# The production of health news by the press: the context of the coverage of the 2007/2008 yellow fever epidemic

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**Abstract** The COVID-19 pandemic scenario raises the amplification of the debate around the production and circulation of information about epidemics. In this sense, the objective of this article is to discuss how social contexts shape the news, taking as an example the case of the news coverage that transformed an epizootic of yellow fever, in the summer of 2007/2008, into an epidemic of urban yellow fever. This is a qualitative research with journalists who worked in two large circulation newspapers and actively participated in the coverage of the event. The interviews were recorded, transcribed and submitted to discourse analysis, which allowed the identification of three factors that influenced the production of a media epidemic of yellow fever: the working conditions and the modus operandi of the newsrooms; the political-ideological dimension of the newspapers; and the difficulties of translation of technicalscientific information. A critical understanding of the production process of the journalistic text can contribute to the construction of communication strategies that minimize the circulation of misinformation on public health in traditional media (newspapers, magazines, radio, TV and news portals).

**Key words** *Epidemic, Media, Communication and health, Yellow fever* 

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### Introduction

Within the context of the COVID-19 pandemic, the mediatization of daily life1 has taken center stage of public discourse, and the infodemic has established itself as a complex, challenging phenomena in the fields of Communication and Health. Such a scenario shows the importance of furthering discussion on health news production, as they spread repertories that attribute meanings to the health-disease process. This paper adds to such discussion, as it attempts to answer the following question: how do social contexts interfere in the circumstances for health news production? In order to do so, this study addresses the role of social context over the news coverage of the yellow fever epizootic outbreak in the summer of 2007/2008, which produced a media epidemic<sup>2</sup>. Such an understanding may help with building up communication strategies as to minimize the spreading of misinformation on public health in traditional media (newspapers, magazines, radio, TV, and news websites).

Although press media no longer has the monopoly to decide what is media information<sup>3</sup> – because of the expansion of digital media, which have made gatekeepers to lose power and imposed more dynamic, inclusive ways of interaction on the communication process - the power of journalism as an expert community that produces and legitimizes discourse and meanings in everyday life is still significant worldwide. A survey released on March 2020 by Edelman communication firm, and conducted with 10,000respondents from 10 countries, revealed that mainstream media organizations were the most trustworthy source of information regarding the pandemic for 64% of 9,000 respondents. It shows that the low credibility of journalism and other sources such as science and the World Health Organization (WHO) tends to reverse, as the pre-pandemic scenario can attest. Among the 1,000 Brazilian respondents, however, the tendency was opposite; 64% told they prefer getting information from social media, and 59% mentioned newspapers and WHO as trustworthy sources. Nonetheless, nearly 7 out of 10 Brazilian respondents declared to follow the news, pointing out they have a greater concern about fake news and COVID-19 than foreigners (85% versus 74%)4.

Regarding digital journalism audience, according to Comscore - an American internet data traffic analytic company -, on the first trimester of 2021, three of the most long-lived Brazilian press organizations led the newspaper national ranking. Over that period, the monthly page views (PV) average was 207 million for Folha de S. Paulo; 170 million for O Globo; and 55 million for O Estado de S. Paulo5.

### Theoretical and methodological path

As part of a larger research project that has studied the yellow fever media epidemic<sup>2,6</sup>, this paper focuses on the specific process of news production that turned a sylvatic yellow fever epizootic - a locally confined outbreak - into an epidemic urban yellow fever. Contrary to technical data from health public agencies<sup>7</sup>, the epidemic discourse in the media was built around misinformation, causing a severe crisis in the national immunization system, and putting at risk the population health<sup>2,6</sup>.

Our guiding theoretical and methodological framework considers mediatized information<sup>1</sup> as constructions which can only occur under historical, political, and sociocultural contexts; always the result of intentional actions that take place under a set of circumstances, or "interaction field"8. In it, players/institutions vie for the consensus that gives them the power to achieve their own goals or interests, interfering in the course of events, influencing the actions of others, and producing social events and facts9. Paradigmatic institutions provide the framework for exercising power, as with media organizations8.

We also consider discourse as a set of linguistic practices that maintain and promote certain social relations and establish realities<sup>10</sup>. There is no neutral discourse; other voices always undergo it<sup>11</sup>. Discursive practices and meaning production develop routinely - a constructionist approach that takes discourse as a collective and interactive construction occurring in the dynamics of historically dated, culturally placed social relations9.

