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Mapping the spread of Russian and Chinese contents on the French-speaking African web

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ABSTRACT

Russia and China have developed informational influence strategies over the past decade and are now deploying their vectors on the African continent. Both Moscow and Beijing have implanted their international media in Africa in order to broadcast positive speeches about their presence and activities in the continent. In addition, the informational content of these two States is rebroadcasted by online African relays, allowing for an increasing spread of the messages and representations conveyed by China and Russia through their media. How effective is the informational influence of these two countries on the African continent and how to map its vectors and relays? This study proposes a methodology to identify web actors who spread Chinese and Russian content, as well as an analysis of the public opinion influencing strategies led by these States for African audiences.

For the former colonial powers and their allies, China and Russia appear to be political and economic adversaries of the first order in Africa. The influence they each carry can't be compared, however: China has invested $130 billion on the continent while Russia has brought in $5 billion. And yet, despite these differences, China and Russia have both accompanied their growing influence with the implementation of media and information apparatuses to improve their respective image, nurture a more favourable public opinion in the targeted countries, and even to support some local actors and political causes.

This dynamic isn't new, nor specific to the two countries: Marshall McLuhan highlighted the accelerating circulation of information during the Cold War (McLuhan 1977) as the notions of disinformation and propaganda were greatly debated on both sides of the Iron Curtain (Whittle 2015). Some of these debates were reactivated by Donald Trump's election to the White House and accusations of Russian interference in the American democratic process. Russia has been blamed for carrying on the long Soviet tradition of disinformation operations known as 'active measures', including the use of forgeries and false rumours (Andrew and Mitrokhin 2005; Rid 2012). As a result, there are many points of view on the precise nature of the missions attributed to the Russian state-sponsored media agencies, from allegations of 'propaganda' (Ogarkova 2014) to the mitigated

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notion of 'public diplomacy' (Audinet 2018, 35). Here we need to make clear that we measure the propagation of contents that are produced and openly published through official media channels and, no matter how biased, misleading or controversial they may be, need to be distinguished from contents produced in the context of covert influence operations. In addition, we believe that their propagation is a strictly quantitative phenomenon impossible to qualify as long as it hasn't been precisely quantified and mapped.

For that reason, this article doesn't insist on the measurement (or qualification) of Russian and Chinese influence, but offers a methodology to highlight the mechanisms underlying the propagation of contents produced by their media agencies for a French-speaking African audience. In other words, we want to show how the strategies of influence of these countries in Africa can be 'uncovered' through the interpretation of some data harvested to that end.

The Russian and Chinese strategies of influence rely on local actors

Russia has inaugurated a strategy of re-establishment in countries such as the Central African Republic (delivery of arms, arrival of Russian military advisers and SMPs), Guinea (where Russia holds alumina and gold deposits), Algeria (Facon 2018) and other countries of the Maghreb (Dubien 2018) and sub-Saharan Africa, some of which were once politically close to the Soviet Union (Vigne 2018). In that context, the success of Russia's international media outlets RT and Sputnik News seems to come from their contents, which have been massively attended to, shared and debated at the local level. In other words, there is a successful 'transmission' between Russian agencies and a number of African actors through local or regional news websites, several influential accounts on social networks (Facebook, YouTube …) and even through some local political movements or non-profit organizations (Limonier 2018).

Thus, the circulation of ideas, narratives and materials produced by Russian agencies relies on formal and informal networks of informational relays. These relays can be of very different types and pursue very different objectives – sometimes even contradictory ones. Their main common point is to circulate the produced contents according to a logic of appropriation, or even reinterpretation. We use the term 'appropriated contents' to convey the idea that these actors voluntarily choose to republish these contents, freely available online. They indeed take over (even distort) Russian contents and use them to serve their own political agendas – which are often very different from the interests and strategic preoccupations of the Russian Federation (Limonier and Gérard 2017).

In several countries where France and its influence are notably present in local political debates, the contents produced by Russian platforms can be mobilized by activists and political movements to counter the French positions. These activists thus hijack informational contents produced with Russia's financial and human resources. This is the case in, for example, Ivory Coast, where the supporters of Laurent Gbagbo often find elements in these Russian contents that support their opposition to president Ouattara and his French supporters. More generally, the pan-African movement and its supporters find in the contents produced by Russian agencies an informational pool easily mobilizable on behalf of their political fights. And the same is true for the movement

against the CFA franc, which has been the subject of many articles published by RT (Limonier 2018).

In the Chinese case, the most appropriated contents deal with the partnership announcements between Beijing and African governments on the construction of diverse infrastructures by Chinese companies. Generalist African news websites, very often in Guinea or Ivory Coast, relay Chinese political narratives and the country's diplomatic postures. These contents systematically present China as an indispensable partner in the development of its African partners and accuse Western countries of being neocolonialist.

China has launched a strategy of implantation throughout the African continent by signing economic and media partnerships with 34 countries. Chinese companies are also involved in the exploitation of resources such as lithium in Mali and oil in Niger. Additionally, China has initiated numerous infrastructural projects in several countries of the continent, such as the Addis Ababa-Djibouti railway line, or the first highway connecting Dakar, Mbour and Thiès in Senegal. It is now looking with interest at the digital transformation of Africa. To accompany it, the Chinese government has used media organizations backed by the state – China Radio International, CCTV, Xinhua – to support its activities in Africa. To promote the propagation of the narratives of Chinese power, the media agreements with African allies encourage the national press agencies of the involved countries to take up Chinese contents, without imposing it, however (Mihoubi 2019). Besides, Chinese authorities have developed a nexus of institutional websites covering the continent and whose publications usually come from the main Chinese media outlets, most notably Xinhua. Russian media are also very proactive in establishing cooperation agreements with local news agencies throughout Africa[1]. In addition, Russia and China tend to get closer in terms of media influence, drawn together by converging interests such as their diplomatic posture towards Western powers. Russia and China have been signing multiple media partnerships since 2017, most of them in the context of the Eastern Economic Forum, in order to mutually reinforce each other[2].

