**Kronos Kidnapping**

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**Kronos Kidnapping Case by Heather Lemon - Introduction**

Kronos is a small island off the Mediterranean coast, home to people of traditionally agricultural farming and timber. In 1994, Sten Sanjorge Jr. discovered oil and gas fields in the country which led to the expansion of GASTech company in Kronos.[4] The Kronos government has pivoted toward energy, specifically natural gas, and financial services. As a result of corruption and poor government planning, many Kronisians have struggled to make the transition with unemployment hovering around 24% and 70% at or below the poverty line. Kronos currently suffers from natural gas pollution with contamination in the water and soil, hyper acidic substrate removal, loss of arable land, deforestation. Kronos international issues - a transshipment point for heroin and hashish to Europe; despite a strengthening of anti-money-laundering legislation, remains vulnerable to money laundering; corruption is a major concern; reporting of suspicious transactions in offshore sector remains weak. [0]

Tethys is located near western Europe bordering the Mediterranean Sea. It is a large and populous country (32 million+) with a diverse economy and high tax rates. It’s central GDP comes from the services and industry workforce. With environmental issues such as air pollution, deforestation, climate change, and hazardous wastes. Tethys international issues - include it being a transshipment point for cocaine, heroin, marijuana synthetics, money-laundering for narcotics trafficking organizations and organized crime. [1]

The Protectors of Kronos (POK) was a political activist movement that began as a small group of seven citizens concerned about contamination from drilling at the Tiskele Bend River gas fields. The protectors of Kronos emerged from the Elodis township, a rural agricultural town of about 6500 persons that lies 25 km from Abila, capital city of Kronos. [0] In early 1997, citizens of Elodis began to be concerned about an abnormal increase in the occurrence of illnesses such as cancer, birth defects, respiratory illnesses, and neurological diseases. Wellness for All used scientific testing of the water from the Tiskele River both upstream and downstream of the Tiskele Bend gas fields and confirmed the presence of contaminants consistent with pollution from Hyper Acidic Substrate Removal, a gas drilling technique employed by GASTech at the Tiskele Bend fields. The WFA published these test results in several international journals. [5][3]

In January 2014, the senior executive members were celebrating a fortune made from the initial public offering (IPO) when several of the GASTech employees went missing. We will try and bring law enforcement up to date on the current organization of the POK, how has it changed over time, who are the key leaders, explanations of why the GASTech employees went missing, and what is the timeline of events surrounding the kidnapping of January 20-21, 2014.

**Kronos Kidnapping Case – POK Early Years**

Protectors of Kronos (POK) was founded by Henk Bodrogi in 1997 and six other co-leaders; Carmine Osvaldo, Ale L. Hanne, Jeroen Karel, Valentine Mies, Yanick Cato and Joreto Katell; out of concern for the citizens of Elodis township where sickness and death has increased since the drilling of oil and gas from an upstream river. [3] The POK members appealed to the Minister of the Interior armed with health statistical reports and testing reports for toxic chemicals from water contamination of the nearby Tiskele River. The initial results from the WFA water testing in 1998 found high levels of chemicals associated with Hyper Acidic Substrate Removal, and technology associated with natural gas drilling operations. Several toxic substances were found Elodis water, including benzene, toluene and xylene arsenic, barium, chromium, lead and selenium. [9] WFA published these results in international health organization conferences, bringing increasingly widespread awareness of the Elodisan situation. They received nothing but skepticism and silence from the government. They began to reach out GASTech representatives, but they were also silent until Hank Fluss Chief Operating Officer meet with members of the POK and took his concerns to Sten Sanjorge Jr. [3]

**Kronos Kidnapping Case – Timeline of Events up until the kidnapping (1998-2013)**

In 1998, Juliana Vann passed away from leukemia associated with benzene toxicity. [3][6] This spurred more support for the members of the POK. [3] POK continued to press the Kronos government for answers, but all their efforts are blocked. In March 2001 Minister Nespola died suddenly. Shortly after President Kapelou accounted his nephew Vincent Kapelou would succeed as the new Minister of Health.[7] Later in the year an underground methane deposit ignited at the GASTech mining operations near Elodis.[8] During which time afterwards there were protests begun at the GASTech fields and several POK activists were arrested. [10]

Later in October of 2001, Elian Karel was now the new leader of POK. However, they added a item to the agenda to include bribery and corruption of governmental officials. [3] In the following years 2005-2009, protests from the POK being more militant, violent, and civil disobedient.

