- to 29-year-olds in the United States, Lup, Trub, and Rosenthal (2015) found that the greater the number of strangers a person follows in this social network, the more likely they are to experience symptoms of depression. In other words, it seems that the choice to follow strangers is also related to this sense of compensation identified by Dhir et al (2018).

Morozov contributes in another way to thinking about the reason why excessive use of social networks generates distraction and fatigue. Apart from common sense that says that such use dulls people, the author states that:

(...) this fatigue can be explained as a natural consequence of the extractive models of data adopted by the platform providers: it is they who designed the systems to distract us to the maximum, because this is how they maximize the number of times we click on the sites - and therefore we provide our data. They continue to dig our psyche just as oil companies dig the ground; and the data keeps spouting from our emotional reservoirs. (MOROZOV, 2018, p.166)

The author, therefore, adds to this context automatic database-based and artificial intelligence mechanisms that will over time better understand users' needs, desires and preconditions, providing distractions that capture attention, encourage navigation, and promotion of clicks, which feeds the network with more data. Along with them, there is also an emotional charge that tends to settle on these mechanisms, in a confluence between expectations of the data market and the users' responses to these

stimuli. The friendly environment of social platforms and networks hides very well-founded strategies of data collection and consumer understanding.

6. Brazilian people and social media

The latest survey released by Hootsuit, a popular social media management platform in 2018, examined data from 239 countries. You can find there results by country. There is great adherence and time spent of Brazilians with digital media. In Brazil, internet penetration is 66%, while the number of social media users on mobile devices is 57% of the population. (The Global, 2018).

The number of hours spent using the internet is also significant. From any device, it is 9h14 a day, on average, which gives the country the third place in the world, behind only Thailand (9h38m) and Philippines (9h29m). Access to social media from any device is also high: 3h39m, the second largest in the world. The country loses only to the Philippines, with 3h57m. At the other end, the Japanese people spend only 48m a day with the same activity.

Several recent phenomena in Brazil have highlighted WhatsApp instant messaging application. According to the site Statista, the country is among the main nations in the penetration of the application's use. Still in 2017, the total population penetration of the country was 56% (Selected, 2019). Among the most recent events involving the application, we highlight the truckers' strike in 2018 and the elections for president, governor, deputies and senators, also in 2018.

The first case was emblematic for the extent of the use of social networks, given a diversified class and apparently little articulated in terms of union representation, which is the class of the truck drivers. This category of workers drew attention to the pricing policies of fossil fuels under the government of Michel Temer, which matched the price of diesel (main fuel of trucks) to the exchange rate of dollar.

The articulation of truck drivers was mainly through Whatsapp application and gained strength by means of the numerous groups that were formed there. The groups were based on the articulation of the strike, but also served as encouragement among the participants, as well as were used as dissemination of diverse political ideas. The movement halted the supply of the country between May 21 and 30, 2018, which caused serious problems that affected public transportation, loss of perishable cargo, as well as harmed the distribution of items in supermarkets, pharmacies and other segments. The testimony of Moisés de Oliveira, one of the truck drivers involved in the strike announced by the BBC at the time, clearly illustrates the dynamics of the application: "We travel all over Brazil and meet other truck drivers, we talk, exchange WhatsApp number. Then, when the strike came, there were already several groups assembled and we distributed the information" (ROSSI, 2018).

Just as the application helped to mobilize the category, it was also responsible for spreading many fake news. In this particular case, news circulated about the takeover of the federal capital by demonstrators, the seizure of power by the military, decontextualized videos that were interpreted as part of the movement, among others.

The same fake news mechanism was also the main reason for building the electoral political scenario that followed that year. The country saw itself in principle with a wide range of options for the post of president. After Dilma Rousseff's impeachment in 2016, the country tried to reorganize itself politically

with new political parties and candidates promising to be a "novelty" for the electoral scenario of that moment. The unfolding of this scenario culminated in the division of the country between right-wing and left-wing voters, with a second round between the formal federal deputy Jair Bolsonaro of the small PSL (Liberal Social Party) and Fernando Haddad, former minister of education of Lula and Dilma's governments and candidate for PT (Workers Party). What followed was a media-driven election within a never-before-seen scenario in the country. The candidatures with longest-running television and larger grants have not taken off, while the internet campaign with low budgets and videos made by lives via streaming put the candidate Jair Bolsonaro at the top of the voting intentions, culminating in his election. As a side effect, the election divided the country between those who support the president-elect and the voters who are against him. A post-election apathy climate is still maintained in 2019, driven by the constant errors given by the lack of experience of a government that suffers from problems in its articulation with the Chamber of Deputies and in the approval of proposals. At the micro-social level, daily life became more difficult, with an economy that does not advance and a scenario of insecurity, with significant setbacks mainly in the area of culture and education.

The high intensity with which Brazilians use social networks and instant messaging applications appears in this case as a propelling agent of the crisis, since it mixes issues of private nature with issues of public interest. The most recent fake news studies, revealed in the significant case of Donald Trump's election in the United States in 2016 and the involvement of Cambridge Analytica, show a correlation between the propensity to believe in newsworthiness based on values and beliefs of who is exposed to certain "news". In the case of Brazil, the electoral scenario was loaded with offensive news, targeting the behavior of candidates and their alleged involvement with controversial topics such as drugs, racism, corruption, among others. The country, once considered as tolerant, social, friendly and open, showed before itself a very different scenario, which still persists after the elections. The division remains and is verified in the streets. Until June 2019, Brazil witnessed four demonstrations at national level. Two in favor of education and against cuts made by the government, a general strike involving several categories that question social security reform, but also a significant pro-government demonstration also at national level.

In sum, the high level of sociability of Brazilians in social networks and message applications has contributed to a multifaceted and dichotomous landscape that has divided the country politically, causing a serious crisis of representativeness and a feeling of insecurity in a substantial part of the population. Adding to this the stagnation of the economy that has not yet responded to the wishes of the new government, we have a delicate and complex scenario, which places in a fragile situation a subject already unstable by the global socio-technical scenarios pointed out throughout this text.

7. Conclusion

The scenario that puts Brazil in front of the numbers of anxiety, depression and consumption of medicines that fight these diseases is complex and multifaceted. Nevertheless, we seek throughout this work to discuss the peculiarities of the country, which make these facts more understandable.

The attempt is also to put the Brazilian condition in a perspective that involves economic, political, cultural and technological factors. When added, these factors can optimize limiting situations that

generate the disorders. In addition, it is important to note the global concerns with the excesses of the exacerbated consumption of smartphones and social media. In the national scenario, where this consumption is already historically high, coupled with the fact that the Brazilian population is still being included in the digital universe, often without a literacy necessary for the good habits of consumption of these media, it is observed high negatives rates linked to the consumption of social media in Brazil, as well as the consequences of this condition, such as problems with self-esteem, self-image, lack of attention and sleep disorders.

The political and economic crisis in which the country now finds itself has structurally strengthened the articulation of ideas that culminated in two great right and left ideological bubbles that grew on the basis of communication networks that were strengthened with social networks and instant messaging applications. Such bubbles have divided the country and now block the power of articulation of the current government, as well as causing crises of citizen's representativeness, their identity as Brazilians, freedom of expression and their security in coming and going.

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