The Chinese strategy includes other tactics, such as the training of journalists. Every year, dozens of journalists, technicians and directors of African media agencies are invited to China to visit the headquarters of CRI, Xinhua or CCTV – before being led on a trip through the country. Chinese political authorities want to emphasize the modernity of their infrastructures in order to arouse admiration and fascination from their African visitors. The strategy's efficiency is already evident in Guinea, where the owner of a local radio station launched the broadcast of CRI on his frequency after he took part in training in China in 2008. The training of journalists does not appear to be a major aspect of Russia's strategy, even though there have been some initiatives such as the 'RT School' held by the Russian TV channel in Moscow.[3]

To increase the likelihood of their contents being picked up, Chinese media outlets freely distribute them to all local African media organizations, be they publicly- or privately-owned. Hence, China differs from the paid model adopted by large press agencies such as the Agence France Presse (AFP), the Associated Press (AP) or Reuters.

As such, China, like Russia, relies on a number of formal and informal African relays to support its economic and strategic interests, but also to promote its image and, ultimately, to influence local public opinion.

Mapping the propagation of contents on the web: a methodology

The implementation of these strategies can be observed, analysed and even mapped. This analysis is made possible by the fact that the contents we are talking about here are overwhelmingly digital: whether they are texts, videos or images, the contents are 'propagated' on the internet at a speed that is all the more important because the cost of replicating them from one platform to another is almost nil (a simple 'copy and paste'), and because more and more Africans are using the web as their main source of information. In addition, the propagation of content from one platform to another generates numerous freely accessible 'digital traces' (metadata). When these traces are cross-referenced and interpreted correctly, they make it possible to follow the circulation of information, as well as to identify the actors who ensure its transit and, *ultimately*, to deduce certain mechanisms of propagation and strategies of influence. In other words, the analysis of digital traces makes it possible to draw up a geopolitical map of Russian and Chinese influence in the region, in the sense that this data informs us on the actors and discourses that these two countries mobilize in order to ensure optimal access to African markets, governments and public opinion.

In this paper, we present not only a methodology for collecting data to identify the relays of Russian and Chinese contents in Africa, but also two ways of mapping and interpreting this data for geopolitical purposes – that is, to analyse the dynamics of rivalries and power strategies that stem from the desire of both Moscow and Beijing to establish themselves permanently on the African continent. The first method consists in analysing the relays according to the supposed nationality of their readers and we will apply it to the case of Chinese contents. The second method consists, as an extension of the first, in drawing up a typology of relays according to their political orientation. To do this, we use relational graphs, whose use in the social sciences comes from the Actor-Network Theory (Latour 2005) and that we propose to adapt to the geopolitical method.

The propagation of textual contents is a complex phenomenon, as it can be conducted through almost all of the means of digital communication accessible to the public: social networks (Facebook, Twitter), but also emails (mailing lists), encrypted messaging services (WhatsApp, Telegram …), streaming platforms, forums and so on (Limonier 2018). The spectrum covered by these vectors of diffusion is so large that any plan to create an exhaustive typology would be illusory.

Then, and if we focus on a limited number of platforms, obtaining the data legally is problematic. If it is theoretically possible to retrace the propagation of contents on a given social network by consulting the metadata through its API,[4] our efforts are quickly hampered by the significant limitations imposed by the service owners depending on their economic models or confidentiality policies (Limonier 2018). For example, Twitter is one of the most studied social networks as the company grants an access, via its APIs, to a large swathe of metadata.[5] Facebook, on the other hand, has for years strictly limited the metadata accessible through its API, and the Cambridge Analytica scandal (a company sued because it bypassed Facebook's policy protecting the personal data it had amassed) led to tighter restrictions.

Without addressing the questions of its legality, a massive manipulation of data extracted from social networks isn't the most satisfactory option to study the mechanisms underlying the propagation of contents produced by Chinese and Russian media outlets.

Besides, the most popular social network in Africa, Facebook, has the strictest barriers limiting data collection.

Focusing on web pages as a vector

For these reasons, we have decided to focus on the oldest vector of diffusion on the internet, which is also the most widely used: web pages. Indeed, among all the existing digital means available to publish and circulate textual content, posting it on a web page remains the most commonly chosen.[6]

However, the collection of data on web pages is free and open, and does not depend on any owner. In theory, it is enough to use a crawler which will automatically explore all or part of the web in order to record public contents in a database (Limonier 2018). This is how the large search engines work (Google, Bing, Yandex, Baidu), as their crawlers browse the web incessantly to look for new pages to index.

We built a database listing all the pages partially or totally covering contents written in French by two Russian agencies (548 articles from RT and Sputnik) and five Chinese agencies (230 articles from Xinhua, CCTV, CRI, CRI Senegal and China Daily) on topics related to Africa.[7] This choice was based on the empirical observation of the presence of a galaxy of websites, blogs and forums covering, appropriating and mobilizing these contents according to a plurality of political and ideological agendas.

To do this, we used the largest public indexing database in existence today, Google. Using our own crawlers would have required indexing the totality of the web on our own to eventually extract the web pages that covered contents published by RT and Sputnik. Such an operation would have required computing or storage capacities that were obviously beyond our means. For that reason, we relied on Google's databases, perfectly conscious of their limitations: if Google manages the most complete index to date, its robots cover only 20 to 30 per cent of existing web pages. The remaining 70 per cent are either non-indexable pages, because they are inaccessible without user identification (this is commonly called the Deep Web), or pages whose administrators refuse any referencing (the Dark Web) (Limonier 2018). So, our study focuses on the 30 per cent of the pages that form the 'surface web.'