In March 2009, Elian Karel was held in Abila City Prison on alleged tax evasion charges. [11] Where he later died of a heart attack in June 2009. [5][11] But conflicting reports show he was in allegedly beaten to death[11]. This event incited the POK to escalate to more violent methods. Silvia Marek advocates for a continued peaceful approach to protesting where Mandor Vann advocated a much more violent approach.[1] Since joining the POK in 2004, Mandor Vann is a top political strategist. He also holds ties to embassies located in Tethys and Asteria.[2] The Asterian People's Army (APA) is a paramilitary organization which has been engaged in terrorist activities funded through its criminal enterprises, which include drug trafficking and political insurgent groups. In recent years the APA has sought to build their brand through websites and the publication of a professional, high-quality magazine called "Arise". [13]

As of 2011, the Government of Kronos has labeled the POK as a "public threat".[16] The POK has evolved from peaceful protests and demonstrations demanding government action to more violent activities including riots as they claim that the government has done little to nothing in addressing the contamination, poisonings, and deaths suffered by their people.[16] Both peaceful and violent POK protest continue after the death of Elian Karel with Silvia Marek taking over as the new leader. [2][17]. Many news articles point to an increase in drug trafficking, drug usage, money laundering, and corruption. [17] Bianca and Arresta said their efforts to treat people has been made more difficult because they often do not know anything about the designer drugs that were taken.

"We have had patients come in and act out of control, who are very violent. They tell us they have been doing cotton candy or synthetic marijuana."One factor for the popularity of cotton candy is its low cost, Bianca said. She said a gram of cotton candy costs about K18 while a gram of cocaine costs K166. Cotton candy creates euphoria, or a high, that is equal to or greater than that of cocaine but also causes a crash that is worse, Bianca said. The crash's ill-effects often prompt people to binge on cotton candy to the point where they consume the drug for days. "They crave it," she said. "We had at least two cases dozen in last month," said Alicia Bianca, director of nurse of the department. [17] Khat or qat is a flowering plant native to eastern and southern Africa.[19] Khat contains the alkaloid cathinone, a stimulant, which is said to cause excitement, loss of appetite, and euphoria. [18][19] Carmin Bodrogi a known relative of a member of the POK family was arrested for allegedly smuggling drugs from Kronos to Tethys (possession/intent to deliver).[20] At an anniversary vigil for the deaths of Juliana Vann and Elias Karel police were reported using pepper spray and batons against those who attended the ceremony. [21]

**Kronos Kidnapping Case – The Kidnapping (January 2014)**

Kronos Star News Timeline – See notebook as to why I chose Kronos Star as the news organization to follow.

article 710 - 10:00 AM a GASTech employee reports that the fire alarm was pulled in response to a bomb threat.

article 692 - 10:15 AM this morning, the fire alarm went off at the GAStech headquarters building in downtown Abila. At the time of the alarm, the media had gathered in front of the building to cover the meeting of GAStech executives, including GAStech President and CEO Sten Sanjorge Jr. and local GAStech executives and their subsequent transition to the presidentially hosted reception at the Capitol Building.

article 763 - 10:20 AM: GAStech employees evacuate the building and a helicopter leaves from the roof of the building.

article 70 - 10:30 AM: Abila fire department responds to the alarm. Firemen are seen entering the building.

article 669 – 11:15 AM Sanjorge is seen entering the capital building, but other executives are missing.

article 540 - 11:55 AM: Abila Fire Captain Federigo Accardi announces that it was a false alarm and the building is safe. In response to reporter's questions, Captain Accardi says GAStech employees made no report of a bomb threat to his agency.

article 163 - 12:20 PM: The Abila police have been called to respond to GAStech headquarters for an unspecified emergency. (editor's note - The call was overheard on a police scanner. The Abila police know this channel is monitored by the media and often do not give the reason for the response)

article 569 - 12:25 PM: We have unconfirmed reports that the GAStech executives have not yet arrived at the scheduled reception at the capitol. Kronos Star reporters covering the reception at the capitol report having seen GAStech President and CEO, Sten Sanjorge Jr., but they have not seen Ingrid Barranco, Ada Campo-Corrente, Orhan Strum, or Willem Vasco-Pais.