Finally, we hold to the Theory of News, by which news is produced in the interaction of personal, social, ideological and cultural forces, as well as in the physical and technical means of fixing and transmitting information; market, organizational, and personal factors3,12 modulate those forces. News is never reality itself, but one of the possible narratives about everyday events (voluntary, natural or induced). Journalists – a community that still claims a monopoly of knowledge, namely to establish what news is - socially construct and share those narratives<sup>3</sup>. Therefore, they are not neutral observers, but

active participants in the process of constructing reality<sup>3,12</sup>.

Four journalists from two daily national print papers (here named *A* and *B*) took part in the study: three reporters who covered the epizootic, and an editor, who provided details on the editorial routine. The analyzed speeches were obtained through semi-structured interviews; the respondents' names are fictitious in order to keep them anonymous.

We anchored the number of participants to the ethnomethodology, whose most important premise is to take the subject as a competent member expressing singularity; a unique being possessing individuality. From that perspective, the quantity of participants does not legitimate scientific knowledge, but rather the quality of their expression. People construct reality through practices and speeches<sup>13</sup>. Therefore, this study considers the respondent journalists as competent members, since, according to Garfinkel<sup>14</sup>: "Members know, require, count on, and make use of this reflexivity to produce, accomplish, recognize, or demonstrate rational-adequacy-for-all-practical-purposes of their procedures and findings"(p.8).

The speech of the journalists who took part in the press media organizations coverage, as we will see, made it possible to understand how sociopolitical, cultural and organizational contexts, working conditions, market and ideological forces, and subjective perception shaped the news on yellow fever and contributed to creating its epidemic sense.

### The text context

The Brazilian press has emerged under the auspices of the "exclusion principle", which means, according to Kucinski<sup>15</sup>, that the public scope forged by the Brazilian print papers replicates "[...] with great fidelity the oligarchic configuration of land ownership; in newspaper management, the practices [...] of favoritism typical of the behest culture from large rural property predominate" (p.20). A deep exclusion due to the lack of regulation in radio and television industries, favoring oligopolies (horizontal, vertical and cross ownership in different media-newspaper, magazine, radio, open and cable TV16, internet provider – in the same market, whether local, regional or national)<sup>2,13</sup>. Such an outline, not a very democratic one, cuts across news construction and approach, creating-in the case of health issues-potentially harmful meanings to the consolidation process of the Brazilian Unified Health System (SUS)<sup>17</sup>.

Regarding the relationship between public health and the communication industry, over 30 years after its establishment and regulation, SUS is still disadvantaged in vying for meanings in everyday life<sup>6,17,18</sup>. A challenge not yet overcome, even when considering the sudden media acknowledgement of the public system and its role in avoiding an even further COVID-19 tragedy in the country. That movement, however, seems to be more aesthetic than ethical and political, since the media still neglects the most meaningful agendafor reversing the current SUS decaying. That is the case of the *Marcha pela Vida* ("March for Life") movement,

[...] which relied on the support of over 500 nationally organized entities defending SUS, [but] did not have any entry in the traditional media circuits. Whether in a propositional or protest agenda, [...] communication shows up in agonic ways, not as a permanent, organic program for political citizenship training<sup>18</sup>(p.7).

Although Federal Law No. 8.080/1990 highlights the right to know as a mechanism for people to make informed decisions on health<sup>19</sup>, little progress has been made in the country regarding that subject. Generally, communication in/from SUS is still instrumental, acting as a "front desk" to meet specific demands, and focusing primarily on making management/managers visible and other players (health workers and customers) invisible<sup>20</sup>.

In political and institutional terms, the epizootic coverage happened at the beginning of Lula's second term; the Health minister was the sanitarian José Gomes Temporão<sup>21</sup>. Until mid-December 2007, ruling and opposite senators engaged in a fierce dispute over the renewal of the most important funding source for SUS then: the CPMF tax, which was rejected shortly before the epizootic outbreak, at the end of that month. Temporão personally advocated for the tax, rejecting the technocratic attributes of his position, and placing himself at the forefront of the political discussion on the most controversial public health issues, many of which were debated by and with the press<sup>21</sup>. He publicly maintained his stance in 2018 when commenting on his time at the Brazilian Department of Health:

Over the four years I held the position, I was fully aware I was part of the movement for the Brazilian health reform, in which I have been active since med school. It was a special moment, sometimes stressful and wearing, but entirely consistent with my political, professional, and personal history, taking part in an administration that did a great deal for social issues in Brazil<sup>22</sup>(p.1).

