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Letter From the Editor

I am proud to present Volume Eleven of the Florida Atlantic Undergraduate Research Journal (FAURJ). The FAURJ is a peer-reviewed journal that provides an opportunity for undergraduate students to publish unique research across all interdisciplinary fields. The FAURJ is offered in collaboration with the Office of Undergraduate Research and Inquiry to facilitate critical thinking, creativity, and to prepare undergraduate students for professional careers in their respective fields. With each peer-reviewed publication, our undergraduate students distinguish Florida Atlantic University as an institution of excellence.

I would like to personally thank each student who submitted to the 2021-2022 journal. The publication process requires an immense amount of dedication, patience, and willingness to learn. Each of you should be proud of this accomplishment. I hope this was a rewarding experience and wish you the best of luck!

—Katherine Buckman

Cover Design Artist Statement

“Sunny Days”

The cover image of “Sunny Days” depicts the true beauty of FAU’s “backyard.” Being 1.8 miles from the coastline, students have found that the beach is their home. Whether it’s to lay out and soak up the sun, meet up with friends for bonfires, surf, or for a therapeutic spot to distance themselves from the stress of the real world; college life within FAU cannot get any better. By taking a creative way of expressing the elements of the environment, one can display a jaw-dropping image. The ocean provides priceless memories that most people take for granted. Beauty is everywhere you look; all it takes is to stop for one moment and appreciate it from another perspective. As an artist, my mission is to inspire others through the memories I have lived.

—Henry Bliss, Undergraduate Student

Dorothy F. Schmidt College of Arts and Letters



The Development of Inhibitors to Target the Driving Functions of PAK1 in Cancer

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Abstract

The p21-activated kinases (PAKs) are a family of protein kinases that play major roles as downstream effectors of the small G-proteins Cdc42 and Rac1 under normal physiological conditions and disease states. Specifically, p21-activated kinase 1 (PAK1) has been shown to play a driving role in cancer development by impacting fundamental cellular functions, such as growth factor signaling and morphogenic processes. As a result, there is increased interest in developing small molecule inhibitors that modulate the activity of PAK1 as anti-cancer agents. This review evaluates the past ten years of research involving challenges related to efficacy, toxicity, and selectivity of the inhibitors that have prevented progress past pre-clinical development, informing the development of new strategies to address these challenges.

Introduction

The p21-activated kinases (PAKs) are a family of protein kinases that play major roles as downstream effectors of Cdc42 and Rac1. Cdc42 and Rac1 are small G-proteins belonging to the Rac1 and Rho family (The UniProt, 2021; Dahmene et al., 2020; Rane & Minden, 2019; Semenova & Chernoff, 2017; Yi et al., 2010). As Cdc42 and Rac1 bind PAKs, the PAKs become activated and mediate downstream signaling. These signaling functions regulate multiple aspects of cellular behavior such as cell division, actin cytoskeletal rearrangements, and cell motility. Given that dysregulation of these functions is a hallmark of cancer (Hanahan & Weinberg, 2011), it has become increasingly apparent that Cdc42 and Rac1 can influence cancer progression and metastasis through the PAKs (Maldonado et al., 2020). The PAKs' involvement in cancer has been associated with their overexpression or dysregulated expression, and the genes encoding

them are not typically found to harbor mutations. The irregular expression of PAKs often interrupts their cellular roles and contributes to unchecked cell proliferation, aberrant cell signaling, increased metastasis, drug resistance, and modulation of the immune system (Rane & Minden, 2019). The goal of this work is to consolidate and evaluate research within this field to gain a clear understanding of how to facilitate progress in the development of PAK1 inhibitors which, in turn, can then help elucidate PAK1 biology and determine candidates for therapeutics.

PAK1 is one of six PAK genes that has been categorized into Group I of the two subfamilies of PAKs (Rane & Minden, 2019). PAKs 2 and 3 belong to the Group I PAK subfamily, and PAKs 4-6 belong to the Group II PAK subfamily (Rane & Minden, 2019). In Group I, the autoinhibitory domain (AID) functions as a major regulator of PAK activation. Group I PAKs are thought to be present mostly as dimers in a trans configuration where the AID from one unit is engaged with the catalytic domain of the other unit. This configuration inhibits kinase activity and autophosphorylation of an activation loop, thus preventing kinase activation. The Group I PAKs are activated via the disruption of the binding between the dimerizing PAKs by the binding of active GTP-bound Cdc42 (Cdc42-GTP) or Rac1 (Rac1-GTP) to the Cdc42/Rac1-

interactive binding (CRIB) domain (Rane & Minden, 2014). Lipids have been described as playing a role in PAK activation; however, their specific role is not well understood (Zhao & Manser, 2012). Ultimately, PAK transforms into a monomer, resulting in autophosphorylation at the activation loop and other sites (Rane & Minden, 2014).

Methods

Publications were evaluated to synthesize the research on inhibitors and PAK1's biological role in the development of cancer.

The domain sequence of PAK1 was constructed using DOG software (Ren et al., 2009). Domains and phosphorylation sites of PAK1 were identified using the UniProt database (2021) and "Targeting PAK1" by Galina Semenova and Jonathan Chernoff (2017). The ribbon structure of PAK1 was developed by the RCSB Protein Data Bank (Berman et al., 2000) and molecular graphics and analyses developed by the Resource for Biocomputing, Visualization, and Informatics at the University of California, San Francisco Chimera were used to color the ribbon structure (Pettersen et al., 2004; Lei et al., 2000). The structures of PAK1 inhibitors were derived from associated publications and developed using ACD/ChemSketch (Advanced Chemistry Development, 2021).

The Structure of PAK1

The 545 amino acid sequence of PAK1 (Figure 1) consists of two principal regions: a N-terminal regulatory domain and a C-terminal kinase (catalytic) domain. These regions are involved in the structural changes that alter the activity of PAK1 via their interaction with other proteins and through phosphorylation (Semenova & Chernoff, 2017). The PAK1 gene contains 23 exons, including 6 exons that are part of the 5'-untranslated region (UTR) and 17 coding exons (Kumar et al., 2017). The N-terminal regulatory domain consists of several motifs that are involved in the interaction with other proteins. The CRIB domain (aa 75-90) overlays the AID (aa 83-149) and p21 binding domain (aa 67-150) (Kim et al., 2016; Semenova & Chernoff, 2017). Adjoining the CRIB motif is a positively charged basic region that is involved in the binding to cell membrane phosphoinositides. Additional amino terminal domains include binding domains for growth factor receptor-bound protein 1 (GRB1) (aa 12-18), Nck (aa 40-45), and PAK-interacting exchange protein (PIX) (aa 186-203), which are proline rich and associate with these SH3-domain containing adaptor proteins (Semenova & Chernoff, 2017). The catalytic domain consists of a two-lobe kinase structure and activation loop, which contains a phosphorylation site at Thr423 (Semenova & Chernoff, 2017).

The General Cellular Functions of PAK1

PAK1 is implicated in the development of cancers (Khan et al., 2020; Semenova & Chernoff, 2017). This is not surprising given that expression of PAK1 has consistently been implicated in growth factor signaling networks and morphogenetic processes, such as cytoskeleton remodeling, cell proliferation, angiogenesis, and cell motility (Khan et al., 2020; Kumar et al., 2017; Ong et al., 2011). PAK1 regulates actin depolymerization and nucleation through multiple interactions (Kumar et al., 2017; Vadlamudi et al., 2004). One interaction includes the phosphorylation of actin-related protein (Arp) c1b-Thr21, resulting in the modulation of Arp2/3 actin nucleation complex. Indeed, the Arp2/3 actin nucleation complex is linked to cancer cell motility as shown by the fact that overexpression of Arpc1b promotes tumorigenic properties of cancer cells (Molli et al., 2010). Another actin binding protein, Cortactin, is phosphorylated by PAK1 and is overexpressed in some cancer types (Moshfegh et al., 2014). PAK1 is also known to interact with and phosphorylate dynein light chain 1 (DLC-Ser88) and integrin-linked kinase-1 (ILK-Thr173/Ser246), which were found to contribute to tumorigenesis (Acconcia et al., 2007). Microtubule biogenesis

is regulated via phosphorylation of Tubulin Cofactor V (TCoB-Ser65/ Ser128) by PAK1, which influences the invasiveness of cancer cells (Vadlamudi et al., 2005). The inhibitory activity of the protein Stathmin on microtubule stabilization is turned off via PAK1 phosphorylation of Stathmin (Kumar et al., 2017).

PAK1 plays a role in the nuclear compartment and impacts mitotic events and gene expression, thus regulating cell viability. For example, in breast cancer cells, activated PAK1 is dispatched to the nucleus upon growth factor stimulation (Singh et al., 2005). PAK1 modulates transcription, including phosphofructokinase-muscle isoform (PFK-M), nuclear factor of activated T-cell (NFAT1), and tissue factor (TF) genes (Sánchez-Solana et al., 2012). PAK1 may modulate the expression of PFK-M and NFAT1 genes through its interactions with chromatin (Singh et al., 2005). PAK1 stimulates the expression of TF, consequently modulating coagulation processes, embryonic development, and cancer-related events (Sánchez-Solana et al., 2012). Through the phosphorylation of microorchidia CW-type zinc finger 2 (MORC2), PAK1 signaling can regulate chromatin remodeling in cancer cells that were subjected to ionizing radiation (Li et al., 2012). In colon cancer cells, the

B-cell lymphoma-6 corepressor in the nuclei is inactivated through phosphorylation by PAK1, resulting in modulation of cell-cycle progression (Kumar et al., 2017; Barros et al., 2012).

Multipolar spindle phenotypes and malfunctioning mitotic segregation of chromosomes in cancer cells are connected to the dysregulated expression and activation of PAK1. Centrosome maturation is modulated via its interaction with PAK1. Once this occurs, the activity of PAK1 is facilitated by G-protein-coupled receptor (GPCR) kinase-interacting protein 1 (GIT1), causing the phosphorylation of Aurora-A on Thr288/Ser342 (Kumar et al., 2017). Through the phosphorylation of histone H3.3A/H3-Ser10, the condensation of chromosomes during mitosis is also thought to be linked to the activity of PAK1 (Kumar et al., 2017). The polymerization and depolymerization of microtubules during mitosis is also regulated by PAK1. Polymerization occurs via the phosphorylation of Tubulin Cofactor B by PAK1 on Ser65 and Ser128 (Vadlamudi et al., 2005). Depolymerization occurs via the phosphorylation of mitotic centromere-associated kinesin by PAK1 on Ser192 and Ser111 (Pakala et al., 2012). Inadequate centrosome duplication can also occur via phosphorylation of Arpc1b-Thr21 by PAK1 on the Arp2/3 complex (Kumar et al., 2017).

PAK1 Regulation and Associated Signaling Pathways

The activation and inactivation of PAK1 affects many signal transduction cascades that influence fundamental cellular roles. The mitogen-activated protein kinase (MAPK)/extracellular signal-regulated kinase (ERK) pathway plays a major role in cell growth, proliferation, and survival (McCain, 2013). After CDC42/Rac1 activate PAK1, mitogen-activated protein kinase kinase (MKK) 4 and MKK7 are activated downstream. Sequentially, c-Jun N-terminal kinase (JNK) 1/2 is phosphorylated by MKK4 or MKK7 (Y. Wang et al., 2018). Furthermore, PAK1 has shown to activate MAPK/ERK kinase (MEK1) 1 and c-Raf, which are crucial effectors of the MAPK/ERK pathway (Ong et al., 2011).

Estrogen receptor alpha (ER α) is a nuclear transcription factor. ER α binds to associated DNA regulatory sequences to regulate specific target gene transcription (Paterni et al., 2014). The phosphorylation of ER α by PAK1 at Ser305 stimulates the transactivation of the receptor, consequently upregulating cyclin D1 levels and promoting movement through the cell cycle (Oladimeji et al., 2016).

Bcl-2 antagonist of cell death (BAD) is a member of the protein family Bcl-2 and has shown to stimulate apoptosis. BAD phosphorylation leads to protein binding with Bcl-

2 and 14-3-3 proteins, resulting in inhibition of its apoptotic abilities. PAK1 had been identified as a kinase involved in directly phosphorylating BAD at Ser111 and indirectly at Ser112 via Raf-1. These phosphorylation sites have been linked to modulation of BAD binding to Bcl-2 (Ye et al., 2011).

The nuclear factor- κ B (NF- κ B) pathway regulates cellular behaviors such as inflammatory responses, cellular growth, and apoptosis (Dolcet et al., 2005; Barkett & Gilmore, 1999). How PAK1 specifically participates in NF- κ B signaling remains unknown; however, its participation in the signaling pathway has shown to be supported by several observations. For example, Kaposi's sarcoma is a tumor of endothelial cells that is portrayed by exceptionally vascularized lesions on the mucosal tissue and skin (Gaglia, 2021). PAK1 was identified as a downstream signaling molecule in the cell transformation pathway of Kaposi's sarcoma-associated herpes virus encoding a GPCR to NF- κ B. Additionally, a PAK1-dependent mechanism involving the upstream regulatory kinase NF- κ B inducing kinase (NIK) activated NF- κ B affected cyclin B1 expression via NF- κ B's activity in gastric cancer and when *Helicobacter pylori* infected gastric epithelial cells (Zhou et al., 2019; Liu et al., 2009).

Validation of PAK1's role in Cancer

As noted before, the levels and activity of PAK1 contribute to the development of multiple cancers (Kichina et al., 2010). Expression of PAK1 is increased in 55% of breast cancers and amplification of PAK1 is further correlated with breast cancer invasiveness (Park et al., 2015). The cytoskeletal markers filamin A, LIM kinase and tubulin cofactor B are phosphorylated by PAK1, therefore influencing cytoskeletal remodeling in breast cancer (Kanumuri et al., 2020). The signaling pathways MAPK, MET, NF- κ B, BAD, and ER α , which the PAKs participate in as regulators and effectors, have been shown to drive breast cancer tumorigenesis (Kanumuri et al., 2020). The phosphorylation of snail, p41-Arc, and C-terminal binding protein-1 (CtBP1) by PAK1 modulates the cell motility of breast cancer cells (Kanumuri et al., 2020). As shown, PAK1 contributes to the development of breast cancer through a multitude of ways.

PAK1 is associated with a variety of proteins that are implicated in the progression of lung adenocarcinoma (Jin et al., 2020; Yang et al., 2019; Lv et al., 2016). Apelin-13 and the APJ (a presumed receptor associated with AT1) receptor have been found to induce cell migration of human adenocarcinoma. The phosphorylation of PAK1 and

cofilin is influenced by apelin, resulting in the promotion of lung adenocarcinoma cell migration (Lv et al., 2016).

PAK1 overexpression modulates gastric cancer progression, metastasis, and prognosis (Zhou et al., 2019; Liu et al., 2015; Liu et al., 2009). Knockdown of PAK1 expression hindered gastric cancer anchorage-dependent and anchorage-independent growth. Furthermore, PAK1 modulates cyclin B1 transcription in gastric cancer through the regulation of NF- κ B (Liu et al., 2009). Understanding PAK1's role in the previous signaling pathways provides an explanation for its role in the development of breast, lung, and gastric cancers.

Development and Use of PAK1 Inhibitors

Based on the involvement of PAK1 in the progression of cancer, a considerable effort has been put into the development of novel inhibitors. These types of inhibitors include ATP-competitive and non-ATP-competitive (allosteric) inhibitors. The ATP-competitive inhibitors prevent the transfer of a phosphate group to the active site. The development of ATP-competitive inhibitors has proven to be quite challenging due to the high plasticity of the PAK1 kinase domain and the flexibility of the ATP binding cleft (Semenova & Chernoff, 2017). As noted, the

strong sequence identity of the PAKs impairs the specificity of the ATP-competitive inhibitors, leading to inhibition of all the PAKs or a group of the PAKs (Semenova & Chernoff, 2017; Rudolph et al., 2015). The non-ATP-competitive inhibitors bind to other sites on PAK1, thus exploiting the regulation of PAK1-specific mechanisms, resulting in more specificity but also decreased potency (Semenova & Chernoff, 2017). The issues with PAK1 and its inhibitors can provide insight on the biology of PAK1.

ATP-Competitive Inhibitors

The ATP-competitive group of indolocarbazoles (Figure 2) has shown promising effects in inhibiting PAK1 biological activities (C. Wang et al., 2018). The alkaloid staurosporine (Figure 2A), a kinase inhibitor, was obtained from a *Streptomyces* strain and demonstrates high toxicity and low selectivity (Karaman et al., 2008; Rüegg & Burgess, 1989; C. Wang et al., 2018). Staurosporine inhibits more than 70% of human kinases by interacting with conserved catalytic domain residues (Semenova & Chernoff, 2017). Staurosporine has influenced the direction of kinase inhibitor development by providing a scaffold for the analog Λ -FL172 (Figure 2B) (C. Wang et al., 2018; Semenova & Chernoff, 2017). To fill the large ATP binding

site of PAK1, the inhibitor Λ -FL172 was selected due to its rigid and bulky octahedral ruthenium complex. Λ -FL172 decreases the binding of ATP at the active site by binding to the adenine pocket (Semenova & Chernoff, 2017; Rudolph et al., 2015; Blanck et al., 2012; Maksimoska et al., 2008). To determine whether metallo-organic inhibitors are suitable, a simple ruthenium complex (R)-1, based on a simple pyridylphthalimide scaffold, was developed that utilizes different coordinate ligands within the PAK1 ATP-binding site. When compared to Λ -FL172, the simple ruthenium complex (R)-1 (Figure 2C) demonstrated improved affinity and potency (Blanck et al., 2012). It can be shown that metal inhibitors involving specific coordinate ligands can potentially play a vital role in the inhibition of PAK1. The potential for further development of members of this class of inhibitors as therapeutics to treat cancer is unclear, and additional research on the toxicity and pharmacokinetics of this class is needed (Semenova & Chernoff, 2017).