article 718 – 12:30 PM Two private jets took off, one being Sten Sanjorge and the other’s destination was Rome, Italy. Between the two private jets that departed the Abila Airport fourteen to sixteen people could have been passengers. “According to Danisliau, the seven or eight passengers of the first plane were "business types" and appeared to be in a hurry. It was not exactly clear where they were headed. The plane took off around 12:30 local Kronos time. The second plane also carried seven or eight "business types", but seemed "much more relaxed than the first group of passengers". Danisliau said the second group of passengers "seemed to be celebrating something." The second plane departed around 14:30 around two hours after the first plane.”

article 524. 462, 435- 1:30 PM: reporters contacted the executives offices with no response

article 289 - 2:00 PM: A government car was allowed through the police perimeter. The occupant, who appears to be a security official, was let into the building.

article 539 - 5:30 PM: We have several reports from GAStech employees that confirm a kidnapping took place, but at this time there is no information on who was involved. Unofficial reports from the police indicate that they believe the Protectors of Kronos (POK) are behind the kidnapping and that they requested government assistance with the investigation. We have received no information which could confirm the POK's role in this alleged kidnapping, but note that they have grown increasingly violent over the past 5 years.

article 298 - 5:50 PM: According to a GAStech employee, the GAStech executives left the building after their meeting this morning and were headed to the reception at the capitol building. When asked about why we were unable to reach them by phone, the employee replied that it was standard corporate security procedure for the executives to be rushed to a secure location in the event of a threat like the kidnapping.

article 441 - 6:10 PM: The GAStech executive jet reportedly arrived in Tethys a few hours ago bearing Sten Sanjorge Jr. The jet was quickly refueled and then departed for Abila International Airport with six GAStech officials onboard.

article 31 Update, 6:30 PM: The GAStech executive jet arrived at the airport. The occupants were taken by limousine to the GAStech building.

article 678 - 7:45 PM: Carman said that police cannot currently account for the whereabouts of fourteen GAStech employees and have not yet been able to find the caterers. When asked if police suspected the caterers in the kidnapping, Carman declined to comment.

article 776 - 7:35 PM: Abila police spokesman Adrien Carman said, "Several GasTech employees appear to be missing.

article 582 - 8:00 PM: Government spokesman Rufus Drymiau has informed us that President Kapelou has been moved to a secure location by his security team as a precaution.

article 637 - 10:00 PM: Tethys federal law enforcement officials and staff from the Tethyn Ministry of Foreign Affairs have arrived in Kronos to assist police in the investigation.

**Kronos Kidnapping Case – Two hypotheses for missing employees**

1. Did the CEO and senior executives fake a kidnapping and steal the money and run away?

2. Did the POK kidnap the CEO and executives to extort money for funding drugs, corruption, and bribery?

My hypothesis is that both incidents occurred. I think the senior member executives did steal the money and run away.[article 713][article 718] I believe the CEO was kidnapped by the POK and the other senior executives knew about it and let it happen as a distraction for themselves so they can run away. CEO Sten Sanjorge Jr was later found the next day back in the capital city Centrum, Tethys. The news report [article 824] shows the POK has taken responsibility for the kidnapping but also a ransom demand of $20 million from the CEO.[article 824] This news [article 460], mentions the names of five executive employees including; Sten Sanjorge Jr, Ingrid Barranco, Ada Campo-Corrente, Orhan Strum, Willem Vasco-Pais. [article 460]. This still leaves 9 people missing [676]. A conflicting report by the police suggest that the police do not believe the people missing have left the island which conflicts with the report [824], where the CEO arrived in Tethys. I still believe the other senior executive members ran away with the money as a second jet with 6-7 business types were celebrating and headed for Rome, Italy [article 718].

**Kronos Kidnapping Case – Dataset Description**

We have been given; a map of Kronos, an org chart of GASTech, employee records, email headers of two weeks prior to the kidnapping, a few employee resumes, factsheet of Kronos and Tethys, and historical reports, and news articles. Needed to do some data cleaning and preprocessing around the email headers content and news articles.