Then suddenly the epizootic outbreak became the subject of unexpected, massive coverage by radio, TV, papers, magazines and the internet, which lasted until mid-February 2008. Studies assessing the regional issue of a print paper have shown that three major epidemic discursive strategies constructed the narrative: "the out-of-control disease", focusing on the "progressive increase" in the number of suspected cases; "the lethal enemy", overvaluing the mortality rates and the symptomatology/treatment of the disease; and "widespread dissemination", favoring topics on urbanization<sup>2,6</sup>.

The meaning of this latter strategy was created because the article omitted the fact it was a sylvatic cycle, poorly informing about the transmitting mosquito, the Haemagogus, who inhabits forested areas along with monkeys, primary hosts to the yellow fever virus. That misconception may have made it hard for the public to understand it was actually a territorially bound event in the Brazilian Central-West region<sup>23</sup>, quite distant from where the newspaper circulated. And yet by the frequent use of the word "epidemic" (simultaneous occurrence of a disease in different regions), when in fact it was an outbreak (sudden increase of cases in a specific area). Despite the technical communication from the Brazilian Department of Health not referring to the risk of an epidemic, and dismissing the urban disease, the mainstream media spread information with no theoretical/technical support in the epidemiology field<sup>21,24</sup>.

### Working conditions and *modus operandi* in newsrooms

Since 2015, when massive advertising funds were displaced to digital media, mainly to social networking platforms, the Brazilian print publishing industry has been decommissioned<sup>25</sup>, worsening the working conditions in newsrooms and changing the profile of journalists; the most experienced, "costly" ones got out, and the younger, "cheaper" ones got in. In consequence, production process and writing quality have also been affected – as pointed out by Amanda, an editor for *Paper A*, according to whom the precarious work has reached all editorial sections, resulting in professionals accumulating tasks and working hours, with no proportional compensation:

This is really insane, because...eehh... they [the most experienced ones] were all fired, in all departments [...] So those kids [...] they are veeery nice, but they [...] have zero experience in reporting. And those people are doing the bulk of the newspaper writing.

For Henrique, a reporter for *Paper B*, this process, as well as the occasional constraints<sup>3,12</sup> arising from journalism routine itself, helps to forge not very reflective and problematizing journalistic narratives:

[...] I am absolutely not willing to act in fast-food journalism again [...] the low quality you can see is because of the lack of structure for a long time [...] Many times you knew you were leaving for an assignment in the morning, and when you got there, you had no way to prepare. [...] So much nonsense and so many clichés are said [...] there is no time to have someone who really knows the subjects. [...] work is so underpaid, stress is so high, that whoever can leave the newsrooms does it. [...] turnover is really high [...].

The metaphor used by Henrique means precarious newsrooms produce quick, serial news the same way fast-food chains do, serving processed meals in large amounts, with low nutritional quality. That *modus operandi* certainly helps to explain the recurring criticism that states mass journalism is usually superficial.

Two ideological forces also establish news: straightforwardness and professionalism<sup>3,12</sup>. The first one is the basis of journalism training; it explains, for instance, the descriptive and factual orientation of the news, the mimetic ambition that makes reality explicit, and the systematic identification of sources in news statements, which are responsible for legitimizing or disqualifying information<sup>12</sup>. The ideology of professionalism, on its turn, reproduces the idealistic sense of the job, quite strong in the popular imagery, taking the journalist as a sort of hero<sup>7</sup>, and helping, according to Souza<sup>12</sup>, to convert news into "[...] a product that boosts dominant powers, defines legitimate and illegitimate, normal and abnormal, and preserves the status quo"(p.12).

Walter, a skilled health reporter for *Paper B*, asserts such a perspective when assessing that the emphasis on the yellow fever, as well as the traditional "right to know," could be qualified as public service: "[...] it was justified because among the diseased there were people from [mentions the city], where most of the readers are".