The inhibitor PF-3758309 (Figure 2D), was derived from pyrrolopyrazoles and was identified through a high-throughput screen for PAK4 inhibition and has further demonstrated activity against PAK1 (Senapedis et al., 2016). PF-3758309 prevents PAK1 autophosphorylation at Ser144 (Chang et al., 2017). PF-3758309

was selected for phase I clinical trials with patients that had advanced/metastatic solid tumors and was tolerated by those with advanced malignancies (Mileshkin et al., 2011; Ndubaku et al., 2015; Rudolph et al., 2015; Semenova & Chernoff, 2017; Senapedis et al., 2016). PF-3758309 inhibited the activity of PAK1 and the Group II PAKs, likely due to similarities in catalytic domain (Murray et al., 2010; Eswaran et al., 2007). PF-3758309, however, showed off-target activities and limited selectivity, causing it to be withdrawn from clinical trials (Semenova & Chernoff, 2017). Outside of clinical trials, PF-3758309 showed promising effects in the regulation of various cancers. For example in pancreatic cancer, PF-3758309 enhanced the effects of various chemotherapeutic reagents, which included 5-FU, gemcitabine, and abraxane (Wang et al., 2019). It is worth further investigation into the prevention of autophosphorylation at Ser144 of PAK1.

FRAX1036 (Figure 2E), FRAX486 (Figure 2F), FRAX597 (Figure 2G), and G-5555 (Figure 2H) belong to a class of small molecules based on an aminopyrimidine-scaffold that had significant activity against PAK1 (Semenova & Chernoff, 2017; Rudolph et al., 2015). The inhibitor FRAX597 was developed through a high-throughput screen partnered with a structure-activity relationship approach (Yeo et al., 2016; Licciulli

et al., 2013). FRAX597 bypasses the Met344 gatekeeper residue of PAK1 by placing its thiazole ring in the back cavity of the ATP binding site (Licciulli et al., 2013). By binding at the back cavity of the ATP binding site, FRAX597 demonstrated increased selectivity and potent antitumor activity in vivo (Rudolph et al., 2015; Licciulli et al., 2013). FRAX597 shows promise as a therapeutic due to its ability to target specifically Group I PAKs and suppress cancerogenic activity (Yeo et al., 2016; Licciulli et al., 2013). FRAX597, however, has shown to inhibit off-target kinases, including RET, YES1, TEK, and CSF1R but has minimal inhibitory effects towards Group II PAKs (Licciulli et al., 2013). Similar to FRAX597 off-target activity, FRAX1036 is highly selective for PAK2 and PAK3 (Korobeynikov et al., 2019). Another inhibitor, FRAX486 targets PAK2 and modulates the scaffolding function of off-targeting upstream receptor tyrosine kinases (Siekmann et al., 2018). Although, FRAX486 suppresses GPCR-induced PAK1 autophosphorylation at Ser144, rendering it inactive (Chang et al., 2017). Progress on the inhibition of PAK1 requires investigation into bypassing the characteristic gate keeper Met344 and the inhibition of autophosphorylation at Ser144 due to potentially increasing selectivity and inactivity. The high selectivity of group I PAKs FRAX597, FRAX486,

and FRAX1036 indicate suitability for validating in vitro experiments as a tool compound due to its moderate kinase selectivity and high potency (Korobeynikov et al., 2019).

G-5555 shows high selectivity as an ATP-competitive inhibitor for PAK1. G-5555 showed an inhibition >70% for 9 out of 235 kinases, including PAK1, PAK2, and PAK3 (Semenova & Chernoff, 2017; Ndubaku et al., 2015). The G-5555 inhibitor was derived from FRAX1036 and demonstrates an increase in stability and potency (Knippler et al., 2019; Ndubaku et al., 2015). The methyl pyridine of G-5555 binds to the ATP-competitive pocket, which is bordered by a catalytic Lys299, gatekeeper Met344, and α C-helix (Ndubaku et al., 2015). G-5555 inhibited the proliferation of PAK-amplified breast cancer cell lines (Rudolph et al., 2016). In animal models of non-small lung cancer and a PAK1-amplified breast cancer, G-5555, however, demonstrated that oral delivery at effective doses resulted in cardiovascular toxicity and death. As a result, G-5555 does not appear to be suitable for clinical development (Rudolph et al., 2016). G-5555, nevertheless, can be used a validation tool for group I PAKs activity.

Two additional ATP-competitive inhibitors, developed from bis-anilino pyrimidines, include AZ13705339 (Figure 2I) and the analogue AZ13711265 (Figure 2J). The inhibitor

AZ13705339 displayed good selectivity, with over 80% inhibition in 8 kinases out of a 125 panel (McCoull et al., 2016). Although AZ13705339 performed well in vitro, it did not in vivo, due to the lack of drug-like properties presumably from high lipophilicity (McCoull et al., 2016). A better choice could be the inhibitor AZ13711265, which has lower lipophilicity, resulting in better pharmacokinetic properties and low toxicity (McCoull et al., 2016).

The novel ATP-competitive inhibitor CP734 (Figure 2K) is highly selective for and inhibits the ATPase activity of PAK1 by targeting residue V342 (Wang et al., 2020). When comparing cell growth inhibition, CP734 demonstrated a stronger effect than G-5555 but a weaker effect than FRAX597. By reducing the activity of PAK1's downstream signaling pathways, such as Ras-Raf, CP734 suppresses pancreatic tumor growth (Wang et al., 2020). A limitation of CP734 is cytotoxicity toward normal human pancreas duct cell hTERT-HPNE and normal human lung bronchus epithelial cell (Wang et al., 2020). Negligible toxicity toward other main organs, however, was observed in vivo (Wang et al., 2020). CP734 exhibited strong synergistic effects with gemcitabine or 5-fluorouracil towards pancreatic cancer cells (Wang et al., 2020). CP734 is a candidate for specifically targeting PAK1 and for synergistic effects with gemcitabine or 5-fluorouracil for treating pancreatic cancer.

The analysis of ATP-competitive inhibitors indicates recurrent problems when developing a PAK1 inhibitor. Met344, for example, is a gatekeeper residue that when bypassed may increase the specificity for PAK1, as seen with G-5555 and FRAX597. If the small molecule inhibitors do not contain a moiety to traverse the residue, this can limit the binding of the inhibitor to PAK1. Other issues are associated with inhibitors FRAX486, FRAX597, FRAX1036, PF-3758309, and G-5555, which had off-target activities that inadvertently interfered with other signaling pathways. Furthermore, high toxicity, as seen with CP734, can be deleterious to healthy cells, causing an escalation of problems. CP734, however, was selective for PAK1 and can be used as a biological tool to validate the activity of PAK1.

Non-ATP-Competitive Inhibitors

The non-ATP-competitive inhibitor IPA-3 (Figure 3A) is a naphthol found through a high-throughput screen to identify inhibitors that targeted PAK1 activation (Deacon et al., 2008). IPA-3 covalently binds to the PAK1 regulatory domain, impairing the interaction with active Rac1/Cdc42 and autophosphorylation at Thr423 (Chen et al., 2019; Viaud & Peterson, 2009; Deacon et al., 2008). In melanoma and colon carcinoma

cell lines with NRAS and KRAS gene mutations, the administration of IPA-3 resulted in increased cytotoxicity to the cells (Singhal & Kandel, 2012). Moreover, the combination of IPA-3 with auranofin in adenocarcinoma and squamous cell carcinoma cell lines that carry EGFR or KRAS mutations synergistically suppressed tumor growth *in vivo* (Ito et al., 2019). While a potent inhibitor, IPA-3 displayed problems in *in vitro* and *in vivo* experiments due to its disulfide moiety, which is quickly reduced, thus rendering the compound inactive (Rudolph et al., 2015).

NVS-PAK1-1 (Figure 3B) is a dibenzodiazepine and was discovered as a PAK1 inhibitor through a fragment-based screen (Semenova & Chernoff, 2017). NVS-PAK1-1 displayed about 100 times more selectivity for PAK1 than PAK2 and has excellent physicochemical properties (Hawley et al., 2021; Karpov et al., 2015). NVS-PAK1-1 inhibits the autophosphorylation of PAK1 (Hawley et al., 2021). Compared to FRAX1036, NVS-PAK1-1 was observed to be more cytostatic and not cytotoxic, resulting in insignificant cell death (Hawley et al., 2021). Another limitation of NVS-PAK1-1 is its short half-life *in vivo* and *in vitro* (Hawley et al., 2021). Further studies are needed to determine the prolonged effects with the administration of the inhibitor NVS-PAK1-1 (Karpov et al., 2015).

Peptides that mimic the AID can inhibit PAK1. Two such inhibitors include fusions with sequences of the cell permeant TAT motif along with the PIX-interacting motif (TAT-PAK18) or the Nck binding motif of PAK1 (PAK-Nck). The TAT-PAK18 inhibitor impedes the PAK1-PIX interaction, resulting in an inhibition of ovarian cancer cell line growth associated with amplification of PAK1 (Zhang et al., 2017; Hashimoto et al., 2010). The PAK-Nck inhibitor prevented the interaction of PAK1 and Nck, which disrupted endothelial cell migration and contractility in vitro and inhibited angiogenesis in vivo (Shin et al., 2013; Kiosses et al., 2002). The delivery of peptide inhibitors to tumor cells, however, remains an obstacle for therapeutic use (Semenova & Chernoff, 2017).

The emerging allosteric inhibitor AK963/40708899 (Figure 3C) inhibits phosphorylation of PAK1 by forming a hydrogen bond with Thr406 and through six hydrophobic interactions with Arg299, Leu396, Tyr346, Ala297, Ile276, and Met244 on PAK1. The inhibition downregulates the PAK1–NF- κ B–cyclinB1 pathway and arrests the cell at the G2 phase (Zhou et al., 2019). Moreover, AK963/40708899 downregulates the PAK1/LIM domain kinase 1/cofilin and PAK1/ERK/focal adhesion kinase pathways suppressing gastric cancer cell invasion and filopodia formation while simultaneously inducing cell

adhesion. Compared to IPA-3, AK963/40708899 has a higher potency and in addition has the ability to be structurally modified and used as a precursor compound for drug development (Zhou et al., 2019). These findings, after additional in vivo studies, promote AK963/40708899 as a potential therapeutic for development against gastric cancer (Zhou et al., 2019).

The existing allosteric inhibitors IPA-3, NVS-PAK1-1, TAT-PAK18, and PAK-Nck have some limitations. IPA-3 is easily reduced, rendering it inactive. NVS-PAK1-1 has limited cytotoxic activity and a short half-life. As they are peptides, TAT-PAK18 and PAK-Nck are difficult to administer to tumor cells. In contrast to these existing inhibitors, the novel inhibitor AK963/40708899 did not exhibit limitations and displayed increased potency when compared to IPA-3.

Future Directions

PAK1 plays a driving role in the progression of cancer (Kanumuri et al., 2020; Prudnikova et al., 2016; Park et al., 2015; Siu et al., 2010). Critical clinical development is needed to identify a PAK1 specific inhibitor that is potent and displays minimal toxicity in vitro and in vivo. The investigation of the selectivity of such inhibitors has provided additional insights into the biology of PAK1, bringing forth new tools to understand more of its cellular functions. Based

on the research collected in the past ten years, a variety of inhibitors have been selected that fulfill the selectivity and inhibition criteria but retain challenges including cellular toxicity in vitro and/or adverse symptoms in vivo. The emerging inhibitor CP734 has contributed to the group of ATP-competitive inhibitors by being significantly selective for PAK1. ATP-competitive inhibitors, on the other hand, have shown consistent problems with the inhibition of off-target kinases, leading to toxicity. This clearly illustrates the need to focus more on non-ATP-competitive inhibitors. AK963/40708899 has demonstrated a high potency and potential as a scaffold for future non-ATP-competitive inhibitor development. The future development of non-ATP-competitive inhibitors may be focused on identification of new inhibitors, which will require novel screening approaches. Another approach may be through the modification of known scaffolds. Promising therapeutic inhibitors of PAK1 will need to be specific, demonstrate high potency, and have minimal adverse side effects.

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Figures

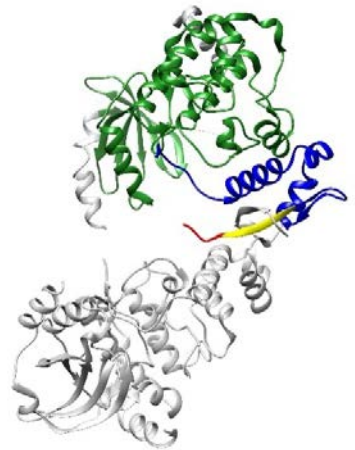
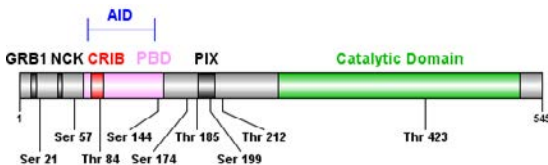


Figure 1. Domain sequence and crystal structure of PAK1

The left image is the domain sequence of PAK1, displaying the serine and threonine phosphorylation sites. The right image is the proposed 3D structure of PAK1. Blue displays the AID, yellow is the overlap of CRIB and AID, red is the CRIB, and green is the catalytic domain.

Domains and phosphorylation sites of PAK1 (Semenova & Chernoff, 2017; The UniProt, 2021). Crystal structure of PAK1 (PDB 1F3M) (Berman et al., 2000; Lei et al., 2000; Pettersen et al., 2004). Amino acids 1-77, 148-248, 417-422, and 543-545 are excluded.

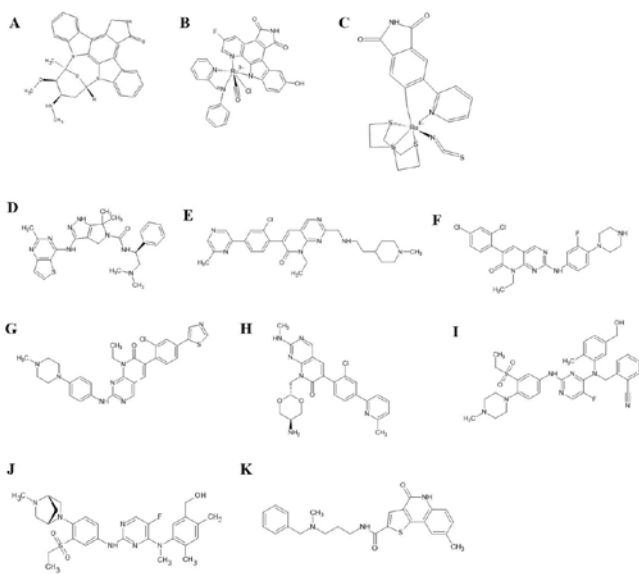


Figure 2. ATP-Competitive Inhibitors of PAK1

Competitive inhibitor identities: staurospine (A) (Rüegg & Burgess, 1989), A-FL172 (B) (Semenova & Chernoff, 2017), simple ruthenium complex (R)-1 (C) (Blanck et al., 2012), PF-3758309 (D) (Semenova

& Chernoff, 2017), FRAX1036 (E) (Ndubaku et al., 2015), FRAX486 (F) (Dolan et al., 2013), FRAX597 (G) (Licciulli et al., 2013), G-5555 (H) (Rudolph et al., 2016), AZ13705539 (I) (McCoull et al., 2016), AZ13711265 (J) (McCoull et al., 2016), and CP734 (K) (Wang et al., 2020). ACD/ChemSketch was used to generate the molecular structures (Advanced Chemistry Development, 2021).

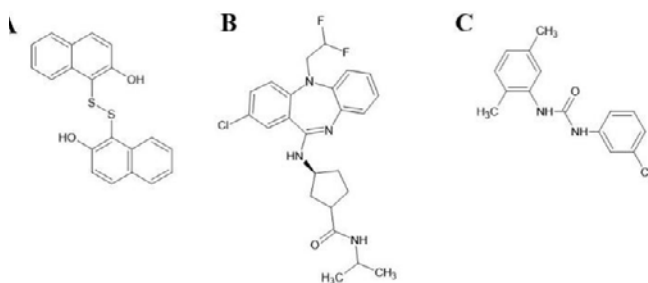


Figure 3. Non-ATP-Competitive Inhibitors of PAK1

Allosteric inhibitor identities: IPA-3 (A) (Viaud & Peterson, 2009), NVS-PAK1-1 (B) (Semenova & Chernoff, 2017), and AK963/40708899 (C) (Zhou et al., 2019). ACD/ChemSketch was used to generate molecular structures (Advanced Chemistry Development, 2021).