**Figure 1**

*Dirty Email Header Example*



There were a handful of GASTech employee records that has missingness in the data. It was either due to the employee did not own a passport or the employee did not serve in the military. Since the missingness is intentional, we chose to keep the missing data.

NLTK was used to clean the subject category of the email headers and news articles. Such as replacing commas, using lower case, and removing all punctuation. For the news articles, we extracted the name of the news company, the datetime stamp which the news article was reported, a feature engineering request to append the word “article” to each of the 845 news articles to tell where we got the news from.

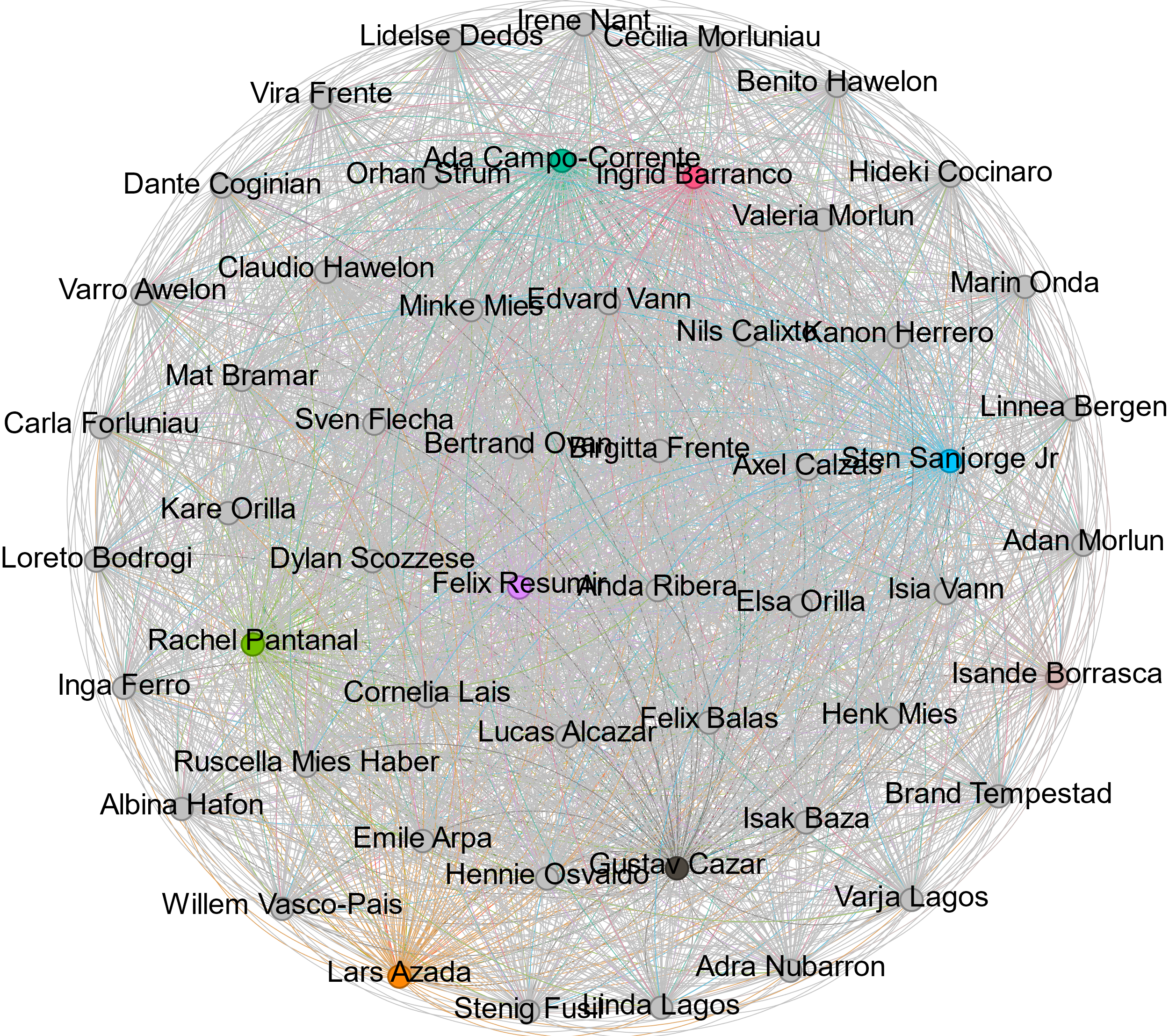
**Kronos Kidnapping Case – Exploratory Data Analysis**