Such a statement legitimizes the discourses that take journalism practice as an instrument for social control. They make it natural the idea that both media professionals and media companies are disinterested service providers, therefore neutral guardians of social morality<sup>6</sup>. Under the ideology of professionalism, Walter considers news as a "mirror image" of society:

[...] the editors are aware of the overall picture. The skilled reporters, on the other hand, are aware of the details, the minutiae, because they keep direct contact with expertise sources (governmental Health departments, doctors, medical associations, hospitals, professors etc.). That's why, at least in the Health section, editors did not use to give too specific guidance like appointing a source or requesting us questions to sources. [...] The reports, at least the ones I wrote, never "disputed" the facts, never distorted the facts.

In the yellow fever case, a recurring complaint from public managers regarded the media relativization of the Brazilian Department of Health speech, raising doubts about the official statement of no risk of urban disease. When questioned about it, Walter clings to a dear principle to journalism in controversial topics: the adversarial principle, which can be outlined in the "both sides of the story" jargon, also called "bothsidesism":

[...] the reporter always looks for an expert outside the public administration, in order to contrast the given information and get, if possible, a different perspective from the official one. [...] We were not supposed to listen to only one side. Quite the opposite: it has always been mandatory to listen to both sides (hence, we also listen to experts outside the administration).

Seen together, both Walter's excerpts cause deep concerns over that kind of journalistic practice, which must be problematized. On the one hand, the adversarial principle results from the media distrust in governmental information, the "inside". In Brazil, such perception dates back to a specific event: the censoring of articles on the meningitis epidemic, in the early 1970s, the strictest one during the military dictatorship<sup>26</sup>. It is an explicit distrust seen, for instance, in the Folha Group's guide of principles and style, where the entry "epidemic", predicts: "It is usual for health authorities to deny the existence of, or to delay publicizing epidemics, under the argument of not creating panic". Therefore, governmental information, the "inside," should always be confronted with the opinion from "outside administration," the "other side," the side that would allow a "neutral" by "symmetry" between differing opinions narrative. In short, bothsidesism would enable the public to assemble their own interpretative framework.

However, in the yellow fever epizootic case, the most competent authority on the subject was the Brazilian Department of Health itself, the "inside", who based its speech on scientific evidence. Even so, from Walter's words, we can infer departmental information would hold intentionally hidden facts, which only an admittedly neutral "other side," because "outside administration", could unveil<sup>24</sup>.

Another utterance drawing attention to Walter's words was the "strictness" he referred to regarding fact-checking. It references the positivist notion of objectivity ("social fact"), built by the proximity of journalistic methods with scientific methods since the first third of the 19<sup>th</sup> century<sup>6</sup>. Resorting to a range of procedures seen as technical, he believed to have followed the professional ethic code and put forward the most realistic view of the event – the theory of possible re-urbanization of the disease –, precisely opposite to the Brazilian Department of Health discourse dismissing that possibility. Walter was the only respondent to disagree with the yellow fever media production:

It's the other way around. I believe that after reading the reports, people have realized the illness and learned how to prevent it, thus avoiding getting sick.

Despite Walter's point of view, further studies brought epidemiological data showing there was no urban yellow fever epidemic in 2007/2008, but rather an epizootic outbreak<sup>27</sup>. Furthermore, the media epidemic caused a severe crisis in the National Immunization Plan (though being one of the three major yellow fever vaccine global suppliers, Brazil not only suspended exports but also submitted a request to WHO for 4 million doses from the global emergency supply<sup>28</sup>), and put the population at risk: at that time, there were four deaths by adverse reaction to the vaccine, all in the State of São Paulo, in areas free from virus circulation/dissemination<sup>24</sup>.

## The political and ideological aspect of newspapers

Editor Amanda rejects the concept of neutral journalism; for her, a political and ideological aspect delimiting news affects both the editorial line and the production routine. Despite being more explicit in politics and economy, that ideology goes through all editorial sections, including Health, and is somehow assimilated by all journalists. The thematization of a subject, as well as the way it is addressed, emphasized or omitted, already denotes, by itself, the ideological

aspect. For Amanda, a news item approach oftentimes depends on that political and ideological allegiance which includes commercial interests of newspaper owners. Hence, an approach pro or against a certain institution (for example, governments, parties, and politicians) would be more or less explicit according to those interests.