List of Acronyms

aa	amino acid
AID	autoinhibitory domain
Arp	actin-related protein
BAD	Bcl-2 antagonist of cell death
CRIB	Cdc42/Rac1-interactive binding
CtBP1	C-terminal binding protein-1
DLC	dynein light chain 1
ERK	extracellular signal-regulated kinase
ER α	Estrogen receptor alpha
GIT1	GPCR kinase-interacting protein 1
GPCR	G-protein-coupled receptor
GRB1	growth factor receptor-bound protein 1
ILK	integrin-linked kinase-1
JNK	c-Jun N-terminal kinase
MAPK	mitogen-activated protein kinase
MEK	MAPK/ERK kinase
MKK	mitogen-activated protein kinase kinase
MORC2	microorchidia CW-type zinc finger 2
NFAT1	nuclear factor of activated T-cell
NF- κ B	nuclear factor- κ B
NIK	NF- κ B inducing kinase
PAK	p21-activated kinase
PAK1	p21-activated kinase 1
PFK-M	phosphofructokinase-muscle isoform
PIX	PAK-interacting exchange protein
TCoB	Tubulin Cofactor V
TF	tissue factor

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The Liminality of Death in *La amortajada* (1938) by María Luisa Bombal

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Abstract

La amortajada by María Luisa Bombal describes the experiences of Ana María, a recently deceased woman as she is prepared for burial. The focus of this research is to compare Arnold van Gennep's theory of rites of passage and Victor Turner's characterization of liminality with the rite of passage of the protagonist. In the second phase of a rite of passage, *limen* phase, a person has lost their previous identity and has not gained another. I expand Turner's use of liminality of this phase to the period of death of Ana María in *La amortajada*. As the main character transitions from her recent death to burial, the *limen* phase provides a new space and time for her consciousness to explore past memories and the present surroundings and changes her state physically, mentally, and culturally.

Introduction

María Luisa Bombal published *La amortajada* in 1938. The "amortajada" translates to the "shrouded woman" and this novel begins with a description of the protagonist, Ana María, waking up during her funeral. Instead of explaining the cause of her death, the narrator describes Ana María's abilities to see and feel although she is dead. In this manner, Ana María observes the surrounding family and friends and remembers her relationships with them. The primary omniscient narrator describes the scenes of the past and present. However, in an indirect style, the narrative voice allows other characters to speak such as Ana María, Fernando, and the priest.

Ana María recounts her history with her first lover Ricardo, her husband Antonio, and her confidant Fernando. She also recollects her relationships with her sister Alicia and her three children Alberto, Fred, and Anita.

The stories emphasize Ana María's struggles from when she was alive, particularly regarding her romantic and familial relationships. Towards the end of the novel, the family and friends place Ana María in a coffin and carry her to the cemetery for burial. In the earth, Ana María rests in her new surroundings as she connects with nature.

This transition from death to burial resembles a rite of passage, influencing her interpretation of her memories and environment and her physical and cultural state. French ethnologist, Arnold van Gennep, described rites of passage in the context of tabu and totemism in Madagascar (Belier 144). According to Van Gennep:

Transitions from group to group and from one social situation to the next are looked on as implicit in the very fact of existence, so that a man's life comes to be made up of a succession of stages with similar ends and beginnings: birth, social puberty, marriage, fatherhood, advancement to a higher class, occupational specialization, and death. For every one of these events there are ceremonies whose essential purpose is to enable the individual to pass from one defined position to another which is equally well defined. (3)

These ceremonies, rites of passage, "...may be subdivided into *rites of separation, transition [liminal] rites, and rites of incorporation*" (Van Gennep 10-11).

Using Van Gennep ideas of liminal rites, British anthropologist Victor Turner explored ceremonies and symbology of rites of the Ndembu in Zambia (Van Gennep 11; St. John 4,6). According to Turner, separation refers to the symbolic separation of the individual from their role in society or from their state. *Limen* defines a person who encounters an intermediary phase in which they lose their old state and have not gained a new one (Turner, "Liminality and Communitas" 359). The person is not recognized by society due to their lost attributes and lives in the margins during this intermediary phase (Turner, "Betwixt and Between" 88). Aggregation signifies that the individual gains a new state with specific social expectations. With this new state, the individual "...has rights and obligations vis-à-vis others of a clearly defined and 'structural' type..." (Turner, "Liminality and Communitas" 359).

Liminality, the transition of a person's state, is an anthropological term first proposed by Arnold van Gennep and later applied in Turner's case studies. According to Turner, state is "...determined by his culturally recognized degree of maturation as when one speaks of the 'married or

single state' or the 'state of infancy'" (Turner, "Betwixt and Between" 88). Besides being dictated by a culture, states can also be defined by a person's physical, mental, emotional, or ecological condition. People who are changing states "...are betwixt and between the positions assigned and arrayed by law, custom, convention, and ceremonial" (Turner, "Liminality and Communitas" 359). As a result, "... these persons elude or slip through the network of classifications that normally locate states and positions in cultural space" (359). One example of liminality that exemplifies the idea of transitioning states is a rite of passage of the Omaha. During the transition between boyhood and manhood, the people who were transitioning separated themselves from their community by traveling into the wilderness. There, they fasted and prayed (Turner, "Betwixt and Between" 91). In this liminal state, the person loses their identity as boy but has not gained the future identity as a man or a *mixuga*. Instead, their identity is ambiguous, "not-boy-not-man", until the vision quest is complete (89).

Another example of liminality is based on Turner's studies on the rites of the Ndembu. The Ndembu describe the liminal period as "kunkunka, kung'ula", meaning "seclusion site", which emphasizes the separation of the transitioning

person from the community and their previous state (90). The transitioning people are "...commonly secluded, partially or completely, from the realm of culturally defined and ordered states and statuses" by moving them to a separate place in the community or by being "...disguised, in masks or grotesque costumes or striped with white, red, or black clay, and the like" (90). For instance, the installation rite of a future chief results in separateness and ambiguity of identity. The chief-elect and his ritual wife are separated from the community by convening in a hut, a *kafu*. This word originates from "ku-fwa, 'to die'" (Turner, "Liminality and Communitas" 362). In this sense, the previous state as a common member of the community but the identity as chief has not yet been realized. After the ceremonial washings and *Kumukindiyila* rite, the transitioning individuals are reintroduced to society with the new states as commoner or chief (362-363).

I intend to extend Turner's definition of liminality in rites of passage to include the dead whose consciousness experiences a period of transition between the physical death of the individual, the shrouding of the body, the wake, and, finally, the burial. The narrator of *La amortajada* portrays the death as a process rather than a single event, with the first physical death triggering an internal conflict with

the past, eventually leading to the burial, or Ana María's final death. Despite the physical death, the protagonist remains in what I call a "liminal space". Her physical mobility is restricted, but her consciousness allows her to remember her past life and observe her friends and family in the present. From Turner's idea of transitioning states, Ana María no longer holds the previous states of being alive, a member of the community, or a mother. She also does not hold the state of being a member of the deceased. Therefore, she exists between physical and cultural states after her death and before her burial. This study investigates how the *limen* phase creates a new betwixt time and space for the central character and how liminality changes her state. While Turner focuses on the cultural significance of liminal states, I focus on the emotional, mental, and physical significance of the individual's liminal state.

Separation, *Limen*, and Aggregation in *La amortajada*

In *La amortajada*, the state of Ana María is ambiguous because she lives between her recent death and her burial. Separation, the first phase of a rite of passage, occurs at her physical death. She is separated from her community of the living with a non-functioning, shrouded body,

and the inability to communicate with the family around her. Starting at her wake, the living family and friends cannot interact directly with Ana María's consciousness, "A la llama de los altos cirios, cuantos la velaban se inclinaron, entonces, para observar la limpieza y la transparencia de aquella franja de pupila que la muerte no había logrado empañar. Respetuosamente maravillados se inclinaban, sin saber que Ella los veía. Porque Ella veía, sentía" (Bombal 5). Her new state as recently deceased prevents her from having interpersonal interactions with the living although she can observe them.

In *La amortajada*, Bombal has created a fantastical world where the character Ana María exists between both the living and dead. She can participate with the living through her observations. Yet, she cannot communicate with them and cannot utilize her previously living body. During the wake, the narrator describes that Ana María sees the people and feels happy because they "...puedan admirarla así, los que ya no la recordaban sino devorada, por fútiles inquietudes, marchita por algunas penas y el aire cortante de la hacienda. Ahora que la saben muerta, allí están rodeándola todos" (5-7). In addition to being able to observe the environment of the wake and the burial, she can also reconsider her experiences in the

past in this *limen* phase. Throughout the novel, the timeframe and setting change between 1) the memories and 2) the wake and burial in the present. Her cultural state changes in this transition. On the one hand, she is separated from her previous identities as wife, mother, or lover as she no longer plays these roles (8-9). However, she has not completely gained the identity of the buried dead.

The burial represents the last phase of liminality, aggregation, in which Ana María emerges from her ambiguity and gains a new state. She completes her transition and accepts the new state as the buried dead. From the coffin to the cemetery, she prepares herself for the end of her liminal phase, remembering the significance of her romantic relationships. She slowly accepts her burial, expressing her tiredness and her desire to stay in her coffin instead of continuing to participate in the land of the living (82-90). When the family and friend move her body from the bed to the coffin, Ana María expresses, “¡Qué bien se amolda el cuerpo al ataúd! No la tiente el menor deseo de incorporarse. ¡Ignoraba que pudiera haber estado tan cansada!” (82). Later, the narrator describes her desires to rest in the earth with the dead:

Y ya no deseaba sino quedarse crucificada a la tierra, sufriendo y gozando en su carne el ir y

venir de lejanas, muy lejanas mareas; sintiendo crecer la hierba, emerger islas nuevas y abrirse, en otro continente, la flor ignorada que no vive sino en un día de eclipse[...].No tentó a la amortajada el menor deseo de incorporarse. Sola, podría, al fin, descansar, morir. Había sufrido la muerte de los vivos. Ahora anhelaba la inmersión total, la segunda muerte: la muerte de los muertos. (91)

The narrator notes a transition of Ana María between the death of her body and the second death in which her body is buried. The description, “descansar, morir,” is like symbolism associated with liminality: the death of the previous state to later be symbolically reborn in a new state. This description signifies the end or death of the intermediary state for Ana María as she gains a more permanent state with “immersion total” (90-91). The new state, the second death, would allow her to rest rather than remaining between the worlds of the living and dead. In addition to the physical change between above and below ground, she also changes mentally and emotionally. Her thoughts switch from her memories and observations of the living family and friends to the sensations of Earth's nature. Once she rests in the cemetery, the novel ends in the aggregation phase of a rite of passage.

Benefits of Liminality

The first benefit of liminality is that during the *limen* phase, the consciousness of Ana María functions to observe and express feelings and reasoning about the past and present. Although the narration does not directly explain the nature of the consciousness, the protagonist's observations during the liminal phases are fluid, moving between time frames. She is not limited by the physical body's internal clock or physical stress. Her consciousness wanders between the present and past and between different locations that hold significance and back to the location of her physical body in the present.

Alberto Toutín and Mario Federico Cabrera argue that the various perspectives of narration and the unique time and space of Ana María "...hilvana[n] fragmentos y repeticiones que hacen a la historia de la protagonista..." (Cabrera 163-164) and "...se abre[n] a nuevas sensaciones que la vinculan, desde una hondura inédita, con la vida de la naturaleza y también con la vida humana y sus avances tecnológicos..." (Toutín 76). Throughout the novel, she recalls significant life events with her lovers, Ricardo, Antonio, and Fernando. When looking back on her relationships with the men, Ana María says, "Pasaron años. Años en que se retrajo y se fué volviendo

día a día más limitada y mezquina. ¿Por qué, por qué la naturaleza de la mujer ha de ser tal que tenga que ser siempre un hombre el eje de su vida?" (Bombal 74). Her statement shows how she felt controlled by the dominance of men in her life and her limited social role of keeping the house in order.

The *limen* phase also allows Ana María to connect the present with the past. During the wake, she shares her revelations about familial and romantic relationships. She notes that Alberto's agony has increased over time:

Son los párpados los que lo cambian, los que la espantan; unos párpados rugosos y secos, como si, cerrados noche a noche sobre una pasión taciturna, se hubieran marchitado, quemados desde adentro. Es curioso que lo note por primera vez. ¿O simplemente es natural que se afine en los muertos la percepción de cuanto es signo de muerte? (36)

Ana María recognizes the severity of the issue that Alberto is facing because she is already dead. She laments the decisions of her son, exclaiming, "¿Por qué? ¿Por qué cela a su hermosa mujer? ¿por qué la mantiene aislada en un lejano fondo del sur?" (36). His jealousy over his wife's beauty and the fear

that she may be desired by others cause his suffering. In addition to isolating his wife María Griselda from the world, he also burns all of the portraits of her so that no one is enamored by her beauty (36-37). By being dead, Ana María can see how her son has begun to die figuratively because of these personal issues.

Due to her ambiguous state, Ana María's relationship with Antonio changes. While she was living and before seeing Antonio at the wake, she was angry at Antonio because "...ya no la apenaba el desamor de su marido, ya no la ablandaba la idea de su propia desdicha. Cierta irritación y un sordo rencor secaban, pervertían su sufrimiento" (75). During the wake, Ana María gains vengeance for the suffering he inflicted by observing how he has aged. She finds satisfaction in his loss of youthfulness. She believes that "Lentamente empezará luego a corroer esa belleza que nada había conseguido alterar, y junto con ella irá desmoronando la arrogancia, el encanto, las posibilidades de aquel ser afortunado y cruel" (77). However, feelings of sorrow for him and the will to return to life arise in Ana María. When Antonio begins to cry, she notices that her bitterness towards him diminishes: "A medida que las lágrimas brotan, se deslizan, caen, ella siente su odio retraerse, evaporarse. No, ya no odia. ¿Puede acaso odiar a un

pobre ser, como ella destinado a la vejez y a la tristeza? No. No lo odia. Pero tampoco lo ama" (78). This wake scene shows that her feelings have changed because of her new perspective at the wake. These feelings resulted from the reflection on her past and present states through liminality of her death process.

By observing her lover, Ricardo, she also recognizes the significance of their relationship and solves the internal conflict created by the deterioration of their relationship. Previously, he had sex with her, resulting in pregnancy, and then left her without warning (18-21). Ricardo's abandonment caused painful memories and emotions (18-19). However, while she transitions from death to burial, she realizes that Ricardo has loved her even though he stopped communicating and spending time with her:

El brusco, el cobarde abandono de su amante ¿respondió a alguna orden perentoria o bien a una rebeldía de su impetuoso carácter? Ella no lo sabe, ni quiere volver a desesperarse en descifrar el enigma que tanto la había torturado en su primera juventud[...]Pero ahora, ahora que él está ahí, de pie, silencioso y conmovido; ahora que, por fin, se atreve a mirarla de nuevo, frente a frente, y a través del mismo

risible parpadeo que le conoció de niño en sus momentos de emoción, ahora ella comprende. Comprende que en ella dormía, agazapado, aquel amor que presumió muerto. Que aquel ser nunca le fué totalmente ajeno. (29-30)

Through the *limen* phase, she resolves “el enigma,” the internal conflict of being abandoned by Antonio. In her previous living state, she could not understand the reason for his abandonment nor his feelings toward her. Yet, in this transitional phase, she reexamines her relationship and concludes that he has always loved her.

The second benefit of liminality is that Ana María can explore her memories from a more objective perspective now that she does not have social expectations associated with her identity from the previous living state. Due to her recent death, she does not retain previous responsibilities as a woman or wife. Liminality after her death provides “...the opportunity to see herself without all of the social and emotional expectations and labels that have heretofore defined her”, no longer enduring the pressure from her family and friends (Wilkinson 86). The main character expresses directly, “No recuerda haber gozado, haber agotado nunca, así, una emoción. Tantos seres, tantas preocupaciones y pequeños estorbos físicos se interponían

siempre entre ella y el secreto de una noche. Ahora, en cambio, no la turba ningún pensamiento inoportuno” (Bombal 8-9). Here, she presents the external pressures on her romantic desires, especially in the context of her sexual relationship with Ricardo outside of marriage.

The narration in this state of liminality reveals that the social pressures have altered her experiences, but now in the present preparation for burial, she reconsiders them. The liberty of reexamining her memories is again demonstrated through the memory of when Ana María did not kiss Antonio. She reconsiders the additional influences of other people and her own response:

...en aquella tarde gris en que su padre le había dicho: “Chiquilla, abraza a tu novio”. Entonces ella se había acercado obediente a ese hombre tan arrogante...y tan rico, se había empujado para besar su mejilla. Recordaba que al apartarse, la habían impresionado el rostro grave de la abuela y las manos temblorosas de su padre...Y haber sentido asimismo la solicitud con que la habían rodeado durante tantos años. Y no; ya no era capaz sino de evocar el temor que se había apoderado de ella a partir de ese instante, la angustia que crecía con los días y el obstinado silencio de Ricardo.