To help answer the questions above, a social network communication graph was created of the GASTech email headers data. A question was asked – How frequently do employees contact each other via email. For example: Ada emailed Felix two times. We can take the email headers csv file and transform it into a source, target, weight. Where the source represents the *From*, the target represents the *To* and the weight is the frequency at which emails were sent to other employees. I initially drew a chord graph from d3blocks but found that there wasn’t much insights about the communication between employees.See Notebook for more description.

To elaborate further on the communication network, we would like to know which employees communicate with each other and what they talk about. It would have been nice to understand more of the context of what people were talking about. We lost that subject context when we did the transformation for getting the email frequencies counts. To elaborate further, you can train a clustering algorithm to group employees based on their email metadata or content. By analyzing the content of emails, we can easily identify groups of employees who are discussing similar topics or engaging in similar activities

**Figure 2**

*Social Network Graph by Gephi*



*Figure 1 – Social Network Graph by Gephi*

The brightly colored nodes are the employees with the most frequent communication with each other. To use Gephi, you must have a source, target, and weight. The weights represent the frequency at which employees communicated with each other.

We also assert that the employee's email address is in the employee records csv file. We discovered that Sten.Sanjorge Jr has two email accounts: Sten.Sanjorge Jr.@gastech.com.kronos & Sten.Sanjorge Jr.@gastech.com.tethys

The names listed are PoK symaptizers. Their citizenship is from Kronos, served in the military experience as well as sending out email contents of defenders of Kronos propaganda.

Ruscella Mies Haber, Isia Vann, Loreto Bodrogi, Inga Ferro, Hennie Osvaldo, Minke Mies, Loreto Bodrogi

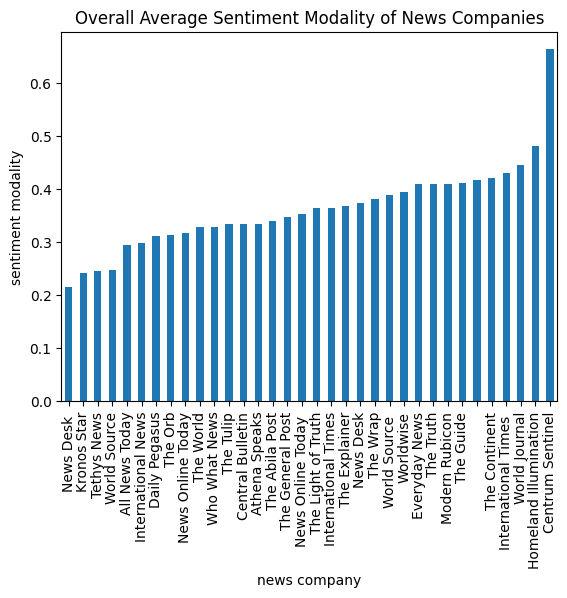
The Asterian People's Army (APA) is a paramilitary organization which has been engaged in terrorist activities funded through its criminal enterprises, which include drug trafficking. In recent years the APA has sought to build their brand through websites and the publication of a professional, high-quality magazine called "Arise". [article 775]

**Kronos Kidnapping Case – Facts vs Opinions on News Articles**

Briefly wanted to point out the news articles of facts vs opinions. Sentiment analysis was performed with the help of the Pattern library. The Pattern library has two main functions one is sentiment analysis, the other is the concept of modality. Modality is a rating from 0 to 1 if some sentence sounds more like a fact it is closer to 0 and if it sounds more like an opinion it’s value is closer to a 1. Here are a few graphs depicted of the overall modality scores of all news companies and the events surrounding the kidnapping during January 20-21st.