Harvesting the data made available by Google was automatically conducted with a web scraper, an extraction technique very similar to that used by indexing robots. Our scraper retrieved all the web page addresses (URLs) detected by Google as containing all or part of one of the articles produced by Russian and Chinese agencies about Africa in 2018 (Limonier 2018).

Introducing our findings

This operation led to a database compiling 4,373 pages reproducing all or a portion of an article written by a Russian or Chinese media outlet on topics dealing with the African continent. For the Russian outlets RT and Sputnik, we found 3,889 pages from 622 different domain names.[8] In other words, with our method, we obtained 600 different entities (web sites, blogs and so on) that could be considered as relays of the Russian media agencies writing in French on topics of African interest. Of course, the term 'relay' should be considered here in its broadest sense: it does not necessarily imply

the existence, on the part of the administrators of these entities, of a politically motivated desire to propagate the contents of RT and Sputnik in order to amplify them (Limonier 2018). On the contrary, their motivations for covering these contents were extremely diverse.

In the Chinese case, we gathered 484 pages that reproduced some or all of the content of 230 articles published by Xinhua, CCTV, CRI, CRI Senegal and China Daily. These pages were produced by 98 different domain names. In other words, we identified approximately a hundred entities (web sites, blogs and so on) that could be considered French-language relays of Chinese media agencies on topics dealing with Africa. Here again, the notion of relay does not necessarily indicate that the administrators of these sites disseminate Chinese content in order to voluntarily participate in its amplification. Their motivations could be very diverse.

When comparing the results obtained for Chinese and Russian media outlets, we noted a very important difference: Russian contents were on average reproduced 7.09 times, as opposed to 2.1 times on average for Chinese contents.[9]

This difference can be explained by a quantitative analysis of Chinese publications. Most of the contents published by Chinese media outlets in Africa deal with Chinese preoccupations and not African issues. Chinese media outlets are tools of influence, and they intend to propagate positive representations of Chinese projects on the continent. Furthermore, Xi Jinping's ascent to power in 2012 marked the beginning of a greater oversight of the Chinese international media system (He 2019). Thus, the diplomatic, nationalistic and defensive nature of Chinese media publications hinders their popularity among the African public, as their contents are not very relevant to their concerns. The contents produced by Russian media, on the other hand, deal with much more diverse and politically-engaged themes and issues, which explains why there are many more platforms that pick up Russian contents.

Relays of Chinese contents in Francophone Africa: an emerging phenomenon

The propagation of Chinese media contents in Africa is an emerging phenomenon that can't be compared, for now, to the success of Russian contents on the continent. We compiled our findings on a map to make their comprehension easier Figure 1.

This map shows the potential impact of Chinese media contents in each country. It presents, on the one hand, the number of websites that relay these contents in each country[10] and it analyses, on the other hand, the visibility of these contents, independently from the location of the relaying websites.[11] As such, several phenomena appear.

First, the countries where the websites relaying Chinese contents are the most consulted are Ivory Coast, Morocco, Tunisia and Niger (maximum scores), followed by the Democratic Republic of Congo, Chad, Senegal and Algeria (significant scores). In these countries, Chinese contents written in French and related to Africa are notably visible. That said, the fact that many relays of these publications are regularly consulted in these countries doesn't necessarily imply that China has a real influence in these media landscapes. The countries with the highest visibility for Chinese contents (such as the DRC, Algeria, Morocco, Ivory Coast) are also the ones where online French-speaking