Such a remark summons two of the five ideology modes of operation: dissimulation and fragmentation<sup>29</sup>. On the one hand, by not deepening discourse to avoid issues with the institution the paper supports, that approach would create information obscuration; on the other hand, by emphasizing their opponents' mistakes, it would enhance a derogatory image in order to make a common enemy to be fought collectively (strategy of expurgation of the other)29.

In the production routine, ideologizing can be less explicit, within an aspect Amanda calls "unsaid"; a sort of editorial behavior aiming to discourage the reporters' work:

[...] obstacles they pose to publish a story [...] "Have you seen how this used to happen 10, 15, 20 years ago?" Then you say: "Dude, it will take me a month to accomplish this" [...] the amount of questions they put, which sometimes are not even relevant, eventually undermine the stories, you know?

Within time (experience) the professional feels the kind of subject and approach he can or cannot publish: "[...] the reporter starts doing something else, because they know it will take them a long time to do it, because they need to be published" (Amanda). According to her, a report that is ready for publishing can also be ruled out, though such an event is extremely rare.

Not so rare are the clear choices of terms used in the texts. For instance, when a subject is bad for the public management the paper supports, the institutions and their managers are made invisible (the problems are generically mentioned, and the article is not bylined); and when it is a thorny issue for their opponents, they are pointed out in the article itself (the reported problem is added with the name of the institution/manager). Amanda explains: "We never say 'Administration A' [supported by the paper]. But we always question [explicitly] 'Administration B' discourse".

Ideology, in that case, operates as reification, being conveyed through the strategies of nominalization and passivization. In nominalization, action and participants' descriptions change according to the interests of the symbolic construction (text/discourse) producer. Passivization occurs, according to Thompson<sup>29</sup>, when verbs are put in passive voice: "[...] 'the suspect is being investigated' instead of 'the police are investigating the suspects" (p.88). By focusing the audience's attention on particular terms detrimentally to others, reification removes the players and the action, tending to represent processes as events that happened in the lack of a historical time and of a subject who creates them.

As journalists are aware of the ideological stance of the organization they work for, they take on assignments believed to be more successful, even distinguished in the journalistic product, including the prime frontpage, as a headline. It should be noted that kind of practice also relates to the career advancement process, since journalistic productivity is attached to the quantity and prominence of the stories one is able to publish.

Reporter Liliana, from the Paper A Health section, declared that when she came across the yellow fever story, she saw an opportunity to stand out. And told us how the coordination of social-organizational and political-ideological forces made her performance in covering the event subjective:

[...] the paper started to show interest, to demand news about it every single day. [...] several fronts [...]: agencies are covering it, Brasília is covering it, we are covering it, Rio de Janeiro... everyone is engaged. [...] it was a news item to sustain the paper's [political] interest, which would have space, which wouldn't be difficult publish. That is true, but [...] it is not something clear, you see? It's not an explicit order [...] it's a general intuition.

Over an explicit editorial instruction, Liliana, just like Amanda, lets us glimpse the power of the unsaid:

[...] since we worked in a weak editorial section, I thought: "Wow, the paper wants some investigation here. I have to play my investigating role. And in this case, the paper will give it more space because there won't be the political curb, because they don't support this administration".

She said she had no doubt the subjectivity forged by the organizational and ideological context played a role in attributing the epidemic sense of the yellow fever:

We also had the intention of being in the newspaper frontpage. [...] I surely did. [...] I had really immersed in a culture [...] in a logic I had already brought from somewhere else, from the production culture of that organization, that... ahhnn... that made us even to have [...] poor clarity [...] of what was really at risk.

### The struggle to translate techno-scientific information

Liliana told us that at first she sought information from the Brazilian Department of Health press office, through which accessing yellow fever surveillance technicians was relatively easy. The problem was comprehending the released material. For her, two aspects were particularly problematic: the language, and the way information circulates. The lay audience—including journalists—could not understand some epidemiology key concepts like "dissemination area," and especially "viral transition," which defined the vaccine target population.