Pero ¿cómo volver sobre una mentira? ¿Cómo decir que se había casado por despecho? (66-67)

In the memory, she notes that she was afraid because she felt trapped in her marriage. This is evident when she realizes that Antonio is not interested in her, her family requires marriage, and Ricardo does not intervene in the situation. At the end of the liminal phase, it appears that she realizes that Antonio is not a horrible or boring person, but the pressure of the family and her feelings influenced her perspective on the marriage. By having time and space in the new liminal phase to reflect, she discerns how her feelings and the additional stresses have affected past situations. During the burial of Ana María, Antonio visits her and cries. While Ana María is dead, she notes that her anger towards him decrease:

A medida que las lágrimas brotan, se deslizan, caen, ella siente su odio retraerse, evaporarse. No, ya no odia[...] Pero tampoco lo ama. Y he aquí que al dejar de amarlo y de odiarlo siente deshacerse el último nudo de estructura vital. Nada le importa ya. Es como si no tuviera ya razón de ser ni ella ni su pasado. Un gran hastío la cerca, se siente tambalear hacia atrás. ¡Oh esta súbita rebeldía! Este deseo que la atormenta

de incorporarse gimiendo: “Quiero vivir. ¡Devuélvanme, devuélvanme mi odio!” (78)

This scene of her liminal phase shows that she longs to take back her previous feelings towards Antonio, wishing to return to life. However, the past has already begun to lose its influence as she transitions to the final phase of her rite of passage, aggregation with the buried dead.

Conclusion

Throughout *La amortajada*, the protagonist, Ana María, experiences a rite of a passage from death to burial. The three phases, separation, *limen*, and aggregation, result in physical, emotional, and mental changes. She is first separated from society and her previous state through her physical death. She then enters the *limen* phase where she is dead but not buried. The past identities from her life as living, such as wife, mother, and lover no longer match with her current status and she is unable to interact with the living. In addition, she does not have the state of dead because she remains unburied, observing the living. Liminality allows Ana María to observe her family and lovers, switching from the present wake to her previous memories. With this ability, she reflects on her previous state as living and expresses her emotions without the physical,

emotional, and societal limitations from when she was alive. She is also able to see the memories from her previous state from a more objective perspective because the pressures of societal expectations as a woman are not influential. The *limen* phase ends at the burial. Ana María's state changes from a transitional state to a member of the buried dead who are connected with nature. This final scene is the beginning of the last phase of a rite, aggregation, where she finally gains all the attributes of the new state, the buried dead.

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Lo Inefable y los Límites del Lenguaje en “El Aleph” (1945) de Jorge Luis Borges

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Resumen

Este ensayo examina el cuento “El Aleph” (1945), del escritor argentino Jorge Luis Borges, con el propósito de indagar en los límites del lenguaje al describir con palabras un momento insólito e inefable. Pese a los intentos del personaje Borges de retratar su experiencia con *lo infinito*, éste no llega a lograr su objetivo pues las formas de ver y transcribir ese instante, el instante en el que se encuentra por primera vez con el Aleph, son inaprensibles e indescifrables. Pero éstas no son las únicas dificultades en el proceso de verbalizar lo inefable; según el filósofo británico John Locke, las palabras presentan inherentes limitaciones que impiden el completo entendimiento de experiencias únicas. Usando la teoría epistemológica de Locke en su obra *Essay Concerning Human Understanding* (1689), este ensayo analiza las limitaciones que el personaje Borges encuentra al contemplar la naturaleza y establecer

una relación entre las palabras y la percepción del mundo.

El lenguaje permite comunicar el pensamiento y dar sentido a la experiencia humana (Parikh 2001). A pesar de ser una de las herramientas de comunicación más poderosas, esta arma (la única de este calibre) se muestra indefensa frente al desafío de expresar determinadas sensaciones y percepciones de la realidad. Es posible verbalizar muchas cosas presentes en el mundo físico, pero ¿es posible expresar lo abstracto con la misma facilidad? En este ensayo, se explorarán las limitaciones del lenguaje que el escritor argentino Jorge Luis Borges¹ percibe en su cuento “El Aleph” (1945). En particular se explorarán soluciones a la pregunta del narrador sobre, particularmente, “¿cómo transmitir a los otros el infinito Aleph...?” (“El Aleph” 163), cuando conceptos

¹ Debido a la existencia de dos Borges en este trabajo, se utilizará: Borges-autor para el autor Jorge Luis Borges, y Borges-personaje para la versión ficticia de Borges en el cuento.

relacionados con *lo infinito* o *lo universal* son imposibles de verbalizar debido a la inmensa complejidad que dichos conceptos abarcan. Para ello propongo utilizar la teoría del filósofo inglés John Locke sobre el uso de las palabras, que éste desarrolla en su obra *An Essay Concerning Human Understanding*, en tanto que nos ayuda a entender la naturaleza del lenguaje y las limitaciones naturales que restringen nuestro entendimiento del mundo que percibimos.

Borges-autor cuenta en “El Aleph” (1945) la historia de una versión ficticia de sí mismo, quien se encuentra perdidamente enamorado de Beatriz Viterbo. Es tal su obsesión y lealtad hacia ella que incluso años después de haber ésta fallecido sigue visitando su casa en el aniversario de su muerte. Ahí se congria con el primo de Beatriz, Carlos Argentino Daneri. Él es escritor, y su última creación es “La Tierra”, un poema que describe el planeta en diligente detalle. Después de escuchar algunos fragmentos del poema, Borges-personaje se burla del estilo pedante de Carlos, abundante “en inservibles analogías y en ociosos escrúpulos” (“El Aleph” 153). Un día, Daneri llama a Borges, comentándole que su casa (donde vivió también Beatriz) será demolida y no puede arriesgarse a perder un extraño dispositivo al que llama aleph, un “lugar donde están,

sin confundirse, todos los lugares del orbe, vistos desde todos los ángulos” (“El Aleph” 161). Borges-personaje deduce que Daneri ha perdido la cordura pero, interesado en visitar la casa de su imposible amada por última vez, insiste en ir. En el clímax del cuento, a su descenso en el decimonono escalón encuentra una “pequeña esfera tornasolada, de casi intolerable fulgor” (“El Aleph” 164), con ilusión de movimiento giratorio producida por los “vertiginosos espectáculos que encerraba” (“El Aleph” 164); el aleph.

El aleph (א) es la primera letra del alfabeto hebreo, y su significado va más allá de lo que puede ser expresado convencionalmente pues tiene un significado místico en la tradición judía. En el alfabeto judío, todas las letras reciben una denominación numeral; y sucede que en el caso del aleph, ese número es el uno: una “síntesis exacta del alfabeto y álgebra” (Lamarti 62). Y no sólo eso, en las matemáticas, el aleph como número simboliza las distintas variedades de infinito y la cardinalidad o tamaño de los conjuntos infinitos. En su experiencia con el aleph, Borges-personaje y el todo del universo se hacen uno por un momento efímeramente eterno, “ese instante gigantesco” (“El Aleph” 164). Como objeto, es minúsculo, con un diámetro de dos o tres centímetros, “pero el espacio

cósmico estaba ahí, sin disminución de tamaño” (“El Aleph” 164) para permitirle presenciar esos conjuntos de cosas y personas en sus infinitas posibilidades. El aleph, punto sobre el cual todas las cosas del mundo pueden ser vistas, es infinito e imposible de describir. En la existencia del aleph yace un problema: ¿cómo retratar *lo infinito* para el lector? Borges-personaje queda maravillado, y sumido en casi mística contemplación existencial, pero rehúye dar algún crédito a Daneri. El cuento concluye con Borges-personaje tratando de desacreditar la autenticidad del aleph que encontró en casa de Daneri.

No es fortuito que, aun cuando el sinfín de imágenes inundan la mente de Borges-personaje, el cuento se mantiene centrado en la absoluta experiencia:

Vi el populoso mar, vi el alba y la tarde, vi las muchedumbres de América, vi una plateada telaraña en el centro de una negra pirámide, vi un laberinto roto (era Londres), vi interminables ojos inmediatos escrutándose en mí como un espejo, vi todos los espejos del planeta y ninguno me reflejó, [...] vi el Aleph, desde todos los puntos, vi en el Aleph la tierra, y en la tierra otra vez el Aleph y en el Aleph la tierra, vi mi cara y mis vísceras, vi tu cara, y sentí vértigo y lloré, porque mis ojos habían visto ese objeto

secreto y conjetural, cuyo nombre usurpan los hombres, pero que ningún hombre ha mirado: el inconcebible universo. (164-66, la cursiva es mía)

En la oración donde intenta describir su experiencia con el aleph se cuentan 430 palabras y treinta y siete oraciones encabezadas por “vi”. La anáfora cumple dos funciones importantes: en un primer plano, añade verosimilitud al testimonio de Borges-personaje frente a lo inexplicable, tratando de recordar y capturar todo lo posible antes de ver su testimonio cortado por la vigilante memoria. En segundo plano, retrata la inconcebible imposibilidad de aquel momento - objetos, lugares, personas a través de la historia, todas casi compresas a un instante, sin superposición o transparencia, en completa simultaneidad y armonía. No hay tema o cosa ausente en estas meras 430 palabras: matemática, historia, medicina, geografía, enciclopedias, literatura (Balderston 32). Borges-autor ha usado la *vista* como “centro inmóvil” (Balderston 31); todo lo que ha tenido lugar en una milésima de segundo ha sucedido en el dominio de la vista, el sentido más adecuado para procesar y describir la experiencia humana.

Parece contradictorio que si bien Borges-autor lamenta su incapacidad de retratar perfectamente este momento, el

fragmento anterior logra articular elocuentemente su experiencia dentro del aleph. Sin embargo, durante su epifanía, nos cuenta de “interminables ojos inmediatos escrutándose [en él]” (“El Aleph” 165), y estos ojos parecen ser de admonición - como si él hubiese llegado a un límite de la conciencia, como un reproche a su afán de alcanzar la cima de las experiencias sagradas, un recordatorio de “la incapacidad del ser humano para penetrar en lo Absoluto” (Lamarti 62). Cuando Borges-personaje nos ve mientras se encuentra dentro del aleph, “rompe con el pacto que mantiene estos dos mundos aparte” (Rodríguez-Navas 214), creando en nosotros como lectores la urgencia de contemplar, por algún momento, la existencia de un objeto y una experiencia tan inconcebible que nos lleve a reflexionar sobre la naturaleza de nuestro mundo, y la realidad de nuestras percepciones. Hacia el final de ese momento, el personaje pasa de ver el inmenso mundo, hacia lo más recóndito de su propio ser: donde la “conciencia se observa a sí misma desde otro ángulo, y, sobresaltada, se gira para taparse los ojos” (Lamarti 62).

La experiencia del todo es rápidamente acompañada por un vacío tan universal como lo es existencial, una sensación de “infinita veneración, infinita lástima” (“El Aleph” 166), que ninguno de los

espejos refleja a Borges-personaje. Por esa infinidad de posibilidades y momentos, hubo también una fugacidad donde Borges-personaje ha contemplado su propia muerte cuando ve “[su] cara y [sus] vísceras” (“El Aleph” 166). Otra lectura emerge cuando se toman los dos siguientes enunciados: “vi mi cara y mis vísceras, vi tu cara, y sentí vértigo y lloré” (“El Aleph” 166). Borges-personaje ha presenciado el apasionado amor de su amada con Daneri. El inconsolable despecho pudo haber causado su propio deseo de morir. El vértigo originado por la sobrecarga sensitiva del aleph se agrava con sus náuseas frente a esas “cartas obscenas, increíbles, precisas, que Beatriz había dirigido a Carlos Argentino” (“El Aleph” 165-166), pruebas de una incestuosa relación entre Daneri y Beatriz, hecho que no despojó de pasión alguna a los primos. Borges-personaje sufre entonces también una infinita desconsolación, causándole dolorosas lágrimas.

En su época temprana, Borges-autor impulsó el movimiento ultraísta en Argentina. Este movimiento de vanguardia nacido en España fomentó innovaciones literarias, nunca vistas, rechazando los artefactos ornamentales, esa obsesión con el estilo y el Romanticismo (Mazzucchelli 19), más propia del modernismo. Desde sus comienzos como miembro

del movimiento ultraísta durante el inicio de la década de los años veinte, la metáfora fue el recurso por excelencia en los ojos de Borges- autor y sus colegas. Las metáforas en el ultraísmo representaron “el esfuerzo del poeta para expresar la milenaria juventud de la vida, que, como él, se devora, surge y renace, en cada segundo”². Las verdades universales sólo podían ser entendidas por medio de otras imágenes, originales e individuales, para reconciliar el problema de la inherente limitación del individuo al enfrentar el mundo externo. Borges- autor, ya incluso joven, mostró reservas hacia ese movimiento que tan vehemente defendió. Es posible que un Borges- autor, con el paso de los años, percibiera que “el desprecio por el repertorio de las metáforas de la literatura universal, particularmente europea, carecía de sentido” (Montano 314). En su furtiva búsqueda por la novedad y originalidad, se daría cuenta que su misma escritura no sería tan diferente a la “cacofonía y caos” (“El Aleph” 159) de la poesía experimental de Daneri. Con el tiempo, Borges- autor renunció al vanguardismo y se dedicó a perseguir y cultivar sus intereses filosóficos. En sus lecturas de Platón, Aristóteles, John Wilkins, Ludwig Wittgenstein y otros pensadores, alimentará su interés por la metafísica y por la naturaleza

del lenguaje, especialmente la conexión entre el lenguaje y la realidad, y la infinidad cosmológica³. El misterio sobre la naturaleza de la realidad permanecerá hasta el fin de sus días, arguyendo en una de sus últimas entrevistas: “El universo es tan complejo que acaso no existan razones para expresarlo; sobre todo por algo tan casual como el lenguaje” (Alifano 37).

En su libro titulado *An Essay Concerning Human Understanding* (1689), Locke propone que el uso de las palabras tiene dos propósitos principales⁴: 1) la recopilación de nuestros pensamientos, y 2) la comunicación de estos pensamientos con otras personas. Estos son dos casos interesantes, pues para el primero, no es necesario usar las palabras adecuadas—la elección puede ser verdaderamente arbitraria, pues conocemos el significado de nuestros propios pensamientos. Sin embargo, para cuestiones que involucren a un ser ajeno a nosotros, esta elección debe ser mucho más precisa (Locke 348). Nótese también que Locke discute que el uso de las palabras comprende dos distinciones: aquellas de uso civil y las de uso filosófico. Las palabras de uso civil se usan en conversaciones

³“The principle of the cosmological infinite presupposes that Borges invents numerous imaginary and possible worlds. Their boundaries are unverifiable. Those worlds fulfill themselves in time rather than in space” (Krysinski 194).

⁴Texto original en inglés, la traducción es mía.

²En una misiva a Isaac del Vando Villar - “Al margen de la moderna estética”, Grecia, año 3, no. 39, 1920, p.15.

cotidianas para referirse a ideas concretas en situaciones comunes. Por otro lado, las palabras de uso filosófico intentan denotar con completa exactitud el significado y esencia de alguna cosa, y expresan normalmente ideas abstractas que buscan la formación de un verdadero conocimiento. La complicación del lenguaje se encuentra bajo esta segunda categoría de uso, donde la imperfección de las palabras es la “duda [presente] en sus significados” (Locke 349).

Los siguientes casos ilustran las inherentes imperfecciones de las palabras (Locke, III, IX):

1. Las ideas que representan son muy complejas, y están compuestas de un gran número de ideas ya unidas.
2. Las ideas representadas no tienen ninguna conexión en la naturaleza, y por ende ningún estándar con el cual puedan ser comparadas.
3. El significado de una palabra se refiere a un estándar, el cual no es de conocimiento común.
4. El significado de la palabra y la esencia real de la cosa no son exactamente equivalentes.

El primer caso es el que me interesa para el análisis del cuento de Borges; después de todo, el autor intenta abarcar *lo infinito* a través de una

extensa enumeración, intentando cubrir todos los ámbitos del universo. La larga oración, unida por las treinta y siete frases, consigue expresar momentos de sensación y percepción, de existencia animada como inanimada, de descanso y de movimiento. Son los paisajes, lugares y tiempos, todos orbitando la visión del Borges-personaje porque la vista es el sentido de mayor comprensión perceptiva para describir la experiencia sensorial (Locke 83). Son también las pequeñeces del día a día, aquellos detalles que se esfuman con tanta facilidad mientras nos perdemos en el momento. Son estos los detalles que agregan realidad a la vida humana. Los sentimientos y las emociones son visitados también por medio de imágenes. Por ejemplo, la soledad en “[su] dormitorio sin nadie” (“El Aleph” 165), y esa inevitable amargura producto del desamor en la “circulación de [su] oscura sangre” (“El Aleph” 166).

Lo infinito es difícil de entender, y más aún de capturar porque “in its original intention, [is] attributed to space, duration and number” (Locke 131) y lo contiene *absolutamente todo*. Asimismo, como es delineado en el tercer caso, los estándares usados por Borges-autor no son conocidos por todos. Alguien sin acceso a su conocimiento, o sin pistas de los significados de sus alusiones y metáforas no puede

entender el encuentro con lo infinito que ha sido plasmado por él (Balderston 32). Algunos ejemplos de las imágenes presentes en su encuentro son el “poniente en Querétaro que parecía reflejar el color de una rosa en Bengala, mi dormitorio sin nadie” (“El Aleph” 165). La yuxtaposición del poniente con el color de rosa captura no sólo la belleza, sino un aspecto más trascendental, casi místico, de la naturaleza y sugiere una de las muchas ilustraciones de lo que es *lo universal*: lo presente en todas las cosas de nuestro infinito mundo. El dormitorio vacío representa un contraste entre el espacio natural místico y lo cotidiano, añadiéndose a esa alienación que el aleph le causa a Borges-personaje. No es sólo una descripción del estado del dormitorio de Borges-personaje, sino más bien una metáfora a la soledad y despecho que siente frente al amor no correspondido de la imposible Beatriz.