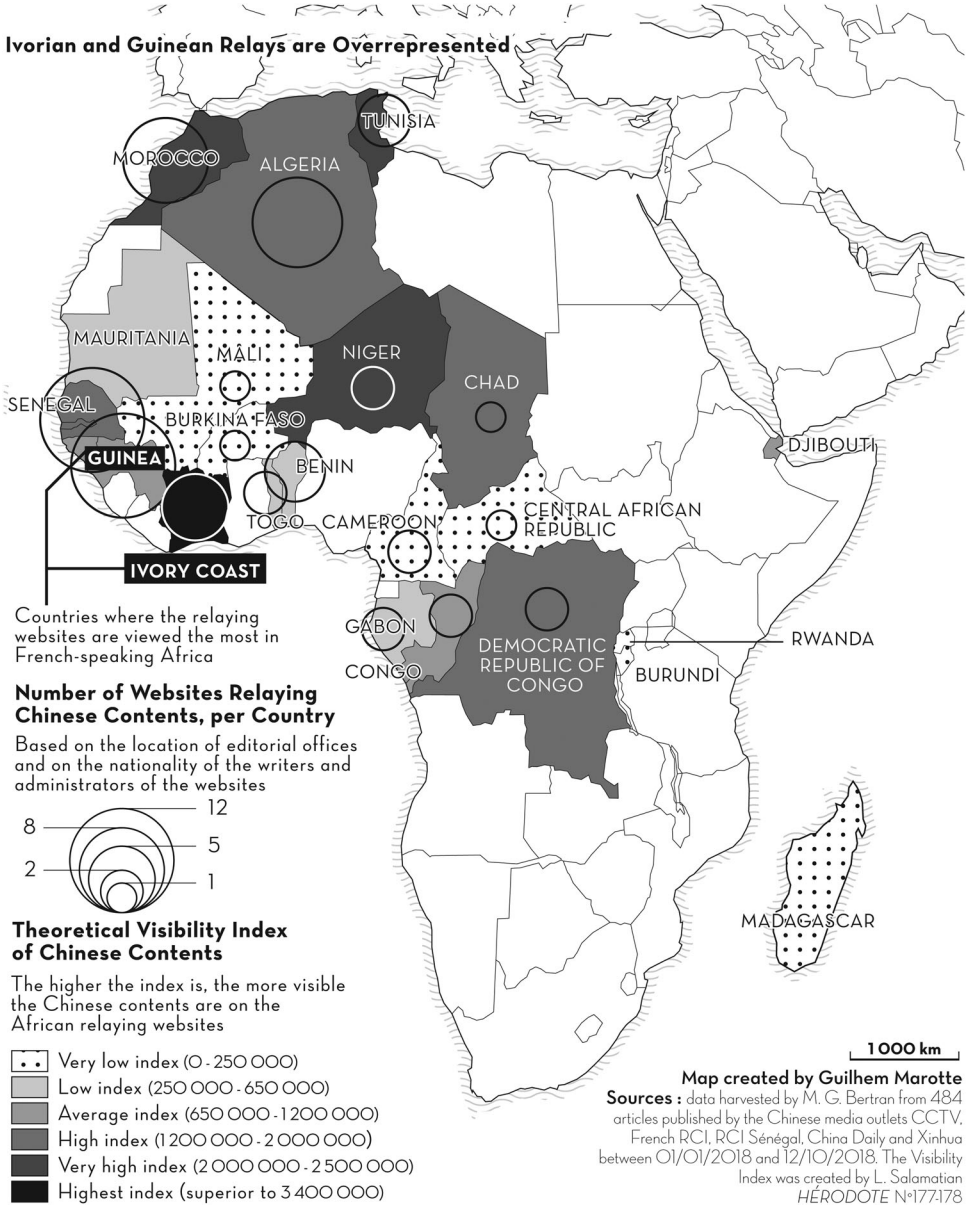


Figure 1. The Diffusion of Chinese Contents in French Speaking Africa.

media outlets and international broadcasters covering contents taken from French and American organizations have the largest audience on the continent.

Second, the proportional circles on the map identify the countries where the relays of Chinese contents are registered after we located the editorial boards, the editors or the administrators of the websites. Some of the websites couldn't be precisely located because they have an opaque functioning, as is often the case with aggregators and curators of contents. The six countries with the most relays are Guinea, Senegal, Algeria, Morocco, Ivory Coast and Benin. Most of these countries have high visibility scores,

save for Guinea and Benin. Tunisia, Niger and the DRC have very high visibility scores but a limited number of Chinese relays.

Finally, when measuring the proportion of published Chinese contents in the targeted websites, we found that Ivory Coast had few relays (5) compared to Guinea (12), Senegal (12), Algeria (9) or Morocco (8) but that the websites it hosted were more active in covering Chinese contents. It can partly be explained by the dynamism of the news website koffi.net that covered approximately 192 pages from Xinhua and CRI in 2018 (out of 484 pages analysed). We will delve into the functioning of the website later on. The Guinean relays were as numerous as the Senegalese relays (12) but covered more intensely Chinese contents. Our analysis also showed that Algerian relays were less numerous than Senegalese relays (9 compared to 12) but that they ultimately covered approximately the same number of Chinese contents. Generally, we noted an overrepresentation of Guinean and Ivorian media outlets in our database, which means that online media outlets in these two countries massively and regularly covered the contents released by Chinese outlets in 2018.

As such, the Chinese efforts directed at these countries led to an evolution in the local journalistic practices that has nourished Chinese soft power. The influence of Chinese media outlets seems more palpable in Senegal, Algeria and Morocco even though it remains, for now, less important than in Guinea and Ivory Coast.

Guinea and Ivorian relays are more favourable to Chinese interests

Three factors can explain the fact that Chinese contents are often covered by Guinean websites. First, Guinea owns half of the world's bauxite deposits. This resource has been greatly coveted by China and the Chinese government has made Guinea one of its strategic partners; China is the world's premier aluminum producer and bauxite is an ore essential for its production. Beijing has thus deployed considerable efforts to shore up its image and reinforce its soft power in the country. Furthermore, one of the oldest settlements of a Chinese media outlet in Africa was in Guinea. The first office of Xinhua was inaugurated in Conakry in 1957. And China is already well-established and influential in the development and modernization of the local media landscape. In January 2018, the Chinese company StarTimes launched a campaign to significantly increase access to digital TV in the whole country. It hoped to equip 309 Guinean villages for an investment of $5-6 million. Finally, there is a network of Guinean 'friends of China' journalists which organizes frequent conferences on topics linked to Chinese-African relations. This association, about 20 journalists in total, was invited to China for specialized training dedicated to Guinean professionals.[12]

Ivory Coast is economically vibrant and hosts one of the largest groups of Chinese companies among French-speaking African countries (Auregan 2014). The important number of Ivorian media outlets covering Chinese media contents can be explained by three main factors. First, the Chinese embassy in Ivory Coast frequently collaborates with the Organization of Professional Journalists from Ivory Coast (OJPCI – *Organisation des journalistes professionnels de Côte d'Ivoire*). And the revalorization of China's image in the country in the face of negative reports from Western media outlets – especially the French newspaper *Le Monde* – is a core element of the current discussions between the Chinese embassy and the OJPCI.[13] Furthermore, the Chinese government is working to promote

the Chinese practice of positive journalism among Ivorian journalists. Then, the People's Republic of China recently financed a project providing an access to satellite TV to 500 Ivorian villages for a total cost of $10 million. The project was signed in Abidjan in June 2015 by the Chinese ambassador Tang Weibin and the Ivorian Minister of Foreign Affairs Marcel Amon-Tanoh. Finally, Xinhua and CCTV each have a correspondent in Abidjan. Also, Xinhua and the Ivorian national press agency have signed a partnership to promote an exchange of contents and a better media coverage of China in Ivory Coast.

Thus, the two countries that reproduced the most Chinese contents in 2018 were those where China had offered journalistic training specially dedicated to national journalists, visibly favoured by the Chinese authorities.