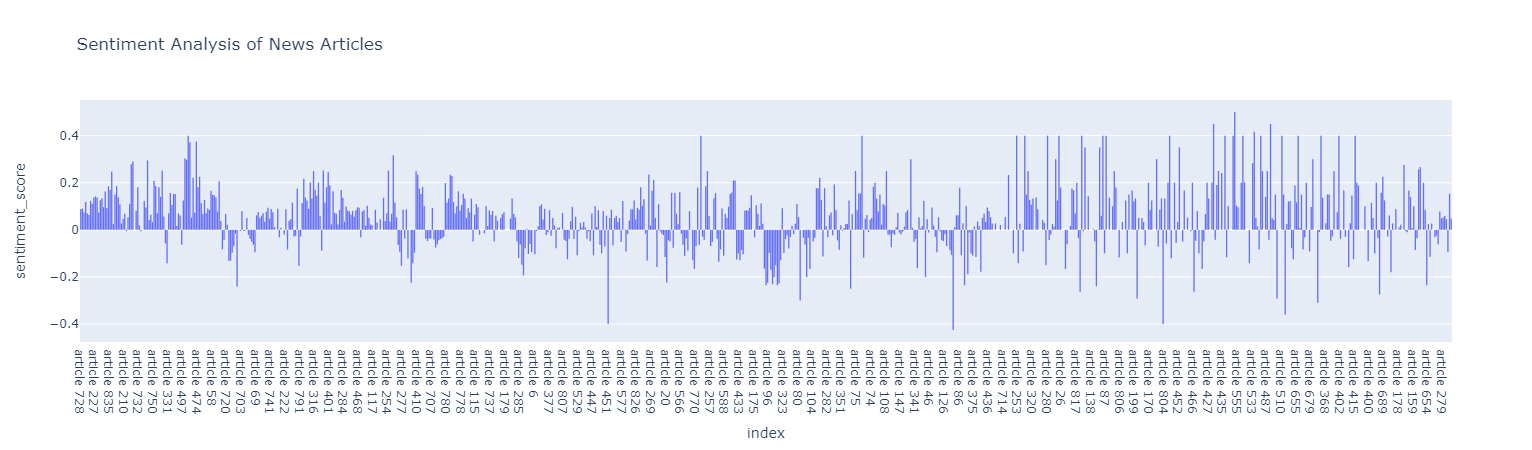
**Figure 3**

*Overall sentiment modality*

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**Figure 4**

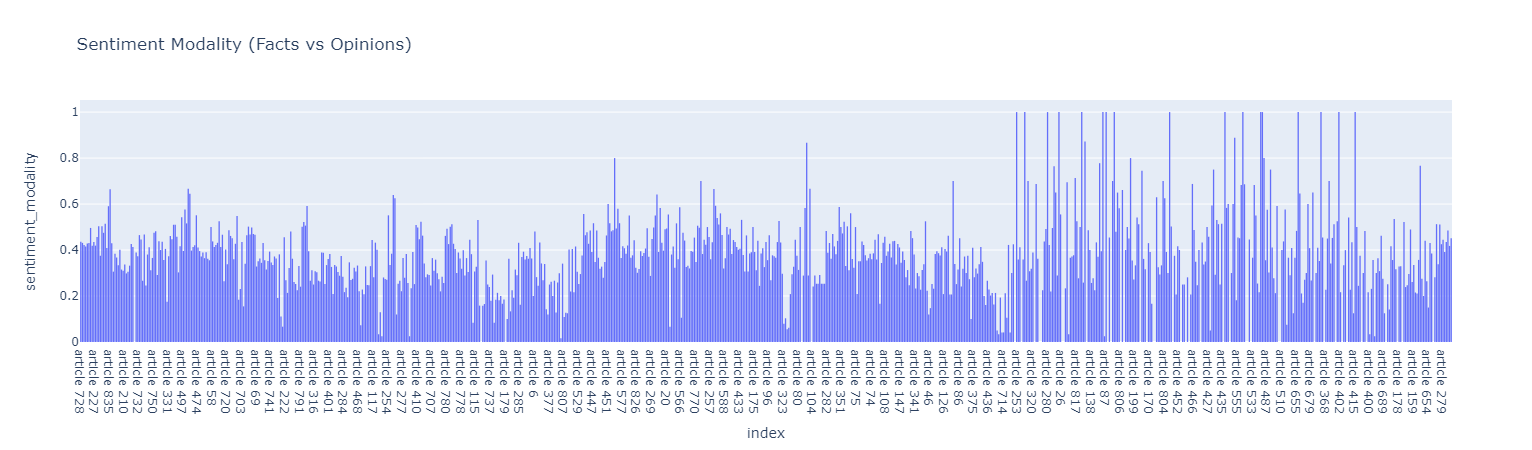
*Sentiment Analysis of News Articles over Time ~20 years*