Julio Ortega indica que al encontrarse con el aleph, Borges-personaje experimenta una “epifanía fugaz” (Ortega 456) tan larga como efímera; una experiencia donde logra ver los hilos que sostienen *lo universal*. Logra ver todas las interconexiones entre cada objeto del universo, el tejido de nuestro mundo, y se queda completamente extasiado. El desafío más grande como hombre (pero más importante,

como escritor), será intentar representar con fidelidad este encuentro místico con *lo infinito*, una experiencia que debido a su misma naturaleza, “overflows the narrow boundaries of language” (Giskin 72). Pero éste es un desafío plenamente calculado: Borges-autor, ávido lector filosófico, gusta de cuestionar las palabras y empujarlas hasta sus límites. El autor propone el encuentro con *lo infinito* donde “[ha] visto millones de actos deleitables o atroces” (“El Aleph” 164), y las palabras son incapaces de darle sentido para demostrar que “el lenguaje refiere al mundo como sombra melancólica pero puede, de pronto, revelarlo en un instante fluido de una visión/versión precipitada por las palabras” (Ortega 456). En otras palabras, Borges-autor sugiere que el lenguaje es la herramienta que nos permite ver más allá del velo que cubre a la realidad, al mismo tiempo que reconoce la imposibilidad de una expresión completamente fidedigna cuando reconoce que el problema central es “irresoluble: la enumeración, siquiera parcial, de un conjunto infinito” (“El Aleph” 164), que transcribir en el lenguaje una experiencia mística le despoja de su naturaleza divina.

¿Cómo capturar la abundante y estridente simultaneidad? Locke propone examinar cuidadosamente nuestra concepción de *lo infinito*, y lo ve como la expansión interminable

de algún espacio, alguna duración, o algún número (Locke 131). Quizá el ejemplo más claro es el de los números: tomemos cualquier número, y añadamos una constante en una serie infinita. Llegaremos a *lo infinito* porque el número resultante siempre tendrá una parte que pueda ser sumada; de esta misma manera podemos pensar en los espacios de la materia o en la duración temporal de algún evento. El lenguaje es unidireccional y “sucesivo” (“El Aleph” 164) por naturaleza, por lo que Borges-personaje debe contentarse con capturar su experiencia en una enumeración de eventos. La enumeración es rica en estructuras sintácticas, donde se alternan grados de complejidad para crear pausas, así como dilataciones en la percepción de los eventos infinitos, capturando una serie de sucesos que resultan tan familiares como extraños (Balderston 33). La cantidad y complejidad de las enumeraciones son la única forma en la que Borges puede reconciliar un lenguaje que queda pobre ante un momento tan opulentamente sensorial. Cuando se ve algo, el cerebro toma una infinitesimal fracción de segundo para procesarlo. Esta demora en procesamiento conlleva también a una demora en la expresión consciente de la experiencia - situándonos para siempre detrás de nuestro misterioso universo. Las enumeraciones también son

reminiscentes de los antiguos cantos y salmos, otorgándole a la experiencia otra capa mística - como una atestiguación a este encuentro con *lo infinito*.

Pero ¿será posible expresar con el lenguaje alguna experiencia que capture (objetivamente) una síntesis de *lo universal*? O, ¿podríamos decir que los límites del lenguaje implican también un límite del universo? Borges-autor no lo cree; para él, el lenguaje es “the major instrument by which mankind sought to impose some structure on the chaos that was the universe, set some limits to its infiniteness” (Standish 136). Es indudable que, por razones que también propone Locke, falle al hacerlo: “Notoriamente no hay clasificación del universo que no sea arbitraria y conjetural”⁵ (“El idioma analítico de John Wilkins” 142-143). La raíz del problema yace en nuestra inhabilidad de poder atribuir un orden total a *lo infinito*, pues las leyes incomprensibles del universo lo rigen y la inteligencia humana no es capaz de alcanzar ese nivel de entendimiento, y en consecuencia, nuestro lenguaje tampoco podrá alcanzar a ese imparable universo.

El mundo parece estar velado;
y el lenguaje, en su intento de

⁵Borges-autor añade, “La razón es muy simple: no sabemos qué cosa es el universo [...] cabe sospechar que no hay universo en el sentido orgánico, unificador, que tiene esa ambiciosa palabra. Si lo hay, falta conjeturar su propósito; falta conjeturar las palabras, las definiciones, las etimologías, las sinonimias, del secreto diccionario de Dios” (“El idioma analítico de John Wilkins” 143)

comprenderlo, desvela todos los misterios que ve. Vale la pena considerar que la mente humana sea incapaz de tener alguna idea sobre *si lo infinito* realmente existe, ya que nuestras ideas o suposiciones no siempre conforman evidencia de la existencia de las cosas (Locke 132). El lenguaje es tan arbitrario e idiosincrático como lo es cada individuo. Nuestras formas de ver el mundo, los esquemas mentales, son guiados en su mayoría por la cultura y el lenguaje que nos albergan. Borges-autor se torna al lector a preguntarle si ha considerado que el mundo quizá no es exactamente como lo imaginamos: en lugar de reflejado en nuestra mente, construido sobre *nuestra* percepción de él⁶. Borges-autor usaría este lente analítico en la *Divina Comedia* para describir la realidad de Dante en su ensayo “El encuentro en un sueño” (1983). Borges-autor invita a considerar la aflicción de Dante Alighieri. La intensidad de su melancolía ante la fallecida Beatriz y la intensidad de su amor lo lleva a “[jugar] con la ficción de encontrarla” (“El encuentro en un sueño” 150) y construir la *Divina Comedia*. El enamorarse, sugiere Borges-autor, es “crear una religión cuyo dios es falible” (“El encuentro en un sueño” 150). Beatriz, “vestida de color de llama viva” (Alighieri, *Purgatorio*, XXX, 33), se asemeja al aleph de “casi intolerable

fulgor” (“El Aleph” 164)—puntos de luces que denotan los encuentros místicos de ambos protagonistas. El encuentro de Dante con Beatriz es el encuentro divino con *su* diosa y *su* infinito, el reflejo de la inquebrantable devoción que Dante sostuvo por Beatriz.

El lenguaje es uno de los logros más importantes que hemos alcanzado. Es único en su capacidad de transmitir nuestras ideas, tanto sobre nosotros mismos como sobre el mundo que nos rodea. En “El Aleph” (1945) de Jorge Luis Borges, encontramos una indagación sobre la naturaleza del lenguaje, y principalmente, su gran problema al tratar de mimetizar una experiencia con *lo infinito*. Este problema, donde se cuestiona la fidelidad con la que podemos retratar el mundo se convierte en un misterio sobre la naturaleza de este mismo. La teoría epistemológica de John Locke sugiere que el problema empieza desde las raíces de la expresión, desde el lenguaje mismo. Toda palabra es naturalmente limitada pues es meramente una imitación de lo que es observado, y lo que es observado se altera continuamente por las palabras para facilitar el entendimiento del observante. Parece que *lo infinito* sólo es concebible a través de una idea de continuas expansiones. En ese caso, ¿cuáles son los límites del universo? ¿Será que el mundo real se encuentra fuera del alcance de

⁶ En otro de sus cuentos, “Tlön, Uqbar, Orbis Tertius” (1940), vemos que sólo el hecho de observar y percibir un objeto cambia su esencia.

las palabras, o son las palabras las que determinan los límites de nuestro mundo? El lenguaje termina siendo un “instrumento para la búsqueda de conocimientos (esencias) abstractos, separados de los fenómenos en los cuales se manifiestan” (Kurlat Ares 6). En su cuento, Borges-autor declara que a pesar de sus mejores intentos, las palabras no serían capaces de retratar ese imposible infinito. La naturaleza de las palabras limita no sólo la intensidad de nuestra experiencia, sino también el entendimiento de ella.

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“You Don’t Get a Choice”: Fallen Hero: Rebirth and Unsettling Expectations of Agency in Interactive Fiction

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Abstract

Interactive fiction, by its very definition, grants its readers the ability to influence the direction of a text, much like the familiar Choose Your Own Adventure children’s books. However, the assumption that interactivity allows for increased reader agency has generated debate, as interactive texts can naturally only provide readers with as much agency as authors are willing to anticipate for and allow. The interactive novel series *Fallen Hero* is of particular relevance to this debate, as its protagonist’s struggle to maintain their agency causes the series’ thematic content to mirror its form. *Fallen Hero* minimizes the reader’s agency even more than is strictly necessary within the formal constraints of the medium in order to enrich its narrative themes surrounding agency and build empathy for its protagonist, therefore embracing the limitations of agency that are inherently present within the interactive form as a strength rather than a failing.

Introduction

“[S]ometimes when you look in the mirror, there is still that moment of vertigo that makes you wonder what you are doing, and whether going through with your plan really is the wisest choice...” states the narrator of Malin Rydén’s interactive speculative fiction novel, *Fallen Hero: Rebirth*, “However, right now, it feels like the only choice left that makes sense” (ch. 1). The narrative of *Fallen Hero* follows a telepathic ex-superhero who has decided to become a supervillain; they influence and possess the minds of others as they prepare to make their public debut, an event that the novel concludes with. Although the narration provides readers with intimate access to the protagonist’s perspective—even addressing the reader in the second person as “you” throughout—the sense of mystery that shrouds the protagonist within the narrative also exists in the complex, branching-path text itself. The narration alludes to but

ultimately withholds key information about the protagonist's backstory and motivations, leaving readers attuned to the protagonist's emotions without quite understanding their cause. The passage quoted above in *Rebirth's* first chapter succinctly captures an overarching theme present throughout the novel: the protagonist's struggle to maintain a sense of agency as they cope with a traumatic past that denied it to them, a struggle not unconnected to the author's choice of the interactive form. *Rebirth's* reticent narration style signifies a traumatized, fractured consciousness, and conveys this to the reader in a way that engenders understanding of the character even as it denies the reader the ability to fully immerse themselves within the ethically suspect villain-protagonist.

Rydén has explained that they decided to adapt *Fallen Hero*, once conceived of as a conventional novel, into an interactive novel series—with *Rebirth* as the first of a planned four-novel arc—a very judicious decision considering that agency is a central thematic concern of the series (“A few questions,” “Okay, explanation”). The very nature of the interactive medium emphasizes the importance of agency, making it uniquely suited to tell stories with thematic focuses such as *Fallen Hero's*.

Interactive fiction grants its readers the ability to influence the direction

of a text, leading to the often-assumed idea that interactivity allows for increased reader agency. Janet Murray's foundational book on interactivity, *Hamlet on the Holodeck*, champions interactive fiction partially on the basis of its ability to provide readers agency—which Murray defines as “the satisfying power to take meaningful action and see the results of our decisions and choices”—with the assumption that increased agency is in itself a positive development (159). The notion that interactivity grants readers agency has generated debate among scholars of interactive narratives—as interactive texts can naturally only provide readers with as much agency as authors are willing or able to anticipate for and allow—but discussions surrounding reader agency often neglect to challenge “the implicit assumption of ‘the more agency the better,’” when “[f]rustrating the player, taking away agency, can also be expressive” (Harrel & Zhu 44; Fernandez-Vara). I argue that *Rebirth* does not attempt to assure readers of their agency, but instead purposefully draws attention to their lack of it through its unique approach to the conventions of interactive fiction—including second-person narration and multiple-choice interactivity—therefore increasing reader empathy with the protagonist's own troubled relationship to agency.

Fallen Hero: Rebirth, as with much of interactive fiction, is absent of visual elements and is entirely text-based, but the digitization of interactive fiction has complicated the simplistic form of the “Choose Your Own Adventure” novel. The programming language that allows for *Fallen Hero*’s more gamified elements, Choicescript, and its capabilities in regards to delayed branching—a term that Dan Fabulich, co-developer of Choicescript, uses to describe how early choices can create or affect variables which then help to determine how the narrative plays out later on—are notable for how they are utilized within *Rebirth*. On the most basic level, readers choose the gender of *Fallen Hero*’s protagonist and thus it varies across different iterations of the text—for the purposes of this analysis, they will be referred to with singular “they” pronouns—but variables can be employed in ways that are specific to the text at hand and may be hidden from readers. For instance, readers of *Rebirth* are presented with the choice of determining the protagonist’s primary motivation, e.g. revenge, greed, or even the conviction that their turn to villainy is simply “inevitable” (ch. 5). This set variable then colors portions of the text throughout the rest of the series—and at times the choices offered—in ways that readers may or may not consciously connect to that single decision. *Rebirth* will be examined on the basis of how

these elements of Choicescript such as hidden variables, along with conventions that are typical of choice-based works and interactive fiction in general such as second-person narration, are used to subvert reader expectations of agency and mirror their experiences with that of the protagonist’s trauma.

Second-Person Narration and Reader Identification

Second-person narration is conventionally used in interactive fiction to engage the reader, both in terms of participation and identification with the protagonist, two elements of the interactive medium that are inherently linked. The influence of the reader on the text—and therefore their agency—operates through identification with the protagonist; the narration addresses the reader “in second person declarative as if she or he were the character,” and the reader then makes decisions while assuming the role of the protagonist (Sorolla 18). *Rebirth* demonstrates this reader/protagonist dynamic when, for instance, the narration describes the protagonist’s thoughts in second-person as they dream about a traumatic event in their life:

There is something disconcerting about a dead body. Your mind identifies them as human, and your thoughts reach out, only to touch...nothing (ch. 2).

After this passage, the reader is prompted with two choices written in first person:

#1 look away. I don't need to see more bodies.

#1 take a closer look. There might be clues here (ch. 2).

The reader is meant to interpret the second-person narration as an invitation to engage “as” the protagonist, with “[s]econd-person narration (‘You are’) evok[ing] first-person participation (‘I am!’).” However, *Rebirth’s* narration style often disrupts this process of reader “participation, identification, or immersion” by either using second-person narration to convey a sense of disempowerment or, as will be explored later, by refusing to provide readers with information needed to make informed choices (Douglass 135).

The use of second-person narration within interactive fiction is customary, but *Rebirth’s* thematic preoccupation with agency—or a lack thereof—renders its narration style comparable to the rare use of second-person within non-interactive literature, where it is often meant to convey powerlessness. Second-person narration is frequently used in experimental literature, and thus has been employed for many purposes, but it has been identified as a way to “manifest...in narrative technique the notion that someone or something

outside of yourself dictates your thoughts and actions” (DelConte 205). While second person is meant to encourage identification within this context as well, it is an aggressive encouragement in which “[t]he point of view forces the reader into the experience” and imparts the sense “that this story is going to happen to you, regardless of whether you like it” (Hawke 12, 13). The way that second-person point of view “sweeps away the readers’ illusion of free choice” within conventional literature may seem to be mutually exclusive with interactive literature’s use of it for the purposes of inviting participation and choice, but the lack of agency that is felt on the part of *Fallen Hero’s* protagonist indicates that the two are coexistent within the text (Hawke 13). When the narration states that “[t]his is not you, you try to tell yourself. You are just following someone else’s script,” during a dream sequence in *Rebirth*, the second-person narration serves to emphasize the impression that one’s life is being dictated by an outside force that determines what will happen to “you” (ch. 4). While the circumstances that led to the protagonist’s feelings of disempowerment are somewhat ambiguous, the narration states that “[y]ou have no other choice” but to become a villain (ch. 8). This encourages reader identification on an empathetic level instead of a mere participatory one, as while the reader

cannot experience the traumatic events that the protagonist has, the text is able to convey their sense of disempowerment through the narration style.

Unreliable Narration and the Disruption of Reader Identification

Although narration within interactive fiction is meant to convey the protagonist's perspective, significant aspects of the protagonist's interiority are withheld in *Rebirth*, including much of their backstory and motivations; as *Rebirth* is the first in a series, further explanation may be expected in *Fallen Hero's* subsequent novels, but the degree of information that is ambiguous or withheld within *Rebirth* is atypical within interactive fiction, due to the way that it interrupts the medium's reliance on the reader's identification with the protagonist. *Rebirth* narrates the thoughts of the protagonist as they occur, resulting in trains of thought that are often inscrutable to readers as the narrator frequently neglects to provide context for the ideas that they connect. For instance, the narration includes the following lines when establishing the protagonist's appearance: "It's not that you are bad looking, at least not with your clothes on. They made sure of that" (ch. 1). It would be natural to assume that the first statement merely demonstrates an insecurity

of the protagonist's, but the last sentence throws the one before it into ambiguity; who are "they," and what do "they" have to do with the protagonist's appearance? The scene continues without explanation or further reference to the figure(s) in question. These ambiguous references to events and individuals that are unknown to the reader, but evidently known to the protagonist, continue to build throughout the narrative and complicate reader immersion and identification.