In Senegal, a limited influence despite Chinese efforts

RCI in French and RCI Senegal are the most republished Chinese media in Senegal. This is due to the fact that the headquarters of the Chinese radio station for French-speaking Africa is located in Dakar. Also, RCI has set up an editorial staff of Senegalese journalists offering programmes conceived for Senegalese listeners. It is, however, difficult to measure the audience of this radio station in Senegal, because the figures are either non-existent or inaccessible. That said, the contents covered remain marginal.

The more recent presence of China in Senegal than in Guinea or Ivory Coast may partly explain this delay in seeing an impact of Chinese media. Indeed, Guinea was the first African country to establish diplomatic relations with China whilst Senegal had broken off its diplomatic relations with China in 1996, when it recognized Taiwan. Diplomatic relations were re-established in 2005 after Dakar broke off its diplomatic relations with Taipei and recognized the 'One China'. Within 5 years, China became the main commercial partner of Senegal. Furthermore, media outlets are more developed and also freer and more democratic in Senegal than in Ivory Coast or Guinea: the media market is stronger and prevents Chinese outlets from finding a greater visibility at this point, especially among radio stations. There are dozens of radio stations and CRI, which came late in the market and didn't obtain a good broadcasting frequency.

Relays of Russian contents in Francophone Africa: a complex and abundant 'galaxy'

An analysis of the platforms relaying Chinese contents highlighted local and national dynamics, but Russian contents forced us to opt for a methodological approach that took into account the political orientations of the platforms.

Indeed, while Chinese contents are mostly dedicated to improving the diplomatic position of Beijing in Africa, Russian contents emphasize more dramatically local issues – even when it runs contrary to Russia's direct interests. In fact, the galaxy of platforms that cover RT and Sputnik's contents is far more complex, abundant and divisive than in the Chinese case. This complexity cannot simply be studied with a geographical analysis: some widely accessed websites in French-speaking Africa that relay Russian contents are, for instance, administered from France or Canada (including some by members of the African diasporas) and the topics discussed by Russian contents are more appealing for platforms focusing on 'generating clicks.'

For that reason, it seems more pertinent to distinguish these platforms based on their political orientation rather than on their presumed nationality. To do this, we assumed that these 600 platforms relaying Africa-related Russian contents mirrored the internet and constituted a network of entities that maintained relations among them. As such, mapping those relations gave us more information about the environment in which Russian contents are propagated: the network brings together disparate actors ranging from Islamophobic websites to anti-Zionist platforms, including pro-Hezbollah web pages. If this galaxy seems paradoxical at first sight, it has a coherent structure that can be measured to understand the political landscape in which Russian contents discussing African issues are deployed.

What is a relational graph?

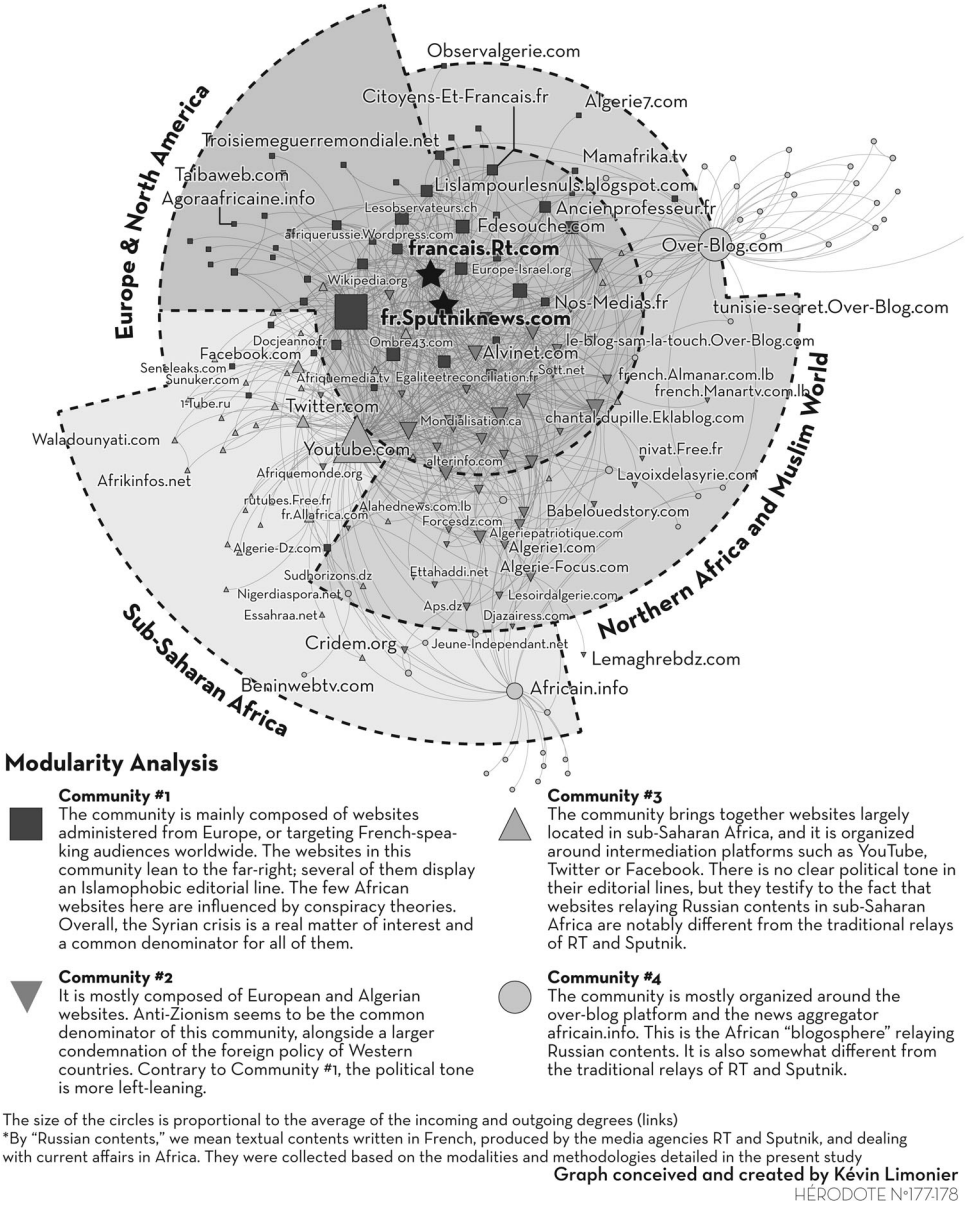
This postulate is seemingly confirmed by the very functioning of the World Wide Web (WWW) which takes its name from the hyperlink (or hypertext) structure that links the websites together, giving the WWW this representation as a web. Hence, the totality of the websites referring to another website constitutes an ecosystem that can theoretically be mapped with relational graphs. Such graphs are graphical representations constituted of nodes linked together by edges that make the visualization of more or less complex relational data possible. In our case, we talk about spatialized relational graphs because the position of each point on the surface of the graph is determined by a spatialization algorithm based on the relations established by the nodes among themselves. To create such a graph, we used Force Atlas (Bastian, Heymann, and Jacomy 2009), an algorithm favoured by social scientists because it produces graphs that are easy to read. Indeed, Force Atlas uses notions such as the attraction force or the repulsion between nodes to position them on the graph, one relative to the others. In other words, with Force Atlas, the closer two nodes are, the more direct or indirect links they share (Limonier 2018). We can draw some conclusions from the position of the nodes about the structure of their relationships, for example, and ultimately we can deduce some qualitative trends.