Such a struggle created a general mistrust atmosphere among journalists:

[...] there are towns in the countryside of São Paulo where you reach a farm after one step [...] On the other hand, one death had occurred in Goiânia, another one in Brasília. So: "Does that population need to be vaccinated, or doesn't it?" [Department of Health:] "No, you can see that in the map!" [...] communication was a bit fragmented, you see? [...] we had a real hard time translating to readers who should be vaccinated. [...] it was a mess...

For Liliana, the SUS communication norm, especially the Brazilian Department of Health website, has always been a problem within the relationship between press and the administration body:

[...] wants to follow the system, but can't. I know it's a centralized system, but there could be a reference. There is no "sus.gov.br." [...] The [State] Department of Health website is the same, the city website is also the same. It's terrible; it's terrible for users and for any citizen willing to be informed about public health.

It's worthy to say that throughout the epizootic coverage, the media took vaccination as the only strategy able to prevent the occurrence of the disease, by that time already under an epidemic sense. Such a narrative, built as a fable, vaulted the vaccine to a sort of "magic potion," hardly warning against the potential risk of the immunizer, and roughly giving precise information about the public to be vaccinated. Then, demand exploded, increasing the number of adverse reaction cases and resulting in the mentioned deaths by yellow fever caused by vaccination. For public managers and epidemiologists, both the explosion in demand and the consequences of indiscriminate vaccination resulted from the journalistic epidemic narrative<sup>21,23</sup>.

About that coverage characteristic, Liliana recalled that among reporters there was an unquestionable idea of vaccine effectiveness and safeness. That is why, when the first deaths occurred, there was a certain perplexity. For her, the tough dialogue between the Brazilian Department of Health and the press added to the crisis. "[...] when dengue started to spread [in late 1990s], [...] we had a much better dialogue with the press [...] [in 2008] I think we needed a spokesperson, someone more prepared. All of them [managers] seemed too defensive or unclear".

The tension between the fields of Health and Journalism, made obvious in Liliana's words, is not a Brazilian particularity. For instance, surveys with American journalists point out they also have a hard time interpreting and translating health events in the news, while managers and health professionals consider the press language as simplistic: "Journalists think scientists immerse in esoteric jargon and cannot explain their work in a simple, convincing way, while scientists say the media oversimplify complex issues" 30.

#### **Conclusions**

This study has allowed a critical discussion on the role of social context in news production about the 2007/2008 yellow fever epizootic outbreak. It has become clear that social, organizational and ideological forces in journalism practice shaped the coverage and contributed to attributing the epidemic sense of the event. The news approach intensified the disease meanings network until it overreached the epidemiology field and settled in everyday life as an "out-of-control" event.

The first element adding to such construction was a narrow perception of straightforwardness, anchored to the practice which postulates that news always has two sides, making it impossible to understand widely the epidemiological discourse. The information turned into news compared the speeches of epidemiologists and health authorities (Brazilian Department of Health) with opinions and predictions guided by a notion of risk that was detached from any scientific evidence.

The second element regards the worsening conditions for journalism work. Journalists submit to exhausting working hours, low wages and pressure for high productivity. Such a process has been changing the profile of traditional media newsrooms, with a predominance of increasingly young/inexperienced professionals and, as a rule, few (or no) skilled journalists in complex sub-

jects like health. That worsening process affects the overall news quality.

Within the political scope, the assessment has showed the tension between the Brazilian Department of Health and the mainstream media – prior to the epizootic outbreak –, as well as one newspapers' explicit opposition to the federal administration. Such a scenario favored the emphasis on the yellow fever coverage-a subject which had not gained prominence in the national media for decades. For that matter, we should recall that, as a complex event, health demands approaches that account for its multiple aspects, especially during a health crisis. Thus, it is essential to always keep in perspective the many elements given by pandemic social contexts. The media yellow fever epidemic and the COVID-19 pandemic are two examples of it.

Finally, it's worthy to emphasize one last element emerging from our assessment/discussion: the struggle to translate techno-scientific information on health. Even in the current scenario of digital media and social media boom, the role of journalism is still essential to amplify or attenuate risk perception in health; in consequence, journalists are significant players in the process of translating techno-scientific terms into a friendly language for all. Therefore, media organizations and professionals should prepare to deal with health issues. On its turn, in order to be effective, the SUS communication norm must cut across technicalities and actually consider the demands from different public health players, including the journalists from generalist media.

### **Collaborations**

The authors worked on the research, methodology, design and final writing.

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