Readers are left confused on a broader level as well; information about the plot that should be essential—concerning the protagonist's past and ultimate goals—is often withheld from readers. The end of the protagonist's heroic career was unmistakably traumatic, but what precisely occurred during the seven years that led up to the beginning of *Rebirth* is only ever alluded to. The "Heartbreak" incident—an encounter with a fellow telepath that resulted in the protagonist's suicide attempt, a formative event that —is a point of trauma that the protagonist still struggles with, as evidenced by the italicized memories that are triggered in the initial chapters of the story before *Rebirth* allows readers to delve deeper into the event almost halfway through its narrative. This dream sequence is one of the narrative's most complicated in

terms of branching, but the various pathways are all disorienting, especially in the moments where the memories of the protagonist and those of the other telepath—the gender of whom varies, and who shall be referred to with “she” pronouns for the purposes of these excerpts—appear to blend:

(antiseptic. ozone. rust. you know this but you should not.)
Lips pulling back, nostrils widening in a baleful grimace, gums stained with tiny blisters.
(i know this because these are her memories. i see this because these are her memories. because she ate them.) (ch. 4)

While this passage is a bit more intelligible within context, as readers should be able to discern that there is a scientific experiment of sorts occurring, precisely what happened to whom and when still cannot be clearly discerned. The sudden use of first person outside of choice prompts is particularly jarring, and otherwise unseen within the novel; the shift in point of view serves to emphasize the issues of identity that the passage depicts. The line about how the other telepath “ate” the people around her is perhaps referencing a mental absorption—a possibility mentioned elsewhere, with “you” wondering if “she invade[d] their minds like she did yours?”—meaning that it is not only the memories of the two telepaths that

readers must attempt to disentangle, but the memories of others as well (ch. 4). The distortions present in the Heartbreak sequence are clearly marked by trauma, but it is still a curious choice on the part of the author to shroud an event as formative to the protagonist as the one that ended their heroic career in ambiguity. To then expect readers to make choices “as” the protagonist, when such significant aspects of the protagonist’s interiority are withheld, problematizes reader agency even further as the choices they make are not informed.

Narrating Trauma and Repression Interactively

While the inadequacy of the information provided to readers by the narration could be interpreted purely as a narrative device on the part of the author, narration within interactive fiction—including in *Rebirth*, perhaps especially so given how often the novel shifts into stream-of-consciousness style narration—is meant to communicate the interiority of the protagonist, as discussed earlier. This would imply that the narration lacks key information because the protagonist herself seeks to hold back the information from their own consciousness. The protagonist prefers to cope with the traumatic experiences that they have endured by repressing them, believing that

the past is “not safe to think about” (ch. 4). When excerpts of the protagonist’s memories are given, it appears to be against their will:

You press two fingers against your forehead, trying to push back the intrusive memories. But they are still there. Inside. (ch. 8)

The above text precedes one of the many italicized flashes of memory that are scattered throughout the narrative—usually triggered by something in the environment of the protagonist that reminds them of their trauma, although the precise connections are often unclear—and demonstrates the protagonist’s reluctance to recall their past. The lack of clarity present within the memories themselves can also be explained by the fact that they are traumatic in nature, particularly in light of the telepathic invasion that the protagonist experienced during the Heartbreak incident. This invasion may have resulted in real psychological damage; the protagonist explains at one point in the narrative that repeated telepathic invasions may cause “[m]emory loss” and other symptoms that are “not dissimilar to PTSD” (ch. 3). Although the narration style of the novel may disorient readers, it serves to convey the protagonist’s mental state and the results of the trauma that they have experienced, one that is based in loss of agency.

The Heartbreak incident is related to memory and repression in more ways than one, as the event was not just a traumatic experience for the protagonist; it reignited past trauma as well. The protagonist’s experience of the event is characterized by their loss of control over themselves, a thread that is present throughout the various pathways of the Heartbreak dream sequence. They struggle to prevent the opposing telepath from influencing both their mind and body, and in some paths they choose to relinquish control over their body entirely. In one iteration of the text, the reader may choose to “draw on my anger” after the narrator states that “[y]ou need to reassert control over your body somehow,” and the text that follows this choice heavily implies that their struggle to maintain agency within the Heartbreak event was not an unfamiliar one: “You thought you were past this [...] You’re not trapped, you’re not controlled, and you are certainly not somebody’s pawn” (ch. 4). Heartbreak evoked an existent sense of disempowerment in the protagonist, and in this sense the event did not simply traumatize them but re-traumatized them, setting them on a path to traumatize others in a strikingly similar fashion. One possible path involves the protagonist actually losing control over their body to the other telepath—whom they refer to as “it” prior to seeing her—a moment

that particularly emphasizes their disempowerment:

It's hijacked your body, and you're sitting here like a puppet. The pressure is blinding; your panic just builds and builds, and you can't let it touch you again, but you have no choice, and you are screaming inside, and then... (ch. 4)

While this would be a traumatic experience for anyone—as shown elsewhere in the novel, when the protagonist himself possesses the bodies of others, a parallel that does not go unacknowledged by the narration—the trauma experienced here is exacerbated by the fact that the protagonist has already “fought to become who you are today. You. Not someone else. Not someone they wanted you to be. Your own life. Your own mind,” an effort to combat previous disempowerment that was evidently made in vain when the self-ownership they had worked for was removed during Heartbreak (ch. 4).

Although it has been many years since the Heartbreak event at the time *Rebirth's* narrative begins, the protagonist's accumulated traumas are tied to their sense of agency to the point where merely recalling them evokes a sense of disempowerment (ch. 1). This is emphasized within the interactive form itself as the reader begins the Heartbreak dream sequence. In Choicescript, the page breaks are

frequently marked by choices—where the reader's choice prompts the following page of text—or else by a button that is often merely labeled “Next.” As the protagonist begins to dream, a button that says “You Don't Get a Choice” meets the reader at the end of the page (ch. 4). This not only communicates the protagonist's lack of choice in experiencing this nightmare on a narrative level, but also that the reader is not allowed a choice where they might normally expect one. After the reader selects the “You Don't Get a Choice” button—as they must, in order to continue the novel—the following page begins with “The dream descends on you like destiny” (ch. 4). The protagonist associates remembering their past with a loss of control—both in that they do not wish to remember and thus any memories they recall are evidence of a lack of control over their current state of mind, and in that the memories themselves generally contain a trauma based in disempowerment—as it continues to reinforce their feeling that they are without agency.

The Poetics of Blind Choices

The lack of information given about the protagonist's motivations interrupts reader identification, which is inherently tied to choice within the “You are!”/“I am!”

dynamic between the narration and the reader (Douglass 135). As the reader cannot properly place themselves within the mindset of the protagonist, asking readers to make choices within *Rebirth* often results in what has been referred to as a “blind choice,” or uninformed choice, within emerging interactive fiction terminology. The choice taxonomy developed by Mawhorter et al. to examine “how choices work alongside narrative to communicate”—the study they refer to as “choice poetics”—describes how blind choices can cause a reader to “feel lost, disoriented, or just frustrated,” when they do not have “enough information to make an informed choice” (“Towards a Theory”). Such choices can be used to “reinforce a narrative theme,” as Mawhorter et al. note, and in *Rebirth’s* case they serve to tie the reader’s frustrated sense of agency with that of the protagonist’s: thus the disruption of traditional identification compels the reader to share in the protagonist’s frustrations.

Rebirth presents readers with the opportunity to set the protagonist’s core motivation about halfway through its narrative, but does not clearly provide a reasoning behind each motivation choice, highlighting the reader’s struggle to discern the motives of the protagonist. The prompt before the choice somewhat

contextualizes the circumstances under which the protagonist feels they must become a villain, but leaves the background information out:

Is that really an option? Go back into hiding? Live a life in the shadows, pretending they will never find you? Maybe you would have had a shot at that before you ran into Ortega, but now the clock is ticking. All you can do is make sure you are as prepared as possible.

So, why are you doing this? (ch. 5)

The unidentified “they” returns, and what the protagonist must prepare for nor how villainy will help them do so is elaborated; thus the information given above does not necessarily help readers interpret the choices that follow:

#I want revenge against the people who hurt me.

#I’ve had enough of being stepped on.

#I want a good life, and this is the way I can have it.

#I need to show the world the truth.

#I don’t know what I want—this just feels inevitable. (ch. 5)

The decision that the reader makes here sets the variable for the protagonist’s motivation—the second option, for example, is designated within the code as “anger”—and

affects the narration and dialogue for the rest of the series, making it a fairly weighty one. Each option is comprehensible, but not in terms of how the protagonist would come to any given conclusion; who are the people who hurt the protagonist, and how did they do so? What is “the truth?” While this is an opportunity for readers to direct some of the narrative themes towards their own desired direction, e.g whether they would prefer the narrative be oriented more towards seeking revenge or contentment, readers are without the information required to determine which option would make the most sense to them. The final choice, or the “fate” motivation, is perhaps the most reasonable for the reader to choose given that it has the protagonist echo the reader’s own lack of clarity surrounding the purpose of the protagonist’s villainy.

Conclusion

Traditionally, works of interactive fiction seek to “collaps[e] the distance between reader and protagonist,” and they do so by allowing the reader to identify not only with the protagonist, but as the protagonist; I argue that *Rebirth* does identify readers with its protagonist, but that it does so by simulating a reader experience that echoes that of the protagonist’s as opposed to allowing readers to fully inhabit the mindset of the protagonist (Sorolla

2). The way that the traditional second-person narration of interactive fiction is employed within *Rebirth* to “emphasize an existence dictated from the outside,” as well as the way that blind choices frustrate the agency of the reader, allow for readers to empathetically understand the protagonist’s own frustrated relationship to agency even as readers are denied full understanding of the context behind this relationship (DelConte 205). Creating this empathetic dynamic between reader and protagonist is crucial not only because of the lack of traditional identification within *Rebirth*, but because its fractured, trauma-colored narration style makes reader affinity with the protagonist potentially difficult to establish. By thematically linking a loss of agency with the protagonist’s trauma and formally evoking a sense of lost agency in readers, *Rebirth* not only comments upon the traumatic impact of losing agency and the need to regain agency in order to process or heal trauma, but also encourages reader empathy for the protagonist in a way that is unique to the medium. *Rebirth*’s particular approach to the relationship between reader and protagonist within interactive fiction—one that that allows for *Rebirth*’s narrative and formal elements to essentially compensate for where traditional interactive identification is lacking—illustrates how traditional reader identification within interactive

fiction can be expanded and re-conceptualized to include the novel's subversive use of this medium convention, and has broader implications for reader empathy in relation to the depiction of trauma in fiction.

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Colonialism in Africa: the impact on sexual and gender-based violence

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Abstract

This project seeks to investigate how colonialism has influenced sexual and gender-based violence (SGBV) in the Democratic Republic of the Congo (DRC). Previous studies within the discipline of political science have not given enough attention to the role that historical experiences—notably colonialism—play in the causes of and responses to SGBV. While many scholars argue that the Rwandan genocide was the catalyst for SGBV in the DRC, this paper argues that the colonization of the DRC is when the country's issue of widespread sexual violence first became normalized. Further, the most influential framework for analyzing SGBV has been the weapon of war frame which argues that rape is a strategy of war, which minimizes and isolates sexual and gender-based violence before and after active armed conflict. Thus, this analysis offers an alternate framework for approaching the origins and potential solutions to SGBV, seeking to fill

this gap in the literature. Although focused mainly on the DRC, the need for greater attention to the impact of colonialism on SGBV also has implications for other African states with similar colonial experiences.

Oftentimes in the analysis of sexual and gender-based violence in the Democratic Republic of the Congo (DRC), the fault is almost exclusively given to the events of the Rwandan genocide, which fails to recognize long-term historical influences, particularly colonialism. Colonialism not only contributes to sexual and gender-based violence (SGBV), but it is also a factor in ethnic conflict and sexual and gender-based violence. I acknowledge that the violence (both sexual and non-sexual) during the Rwandan genocide built upon ethnic tensions that were created by Germany when they initially colonized Rwanda in 1884 and further maintained by Belgium once they took over power of Rwanda in 1916. As the conflict in Rwanda soon bled into surrounding countries,

any pre-existing tensions in said countries were only aggravated, leading to explosive conflicts like in the case of the Burundian Civil War. However, I argue that there also needs to be an analysis of sexual and gender-based violence in the DRC that begins prior to the Rwandan genocide, as colonial rule is where the culpability lies. Whilst the focus of this project will be on the DRC and to a lesser extent, Rwanda, the observations of this analysis can be applied to other former African colonies. As such, the terms of this paper propound that the only way to move away from standardized resolutions is to incorporate and consider the consequences of colonialism, especially concerning sexual violence.

It is first important to define key terms used throughout this analysis. In defining sexual violence, this study uses the definition provided by the United Nations Human Rights Office of the High Commissioner, which defines sexual and gender-based violence as “rape, sexual abuse, forced pregnancy, forced sterilization, forced abortion, forced prostitution, trafficking, sexual enslavement, forced circumcision, castration, and forced nudity” (2014). These crimes can and do happen to anyone regardless of gender and sexual orientation, however, in framing this research, I largely refer to women and girls. Additionally, it is

imperative to define neo-colonialism. Neo-colonialism is when a state is independent in theory with all the appearances of sovereignty, but its economic system and therefore political policy is directed from the outside (Nkrumah, 1965, p. 1). Economically, many different countries and corporations still take advantage of the plethora of natural resources (mostly mineral) located in the Eastern Congo. Rebel forces pillage and force occupants out of their villages near mines, so they can reap the benefits of the resources. These minerals are a large reason for the extractive economy that the DRC has presently.

Throughout this research the weapon of war frame as presented by Crawford (2017) is referred to, which classifies sexual violence as a weaponized existential threat that is well documented in academic literature (Buss, 2009; Merger, 2011; Baaz & Stern, 2013; Crawford, 2017). In previous work, Crawford (2013) largely bases her view of the weapon of war frame on the discussion by Buss (2009) regarding “rape as a weapon of war”. According to Buss, rape as a weapon of war or genocide occurs when sexual violence has a “systematic, pervasive, or officially orchestrated aspect” (Crawford, 2013). Rape and sexual violence in times of war is as ancient as war itself, but for far too long it has been

perceived as something that just happens during times of war, instead of a clear war strategy (Bergoffen, 2009). In times of conflict the body of a woman becomes a ceremonial battlefield of messages between men -- victory for one side and defeat for the other (Brownmiller, 1975). Sexual violence as a weapon not only negatively impacts the victim, but their family and community as well, which is why it is such a powerful weapon. The weapon of war frame has become synonymous with "rape as a weapon of war" in the international community and surrounding literature. The use of the frame has played a prominent role in both the Rwandan and Yugoslavian Tribunals, where rape has been prosecuted as a crime against humanity as well as genocide (Buss, 2009). Despite both this analysis as well as copious scholarship surrounding sexual and gender-based violence in times of active conflict deferring to the frame, it is not perfect. I recognize that it holds deep-seated Western bias, leaves out men, boys, and the LGBTQ+ community as victims of sexual violence, and uses rape to generalize all forms of sexual violence.

I assert that the biggest and most pressing issue with the frame is that it does not consider any scholarship from outside of political science or International Relations. By stating that sexual violence is a weapon

of war, a problem arises in which sexual violence is no longer an unfortunate by-product of war, but a main feature of military strategy that the international community can regulate. This shields states' own armed forces from culpability for opportunistic sexual violence, as seen in Abu Gharib where United States (US) armed forces sexually violated imprisoned Iraqi citizens at their leisure. The punishments for the soldiers were extremely lenient for the war crimes committed as they were under such a shield. Opportunistic sexual violence carried out by authority figures is just as big of an issue, however, it is much less frequently discussed. Just as well, the weapon of war frame oversimplifies the complex dynamics of all forms of sexual violence and those who are involved, which can further lead to insufficient responses to sexualized violence (Baaz & Stern, 2013; Crawford, 2017). The weapon of war frame ignores sexual violence in times that the international community recognizes as peaceful, only giving attention to sexual violence in times of conflict. The frame only discusses sexual violence as a byproduct and fails to explore the historical origins of the issue.

The most prominent issue with the weapon of war frame is that it speaks to realist theories of International Relations as well as political science, not acknowledging

other beneficial fields such as history, feminism, economics, and anthropology. Commonly, the weapon of war frame is defaulted into the box of the realist paradigm. According to Bova (2016), realism was popularized post World War II and is “based on the assumption that international relations is a struggle for power among sovereign states” and it tends to dominate the discourse (p. 7). Realism is characterized by three core assumptions; the first is the nature of basic social actors, the second is the nature of state preferences being fixed and uniformly conflictual, and the third is that of the international structure itself, not solely the actors (Legro & Moravcsik, 1999). While these features can be applied to the weapon of war frame, the realist paradigm alone is unable to explore why such a power struggle exists in the Democratic Republic of the Congo in particular, without giving attention to a broader approach.

The feminist paradigm suggests that “traditional scholarship on international relations reflects a predominantly male perspective on the world, and that the inclusion of more women in positions of authority in international relations could change the way world politics is conducted” (Bova, 2016, p. 31). There is also an argument to be made that realists ignore the relationship of politics and the lives of women around the world.