Representing the totality of the web in a relational graph is evidently impossible because the required computer capacities would be prohibitive. It is however possible to set up some graphs by focusing on more or less important segments of the web – in our case, the 622 websites identified as having relayed Russian contents. As we represented the relationships among the websites graphically, we wondered whether it could be possible to determine some large political or discursive trends structuring the ecosystem of websites that relays contents produced by RT and Sputnik. In doing so, we obtain a slightly less coarse vision of the forces that tend to explain the success of these two platforms or, *at the very least*, an idea of the major political and narrative trends of their relays (Limonier 2018).

How to read a graph

To make a semantic or political interpretation of a relational graph of the web is to accept the following postulate: the hyperlinks that connect two websites are not random. They are created by the administrators of the websites or by the authors of the contents posted there, and most often refer to third-party contents used to support what is being said.

Concretely, a blog dedicated to the Palestinian cause will refer to a website promoting Zionism more rarely than to a pro-Palestinian website. Exceptions may occur, such as when a site A links to the contents of a site B to discredit or mock them. In the same way, some generalist sites (platforms such as Wikipedia) refer to all types of content. But these are generally minimal and do not interfere with spatialization, i.e. the process by which an algorithm will determine the position of each point on the graph and, *ultimately*, produce a cartography like the one presented here (Limonier 2018). Figure 2



Modularity Analysis

Community #1
The community is mainly composed of websites administered from Europe, or targeting French-speaking audiences worldwide. The websites in this community lean to the far-right; several of them display an Islamophobic editorial line. The few African websites here are influenced by conspiracy theories. Overall, the Syrian crisis is a real matter of interest and a common denominator for all of them.

Community #2
It is mostly composed of European and Algerian websites. Anti-Zionism seems to be the common denominator of this community, alongside a larger condemnation of the foreign policy of Western countries. Contrary to Community #1, the political tone is more left-leaning.

Community #3
The community brings together websites largely located in sub-Saharan Africa, and it is organized around intermediation platforms such as YouTube, Twitter or Facebook. There is no clear political tone in their editorial lines, but they testify to the fact that websites relaying Russian contents in sub-Saharan Africa are notably different from the traditional relays of RT and Sputnik.

Community #4
The community is mostly organized around the over-blog platform and the news aggregator africain.info. This is the African "blogosphere" relaying Russian contents. It is also somewhat different from the traditional relays of RT and Sputnik.

The size of the circles is proportional to the average of the incoming and outgoing degrees (links)
*By "Russian contents," we mean textual contents written in French, produced by the media agencies RT and Sputnik, and dealing with current affairs in Africa. They were collected based on the modalities and methodologies detailed in the present study

Graph conceived and created by Kévin Limonier
HÉRODOTE N°177.178

Figure 2.

The graph above represents the set of hyperlinks that tie together nearly 200 of the 622 sites we have identified as Russian content relays. We used Hyphe to create the graph, a tool developed by Sciences Po's Medialab that crawls the websites from a predetermined list to extract all the hyperlinks and then builds a graph of the links connecting the websites together (Jacomy et al. 2016, 4). The loss of 422 sites is due to the fact that the robot we used to list the hyperlinks did not find a match between each of these 422 and the rest of the database.

The spatialization shows the main geographical areas of the French-speaking world

Based on the assumption that the majority of hyperlinks are representative of editorial and political choices made by editors or administrators (Severo and Venturini 2016), we can therefore *read* the spatialization here and give it a political meaning, according to the proximity or distance of a node with the others. Here, our graph is organized concentrically, and according to a fairly simple discretization:

- The central circle regroups nearly all the websites in the graph with a global audience, not necessarily limited to African readers. At the heart of this 'first circle', we find RT and Sputnik and, close to them, websites such as Egalité et Réconciliation, Fdesouche, and lesobservateurs.ch, which are all located on the far right and often Islamophobic. This proximity with Russian media outlets can be explained by the fact that they often refer to RT and Sputnik and are important relays for Russian contents.
- The peripheral circle regroups almost all the African websites, organized along an axis that neatly separates the Maghreb (right) and sub-Saharan Africa (bottom left).