How people report about the news was initially positive but as protests become more violent and more deaths occur, we see more of a mixture of positive and negative sentiment over time. Could it be that the citizens of Kronos are becoming more discontent with the current state of the government.

**Figure 5**

*Sentiment Modality of News Articles over Time ~20 years*



The sentiment modality score has increased over the years and news organizations are reporting more opinion based articles than facts.

**Kronos Kidnapping Case – Conclusion**

The first explanation as to why the GASTech employees went missing is that the senior executives stole the new money received from the IPO and ran away.

There are multiple articles linking to jets taking off from the airport during the time of the kidnapping, to the senior executives not showing up at the reception. The CEO was sighted at the Capitol reception but left shortly after for Tethys. The second explanation as to why the GASTech employees went missing was from them being kidnapping by members of the POK who have become increasingly more violent over the past few years since Elian Karel's death. There are news articles reporting a ransom note for $20 million from the POK, but a majority of the articles say no one has ever officially claimed responsibility for the kidnapping. Please see notebook or presentation for founding and current POK structure diagrams.

**Kronos Kidnapping Case – References**

[0] FACTBOOK-Kronos.docx

[1] FACTBOOK-Tethys.docx

[2] Wagner, (F.N.) and Andrews, (W.B). (January 2009). “A Psycorps Analysis Brief.” *Historical Documents 5 year report clean*, Pages 6

[3] Halford, Kyrla, “The Application and Validation of Social Movement Models in Understanding the Evolution and State of One Grassroots Social Movement in Kronos: Protectors of Kronos” (October 2005). Master’s Thesis. Paper SW1138. *Historical Documents 10 year report*, Pages. 6

[4] The Light of Truth, (1994/09/25), *the expansion of gastech reaches the shores of kronos*. article 802.txt

[5] The Light of Truth, (1998/11/15), *health for all breaths (wfa) gastech and government of kronos.* article 823.txt

[6] Daily Pegasus, (1998/08/21), *of ten years - old dices of the girl of elodis of the envenenamiento*

article 791.txt

[7] News Online Today (2001/06/15), *Minister of Health Dies Suddenly*. article 746.txt

[8] The Abila Post (2000/08/16), *tiskele bend explosion and fire*. article 663.txt

[9] Salo M. Homeland Illumination, Elodis public health fact sheet – update.(31 May 2000) article 254.txt

[10] Homeland Illumination (2005/04/05) *pok protests end in arrests.* article 221.txt

[11] International News (2009/03/12) *Activist Leader Karel Arrested for Tax Evasion* article 836.txt – other references cited (article 798, 820, 683, 73)

[12] Petrus G. (2011/06/20) Homeland Illumination. A *look back at a life cut tragical short: elian karel.* Article 161.txt - other references cited (article 225, 745, 62)

[13] International Times (2013/10/21) article 287.txt

[14] Word Source (2013/10/22) *Multi-Country Task Force Formed*. article 775.txt

[15] News Online Today (2013/02/08*) Abila Hospitals Seeing Influx of Designer Drug User* article 124.txt

[16] The Abila Post (2021/08/22) *who are the protesters.* article 54.txt

[17] International News (2010/06/21) *POK Protest at Abila Police Headquarters* article 767.txt

- other references cited (article 800, 801, 812)

[18] International Times (2013/02/07) *Abila Hospitals Seeing Influx of Designer Drug Users* article 651.txt

[19] Wikipedia (2023/05/20) Khat, <https://en.wikipedia.org/wiki/Khat>

[20] Athena Speaks (2011/11/23) *blotter of arrest of police force of kronos – abila* article 255.txt

[21] Daily Pegasus (2012/06/22) *pok remembers martyred leader.*  article 572.txt