When speaking to the gendered perspective of realism specifically, feminist scholar J. Ann Tickner, realism “claims to be universal and objective”, but in reality, the paradigm is “based on knowledge primarily from men’s lives” (2005, p. 2177). This means that the weapon of war frame caters to the male perspective of sexual violence, as opposed to the perspective of females, whom it affects the most. To better understand the issue of SGBV in the DRC, the weapon of war frame as well as the insights of realist scholars must be built upon, looking to a more multi-dimensional, interdisciplinary approach. In his work on History and International Relations: From the Ancient World to the 21st Century, Malchow (2016) claims that, “the study of politics.... can almost always profit from a more serious engagement with social and cultural contexts—a commonplace in the discipline of History” (p. IX). Thus, by drawing upon other disciplines, specifically history, this analysis will offer a more nuanced approach to sexual violence beyond just being an instrument of war. There is a glaring need for intertextuality in International Relations and political science. The weapon of war frame must be utilized from a constructivist lens, which will allow for an emphasis on the roles of human agency, norms, and identities in the construction of the character of international relations (Bova,

2016, p. 26). The constructivist paradigm can offer the perspectives of feminism, history, and political science which are all crucial to understanding the weaponization of sexual violence, which is the objective throughout this project.

On April 6th, 1994, the Rwandan genocide began, marking a horrific spree of murder and rape of Tutsis, Twas, and moderate Hutus lasting one-hundred days. The genocide caused a mass exodus of Rwandans to cramped refugee camps in the DRC, where rape and disease were rampant. Thousands more died in the refugee camps (Wilkinson, 1997). The issues of sexual violence literally and figuratively bled into the DRC, where they linger to this day. Of course, the international community has not sat by idly; the United Nations (UN) has intervened in numerous peacekeeping missions in both Rwanda and the DRC, before and after the Genocide. However, the current UN peacekeeping mission in the DRC, The United Nations Organization Stabilization Mission in the Democratic Republic of the Congo, or MONUSCO, has come under great scrutiny. Citizens of the DRC feel that the UN Peacekeepers do not do much, which is not unfounded. In 2014, the Human Rights Watch accused peacekeepers of failing to respond to repeated calls for help during an attack in which thirty people were

killed. Peacekeepers were only five and a half miles away but arrived two days later (“DR Congo”). Additionally, MONUSCO, as well as peacekeeping operations since the 1990s in Bosnia and Herzegovina, Cambodia, East Timor, Haiti, Liberia, Sierra Leone, Somalia, Rwanda, the Central African Republic, and South Sudan, have faced allegations of sexual assault and exploitation of women and girls (Human Rights Watch, 2016). During the preceding peacekeeping mission in the DRC called MONUC, girls as young as thirteen were interviewed by the Human Rights Watch (HRW) claiming to have been raped by peacekeepers (hrw.org, 2005).

In discussing the issue of sexual and gender-based violence in the DRC, it is crucial to study the transition of colonialism to neo-colonialism and how that has created persistent issues within the scholarship. Neo-colonialism is not singularly defined, but it is commonly agreed upon that it occurs when a state is independent in theory with all the appearances of sovereignty, but in actuality, its economic system and therefore political policy is directed from the outside (Nkrumah, 1965, p. 1). Seeing as much of the work conducted by scholars has a Western bias, the issues of neo-colonialism are often ignored because they prove critical of the Western world, “the global economy today is a profoundly uneven

terrain of resources and power, more neo-colonial and American-dominated than global in any real sense” (Bockman, 2015, p. 110). With this, it is imperative to study path dependency and the legacies of colonialism; however, it serves to strengthen the argument by putting current literature in conversation with scholars from other fields as they have a lot to offer to the current discourse. Malchow posits that “to understand causation is to learn from history about the present and from the present about history” (Malchow, 2016, p. 6). Therefore, without the use of history especially, the weapon of war frame alone will remain ineffectual to provide language that can assist the international community in offering a holistic response to sexual violence.

Although many scholars agree that the whole of the continent of Africa -- besides Liberia and Ethiopia -- were colonized, Seger (2018) points out that the “sovereignty” held by the two countries was questionable. When broken down into numbers, it is difficult to grasp the atrocities that happened and what allowed them to happen under colonial rule in Africa. In the DRC alone, millions died under the rule of King Leopold, numbers possibly rivaling the Holocaust, but it remains a largely unknown piece of history (Hochschild, 1999). The mistreatment of Africans was encouraged by the scientific

community, specifically anthropology (Baker & Patterson, 1994). In relatively the same period as the “Scramble for Africa,” anthropologists began to falsely connect race to biology, as many were searching for a biological underpinning to man-made racial categories. At the time, anthropologists presented “scientific” evidence that white Europeans were superior, associating African people with lower intelligence and laziness. Many Europeans felt their intentions of making Africans more “civilized” like themselves and less “primitive” were justified by science (Miller, 1995).

Only recently has the cruciality of women’s roles in sustaining the human species been recast into the picture of prehistoric record, as it was commonly believed by the scientific community that women were “side-kicks” to men, so to speak, as shown by the popularity of the “hunting hypothesis” (Zihlman, 1978; Hill, 1982). For thousands of years in human evolution, which began in Africa, men and women were far more egalitarian (Zihlman, 1978; Dyble, et al., 2015). Western gender roles and the narrative of women as “lesser than” has been only recently introduced in comparison. The most explicit source of female oppression, in present and colonial times, is sexual violence. Male colonizers not only raped the land of the Congo but the women as well, which was normalized for

Congolese men for decades and is still perpetuated (DR Congo: 'Widespread and systematic' violence, 2021). Often, in formerly colonized countries the fear of being sexually violated prevents girls from getting an education like their male counterparts and keeps women from going to work and becoming financially independent (Cartner, 2019).

Along with racism, colonialism brought Westernized gender norms, reinforced for centuries in Europe. Standifer (2017) writes,

Colonial officials shaped policies on the incorrect assumption that Congolese gender dynamics were identical to European tradition, where women did not work and had no independence, and violent chastisement, or even murder, of women was a man's traditional right. Those policies created systems where women had no recourse to combat violence and power disparities, even where remedies had once been available outside of colonial systems. By the dawn of independence, many Congolese accepted this mythos, and continued the oppression of women as African tradition (p. 4).

Mendoza (2016) similarly notes that European gender roles had a significant impact on the relations between men and women within the colony (Coetzee & du Toit, 2017, p. 221).

It is impractical to purport that sexual violence did not exist prior to colonialism, however, as the colonial process advanced, women of the colonized peoples were no longer in positions of power, nor were they independent. They were introduced to a way of life rife with degradation. It is no coincidence that the systems of oppression and domination used to colonize are practically identical to the strategies European, male colonizers used to dominate and oppress indigenous women (Moane, 1966; Kanuha, 2002). Mies (1986) points out that the process of European colonization is quite hypocritical in that, "while African women were treated as 'savages', the women of the white colonizers in their fatherlands 'rose' to the status of 'ladies'" (p. 95). The polarization of "savage" versus "civilized", or "us" versus "them", was and continues to be a deeply ingrained structural principle within global society. Such examples can be seen in the media in terms of how Black women may be portrayed as opposed to their white counterparts. This is not to say that white women were not oppressed in Europe, Mama (1997) adduces that women, particularly of the working class, were deleteriously exploited sexually and economically (p. 49). Mama further contends that the exploitation and oppression of white women in Europe was subsequently "perfected" when performed on African women. While

the West aims to look for solutions to sexual and gender-based violence, it is also important to note the impact of Western colonialism. If international organizations do not fully assess the causes of gender-based violence, this will ultimately limit the effectiveness of the solutions.

In a talk he gave in 1986, scholar Michael Parenti said, “Poor countries are not ‘under-developed’, they are over-exploited.” The systems that colonialism created and the extractive economy that neo-colonialism maintains, are the reasons for Congo being so mineral rich, yet the second poorest country in the world. The World Bank estimates that in 2018, 73% of the Congolese population, 60 million people, were living on less than \$1.90 a day (2021). Economist Joseph Stiglitz postulates that the International Monetary Fund is also insensitive to the histories of former colonies, an assertion which underscores that such an approach is seen across an array of international organizations, not just the United Nations (2002). People in the DRC are murdered every day -- 48 are raped every hour -- but the international community continuously turns a blind eye, and the DRC is in a hopeless position due to political and economic decline aggravated by neo-colonialism (Peterman, et al., 2011, p. 1064). Possible reasons could be elements of racism

in responses, or that the Security Council consists of former and current colonizing powers, or the issue of profits over people (Companies Protect Profits over People, 2012). An additional reason that is not often addressed, however, is the lack of an in-depth holistic discussion on sexual violence in the Congo.

The dire situation that women and girls in the DRC are facing must be addressed. With the constant risk of conflict there is an added challenge of getting aid to people who have contracted the Ebola virus or COVID-19, both of which are easily spread, especially in places where education on the matter is greatly lacking (Oppenheim, 2019). This could lead to the manifestation of new strains, which would prove deadly on a global scale. Without serious change, the people of the Congo don't just suffer, the entire world suffers as well. Additionally, Africa is a leading example for managing easily transferable diseases, which is especially important to note during the COVID-19 pandemic. Thus, this is one area where research can be expanded upon outside of the findings of this paper in the future, as well as further exploration and collection of data of sexual violence in the DRC against men, boys, and the LGBTQ+ community.

Practically speaking, the benefits of solutions for the obstacles discussed

heretofore would allow for safer working conditions not only in the DRC, but other formerly colonized African countries with similar struggles as well, which would allow them to economically prosper. This would benefit the global economy and offer a better understanding of how to proceed in correcting many of the issues laid forth in this paper, as they are truly of global concern. The international community addresses, frames, and seeks solutions for gender-based violence from a Western perspective and ignores the history of colonialism, perpetuating the cycle of violence. Repeatedly, the international community (the UN in particular) has used a singular approach for issues of sexual violence all over the world when each instance occurs for different reasons. This is largely because the scholarship surrounding sexual violence within political science and International Relations in “developing” countries largely fails to account for outside fields. Each additional field incorporated, such as history, women and gender studies, and anthropology, would prove to be a huge asset, as opposed to addressing superficial issues instead of addressing the root cause. Whilst being attentive to the different historical pasts of all African countries, an acknowledgment of the overarching impact of colonialism on sexual and gender-based violence is applicable to other countries dealing

with similar issues. That is why this research is so crucial, as more nuanced scholarship will help create a greater response from both the international community as well as the general, global public.

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The Power of Voice: A Comprehensive Analysis of the Power of Rhetoric

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Abstract

During the COVID-19 pandemic, political rhetoric has swayed public perception and the efficacy of policy. In the political science field, there has been a gap in literature surrounding the analyses of COVID-19 and rhetoric. This paper aims to pinpoint the three most reoccurring modes of speech used by politicians during the COVID-19 pandemic: war metaphors, motivating language model, and rhetoric through the analysis of both war metaphors and the motivating language model. In these models, gendered assumptions will be analyzed, while assessing how hypermasculinity impedes social change and promotes xenophobic sentiments.

Introduction

During COVID-19, how world leaders communicate sets the stage for how policy is understood.

Following leaders' speeches from the early start of the 2020

pandemic, the manner in which politicians addressed their citizenry is associated with divergences in public response. In particular, this paper aims to address the following: while political science has assessed the role of rhetoric in discourse analysis, there has been a gap in literature. Using COVID-19 as a case study, how may a deeper study of rhetoric help explore its impact on public perception?

Following the rhetoric of Donald Trump, Joseph "Joe" Biden, Boris Johnson, Giuseppe Conte, Pedro Sánchez, Angela Merkel and Jacinda Ardern, I will analyze speeches given from March 2020 to June 2020, where rhetorical modes of speech were more commonly and frequently used. Trump's response to the pandemic has garnered international media attention, influencing the response of politicians such as Boris Johnson and amassing critique from politicians such as Angela Merkel and Jacinda Ardern.

This paper posits that when leaders use metaphors that evoke sentiments of war and/or collaboration, political rhetoric may not only reshape public understanding in a given country but may do so internationally. Leaders will be categorized under three modes of speech: war metaphors, motivating language model, and a combination of both, using their linguistic content to assess how the public has responded to rhetorical stimuli. Yet, given this focus on language, it is imperative to note that war framing has promoted hypermasculinity and xenophobic attitudes and is the method of framing often preferred in political speech.

Using a theoretical approach, I clarify that war framing is used not only by male politicians but also by female leaders. However, a marriage between war framing and the motivating language model may offer a more fit implementation of collective meaning around the 2020 health crisis. The aim of this paper is not to test causal hypotheses of how COVID-19 rhetoric has affected outbreak control and/or policy execution. Rather, it seeks to generate insight into the importance of speech on both group and social norms.

Rhetoric: An Introduction

To understand the function of

rhetoric during the pandemic, it is crucial to assess its meaning. Following the definition of linguist David Crystal, rhetoric can be defined as “the study of effective or persuasive speaking and writing, especially as practiced in public oratory” (Crystal 2008). Originating from ancient Greece, rhetoric has dominated the works of scholars such as Aristotle. In his *A Treatise on Rhetoric*, Aristotle defined the concept as “the faculty of discovering in any particular case all of the available means of persuasion.” In a more modern text of rhetorical theory, *The Philosophy of Rhetoric* by literary critic and rhetorician I.A. Richards establishes that rhetoric is a study of misunderstandings and its remedies. He also introduces a new influential concept of the metaphor, describing it as composed of two parts: the tenor and the vehicle. For Richards, the tenor can be described as the concept, whereas the vehicle acts as the describer, the figurative language used to describe the tenor. In speech, metaphors serve as the vehicle for persuasion; they allow for an effect to be referred to another. They are not just mere literary devices; rather, they act as vortexes that pervade our internal and external modes of communication. Metaphors may either obscure or enlighten the idea that the speech giver is trying to convey.

Metaphors

Traditionally, metaphors have been studied in the literary and poetic paradigm. However, leaders have taken a liking to using metaphors in their speeches as the coronavirus has often been referred to as the “invisible enemy.” Metaphorical expressions are commonly used in language as they, on average, occur between “3 and 18 times per 100 words” (Semino 2021). Conceptual metaphor theory perceives metaphors as conceptual means of understanding human thought in cognitive linguistics (Lakoff & Johnson 1980). More importantly, “Illness, including both physical and mental illness, is precisely the kind of subjective and sensitive experience that tends to be talked about, conceptualized and even experienced through metaphor” (Semino 2021). Yet, metaphors are not neutral when perceiving reality as they may highlight some aspects of actuality while infringing on others, facilitating differing perspectives and evaluations (Semino 2021, Lakoff & Johnson 1980). For example, during health emergencies, war metaphors emphasize feelings of urgency and swift action while obscuring the possibility of adaptation. Metaphors are important rhetorical devices capable of persuading. As such, the study of metaphors during COVID-19 is crucial.

The War Metaphor

The most common conventional metaphors are inclined towards basic sensorimotor experiences. The incapability to protect ourselves from an aggressive threat pushes our need for survival. Such a scenario can be applied metaphorically to fewer tangible issues such as an illness. Belligerent military powers are the most aggressive forms of opposition, and wars are the most extreme forms of dealing with them. This may explain why new and urgent crises such as pandemics are conceptualized through metaphors of fights and battles (Semino 2021). War framing has not been a new concept; the origins and evolution of war and politics date back to ancient times. Scholars such as Augustine of Hippo saw war as necessary for peace to preside, whereas Carl von Clausewitz perceived war as the continuation of politics. War rhetoric enables listeners to view an entirely new crisis, such as the COVID-19 pandemic, and relate it to a state of armed conflict—a context with which a vast majority of the population can resonate.

Studies evaluating the effects of war framing on public perception have detected potential strengths and weaknesses depending on factors and context—war metaphors aid in creating people’s perceptiveness to urgency. Therefore, war metaphors

may be extremely helpful when used at the start of a pandemic as they create a sense of collective responsibility in fighting a common enemy. Yet, war framing has been shown to hold “potentially counterproductive framing effects” (Semino 2021). And, when used during the height of the pandemic, war framing creates discriminatory sentiments. In the U.S., President Donald Trump has heightened this response.

The Problem with “Chinese virus”

Trump referred to COVID-19 as the “Chinese virus” more than twenty times between March 16 and March 30 of 2020 (Viala-Gaufrey & Lindaman 2020). When faced with accusations of racism against Asian-Americans, on March 18, 2020, the president responded with: “It is not racist at all. No, it’s not at all. It’s from China. That’s why. It comes from China, I want to be accurate” (Viala-Gaufrey & Lindaman 2020). Devakumar et al. (2020) assert that: “Following the spread of COVID-19 from Wuhan, China, discrimination towards Chinese people has increased—for example Chinese people being barred from establishments” (Devakumar et al. 2020). Speech shapes our world views; thus, expressions such as “Chinese virus” or “foreign virus” imply a foreign threat. It is important to

note that war framing is not a sole conservative line of thinking.

Joe Biden has claimed that “tackling the pandemic ‘is a national emergency akin to fighting a war,’ which closely echoes Bernie Sanders’ statement that “the crisis ‘is on a scale of a major war”” (Engberg-Pedersen 2020). There is a general agreement that COVID-19 resembles a war-like climate, and this consensus has not only been noted in politics:

Not only has it proven expedient for the political leadership to speak of Covid-19 in terms of war; under the heading “Economic Policies of the COVID-19 War,” the IMF issued a series of policy suggestions both for phase 1 – “the war” – and for phase 2 – “the post-war recovery.”ⁱ From Nobel-Prize winner in economics Joseph Stiglitz to leading US immunologist Anthony Fauci, there is general agreement that “this is a kind of war” and we are currently “living through the fog of war. (Engberg-Pedersen 2020)

While it cannot be denied that other politicians, economists, and the like have followed war rhetoric, it is imperative to opine that Donald Trump has directly and publicly associated immigrants with foreign diseases.