Such spatialization seems to indicate that, even in the case of Russian contents dealing with Africa, European platforms remain the most central relays, while African websites are pushed to the periphery. However, this spatialization, if it follows a certain logic, does not explain at all how far right European sites, often Islamophobic, are themselves linked to African platforms to form a unique and seemingly paradoxical ecosystem (Limonier 2018).

Typologies of the communities

To answer that question, we used a tool automatically detecting communities, a process also called an analysis of modularity (Lambiotte, Delvenne, and Barahona 2015). Mostly used when dealing with social networks, the modularity consists of partitioning a graph into communities, that is into groups of nodes that have more links in common between themselves than with nodes outside their group. In our case, the algorithm of modularity detected four communities, each comprising 40 to 60 nodes (websites). We can immediately distinguish two types of communities from these results: the 'structural' communities and the political communities (Limonier 2018).

a. Political communities

The more significant nodes in these communities share a common idea or a common element of speech. In other words, the central nodes in these communities (the

structuring nodes) are websites that share a strong common political or discursive identity. This identity tends to become less significant as we move away from the centre of the community (Limonier 2018).

In our graph, the community with the most visible political orientation is probably community no. 1. Its central nodes are websites with evocative URLs such as lislampourlesnuls.blogspot.com, lesobservateurs.ch, Fdesouche.com, troisiemeguerremondiale.net (a website assigning itself 'to demonstrate that we are heading straight for a religious war). Also listed here is europe-israel.org, a website presenting itself as wanting to "bring together European citizens of all religions and all origins in support of Israel"[14] and that dedicates many articles to radical Islam or to the migration crisis in Europe. All these websites are notable for their pronounced Islamophobic positions and their hostility to migrants coming to Europe. Logically, this community has almost no African website, except a few at the very periphery. Most of them are sites whose articles (mainly news items) have been taken up by Islamophobic platforms. But there are also some militant sites such as Africa24.info (see above) or mamafrika.tv, a website mostly read from Congo and Cameroon that offers a treatment of global news from the perspective of the major issues in which Russia is involved.

The second large political community is no. 2. It is both distant and very close politically from community no. 1: it is organized around websites and blogs seemingly sharing anti-Zionist ideas and, more generally, hostility to Israel. This community is structured around some websites, such as the very active blog penned by the writer and blogger Chantal Dupile who has often called France 'radically Zionist and freemason, nauseating,'[15] or the French-speaking version of Al Manar, owned by Hezbollah. There are also less radical sites, mostly oriented to the left or to the far left, such as blogs of communist activists or the site of the newspaper alterinfo.net. Finally, a large quantity of Algerian news websites appear at the periphery of this community (Limonier 2018).

Our two political communities appear antagonistic: a community mainly structured around far-right Islamophobic websites on the one hand, and a more left-leaning ecosystem seemingly centred around anti-Zionism on the other hand. But this antagonism is only apparent because several recurring topics are shared by the two communities. They altogether support the Syrian regime and offer an undying critique of political and economic liberalism. In the background of these redundant postures, other major themes such as a criticism of the American foreign policy or of the European elites are visible. These are the main themes classically addressed by Russian platforms, which extend over entire political spectrum, or at least its two extremes (Limonier 2018).

This political anchoring of Russian platforms is not a surprise. It has been thoroughly studied and been addressed in numerous publications that highlighted some of the discursive and political trends (Mattelard 2016) of the *mjadkaja sila* (Audinet 2016), the Russian version of the American concept of soft power. That said, it is interesting to note that, even in the case of a number of websites relaying Russian contents that discussed African topics, the fault lines remain focused on European or international politics and very rarely on purely African controversies. In the end, a majority of the sites identified in our database as being primarily aimed at an African audience and using RT and Sputnik (with the notable exception of certain Algerian sites) escape these Europe-centric thematic classifications (Islamophobia, migration crisis, etc.). This could be explained by our lack of knowledge of local political contexts but also by the fact that many African

sites take up Russian contents indiscriminately, and without any particular political motivation (Limonier 2018).

b. Structural communities

Structural communities are those that are organized around a mode of information dissemination (social network, blog platforms …), whose *dissemination structure* they reflect. This means, for example, that most of the blogs on the over-blog platform are part of the same community since they are connected to the rest of the graph only via the central over-blog website. This structure prevents any political interpretation of their position on the graph. Our graph shows two such communities here (no. 3 and no. 4) and they mostly assemble websites connected to the rest of the graph through their intermediation platforms. In other words, this means that these sites, which relay Russian contents about Africa, do not link to RT or Sputnik. The nodes within community no. 4 are mostly blogs from the over-blog.com platform or websites linked to the rest of the graph through africain.info, a news aggregator. The websites in community no. 3 are connected to the rest of the graph through YouTube and, to a lesser extent, via Twitter and Facebook. With a few exceptions, the websites of these two communities don't seem to show any activism when covering Russian contents and, as a matter of fact, seldom mention RT and Sputnik with hyperlinks (Limonier 2018).

Conclusion

While this quantitative study has shown the extent of the phenomenon of repurposing Russian contents dealing with African topics (more than 3,889 web pages on 622 websites between 1 January and 1 August 2018), it also highlights the plurality of political, human and technical contexts that can explain this coverage. Hence, most of the websites we have identified as targeting most immediately an African audience seem to be relaying Russian contents indiscriminately. This observation confirms the hypothesis that RT and Sputnik have managed their 'normalization' and their institutionalization in the French-speaking media landscape in Africa. Moreover, we have shown that there is a real difference between the coverage of contents produced by RT and of contents produced by Sputnik, the second being more largely relayed in Africa. This can be explained by the deep differences that distinguish both agencies, but perhaps also because Sputnik's success results from a better reception of its editorial line among some African audiences (Limonier 2018).

Then, we have emphasized the different dynamics underlying the reception of Russian contents in a plurality of countries. Of course, our typology by countries is only a first step that requires deeper research and more precise analyses to better understand local media ecosystems and the motivation behind the appropriation of these contents. Our methodology can also be expanded to conduct studies on other types of media (official or otherwise), languages and countries. For example, we conducted a study on the propagation of Russian contents in the English language about the US presidential primaries in 2020 which gave interesting results, confirming in particular that Russian contents appeal to both extremes of the political spectrum, along with a galaxy of conspiracy websites (Douzet et al. 2020). This corroborates the observation in this paper that Russian contents

in the French language appeal to far-right websites, many of them Islamophobic, in Europe.

Finally, we have established that some political fault lines structure the ecosystem of these relays around notions such as the geopolitical situation in the Middle East, and especially in Syria, Israel or Palestine. There again, this study would need deeper research, because we believe that the many questions underlying these topics form a legitimate 'narrative universe' in which some relays are evolving. In conclusion, examining more carefully and qualitatively our findings based on the relational graph presented in this article could help us figure out what controversial topics explain the successes of Russian platforms in Africa.

Chinese media contents are less covered than Russian contents in Africa but the phenomenon could soon become more important. During our analysis, we have demonstrated that close to a hundred African websites relay articles from Chinese platforms. We have also documented that Russian contents were on average reproduced 7.09 times, as opposed to 2.1 on average for Chinese contents. Chinese media outlets don't seem to have yet found a notable following among media professionals and consumers on the African continent who have a limited trust in Chinese journalistic practices. Contrary to Russian organizations, Chinese agencies remain focused on the diffusion of narratives on the Chinese regime in order to improve the diplomatic position of Beijing in Africa, without trying to address and emphasize more dramatically the local problematics, like Russian agencies do. This heavily limits their popularity and ultimately their propagation in Africa. However, in the wake of the global COVID-19 pandemic, we have noticed an evolution of Chinese contents throughout 2020, more geared towards local issues.

We have also observed that the coverage of Chinese contents in Africa is not an ideological and activist phenomenon on the part of relaying websites, but usually an 'easy' solution as the articles are freely available and allow African outlets to relay or cover the relations between China and African countries. Furthermore, the favourable treatment of African news by Chinese media outlets favours the coverage of their contents, especially when the editorial line of these outlets is close to the narratives of their own governments.

From a geopolitical point of view, China tends to compete with large powers such as France, the United Kingdom or the United States, the international media outlets of which are also deployed on the African continent. This is reflected in the media contents: the outlets of the Western powers often discuss a 'Chinese threat' whereas their Chinese counterparts disseminate representations of 'neo-colonialism' against former colonial powers in Africa. Xi Jinping affirmed that China shouldn't be perceived as a threat to Western countries, and that it doesn't intend to replace the traditional partners of African countries but intends to work side by side, equal to equal, in a multipolar logic. Strategically, Xi Jinping needs to demonstrate that Beijing has become a full power on its own terms with the means to internationalize its media outlets and strengthen their implantation in Africa. It requires an offensive strategy with the acquisition of stakes in local media outlets, and massive investments in media agencies and telecommunications that would put the country above the international outlets of Western countries in terms of infrastructures. The countries where China has successfully settled in the media landscape are the countries where it can rely on the largest number of relays. These investments create the structural conditions for a Chinese informational influence in Africa, but their scope is still limited due to the lack of a qualitative approach to information

geographically precise enough – something Russian outlets have well understood and progressively mastered.

Notes

1. Bugayova, Nataliya and Barros George. 2020. "The Kremlin's Expanding Media Conglomerate." *Institute for the Study of War*. URL: http://www.understandingwar.org/backgrounder/kremlin's-expanding-media-conglomerate
2. "Sputnik expands news exchange with regional media in China." *Ria Novosti,* 14 August 2019. URL: https://ria.ru/20190814/1557492868.html
3. URL: https://school.rt.com/en/
4. An API (Application Programming Interface) is a set of functions that allow applications to communicate with each other and to mutually exchange services and data. Concretely, Twitter's API allow the exchange of data with external services, including services created to further scientific research.
5. Data that describe or define other data are called metadata; for example, the data or geolocalization of a message on social networks.
6. In fact, the propagation of contents on social networks or on other types of intermediation platforms (mail services, private messaging apps and so on) is often nothing more than sharing an URL as the user precisely accesses to the textual content via a web page outside the service used to send the address (Limonier 2018).
7. These articles were identified through a series of requests conducted based on a number of different keywords (typically 'Africa', 'Ivory Coast', 'Algeria', 'Touadéra' …) which allowed us to filter some results. Another manual selection was then conducted to delete the articles matching a keyword but discussing related topics such as the declarations of European political leaders during the migration crisis.
8. A domain name is the identification of an internet domain such as 'www.geopolitique.net.' The pages correspond to precise contents on a domain name, such as www.geopolitique.net/XYZ.htm where XYZ.html corresponds to a specific page.
9. This is a ratio between the number of contents and the number of pages reproducing these contents.
10. To determine the geographical origin of a website, we look into a number of informational details such as the localization of its editorial board, or the nationality/origin of the writers/administrators of the website, especially for the websites administered from France or Canada by people from the diasporas.
11. We have elaborated a visibility index based on Alexa and SimilarWeb data that measure, country by country, the traffic on the most consulted websites.
12. "Médias: le réseau des journalistes guinéens amis de la Chine dans la dynamique de l'élargissement", *Guineematin.com,* 17 February 2018. URL: https://guineematin.com/2018/02/17/medias-reseau-journalistes-guineens-amis-de-chine-dynamique-de-lelargissement/
13. In January 2018, the newspaper *Le Monde* accused Beijing of spying on the headquarters of the African Union in Addis Ababa (Ethiopia) using its "cybersurveillance capacities."
14. URL: http://www.europe-israel.org/about/
15. URL: http://chantaldupille.fr/mesarticles/rss/90-pourquoi-je-quitte-la-france

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