This type of language: using expressions such as “Chinese”

or “Wuhan” virus, personifies the threat. Personification “is metaphorical: its purpose is to help understand something unfamiliar and abstract (i.e., the virus) by using terms that are familiar and embodied (i.e., location, a nationality or a person)” (Engberg-Pedersen 2020). When used accordingly, it enables a better understanding of concepts and ideas. But as cognitive linguists George Lakoff and Mark Johnson have long shown, metaphors are more than poetic tools—they shape our understanding and outlook of the world. Using the adjective “Chinese” is highly problematic as it associates an ethnic group with an infection. When used in medical language, it is recognized as a process of othering (here and there) that has historically been used in anti-immigrant rhetoric and policy toward Asian-Americans in North America (Engberg-Pedersen 2020).

In the late 19th century, the American business class sought to accuse Asian immigrants of all that was wrong in the U.S. at the time, from the economy and low wages to the rapid increase of diseases in urban areas. As such, white supremacists began to depict Asian-Americans as both hygienically and genetically inferior (Herrera 2020). In 2020, and well off into 2021, anti-Asian hate crimes have risen by 150%

in the United States (Yam 2020). Contextualizing a virus after a geographic location or group identity implies that a foreign virus equals a foreign threat. Additionally, replacing COVID-19, or, SARS-CoV-2— the official name given to the 2020 virus by the World Health Organization (WHO)— with “China virus” hinders public perception of the disease; it links geographical location with discriminatory language, increasing xenophobic sentiments and hampering the general understanding of the virus. Accordingly, by using rhetoric that criminalizes the disease, “we are implicitly rejecting the science. By presenting a virus as an enemy we impede responsibility humans bear for driving patterns of disease” (Naumova 2020).

War framing: a Transnational Approach

Since early 2020, metaphorical descriptions of the pandemic as war have been widely used not just in the U.S. but internationally: Johnson in the UK, Conte in Italy, and Sánchez in Spain. The most notable finding is that the leaders mentioned have framed the situation as a “combat,” “battle,” “alien invader,” “fight,” and “war” (Semino 2021, Benziman 2020). By doing so, leaders have framed and contextualized this chaotic situation, portraying a picture amongst the

citizenry of war and destruction, of hopelessness and instability.

In 2018, the *Journal of Public Health Policy* published a series of warnings, stating that “When the next pandemic virus emerges, the world might be confronted with a social, political, and economic crisis of unimaginable dimensions” (Naumova 2020). As such, war rhetoric distracts the public from “pragmatic tasks aiming at preventing pandemics through strengthening the global health security agenda, restricting unsanitary wild-life markets, and decreasing environmental degradation” (Naumova 2020). The gravity of calling a health crisis a war is that these analogies call for a public sacrifice and justify interventions. Governments often portray these interferences as required to control the spread of infections, but in reality, they hurt low-income neighborhoods and minorities. Additionally, when war references are applied to health crises, “the appeal to human emotions can be easily abused by shifting public attention from thoughtful and comprehensive strategies of balancing risks and the needs for keeping communities functioning to impulsive reactions” (Naumova 2020). While critics of war metaphors have a right to be concerned, war metaphors can also have useful functions (Semino 2021).

The Positive Effect of War Framing

War metaphors emerge from a *protectionist* standpoint; often, this protection creates outbreaks of fear, as per Donald Trump's rhetoric. War metaphors, in political usage, are constantly introduced to manage a perceived societal problem. In crisis communication, war framing helps promote a general mobilization of the citizenry, as the nation is at war with an invisible enemy. Metaphors have framing effects, and when used during health crises, they may be highly effective. It must be stressed that whether they are effective depends on the context and other factors. It may be argued that war metaphors could have been appropriate at the beginning of the pandemic, “to convey the dangers posed by the virus, justify the need for radical changes in lifestyle, and generate a sense of collective responsibility and sacrifice for a common purpose” (Semino 2021). War resonates with urgency. Therefore, leaders feel the need to emphasize how to “win” it. In doing so, war framing grants politicians more leverage on how to address the citizenry. This frame has forced citizens to comply with harsher measures, but it has also allowed leaders to accept a higher number of casualties, as this is a war; therefore, wars must equal to an increased number of deaths. While they have received both criticism and praise,

war metaphors are just one factor in rhetorical speech analysis.

The Motivating Language Model

Much of the literature on crisis communication revolves around the framing of war rhetoric. However, political science and politics should address that response has various goals that should not be limited to military language only. Empathetic language may offer a successful response model when dealing with a global crisis. Effective leadership is defined as leaders ensuring good coordination, rapid response, and an evidence-based approach that is well-communicated and instills a sense of partnership. Countries like Germany and New Zealand have been praised for their decisive action, often linked to their female leaders. Effective leadership has been driven by a partnership-solidarity approach to the pandemic and transparency in sharing data and statistics from an early start. Female voices “can challenge rational approaches to crisis management” (Branicki 2020). While the pandemic has fostered “the language of the battlefield” (Branicki 2020), leaders such as New Zealand’s Prime Minister Jacinda Ardern and Germany’s Chancellor Angela Merkel have taken a different approach.

New Zealand has been perceived as a successful COVID-19 response

plan, primarily due to Ardern’s compassionate leadership style. The use of language and tone, more so a motivating use of these styles, can enable a shift “in sensemaking for followers in terms of how they collectively perceive a critical and challenging situation” (McGuire et al. 2020). Ardern has managed to convince her “team of five million to alter their behavior and establish new social norms” through the use of social media platforms such as Instagram and Facebook Live broadcasts (McGuire et al. 2020). In today’s society, which revolves much around popular (pop) culture, this shows how “discursive devices, images of social solidarity and information outlining both responsibilities and ‘success,’ can be used to co-create the crisis experience” (McGuire et al. 2020).

Ardern has often mixed popular culture with politics, especially during her Facebook Live broadcasts and Instagram Stories, creating a “rhetorical blending: epidemiology brightened with empathy, law leavened with mom jokes. And it has been strikingly effective” (Huang 2020). Not many politicians use “memes” or “mom jokes” to connect with the citizenry, so this blending between pop culture and politics is seamlessly done. Ardern’s politics of kindness “stands in stark contrast to some other male world leaders, who espouse and exhibit isolationism,

nationalism, protectionism, racism, and sexism” (Huang 2020). While war metaphors are primarily associated with masculinity, it is imperative to analyze compassionate responses beyond female leadership.

Selection bias has played a key role in the 2020 pandemic by selective reporting “cases where women-led countries have succeeded in pandemic management... These reports fail to acknowledge men-led countries that have done similarly well, while instead emphasizing carefully selected cases where men have not performed well” (Windsor 2020). It is all-important to acknowledge that in countries where women can attain national leadership titles, core cultural values often found in women are rewarded and accredited: “such as long-term orientation, a collectivist (rather than individualist) focus, with fewer disparities in society” (Windsor, n.d.).

As such, “women who lead these countries are able to successfully manage crises like the pandemic not because they are women, but because they are leading countries more likely to elect women to the highest executive office in the first place” (Windsor 2020). While men’s leadership is categorized as more transactional, citizens are more willing to follow the advice of leaders they can trust. This mutual trust has often been categorized as feminine.

Gendered bias in politics is problematic. Women leaders are often recognized as a favorable option during a health crisis. However, this approach is guided by role stereotypes, “according to which women tend to be communal and sharing, whereas men are agentic and independent” (Sergent & Stajkovic 2020). Empathetic language has habitually been associated with women, while bluntness and forcefulness have been linked to men. Politics should more closely analyze the overemphasized gender stereotypes that define men and women leadership. Because of this gendered and biased thinking, “macho” populist leaders continue to dominate high office.

Women make up a small percentage of world leaders. While it is convenient to associate women with being more apt to deal with crises due to their gender, it does not mean that compassionate male leadership is nonexistent. For example, Ardern’s leadership style more closely resembles Canada’s Prime Minister Justin Trudeau than Merkel’s. Both prime ministers lead through their ability to communicate sensitively, especially towards minority communities. On the other hand, Angela Merkel has often been nicknamed the “Mutti” or the “Mommy” of the nation; however, this refrains from representing her

true leadership style. Merkel does not lead as a soft and sensitive mother; her governorship is ruled by discipline and backed by her extensive scientific background rather than by her gender. Despite increased participation by women in leadership roles, there are prominent gender-related differences in the assessment of rhetorical speech that dominate the discipline of political science. An alternative evaluation may analyze rhetoric beyond a “male” and “female” lens.

An Alternative Approach

Building upon the war metaphor and the motivating language model frames, I argue that a marriage between the two may more closely represent the use of rhetoric during the COVID-19 pandemic. War framing has been present since ancient times. However, acknowledging that war framing is often directed as “male” may more closely analyze why patriarchal approaches dominate political leadership.

For centuries, scholars have argued that violence is an instrument of politics and vice-versa. Philosophers such as Thomas Hobbes have regarded violence as essential for personal and political safety, with Carl von Clausewitz arguing that war is a continuation of politics.

For Jean-Jacques Rousseau, human nature is composed of timid individuals who only become corrupt

under the influences of society and the state. James Randall, noted for “The Blundering Generation,” has argued that violence responds to miscalculation. Media outlets and scholarship have spotlighted male leadership as overusing war metaphors while neglecting the presence of other modes of speech.

While both Boris Johnson and Donald Trump have defined themselves as wartime presidents, the prominent contrast between the framing of rhetoric between Johnson and Trump is Johnson’s willingness to listen to scientific experts, which Trump has neglected to do during his time as president. For example, Johnson has invoked wartime language such as “the enemy can be deadly,” yet, he has also portrayed empathetic language in his speeches by emphasizing national unity, international cooperation, and the importance of a tight-knit community. The use of both war metaphors and the motivating language model has also been noted in politicians such as Spain’s Prime Minister Pedro Sánchez and Italy’s Prime Minister Giuseppe Conte.

Pedro Sánchez has been the prime example of using both motivational language and war framing. His speeches often begin by expressing Spain’s “war” against the virus, followed by the underlining of expert advice and how crucial it is for the country to follow said orders,

especially for the well-being of the most vulnerable. In Italy, Conte has framed his rhetoric around a famous wartime phrase by Winston Churchill; however, his speeches have mostly revolved around empathy and motivating language. The prime minister's communication presents a very influential narrative, as, by asking for "sacrifices" and a united responsibility for the "strength of our country," Conte "offers the figure of a welfare state dedicated to its children in a paternalistic and curative impulse" (De Luca 2020). While female leadership has continually been defined as overtly empathetic, placing a gendered lens on rhetoric reaffirms the role of masculine domination.

This approach often belittles women, especially female politicians, who seek to assert authority using rhetoric. Language that invokes war, when used accordingly, can be a powerful tool to impose a sense of gravity and importance. When mixed with war framing, Jacinda Ardern's and Angela Merkel's use of empathetic statements may inspire a form of unity; however, such an approach must be accompanied by mutual trust between the government and its citizens, along with transparency and social cohesion.

For instance, Ardern's subtle use of war metaphors, such as the "battle" has been "won," suggests that the

threat persists even if cases have decreased. Thus, a sense of urgency is still being evoked. Ardern's constant use of "team of 5 million" also underlines closeness, a "small" community that gave up its freedom for national unity. On the other hand, Angela Merkel has been praised worldwide for her straightforward and compassionate delivery while being disinclined toward any rhetorical grandeur. For many years, her lack of passionate phrasing has been the basis of her criticism; still, Merkel's response has been applauded for her swift and eloquent explanation of statistics. Merkel has compared the COVID-19 crisis to a challenge not seen since World War II and has placed the importance of solidarity at the forefront.

A marriage between war framing and empathetic statements may inspire a form of unity. However, war rhetoric alone allocates fear and anxiety while hurting minority populations at large. As seen by the high rate of hate crimes toward Asians in the United States, war metaphors are dangerous tools when used to influence how people interpret and assess a given situation. Fear-based approaches often instigate conflict amongst people and marginalized cultural groups. Yet, empathy appeals predominantly through a collection of compassionate social solidarity and unity.

Conclusion

While this research has been conducted as part of an undergraduate thesis project, I urge the discipline of political science to analyze the correlation between history and rhetoric and the gendered approach scholarship has been taking to define “male” and “female” political rhetoric. In identifying gender, this research did discuss a small portion of women leaders; however, I acknowledge that gender is complex, self-identified, and non-binary. Therefore, future research should include the role of the LGBTQ+ community in politics. While this research does not aim to finalize which male or female response has been deemed more effective, it provides an introduction to which rhetorical modes of speech have been more often used by leaders while providing insight into a third frame of rhetorical analysis.

Future research should also assess the role of history in political science, and the importance history has in the analysis of rhetoric, as finding common ground between the two disciplines may enhance both rhetorical and theoretical studies. Possible advances for future research may also be the role of social media and politics, as much of today’s information is written in 280 characters or less, with no proper mode of fact-checking.

Social media is shaping politics. It is

breaking the way in which politicians can directly communicate with the public through informal humanity. Online platforms have the power to shape public opinion and become hubs for the proliferation of white supremacist propaganda and other extremist groups. Interactive media is also being influenced by modern popular culture, therefore changing how politicians communicate with the public and vice versa. This aspect should be more closely monitored, as social media has created a new form of dialogue between politicians and citizens. Thus, an important research challenge would be to analyze how people seek, or rather, avoid misinformation and how those decisions affect their behavior in the management of disease outbreaks. Studies such as Cinelli, et al. (2020) may be helpful in the evaluation of social media and COVID-19 as the authors outline the term infodemic to define the perils of the spread of misinformation during global health outbursts, particularly under platforms such as Twitter.

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Author Biographies

David Harbaugh

David Harbaugh is a fourth-year undergraduate student, pursuing degrees in Biological Chemistry and Spanish Literature at the Wilkes Honors College. David's academic and scientific focus includes a development of novel therapeutic approaches that will contribute to the field of cancer biology. His passion for research was ignited under the mentorship of Dr. Joseph Kissil and Dr. Catherine Trivigno and his experience as an undergraduate researcher at Scripps Research Institute. David has presented his preliminary research titled "Development of a Kinase Translocation Reporter For High-Throughput Screening of Novel PAK1 Inhibitors" at the 11th Annual OURI Symposium, 18th Annual Wilkes Honors College Symposium, Florida Undergraduate Research Conference, and the National Conference on Undergraduate Research.

Jillian Hanley

Jillian Hanley is a recent graduate from Florida Atlantic University's Harriet L. Wilkes Honors College. She finished with a Bachelor of Science in Physical and Biological Sciences with a minor in Spanish Literature. Through the

interdisciplinary courses of the Honors College, she has been able to combine her interests in the sciences with culture and language. She first became interested in Hispanic and Spanish literature while studying abroad in Madrid with faculty member, Dr. Carmen Cañete Quesada. Since then, she has continued studying literature and, in this paper, aims to understand how the protagonist experiences liminality through the process of death.

Pedro Millan

Pedro Millan is a senior at the Harriet L. Wilkes Honors College pursuing a double concentration in Cellular Neuroscience and Psychology with a minor in Spanish Literature. He emigrated from Peru at the age of thirteen. Since young, he had an affinity for stories and their ability to shape and envision worlds for the readers. His old school implemented the teaching of basic levels of English, French and German, resulting in an upbringing surrounded by foreign languages – fun to learn, harder to pronounce. In 2017, he won second place in The Palm Beach Post's Pathfinder Award for the category of Foreign Language. During college, his interests led him to research

areas such as second language acquisition, and the effects of bilingualism (or multilingualism) on personality development, which he hopes to pursue in graduate school. In his free time, he enjoys watching movies, strength training and participating in team sports.

Tristan Sheridan

Tristan Sheridan is a recent graduate from Florida Atlantic University with a Bachelor of Arts in English. Studying literature within the FAU English department has inspired her to engage with mediums that work to broaden and subvert conventional literary concepts, as evidenced by her contribution to the FAURJ and its focus on interactive fiction. Tristan previously discussed her research in interactive fiction during an oral presentation at FAU's 2021 OURI Symposium and won first-place within her research category. She is continuing her education in English within FAU's Master of Arts program and hopes to further engage with unconventional and experimental literature during her pursuit of this degree.

Haliston Lake

The author is a recent graduate of Florida Atlantic University, where she received her Bachelor of Arts in Political Science as well as a minor in Anthropology and a certificate in Women, Gender, and Sexuality Studies. A majority of her

undergraduate career has been dedicated to studying the African political landscape and its effects on women. The diverse interests and love for learning that the author has have been nurtured from a young age by her parents as well as the many wonderful teachers and professors that she has had over the years. Her favorite place to research and write is at her family home in Parkland, Florida surrounded by her six fur siblings.

Isabella Cipollone Movilla

Born in Boston to an Italian father and a Colombian mother, when she was just two years old, her parents decided to move to Italy and start a new beginning. Now, that decision gave her the opportunity to grow up in a dissimilar setting than the United States, specifically between the border of Umbria and Tuscany, where she had the pleasure of growing up in a rural house with a history of more than two hundred years, surrounded by beautiful landscapes and such a rich culture. As her parents owned a bed & breakfast amongst the vast sunflower-filled hills of Umbria, she was granted the opportunity to meet people from all over the world, garnering her passion for culture studies and international relations, and the manner in which language, no matter how different it is from the native one we speak, binds us together through shared experiences.



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